January 2025

Third Quarter 2024 Monitoring Report Two-Mile Pond Complex Riparian Survey

City of Santa Fe, New Mexico



prepared by



JOHN SHOMAKER & ASSOCIATES, INC. WATER-RESOURCE AND ENVIRONMENTAL CONSULTANTS 505-345-3407 • www.shomaker.com

prepared for



THIRD QUARTER 2024 MONITORING REPORT TWO-MILE POND COMPLEX RIPARIAN SURVEY, CITY OF SANTA FE, NEW MEXICO

prepared by

Steven T. Finch, Jr., CPG, PG

Dustin Schwartz

Annie McCoy, CPG

Sherry Galemore

JOHN SHOMAKER & ASSOCIATES, INC. Water-Resource and Environmental Consultants 2611 Broadbent Parkway NE Albuquerque, New Mexico 87107 505-345-3407 www.shomaker.com

prepared for

City of Santa Fe Public Works Department

January 30, 2025

CONTENTS

1.0 INTRODUCTION	1
1.1 Project Background	1
1.2 Scope of Work	
2.0 SUMMARY OF EXISTING DATA AND INFORMATION	6
2.1 NMED SWQB	6
2.2 Google Earth Images	
2.3 NDMI Images	
2.4 NDVI Images	
2.5 Streamflow Monitoring	
3.0 RIPARIAN MONITORING	
3.1 Field Investigations To Date	19
3.1.1 Landscape Context	19
3.1.2 Biotic Metrics	20
3.1.3 Abiotic Metrics	24
3.1.4 Summary Riparian Metrics Ranking	27
3.1.5 Soil Moisture	27
4.0 SUMMARY OF FINDINGS	29
5.0 REFERENCES	30

TABLES

Table 1. S	Summary of the historical images for Two-Mile Pond Complex	5
Table 2. S	Summary of NDMI images for Two-Mile Pond Complex	3
Table 3. S	Summary of NDVI images for Two-Mile Pond Complex	9
Table 4. N	NMRAM scoring and ranking description19	9
Table 5. A	Average scores for landscape context metrics)
Table 6. A	Average scores for biotic metrics)
Table 7. S	Summary of mosquito survey	1
Table 8. S	Summary of fauna observed in Two-Mile Pond riparian area	2
Table 9. A	Average scores for abiotic metrics24	4
Table 10.	Summary of field-measured water-quality data for Two-Mile Pond system	5
Table 11.	Summary of Two-Mile Pond Complex riparian area metrics ranking	3

ILLUSTRATIONS

Figure 1.	Map of Santa Fe watershed showing location of Two-Mile Pond Complex2
Figure 2.	Map showing locations of City of Santa Fe reservoirs, Santa Fe River, and Two-Mile Pond receiving watershed
Figure 3.	Landscape map showing the Two-Mile Pond Complex and area of investigation on June 7, 2023 aerial photograph
Figure 4.	Map showing NMED SWQB defined riparian habitat zones for Two-Mile Pond Complex
Figure 5.	Map of Two-Mile Pond Complex showing streamflow monitoring stations
Figure 6.	Hydrographs for year-to-date 2024 of (a) <i>Santa Fe River below Nichols</i> (b) Santa Fe River next to Two-Mile Pond, and (c) Santa Fe River below Two-Mile Pond return
Figure 7.	Hydrograph for year-to-date 2024 of (a) Restoration Channel Below Old Stone Dam, (b) Two-Mile Pond return (below Two-Mile), and (c) Cerro Gordo diversions

APPENDICES

(follow text)

Appendix A. Historical Google Earth Images of Two-Mile Pond Complex

- Appendix B. NDMI Images for Two-Mile Pond Complex
- Appendix C. NDVI Images for Two-Mile Pond Complex
- Appendix D. Field Investigations Forms
- Appendix E. Field Photos
- Appendix F. Santa Fe, New Mexico, Mosquito Study Two-Mile Pond
- Appendix G. Soil moisture maps

THIRD QUARTER 2024 MONITORING REPORT TWO-MILE POND COMPLEX RIPARIAN SURVEY, CITY OF SANTA FE, NEW MEXICO

1.0 INTRODUCTION

John Shomaker & Associates, Inc. (JSAI) was contracted by City of Santa Fe Public Works Department to provide monthly monitoring of the Two-Mile Pond Complex riparian area from the Restoration Channel staff gage to decommissioned Two-Mile Dam (Figs. 1 through 3). The monitoring area is focused on the riparian area associated with the Restoration Channel and Two-Mile Pond Complex. Six monitoring transects have been identified for assessment of riparian conditions (Fig. 3). JSAI utilized standardized riparian monitoring and assessment methods described by New Mexico Rapid Assessment Method (NMRAM) Field Guide prepared by the New Mexico Environment Department Surface Water Quality Bureau (NMED SWQB) (Muldavin et al., 2022). The NMRAM field guide provides procedures for conducting a rapid ecological assessment of wetlands and riparian areas in the Montane Riverine Wetland Subclass that occur along unconfined mountain streams and rivers at elevations between 6,000 and 8,500 ft above mean sea level (ft amsl).

1.1 Project Background

The Santa Fe River begins in the Sangre de Cristo Mountains and flows to the Rio Grande. The Two-Mile Pond Complex is in the upper reach of the Middle Santa Fe River hydrologic system (Fig. 1). Reservoirs were established in the Middle and Upper Santa Fe River hydrologic system as a result of securing and developing water supply for the City of Santa Fe (Fig 2). The City of Santa Fe reservoirs include:

- Old Stone Dam constructed in 1880, but silted in by 1904
- Two-Mile Dam and Reservoir constructed in 1893 and decommissioned in mid 1990s
- Granite Point (McClure) Dam and Reservoir constructed in 1926
- Nichols Dam and Reservoir constructed in 1943

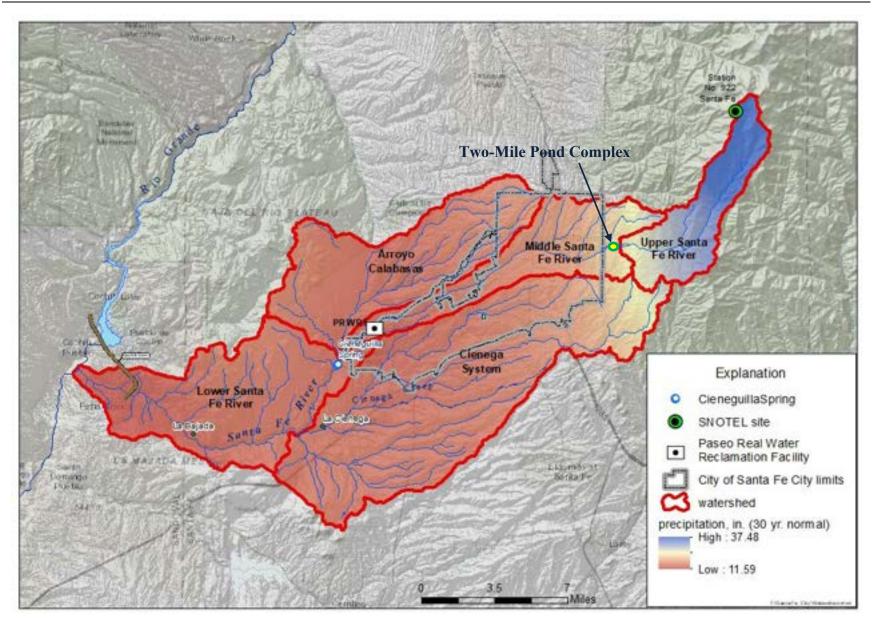


Figure 1. Map of Santa Fe watershed showing location of Two-Mile Pond Complex.

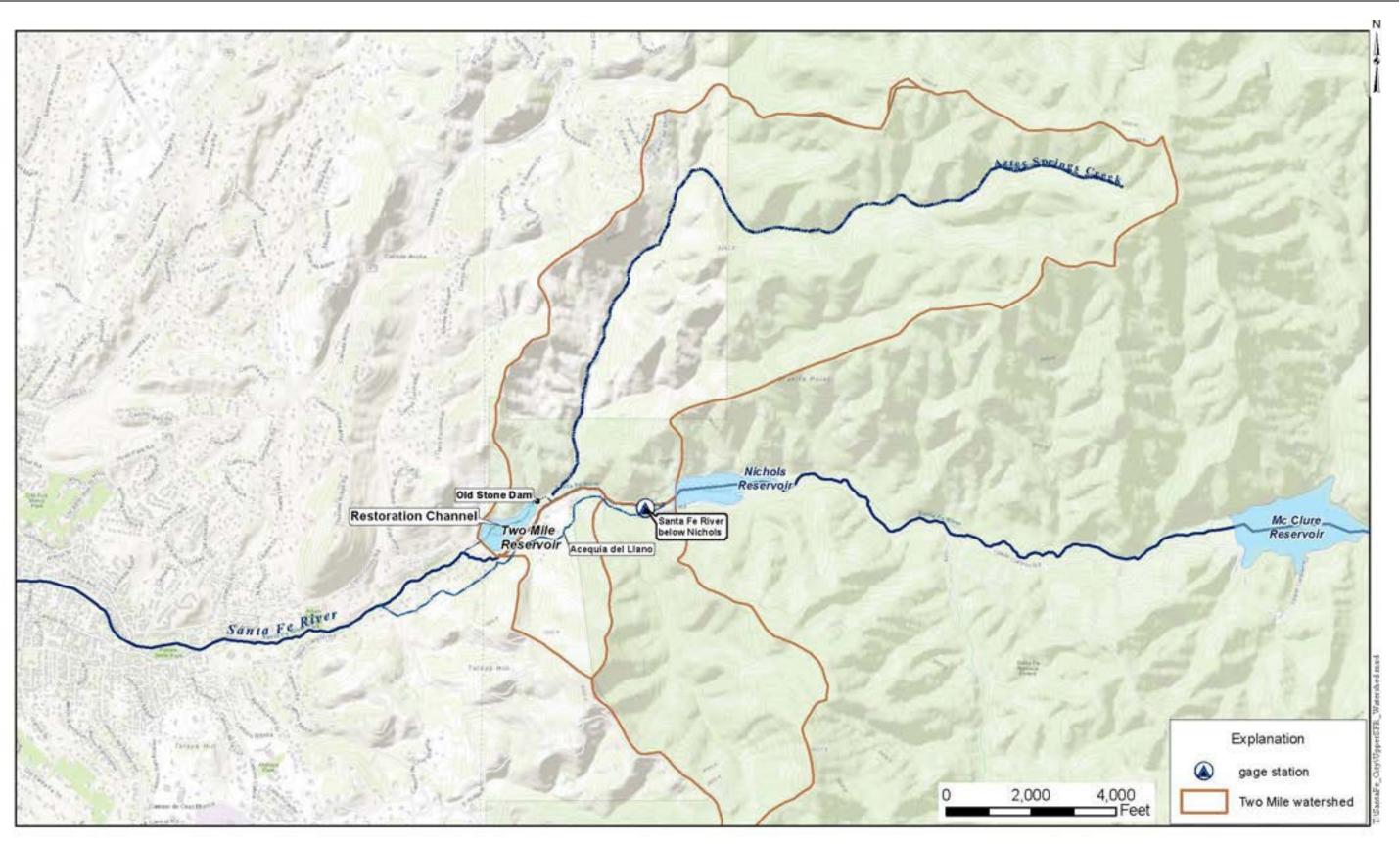


Figure 2. Map showing locations of City of Santa Fe reservoirs, Santa Fe River, and Two-Mile Pond receiving watershed.

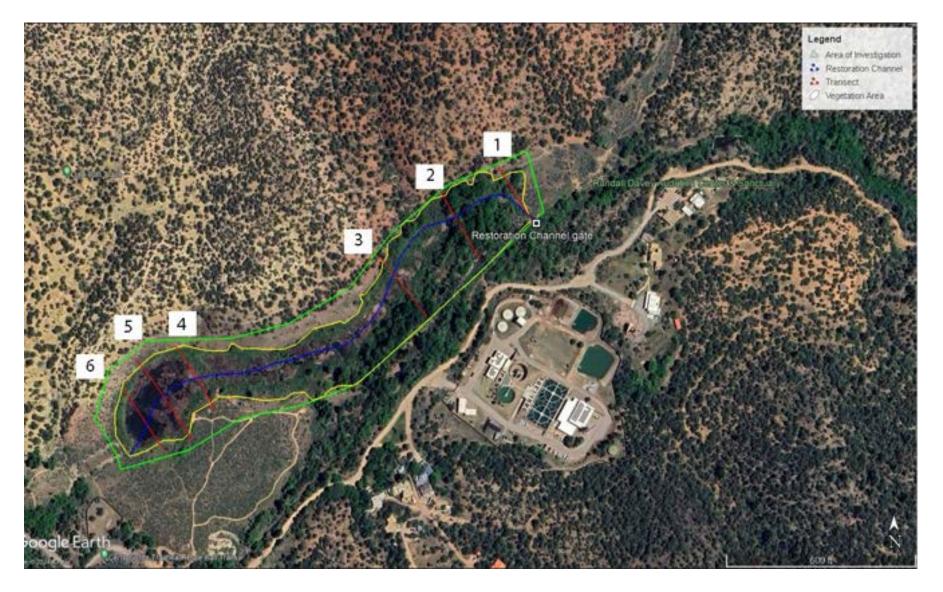


Figure 3. Landscape map showing the Two-Mile Pond Complex and area of investigation on June 7, 2023 aerial photograph.

The Two-Mile Pond Complex is the result of restoration of the decommissioned Two-Mile Dam that was constructed in the Santa Fe River canyon. The Two-Mile Pond Complex was donated to The Nature Conservancy (TNC) in 2000, which converted it into the "Santa Fe Canyon Preserve." Features of the Two-Mile Pond Complex include:

- Restoration Channel
- Remnants of Old Stone Dam
- Remnants of decommissioned Two-Mile Dam
- Established riparian area along the Restoration Channel in the former footprint of Two-Mile Reservoir

The City of Santa Fe Ordinance 2012-10 established the Santa Fe River Target flows for a Living River Initiative. Target Flows are Santa Fe River flows originating from above McClure Reservoir that are bypassed (water that flows past a diversion or storage facility) and released to Santa Fe River at the base of Nichols Dam. Since 2012, target flows have run through Two-Mile Complex via the Santa Fe River and Restoration Channel. Other bypass flows include those for court-ordered acequia deliveries downstream of the Two-Mile Complex.

Santa Fe River bypassed flows are waters of the State. In 2023, the New Mexico Office of the State Engineer (NMOSE) determined that Restoration Channel diversions from the Santa Fe River and storage in Two-Mile Pond had no supporting water right permit, and ordered a stop to these diversions and storage of water. There are concerns that these changes in streamflow conditions through the Two-Mile Pond Complex will alter the established riparian system. The primary objective of assessing the Two-Mile Pond Complex riparian area is to determine current conditions and health of the system, and affects due to changes to the hydrologic regime.

1.2 Scope of Work

The intentions of the quarterly monitoring reports are to provide a summary of the project, to present data collected to date, to provide an assessment of the collected data, and to present observations and findings. The quarterly monitoring reports are to include:

- field datasheets (Appendix D)
- ➤ landscape map (Fig. 3)
- sampling rank and score and assessment summary (Table 4)
- stressor checklist (Appendix D)
- ➤ sampling area rank and score and assessment summaries (Table 8)
- > water flows and budget from the streamflow monitoring network
- observed changes in surface water and soil moisture conditions

2.0 SUMMARY OF EXISTING DATA AND INFORMATION

Available existing data and information were compiled for the Two-Mile Pond Complex, which were limited to NMED riparian habitat mapping, historical imagery, and streamflow monitoring performed for Santa Fe Water Division.

2.1 NMED SWQB

The NMED SWQB has prepared a riparian habitat map of the Two-Mile Pond Complex portion of the Santa Fe River (Fig. 4). Each colored section represents a different habitat in the Two-Mile Pond area. These habitats were used as a guideline in completing Worksheet 5 and B1 of the Montane Riverine Wetlands field worksheets. It should be noted that Habitat IA1 in this model appears to be exaggerated and was not included in the field observations.

2.2 Google Earth Images

Google Earth historical aerial imagery for the Two-Mile Pond Complex were available for 1991 to 2023. Historical imagery can be referenced from Appendix A. The Restoration Channel and area of investigation were placed on each image for reference. A summary of the historical images reviewed is presented in Table 1. The Two-Mile Pond Complex riparian area begins around 1996, and significant tree canopies are observed by 2005. Since Two-Mile Dam and Reservoir were decommissioned, the riparian area was established and ponded water has been observed in Two-Mile Pond.

Google Earth image date	approximate combined area of riparian and surface water (acres)	observations
May 25,1991	na	Two-Mile Reservoir operational
October 8, 1996	8.86	4 years after Two-Mile decommissioned
December 6, 2002	9.52	significant drought period
May 10, 2004	8.32	prior to SFR target flows
April 26, 2005	9.67	established tree canopies
May 8, 2009	9.39	water present in Two-Mile Pond
June 16, 2011	8.38	beaver ponds present
October 2, 2013	9.96	beaver ponds present
November 1, 2015	10.00	water present in Two-Mile Pond
June 10, 2017	9.64	water present in Two-Mile Pond
March 2, 2021	9.38	water present in Two-Mile Pond
June 7, 2023	10.40	water present in Two-Mile Pond

Table 1. Summary of the historical images for Two-Mile Pond Complex

SFR - Santa Fe River

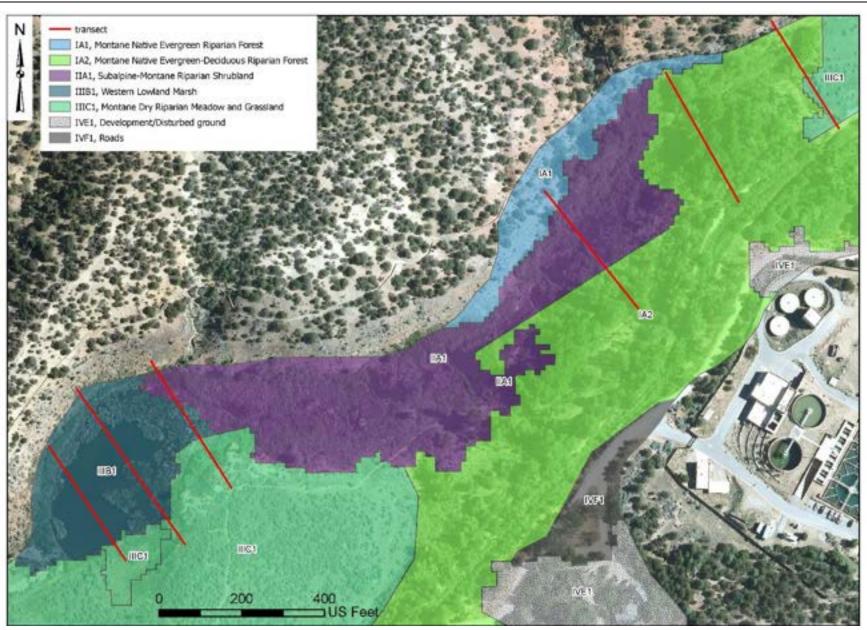


Figure 4. Map showing NMED SWQB defined riparian habitat zones for Two-Mile Pond Complex.

The combined riparian and surface-water area was estimated from each historical image after 1996. Over the last 28 years, the combined riparian and surface-water area has varied between 8.32 and 10.40 acres. For 2013 to current, the average area has been about 10 acres. The primary change in the riparian area has been the development of the tree canopy, particularly from 2005 to current.

2.3 NDMI Images

Normalized Difference Moisture Index (NDMI) from Modified Copernicus Sentinel Data is used to determine vegetation water content and monitor droughts. The values range from -1 to 1 with negative values representing barren soil, values around zero correspond to water stress or dormancy of deciduous vegetation, and positive values represent vegetative canopy without water stress or snowpack cover. NDMI images for January through June 2024 can be referenced from Appendix B, and a summary of observations is presented as Table 2. The quality of the imagery depends on degree of cloud cover.

image date	Two-Mile Pond Complex observations	
January 16, 2024	NMDI 1.00 to 0.10, snowpack covered, barren soil	
February 5, 2024	NMDI 0.20 to -0.10, high soil moisture to dormancy	
March 3, 2034	NMDI -0.03 to -0.50, indicating water stress or dormancy	
April 10, 2024	NMDI -0.01 to -0.20, indicating water stress or dormancy	
May 17, 2024	NMDI 0.20 to -0.01, indicating water stress	
June 16, 2024	NMDI 1.00 to 0.00, high canopy without water stress	
July 16, 2024	NMDI 0.8 to -0.03, high canopy without water stress	
August 13, 2024	NMDI 0.8 to 0.00, high canopy without water stress	
September 12, 2024	NMDI 0.8 to 0.03 high canopy without water stress	

Table 2. Summary of NDMI images for Two-Mile Pond Complex

NDMI - Normalized Difference Moisture Index

2.4 NDVI Images

Normalized Difference Vegetation Index (NDVI) from Modified Copernicus Sentinel Data is used to quantify green vegetation. It is a measure of the state of vegetation health based on how plants reflect light at certain wave lengths. The values range from -1 to 1 with negative values representing water; values around zero correspond to barren areas of rock, sand, snow, or dormant vegetation, low positive values represent shrubs, grasses, or new growth; and high positive values represent forested areas. NDVI images for January through June 2024 can be referenced from Appendix C, and a summary of observations is presented as Table 3.

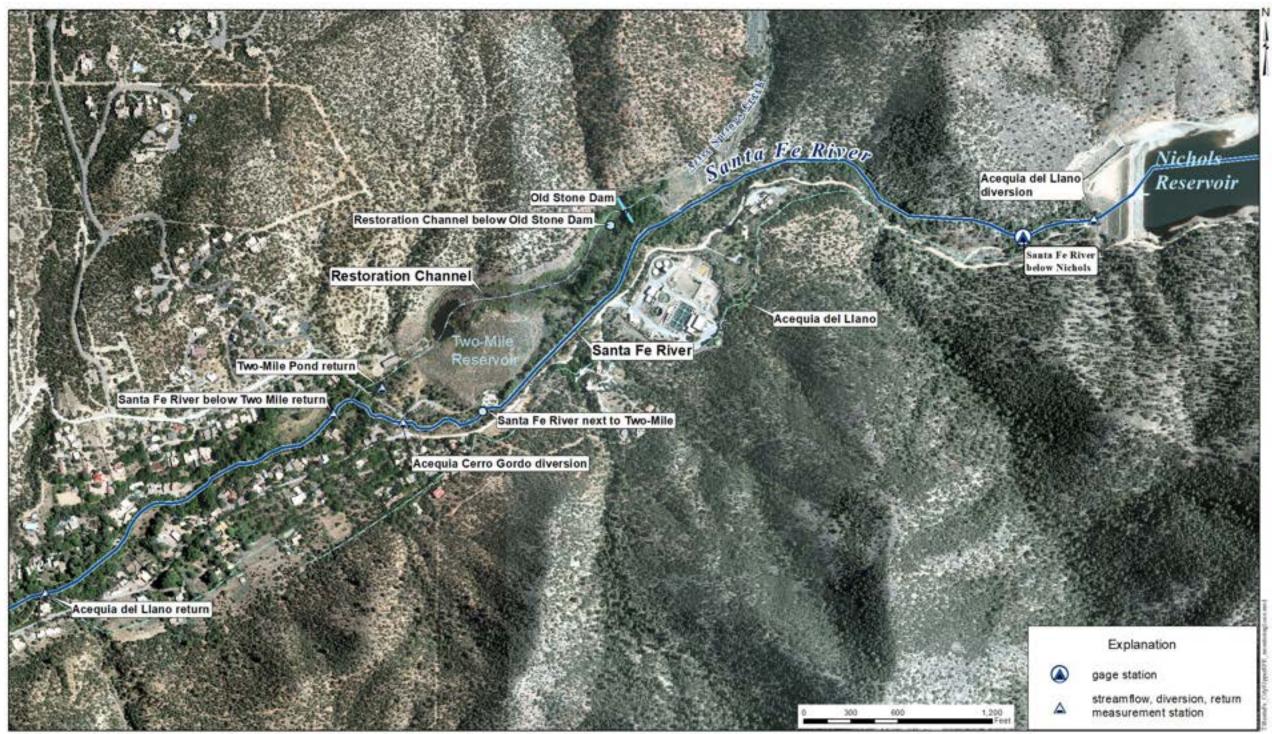
image date	Two-Mile Pond Complex observations	
January 16, 2024	NDVI 0.4 to -0.1, snowpack, dormant vegetation	
February 5, 2024	NDVI 0.4 to 0.0, snowpack, dormant vegetation	
March 3, 2034	NDVI 0.4 to 0.1, shrubs, grasses, new growth	
April 10, 2024	NDVI 0.4 to 0.0, soil, water, shrubs, grasses, new growth	
May 17, 2024	NDVI 1.0 to 0.2, shrub, grassland, temperate forest	
June 16, 2024	NDVI 1.0 to -1.0, water, shrub, temperate forest	
July 16, 2024	NDVI 1.0 to -1.0, water, shrub, temperate forest	
August 13, 2024	NDVI 1.0 to -1.0, water, temperate forest	
September 12, 2024	NDVI 1.0 to -1.0, water, temperate forest	

Table 3. Summary of NDVI images for Two-Mile Pond Complex

NDVI - Normalized Difference Vegetation Index

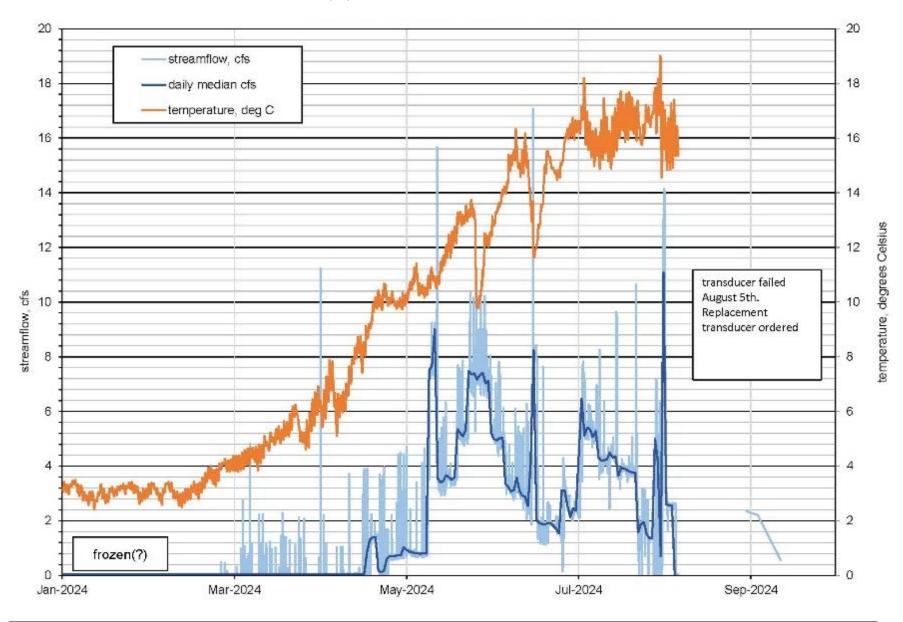
2.5 Streamflow Monitoring

The City of Santa Fe Water Division has contracted JSAI to install and maintain several continuous streamflow monitoring points in the Two-Mile Pond Complex area (Fig. 5). Hydrographs for the Santa Fe River monitoring stations are presented as Figure 6a through 6c, and hydrographs for the Restoration Channel and Two-Mile return are presented as Figures 7a and 7b. Hydrograph for Cerro Gordo acequia diversions is presented as Figure 7c.



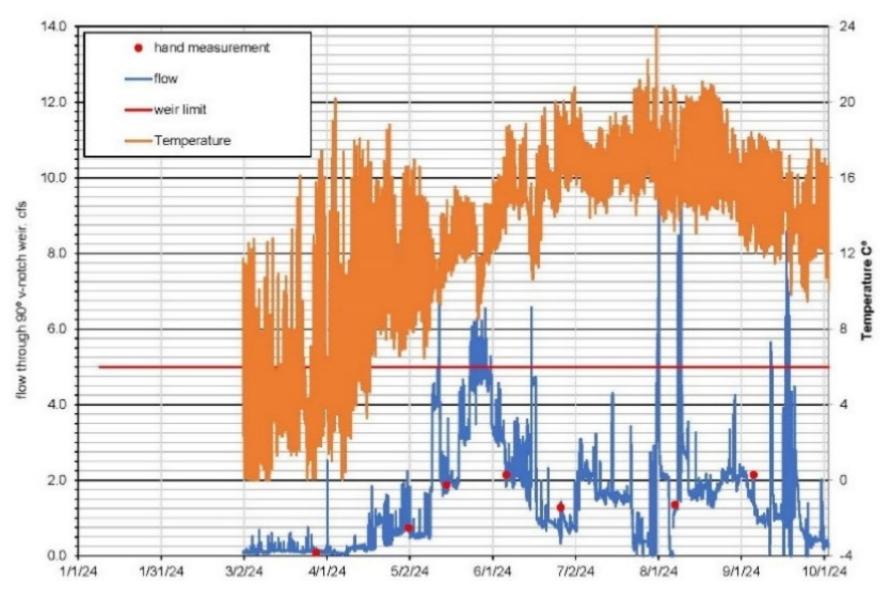
aerial photography: Santa Fe County 2017

Figure 5. Map of Two-Mile Pond Complex showing streamflow monitoring stations.



(6a) Santa Fe River Below Nichols

JOHN SHOMAKER & ASSOCIATES, INC. WATER-RESOURCE AND ENVIRONMENTAL CONSULTANTS



(6b) Santa Fe River next to Two-Mile Pond

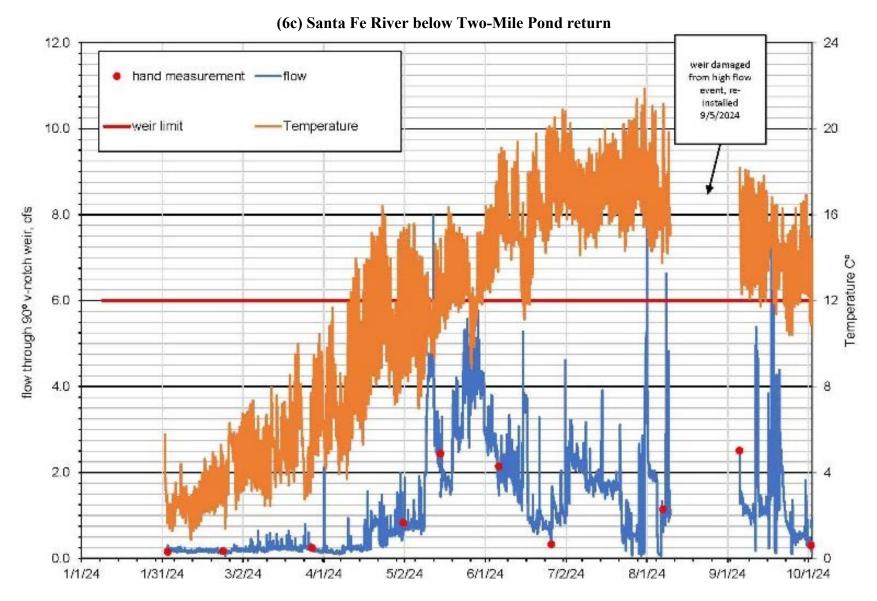
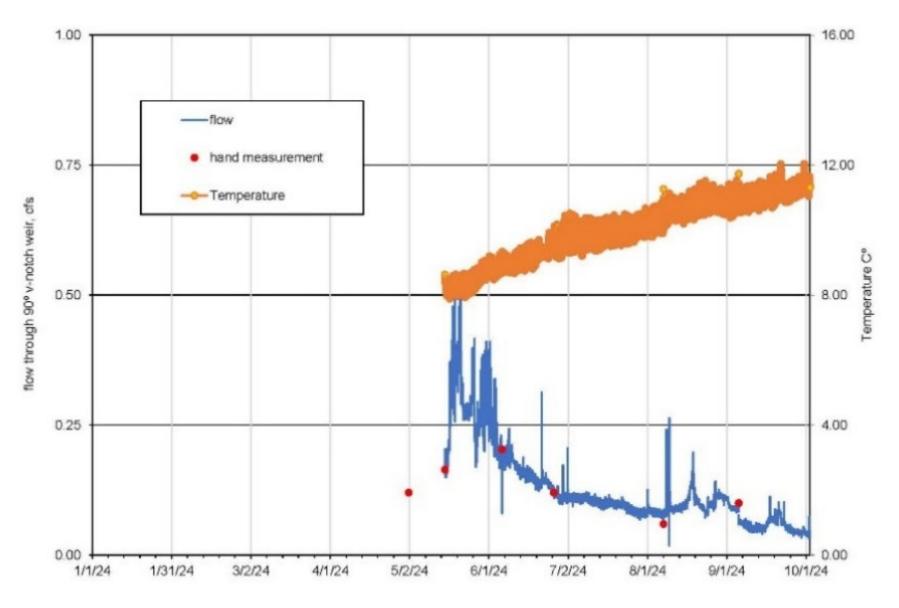
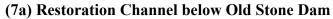
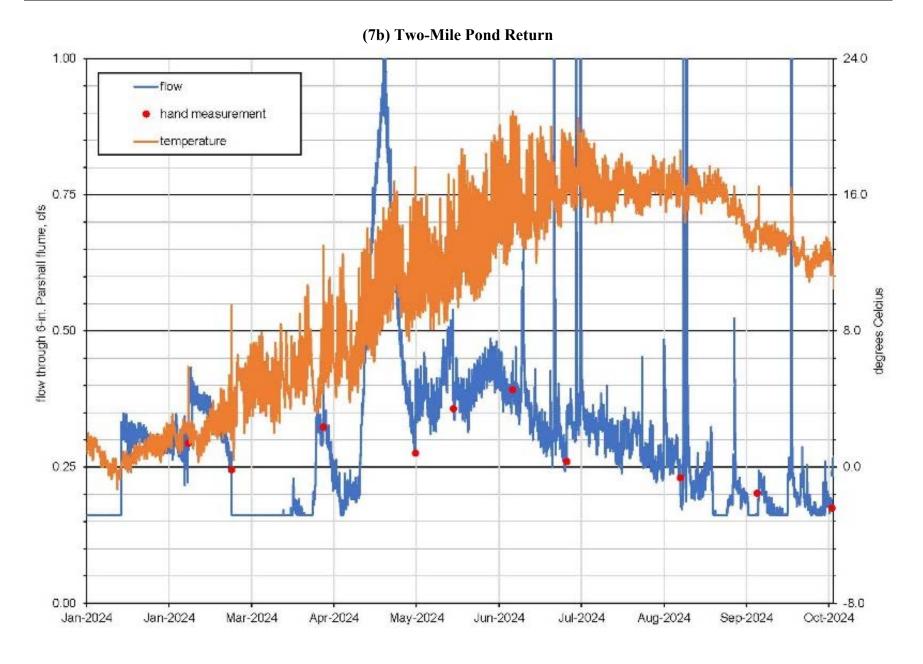
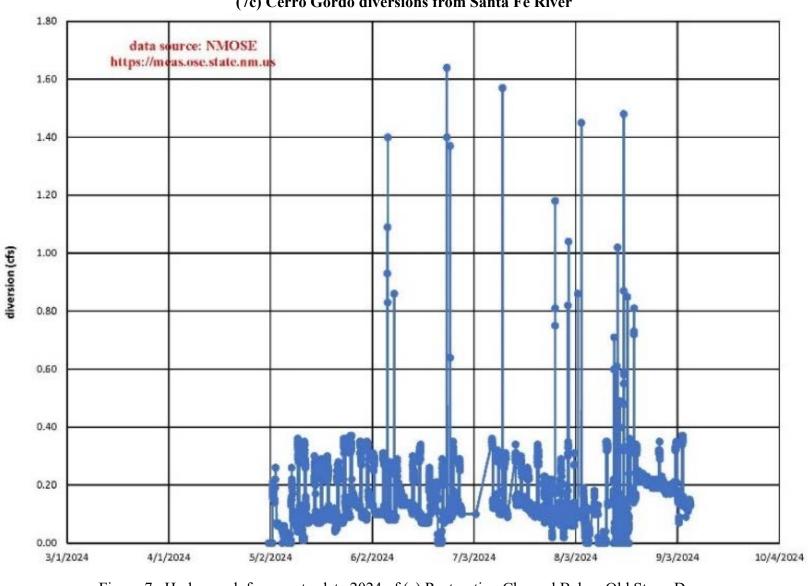


Figure 6. Hydrographs for year-to-date 2024 of (a) *Santa Fe River below Nichols* (b) Santa Fe River next to Two-Mile Pond, and (c) Santa Fe River below Two-Mile Pond return.









(7c) Cerro Gordo diversions from Santa Fe River

Figure 7. Hydrograph for year-to-date 2024 of (a) Restoration Channel Below Old Stone Dam, (b) Two-Mile Pond return (below Two-Mile), and (c) Cerro Gordo diversions.

The gage Santa Fe River below Nichols monitors all bypass flows below Nichols Dam. The river channel at the gage Santa Fe River below Nichols was clogged with fallen trees during this last winter, which was cleared and recorded streamflow data validated. Year-to-date transducer data (calculated flow and water temperature) are presented on Figure 6a. From January to about mid-April, streamflow at Santa Fe River below Nichols was less than 0.1 cubic feet per second (cfs). Bypass flows for irrigation deliveries and targeted flows for Living River Initiative started around mid-April (Fig. 6a). Spring pulse occurred mid-May. Additional bypass flows occurred during the summer into the fall as a result of repairs to Nichols Dam. During the middle of August, it was discovered that the transducer had failed and a replacement transducer was installed by September 23rd. Some manual staff gage measurements were made in September. Bypass flows during July averaged 3.9 cfs and ranged between 1 and 10 cfs.

An existing 90° V-notch weir in the Santa Fe River next to Two-Mile Pond was modified by expanding the weir dimensions. At the beginning of March 2024, the V-notch weir was built up and equipped with a stilling well and transducer to accommodate flow measurements up to 5 cfs. The V-notch weir next to Two-Mile Pond measures Santa Fe River flows upstream of the Two-Mile Pond return (Figs. 5 and 6b).

At the beginning of February 2024, a 90° V-notch weir was installed in the Santa Fe River below the confluence of Two-Mile Pond return and Santa Fe River (Fig. 5). The weir is equipped to provide continuous monitoring of flows up to 6.0 cfs in the Santa Fe River below Two-Mile Pond return. Streamflow calculated from stage and water temperature can be referenced from Figure 6c. A storm water runoff event in August damaged the weir, and it was repaired September 5, 2024. Several storm events appear in the hydrograph during late July. Other spikes in flow are related to bypass flows for repairs at Nichols Dam.

Santa Fe River flows from below Nichols, around Two-Mile Pond, and downstream of Two-Mile Pond confluence show a base flow of 0.1 cfs during the First Quarter of 2024, sustained flows above 3 cfs during the Second Quarter of 2024, and flows varying between <0.5 and above 6 cfs during the third quarter (Fig. 6a, b, and c). Santa Fe River water temperature increased from winter (3 °C) to summer (18 °C), and then decreased during the third quarter about 15 °C. Low flows at Santa Fe River next to Two-Mile show larger daily fluctuations in water temperature (Fig. 6b) due to the shallow concrete lined channel.

There are two monitoring stations for the Two-Mile Pond system: 1) Restoration Channel below Old Stone Dam, and 2) Two-Mile Pond return (Fig. 5). The Restoration Channel below Old Stone Dam monitors seepage from the base of Old Stone Dam and flows entering the Two-Mile Pond system from above Old Stone Dam is plotted with Two-Mile Pond return on Figure 7a.

The Two-Mile return 6-in. Parshall flume monitors all streamflow exiting the Two-Mile Pond Complex (Fig. 7b). JSAI has been monitoring this flume for the past few years. There have been issues with maintaining the flume, such as suspended sediment and organic debris clogging the ports for the stilling well and flume entrance. Returns from Two-Mile Pond Complex increase to about 1 cfs during spring pulse, and remained between 0.15 and 0.40 cfs during the third quarter. The occasional spikes in flow are believed to be a result of debris clogging the flume and then dislodging.

Streamflow measured below Old Stone Dam appears to be less than the Two-Mile return (Fig. 7a); however, this could be within the range of measurement error or a component of underflow in the beaver pond structure that is not measured. Water temperature below Old Stone Dam is relatively constant and lower than Santa Fe River, indicating groundwater issuing from the base of Old Stone Dam. During the Third Quarter of 2024, streamflow through the Two-Mile Pond system averaged about 0.3 cfs (Fig. 7a and b). Daily fluctuations in flow and temperature at Two-Mile Pond return may resemble effects from evapotranspiration of the Two-Mile Pond system.

It is important to note that flow in the Santa Fe River maybe zero or negligible between Nichols Dam and Two Mile Pond (Fig. 6), however, due to groundwater seeps below Old Stone Dam, the Restoration Channel maintains constant flow (Fig. 7).

Diversions from Acequia Cerro Gordo are shown on Figure 7c. These diversions need to be considered when estimating water budget for the Santa Fe River from below Nichols to below Two-Mile Pond confluence. Diversion rates appear to average 0.3 cfs for scheduled water delivery days.

3.0 RIPARIAN MONITORING

The monitoring period is January to December 2024. Field investigations are performed monthly during the growing season between March and November. This Third Quarter report includes monthly field investigations from March through October 2024.

3.1 Field Investigations To Date

The New Mexico Rapid Assessment Method (NMRAM) Montane Riverine Wetlands data sheets for assessment of Two-Mile Pond on March 7, 2024; April 9, 2024; May 15, 2024; and June 11, 2024; July 16, 2024; August 13, 2024; September 11, 2024; October 9, 2024; can be referenced from Appendix D, including the stressor checklist. Field photographs are presented in Appendix E.

Category scores are graded on a scale from 1 to 4 (higher numbers are more desirable indicating better health and riparian condition). Table 4 is a summary of the scoring and ranking method. Each transect is graded independently and the resulting grades are multiplied against a weighted ratio and combined to give each transect a wetland condition score.

rank	score	description
А	≥3.25 - 4.0	excellent condition
В	≥2.5 - <3.25	good condition
С	≥1.75 - <2.5	fair condition
D	1.0 - <1.75	poor condition

 Table 4. NMRAM scoring and ranking description

NMRAM - New Mexico Rapid Assessment Method

3.1.1 Landscape Context

Landscape maps (Figs. 3 and 4, Appendix A) and field observations were used to evaluate the landscape context metrics, such as surrounding land use and riparian connectivity. A summary of the landscape context metric scoring is presented as Table 5. Landscape context remains the same throughout the investigations because it is performed remotely and ahead of all investigations. For the year of 2024, it was determined that the landscape context has a score of 3.25, as can be seen in Table 5 below.

landscape context metric	average score 2024
buffer integrity index	3.00
riparian corridor connectivity	4.00
relative wetland size	4.00
surrounding land use	2.00
total	3.25

Table 5. Average scores for landscape context metrics

3.1.2 Biotic Metrics

Biotic metric scores were calculated using the Montane Riverine Wetlands Field Guide method of ranking a riparian area. Each category has a set of biotic measurements and observations that are recorded in the field and then combined to result in a final ranking for the riparian area. Table 6 shows the average of all six transects for the total biotic component of Two-Mile Reservoir. Results from all transects can be found in Appendix D.

biotic metrics	March 7 average scores	April 9 average scores	May 15 average scores	June 11 average scores
relative native plant community composition	2.83	3.17	3.00	3.33
vegetation horizontal patch structure	2.83	3.00	3.00	3.00
vegetation vertical structure	2.83	2.83	2.83	2.67
native riparian tree regeneration	3.00	3.50	3.17	2.83
invasive exotic plant species cover	2.83	3.00	3.17	3.00
total	2.87	3.10	3.03	3.33

 Table 6. Average scores for biotic metrics

biotic metrics	July 16 average scores	August 13 average scores	September 11 average scores
relative native plant community composition	3.33	3.33	3.33
vegetation horizontal patch structure	3.33	3.17	3.17
vegetation vertical structure	3.00	3.00	3.00
native riparian tree regeneration	3.17	3.17	2.33
invasive exotic plant species cover	2.67	3.00	3.00
total	3.10	3.13	2.97

Each monthly investigation biotic factors including flora and fauna are documented. The NMRAM focuses on the flora aspect of the riparian environment and can be seen in the rankings of each transect. The fauna of the environment can be referenced from Table 8. This table lists all fauna that has been present during the monthly investigations. Merlin Bird ID (a trusted bird identification app) is used in areas where the birds can be heard but are not seen. Traces of animals including tracks, droppings, and other sounds are also documented when they are observed in the field. Photographs of some of these species can be found in Appendix E.

The City of Santa Fe, New Mexico Integrated Pest Management conducted their own Two-Mile Pond mosquito survey on June 18, 2024. The results of their field collection can be found in Table 7. Sixty Mosquitos were caught and among them 18 (Culex tarsalis) are common vectors for the West Nile Virus in New Mexico. The entire report can be found in Appendix F.

species	count	percent of total sample
Aedes increpitus	1	1.52%
Aedes trivittatus	11	16.67%
Anopheles freeborni	6	9.09%
Culex tarsalis	18	27.27%
Culiseta incidens	4	6.06%
Culiseta increpitus	1	1.52%
Culiseta inornata	25	37.88%

Table 7. Summary of mosquito survey

date	observed species
2/7/2024	Red Wing Black Bird
3/7/2024	Small Gnats
	Goldfish
	Deer droppings/tracks
4/9/2024	Tadpoles
1, 5, 2021	Bees
	Mallard Ducks
	Pinyon Jay
_ (_ (Garter Snakes (6)
5/15/2024	Spotted Towhee
	Black Chinned Hummingbird
	Frog Croaks
	Whiptail Lizards
	American Robin
	Pinacate Beetles (3)
	Swallowtail Butterfly
	Boxelder bugs
	Gerridae
	Whiptail lizards
	Mule deer
6/11/2024	Black- Headed Grosbeak
	Spotted Towhee
	American Robin
	House Finch
	Pine Siskin
	Yellow Breasted Chat
	Warbling Vireo
	Lesser Gold Finch
	Western Wood Pewee
	Box Elder Bugs
	Gerridae
	Melolonthinae

Table 8. Summary of fauna observed in Two-Mile Pond riparian area



7/16/2024	Whiptail Lizards			
	Garter Snakes (4)			
	Spotted Towhee			
	Redwing Blackbird			
	Song Sparrow			
	Broadtail Hummingbird			
	Yellow Breasted Chat			
	Robin			
	Warblin Vireo			
	Red Breasted Nuthatch			
	Violet Green Swallow			
	Dragon Fly			
	Frog Croaks			
	Ants			
	Butterflies/Moths			
8/13/2024	Racoon Tracks			
	Lesser Goldfinch			
	Mosquitos			
	Bees			
	Coopers Hawk			
	Fence Post Lizard			
	Pine Siskin			
	American Crow			
9/11/2024	Dragon Fly			
	Wasps			
	White Breasted Nuthatch			
	Northern Flicker			
	Broadtailed Hummingbird			
	Black Capped Chickadee			
	Lesser Goldfinch			
	Racoon Tracks			
	Gerridae			
	Deer Track			
	Bluetail Lizard			
	Narrowtail Hummingbird			







3.1.3 Abiotic Metrics

Scores were calculated using the Montane Riverine Wetlands Field Guide method of ranking a riparian area. Each category has a set of abiotic measurements and observations that are recorded in the field and then combined to result in a final ranking for the riparian area. There are four abiotic metrics that reflect the physical status of the riparian area:

- 1. Physical Patch Complexity, which is a measure of the physical structural complexity of a site that contributes to ecological richness.
- 2. Channel Equilibrium, which is the assessment of the degree of channel aggradation or degradation relative to reference equilibrium conditions.
- 3. Steam Bank Stability and Cover, which is a measure of stream bank soil/substrate stability and erosion potential that reflect overall stream bank stability.
- 4. Soil Surface Condition reflects anthropogenic soil disturbance impacts within the sampling area

Due to the circumstances, Two-Mile Pond "Floodplain Hydrologic Connectivity" was not accounted for since its results could be misleading and its importance is not relevant to this particular investigation. Table 9 shows the average of all six transects for the total abiotic component of Two-Mile Reservoir. Results from all transects can be found in Appendix D.

abiotic categories	March 7 average scores	April 9 average scores	May 15 average scores	June 11 average scores	
physical patch diversity	2.50	2.33	2.33	2.33	
channel equilibrium	4.00	4.00	4.00	3.83	
stream bank stability and cover	4.00	4.00	4.00	4.00	
soil surface condition	3.67	3.50	3.50	3.33	
total	3.54	3.46	3.46	3.38	

Table 9. Average scores for abiotic metrics

abiotic categories	July 16 average scores	August 13 average scores	September 11 average scores	
physical patch diversity	2.33	2.67	2.67	
channel equilibrium	3.83	3.67	3.67	
stream bank stability and cover	4.00	4.00	4.00	
soil surface condition	3.67	3.83	3.83	
total	3.46	3.54	3.54	

Two-Mile Pond is preparing for fall as the flora give their final blooms and the leaves begin turning yellow. The canopy and density of the high forest thrived through the summer. The channels and waterways themselves are surrounded by thick walls of willows and cattails that keep the banks from eroding. The streams themselves appear to be in a state of equilibrium and there are no signs of active degradation or aggradation that were noticeable at this time. The anthropogenic disturbance also appears low considering the popularity of the area's trails. Overall, the abiotic components of the riparian area appear to rank on the higher end of the scoring throughout Two-Mile Pond Complex.

Field water-quality data were measured from March to September 2024, and a summary of the field water-quality data can be referenced from Table 10. Monitoring points included Santa Fe River adjacent to Two-Mile Pond system, seeps at the base of Old Stone Dam, Transect 3, Beaver Dam at the Restoration Channel below Old Stone Dam, and Transect 6. It is important to notice the Santa Fe River is not directly connected to the Two-Mile Pond system. The specific conductance and turbidity of the water increases as the water moves through the riparian system. This is likely caused by evapo-concentration. Decreasing dissolved oxygen through the Two-Mile Pond system is likely indicative of increasing organic matter. The Santa Fe River has lower specific conductance than water below Old Stone Dam, further indicating the source of water below Old Stone Dam is groundwater.

field pH results along Two-Mile Pond								
	Santa Fe River	Old Stone Dam	Transect 3	Beaver Dam	Transect 6			
4/9/2024	6.75	6.96	7.23	6.86	6.89			
5/15/2024	6.69	6.48	6.60	6.50	6.67			
6/11/2024	7.60	7.02	7.32	6.72	6.71			
7/16/2024	6.84	6.08	6.85	6.71	7.1			
8/13/2024	7.72	7.08	7.12	6.91	6.91			
9/11/2024	7.57	6.76	7.33	6.9	6.85			
	specific conductance results along Two-Mile Pond (µS/cm)							
	Santa Fe River	Old Stone Dam	Transect 3	Beaver Dam	Transect 6			
4/9/2024	76.9	160	170	244	246			
5/15/2024	63.0	187	249	350	285			
6/11/2024	60.7	181	193	371	358			
7/16/2024	49	152	179	363	306			
8/13/2024	79	186	216.3	308	308			
9/11/2024	65	202	212	245	439			
	temperat	ure results along	Fwo-Mile Pon	d (°C)				
	Santa Fe River	Old Stone Dam	Transect 3	Beaver Dam	Transect 6			
4/9/2024	7.7	7.9	6.2	11.5	4.5			
5/15/2024	14.0	9.3	9.1	13.5	10.2			
6/11/2024	16.8	8.4	10.7	14.4	14.2			
7/16/2024	17.2	10	12.3	16.2	16.4			
8/13/2024			12.3	10.2	1011			
	17.4	11.2	13.9	16.9	16.9			
9/11/2024	17.4 14.5	11.2 11.1						
	14.5		13.9 11.3	16.9 17.1	16.9			
	14.5	11.1	13.9 11.3	16.9 17.1	16.9			
	14.5 dissolved ox	11.1 ygen results along	13.9 11.3 Two-Mile Por	16.9 17.1 nd (mg/L)	16.9 12.5			
9/11/2024	14.5 dissolved ox Santa Fe River	11.1 ygen results along Old Stone Dam	13.9 11.3 Two-Mile Por Transect 3	16.9 17.1 nd (mg/L) Beaver Dam	16.9 12.5 Transect 6			
9/11/2024	14.5dissolved oxSanta Fe River7.877.62	11.1 ygen results along Old Stone Dam 3.7	13.9 11.3 Two-Mile Por Transect 3 7.5 4.86	16.9 17.1 nd (mg/L) Beaver Dam 4.15 3.48	16.9 12.5 Transect 6 2.6			
9/11/2024	14.5dissolved oxSanta Fe River7.877.62	11.1 ygen results along Old Stone Dam 3.7 2.42	13.9 11.3 Two-Mile Por Transect 3 7.5 4.86	16.9 17.1 nd (mg/L) Beaver Dam 4.15 3.48	16.9 12.5 Transect 6 2.6			
9/11/2024	14.5dissolved oxSanta Fe River7.877.62turbidity	11.1 ygen results along Old Stone Dam 3.7 2.42 y results along Two	13.9 11.3 Two-Mile Por Transect 3 7.5 4.86 o-Mile Pond (1	16.9 17.1 d (mg/L) Beaver Dam 4.15 3.48 NTU)	16.9 12.5 Transect 6 2.6 1.99			
9/11/2024 5/15/2024 9/11/2024 6/11/2024	14.5dissolved oxSanta Fe River7.877.62turbiditySanta Fe River	11.1 ygen results along Old Stone Dam 3.7 2.42 y results along Two Old Stone Dam	13.9 11.3 Two-Mile Por Transect 3 7.5 4.86 o-Mile Pond (1 Transect 3 7.83	16.9 17.1 d (mg/L) Beaver Dam 4.15 3.48 NTU) Beaver Dam	16.9 12.5 Transect 6 2.6 1.99 Transect 6 16.20			
9/11/2024 5/15/2024 9/11/2024	14.5dissolved oxSanta Fe River7.877.62turbiditySanta Fe River6.10	11.1 ygen results along Old Stone Dam 3.7 2.42 y results along Two Old Stone Dam 4.44	13.9 11.3 Two-Mile Por Transect 3 7.5 4.86 o-Mile Pond (1 Transect 3	16.9 17.1 d (mg/L) Beaver Dam 4.15 3.48 NTU) Beaver Dam 8.45	16.9 12.5 Transect 6 2.6 1.99 Transect 6			

 $\mu S/cm$ - microsiemens per centimeter

mg/L - milligrams per liter

NTU - nephelometric turbidity units

3.1.4 Summary Riparian Metrics Ranking

The landscape context, biotic, and abiotic metrics for each monthly investigation are ranked and scored using a modified NMRAM. The weighted average for each metric is calculated, tabulated, and ranked using the scoring method summarized in Table 2. The Two-Mile Pond Complex riparian area rankings from March through November are summarized in Table 11. All individual transect grades can be found in Appendix D along with a graph showing each transect's progress over time. Table 11 shows the averages of all six transects for each given month. This way the overall health of the pond can be seen over time without extensive details on individual transects. Each investigation is based on monthly field observations, with the exception of landscape context. Landscape context remains the same throughout the investigations because it is performed remotely and ahead of all investigations. For more detail as to why a particular month did better or worse, the individual transect rankings for each month can be found in Appendix D. Common changes can include things like exotic species becoming more proliferate, land coverage and new growth struggling/striving, new stressors introduced into the environment, or expansion/destruction of existing flora. Table 11 shows the results of the Second Quarter report and the rank for each month can be seen at the bottom.

3.1.5 Soil Moisture

Soil moisture was measured every 15 ft from the southeast end of a transect to the northwest end. Moisture was measured using a conductance-style moisture meter, which had a probe depth of 6 in. The moisture meter gives results from a scale of 1 to 10, which is a relative indicator of moisture based on conductivity of water in the soil. This device helps get a general idea of where water might be concentrated in the ground and over time, and ability to see how this parameter changes. The northwest side of these transects are not always accessible due to thick willows but readings are made until water is reached or until willows become too thick to enter. Willow thickets indicate high moisture areas. Field notes from the soil monitoring can be found in Appendix D.

The soil moisture data for monthly visits from March through September 2024 were contoured. Images of soil moisture distribution can be referenced from Appendix G. Interpretations were made between data points using imagery.

Table 11. Summary of Two-Mile Pond Complex riparian area metrics ranking

NMRAM	weight			month	ly investigat	ions		
metric description		3/7/2024	4/9/2024	5/15/2024	6/11/2024	7/16/2024	8/13/2024	9/11/2024
landscape context								
buffer integrity index	0.25	3.00	3.00	3.00	3.00	3.00	3.00	3.00
riparian corridor connectivity	0.25	4.00	4.00	4.00	4.00	4.00	4.00	4.00
relative riparian size	0.25	4.00	4.00	4.00	4.00	4.00	4.00	4.00
surrounding land use	0.25	2.00	2.00	2.00	2.00	2.00	2.00	2.00
		ł	piotic					
relative native plant community	0.20	2.83	3.17	3.00	3.33	3.33	3.33	3.33
vegetation horizontal patch structure	0.20	2.83	3.00	3.00	3.00	3.33	3.17	3.17
vegetation vertical structure	0.20	2.83	2.83	2.83	2.67	3.00	3.00	3.00
native riparian tree regeneration	0.20	3.00	3.50	3.17	2.83	3.17	3.17	2.33
invasive exotic plant species cover	0.20	2.83	3.00	3.17	3.00	2.67	3.00	3.00
		a	biotic					
physical patch diversity	0.25	2.50	2.33	2.33	2.33	2.33	2.67	2.67
channel equilibrium	0.25	4.00	4.00	4.00	3.83	3.83	3.67	3.67
stream bank stability and cover	0.25	4.00	4.00	4.00	4.00	4.00	4.00	4.00
soil surface condition	0.25	3.67	3.50	3.50	3.33	3.67	3.83	3.83
major attribute								
landscape context	0.30	3.25	3.25	3.25	3.25	3.25	3.25	3.25
biotic	0.35	2.87	3.10	3.03	2.97	3.10	3.13	2.97
abiotic	0.35	3.54	3.46	3.46	3.38	3.46	3.54	3.54
RIPARIAN CONDITION SCORE	Σ	3.22	3.27	3.25	3.19	3.27	3.31	3.25
RIPARIAN RANK		В	А	А	В	А	А	А

4.0 SUMMARY OF FINDINGS

The Two-Mile Pond Complex riparian area started after the decommissioning of Two-Mile Dam and Reservoir in 1992, and has been about the same size for over the last 20 years. Large tree canopies above and below Old Stone Dam became evident around 2005. See historic imagery in Appendix A.

During the Third Quarter field investigation, Two-Mile was hit with monsoons and mostly wet soil for July and August but then had a very dry September. The wet soil still supported the blooming of most of the flora but some trees had begun preparing for winter. (see Appendix G).

Streamflow through Two-Mile Pond Complex during the Third Quarter originated from groundwater discharge at the base of Old Stone Dam. The outflow from Two-Mile Pond ranged from 0.16 to 0.40 cfs, and averaged 0.3 cfs. It is important to note that flow in the Santa Fe River maybe zero or negligible between Nichols Dam and Two Mile Pond (Fig. 6), however, due to groundwater seeps below Old Stone Dam, the Restoration Channel maintains constant flow (Fig. 7).

For the Third quarter, the Two-Mile Pond Complex riparian ranking is in (excellent condition). An excellent condition (A) riparian system has intact functions and processes, diverse vegetative communities with almost no exotic weeds, is relatively large compared to its historical size, and has natural buffers. These riparian systems are largely undisturbed and provide an excellent habitat for native flora and fauna.

- Modified Copernicus Sentinel Data, <u>https://www.sentinel-hub.com/</u> Modified Copernicus Sentinel data [2024]/Sentinel Hub
- Muldavin, E.H., Bader, B., Milford, E.R., McGraw, M., Lightfoot, D., Nicholson, B., and Larson, G., 2011, New Mexico Rapid Assessment Method: Montane Riverine Wetlands, Version 1.1. Final report to the New Mexico Environment Department, Surface Water Quality Bureau, Santa Fe, New Mexico, 90 pp. and appendices.
- Muldavin, E., Milford, E., Triepke, J., Gonzalez, C., Urbanovsky, A., McCartha, G., Kennedy, A., Chauvin, Y., Smith, J., Leonard, J., Elliot, L., Hanberry, P., Diamond, D., and Clark, A.E., 2022, New Mexico Riparian Habitat Map (NMRipMap): Version 2.0 Plus. New Mexico Natural Heritage, Museum of Southwestern Biology, University of New Mexico; USDA Forest Service, Southwest Region; Missouri Resource Assessment Partnership (MoRAP), University of Missouri, and USDA Forest Service, Geospatial Technology and Applications Center (GTAC), Salt Lake City, UT, Accessible at nhnm.unm.edu/riparian/nmripmap.
- City of Santa Fe, 2024, Two-Mile Pond Mosquito Survey: City of Santa Fe New Mexico Integrated Pest Management, p 1.

APPENDICES

Appendix A.

Historical Google Earth Images of Two-Mile Pond Complex

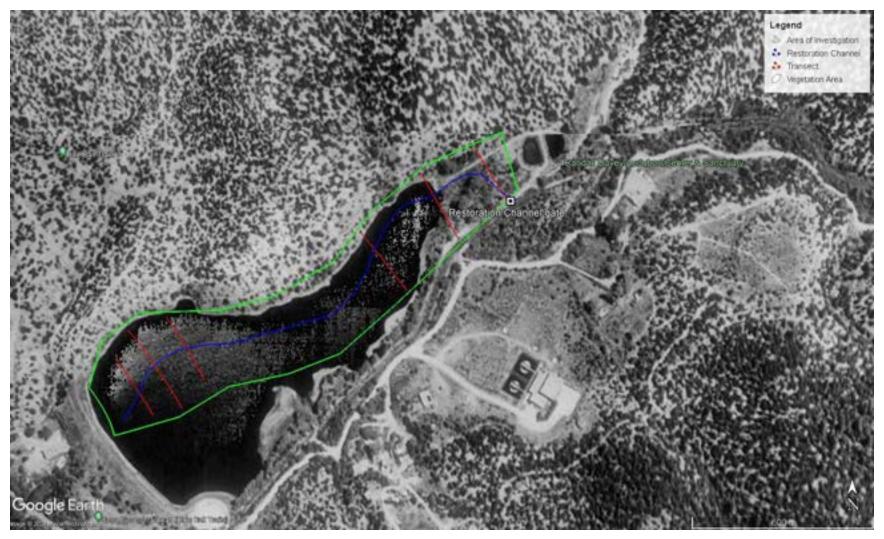


Figure A1. Historical image of Two-Mile Pond Complex dated May 25, 1991.

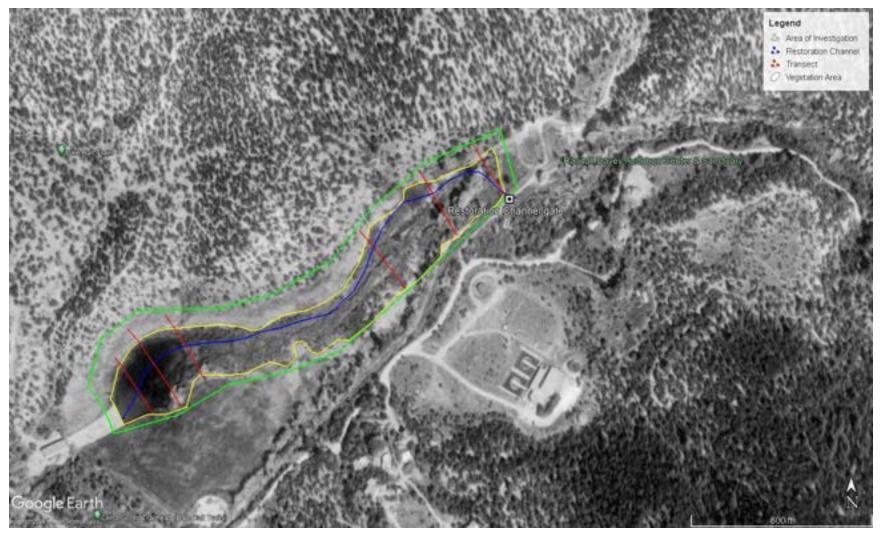


Figure A2. Historical image of Two-Mile Pond Complex dated August 10, 1996.

JSAI

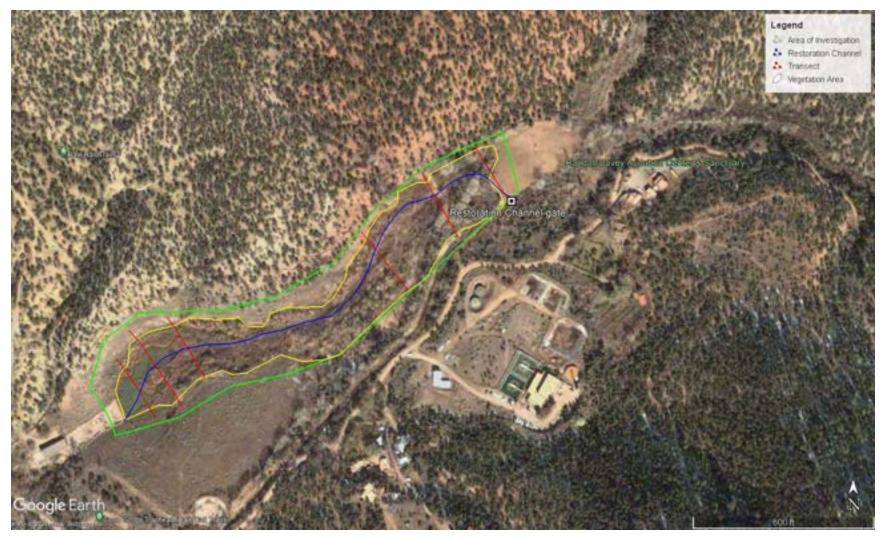


Figure A3. Historical image of Two-Mile Pond Complex dated December 6, 2002.

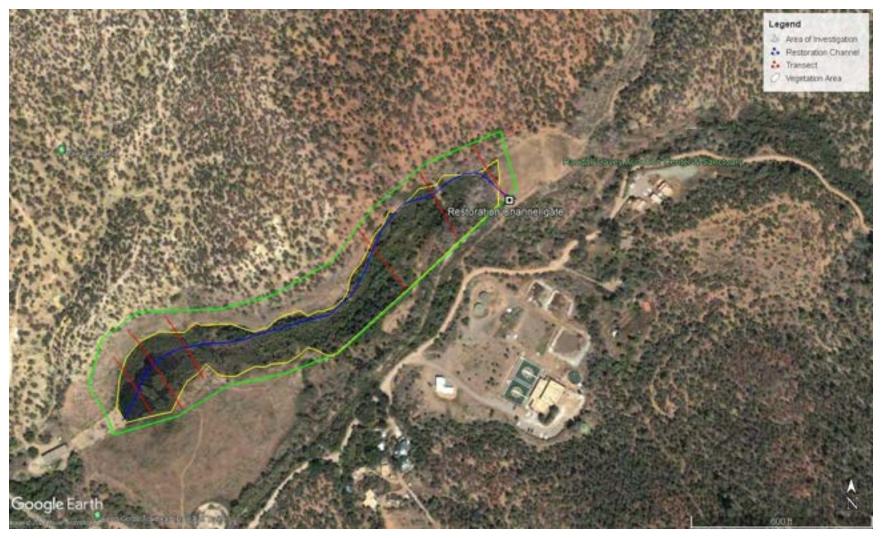


Figure A4. Historical image of Two-Mile Pond Complex dated May 10, 2004.



Figure A5. Historical image of Two-Mile Pond Complex dated April 26, 2005.



Figure A6. Historical image of Two-Mile Pond Complex dated May 8, 2009.

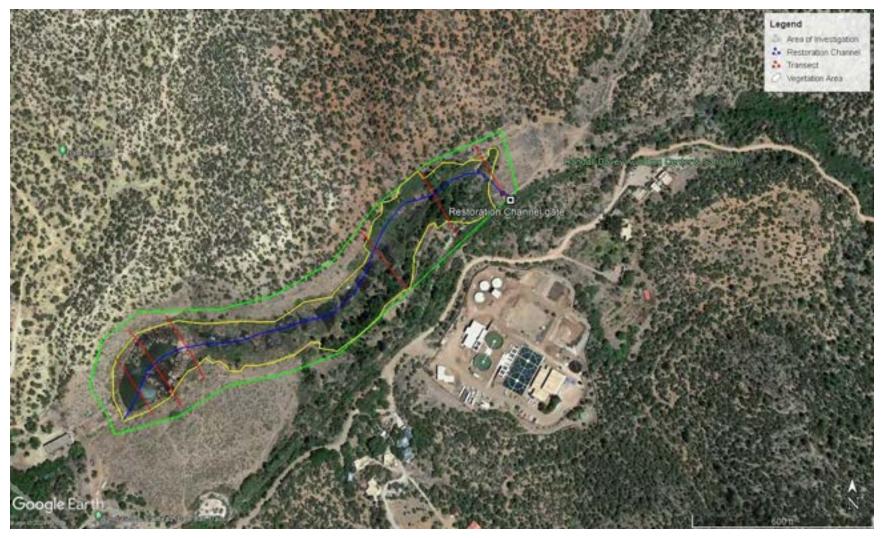


Figure A7. Historical image of Two-Mile Pond Complex dated June 16, 2011.

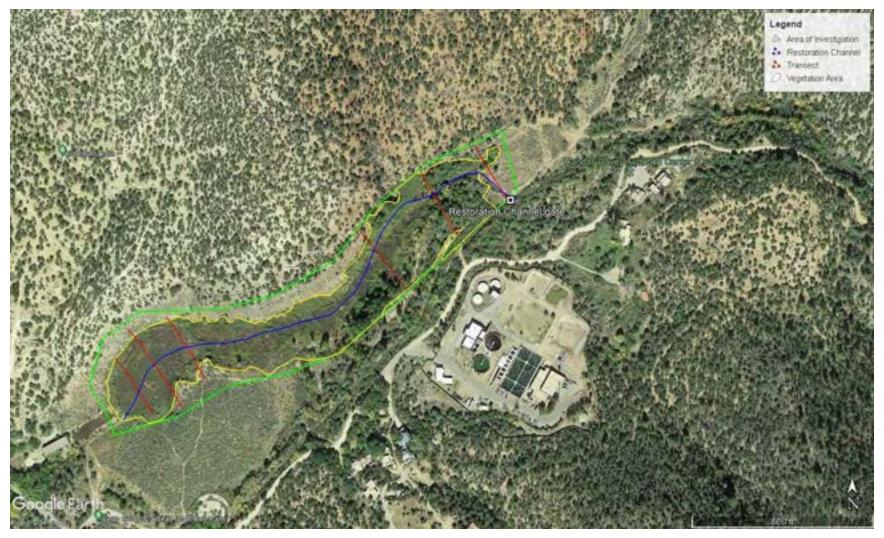


Figure A8. Historical image of Two-Mile Pond Complex dated October 2, 2013.

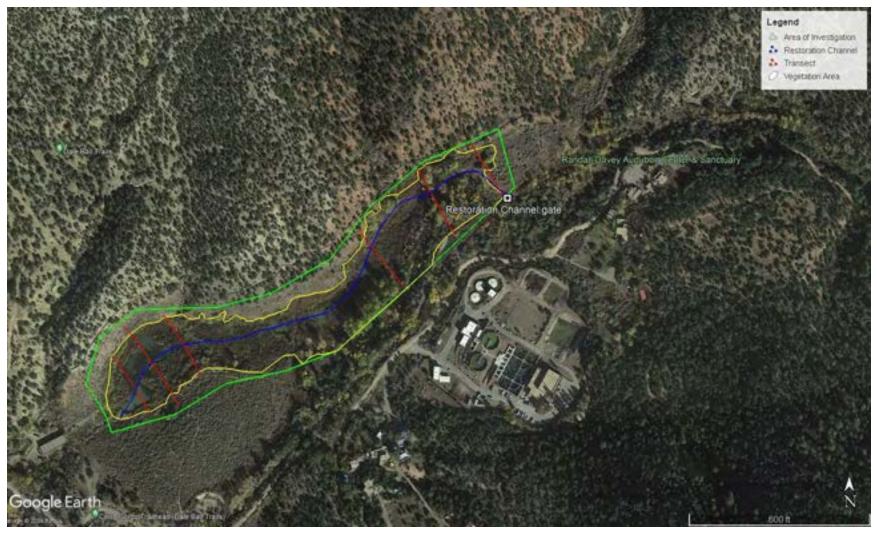


Figure A9. Historical image of Two-Mile Pond Complex dated November 1, 2015.

JSAI

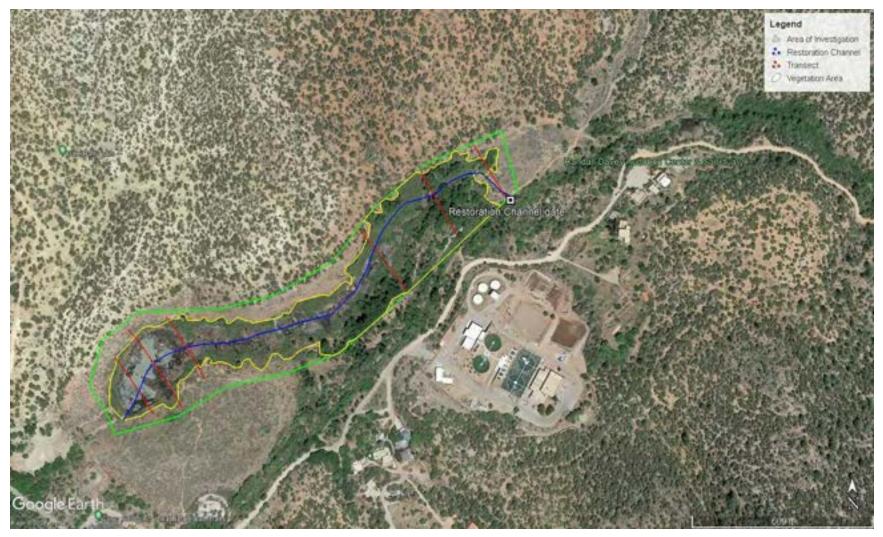


Figure A10. Historical image of Two-Mile Pond Complex dated June 10, 2017.

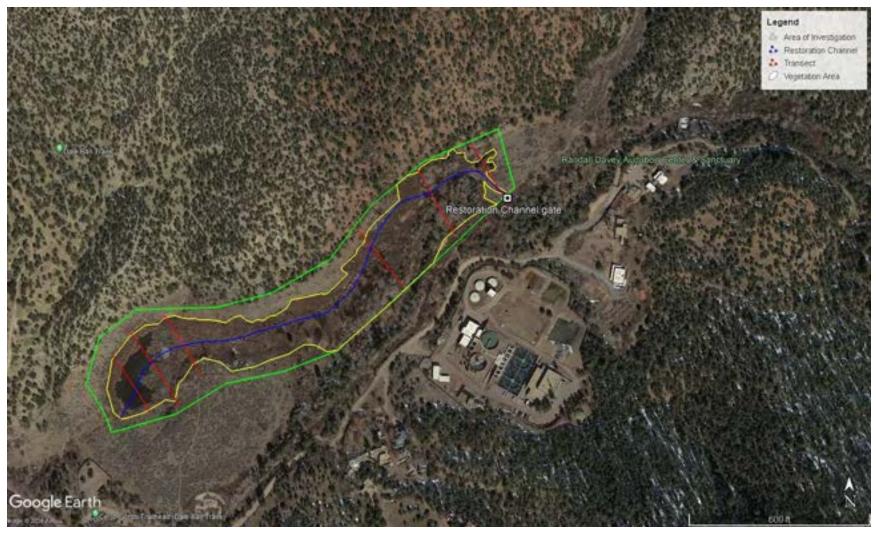


Figure A11. Historical image of Two-Mile Pond Complex dated March 2, 2021.

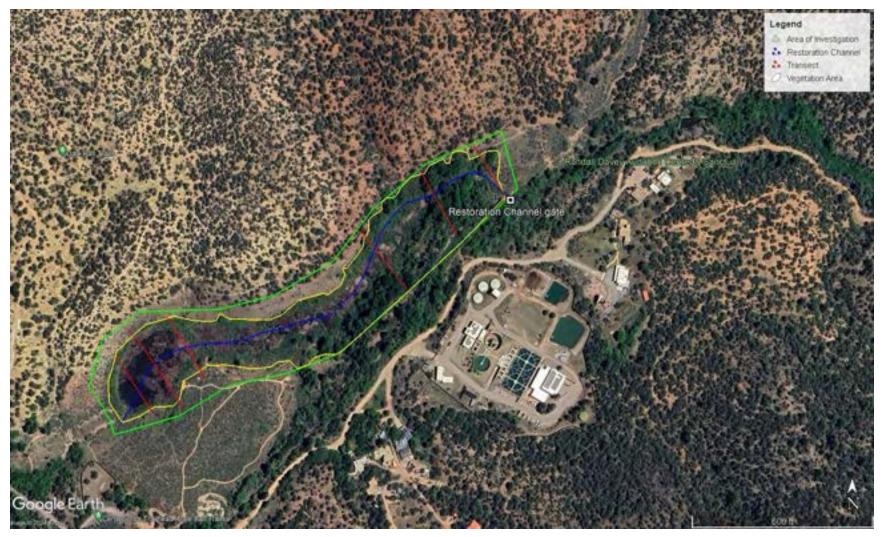
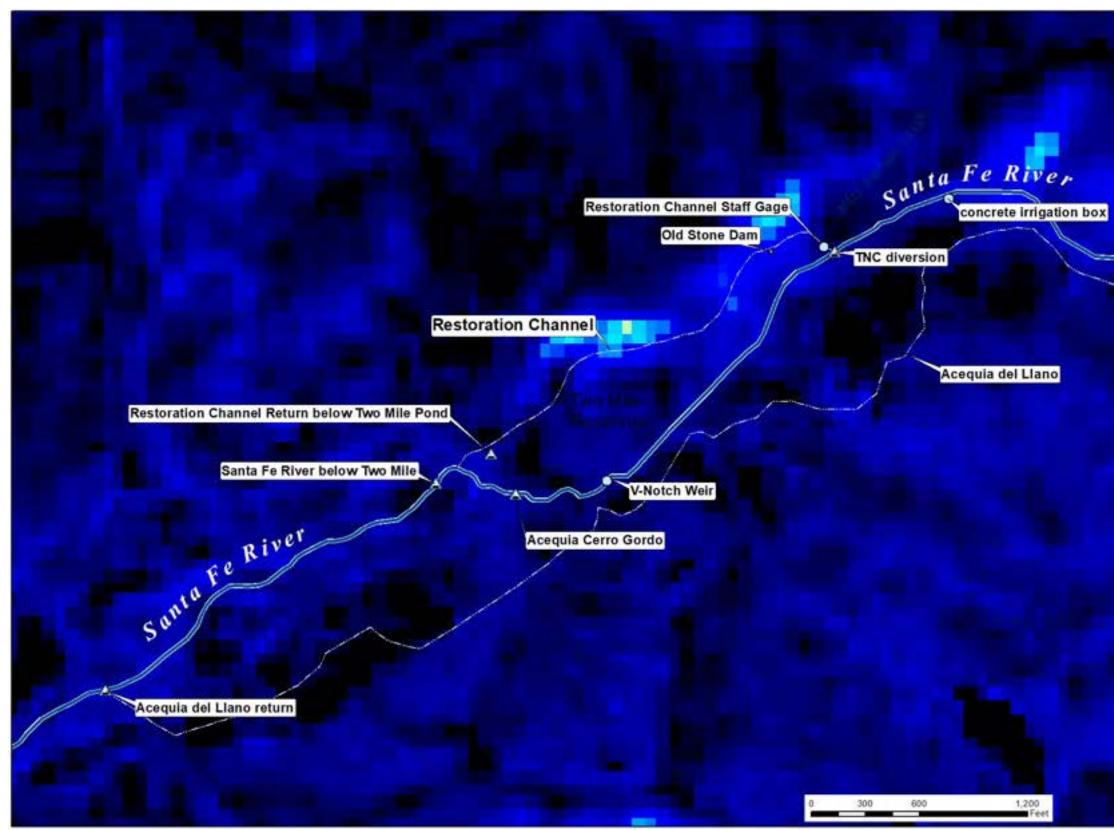


Figure A12. Historical image of Two-Mile Pond Complex dated July 6, 2023.

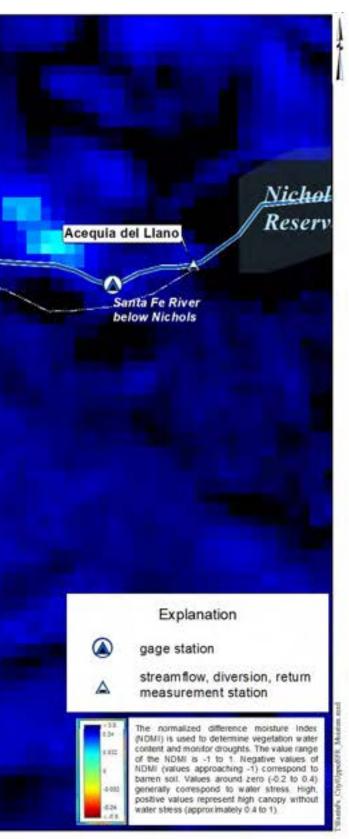
Appendix B.

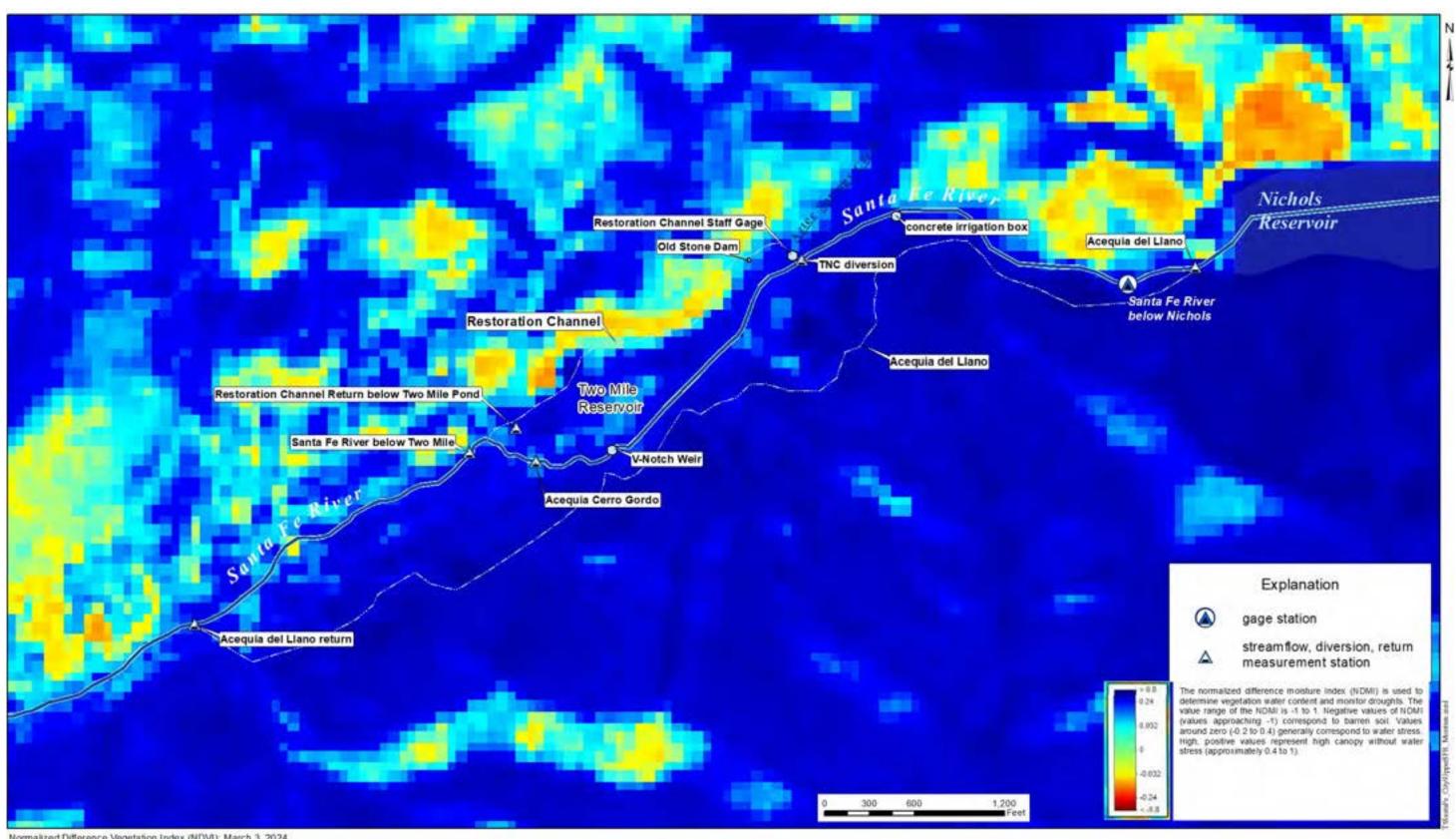
NDMI Images for Two-Mile Pond Complex



Normalized Difference Moisture Index (NDMI): Jan. 16, 2024

Figure B1. NDMI image of Two-Mile Pond Complex for January 16, 2024.

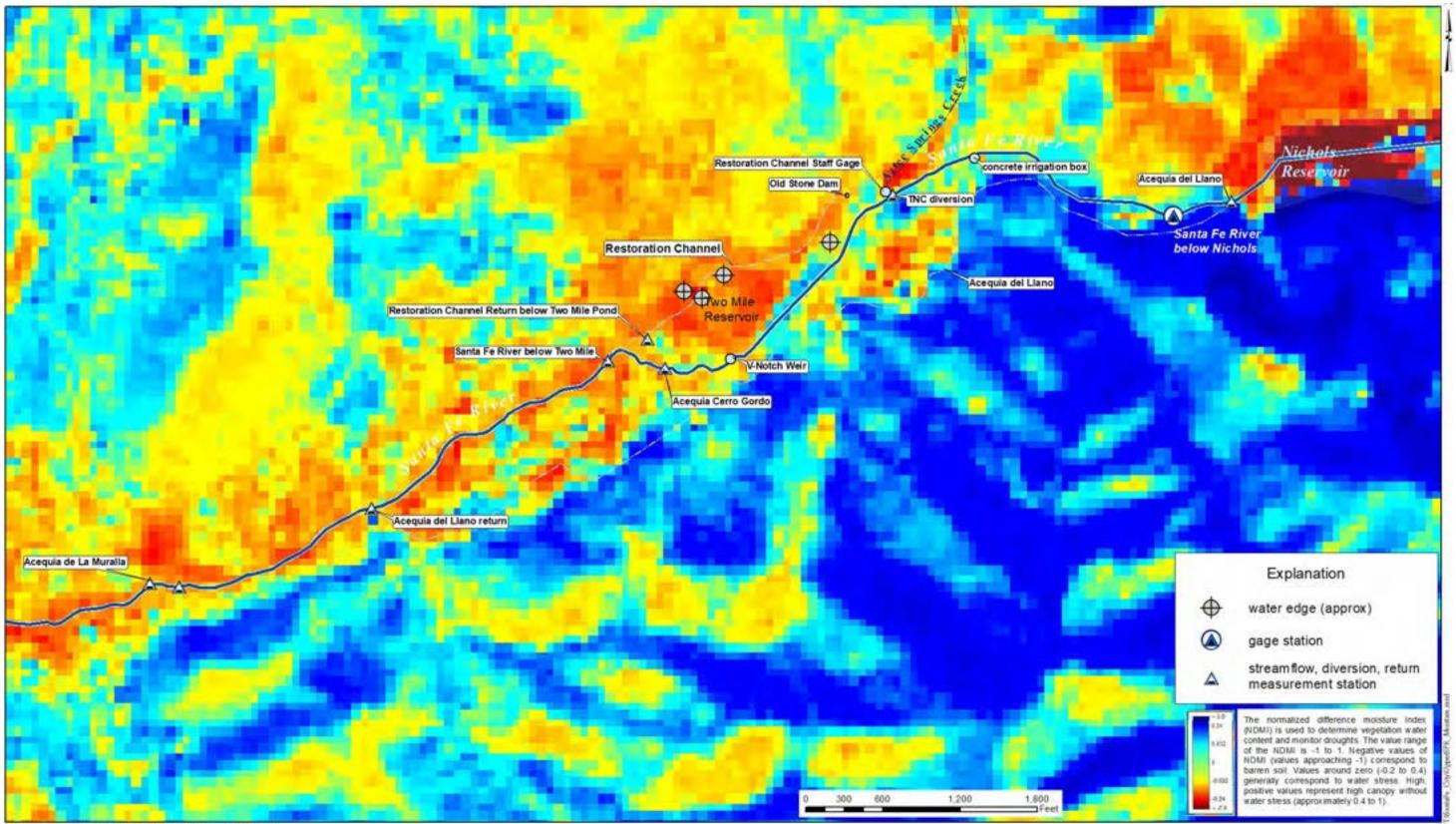




Normalized Difference Vegetation Index (NDVI): March 3, 2024

Figure B2. NDMI image of Two-Mile Pond Complex for February 5, 2024.



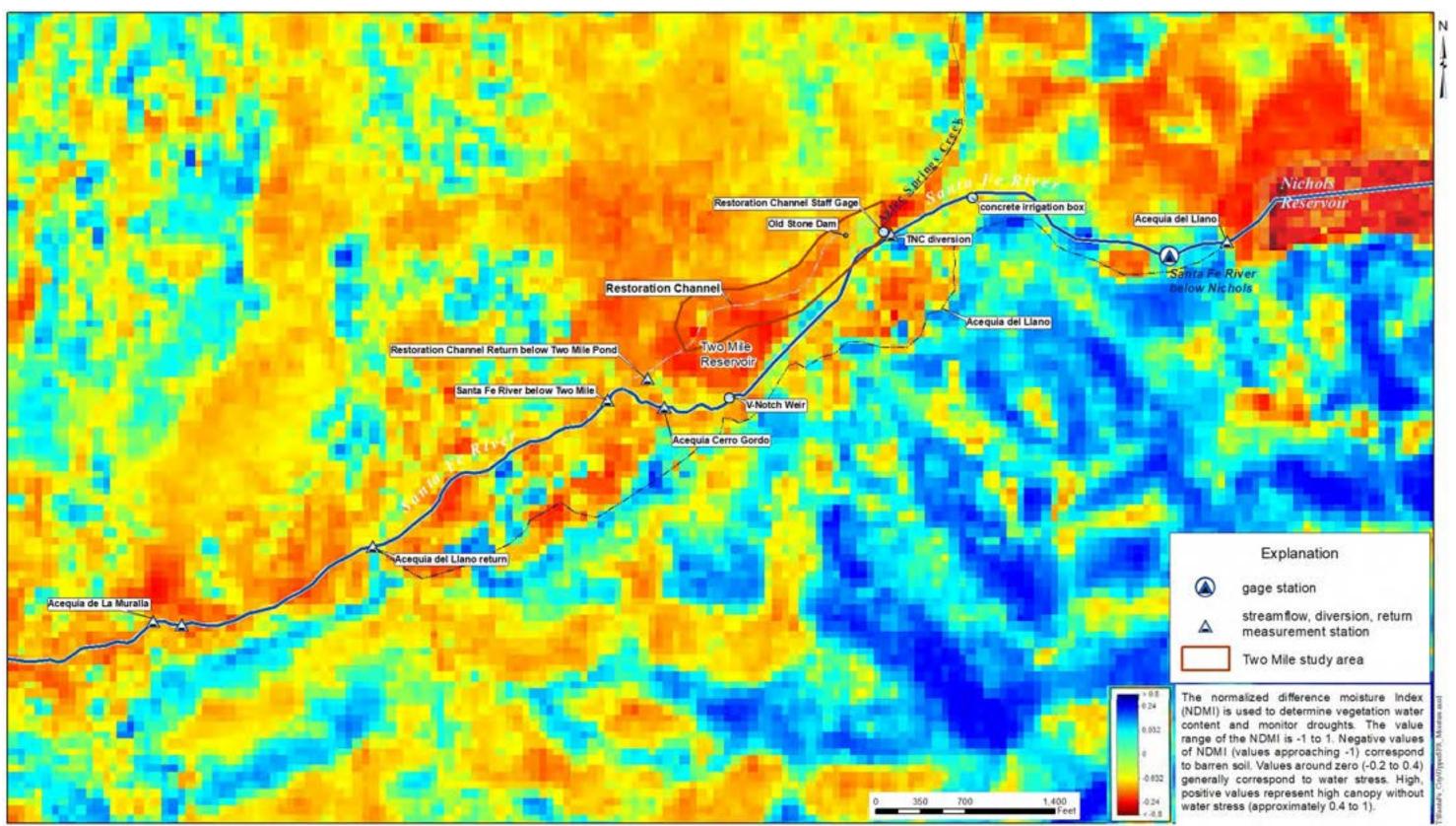


Normalized Difference Moisture Index (NDMI): March 3, 2024

Figure B3. NDMI image of Two-Mile Pond Complex for March 3, 2024.

Appendix B.

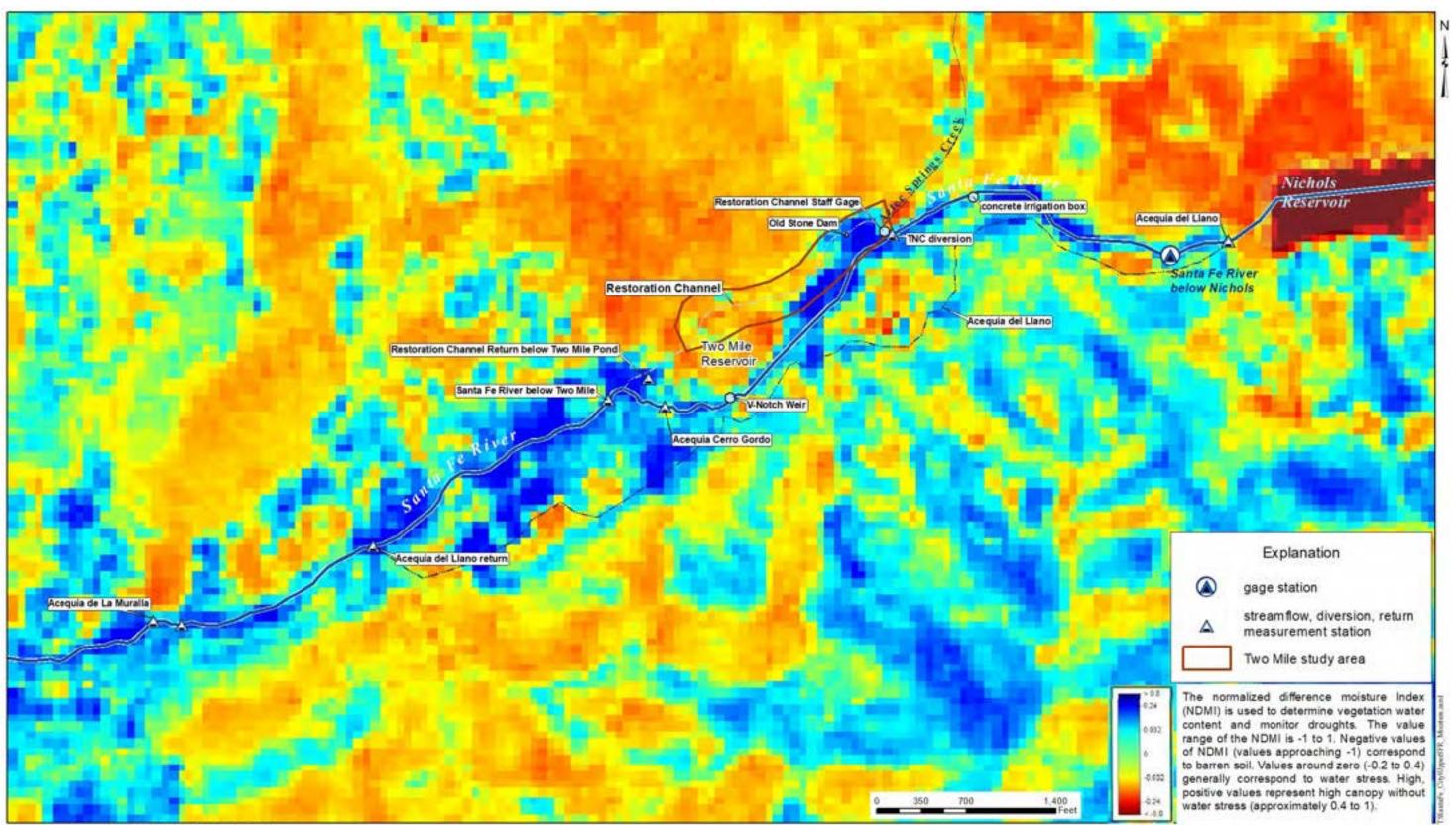
JOHN SHOMAKER & ASSOCIATES, INC. WATER-RESOURCE AND ENVIRONMENTAL CONSULTANTS



Normalized Difference Moisture Index (NDMI): April 10, 2024

Figure B4. NDMI image of Two-Mile Pond Complex for April 10, 2024.

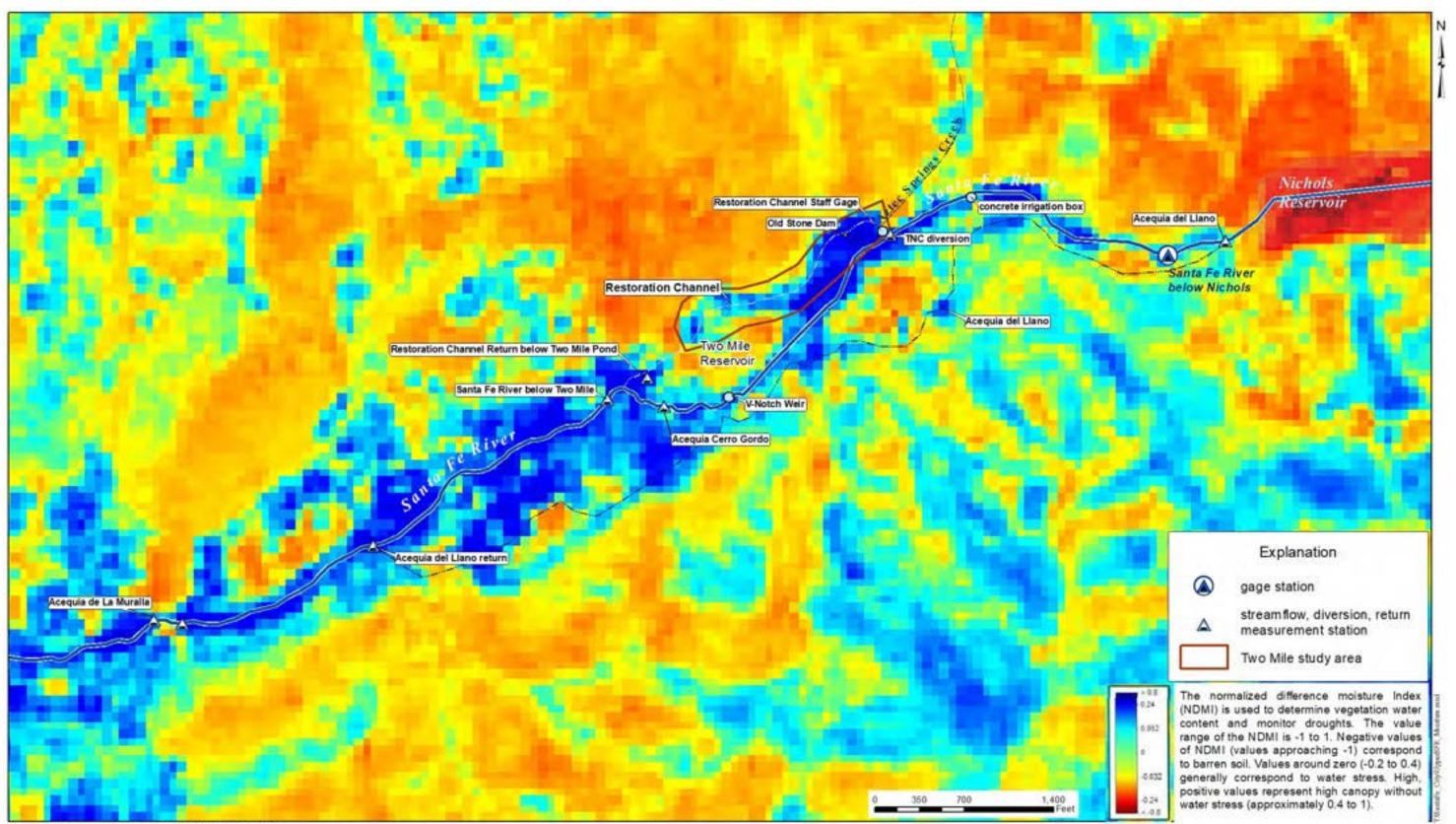
Appendix B.



Normalized Difference Moisture Index (NDMI): May 17, 2024

Figure B5. NDMI image of Two-Mile Pond Complex for May 17, 2024.

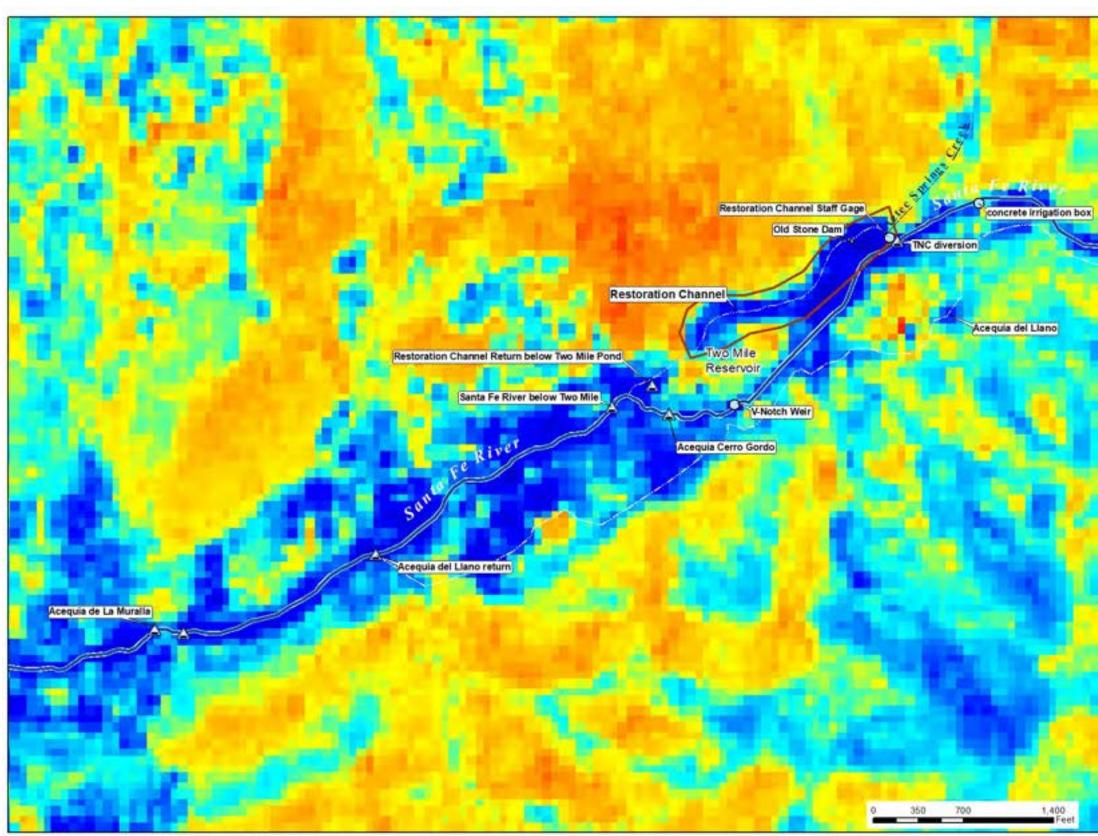
Appendix B.



Normalized Difference Moisture Index (NDMI) June 16, 2024

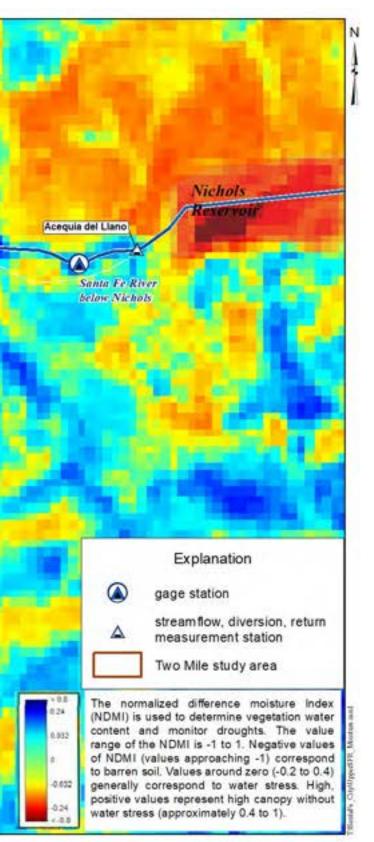
Figure B6. NDMI image of Two-Mile Pond Complex for June 16, 2024.

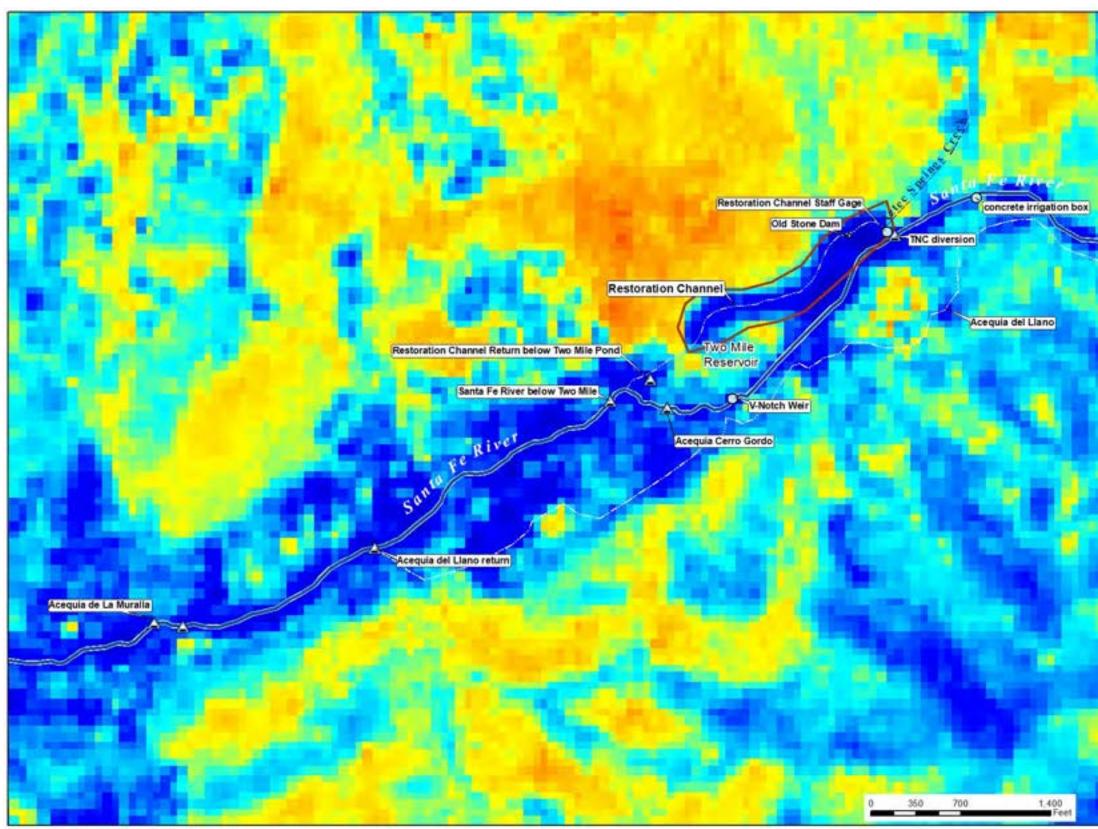
Appendix B.



Normalized Difference Moisture Index (NDMI): July 16, 2024

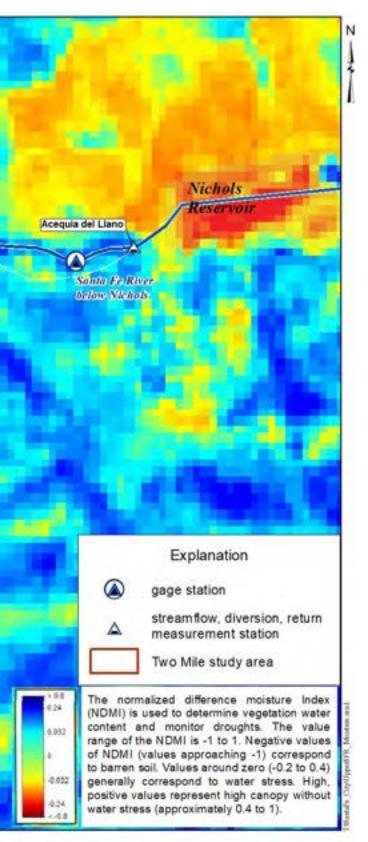
Figure B7. NDMI image of Two-Mile Pond Complex for July 16, 2024.

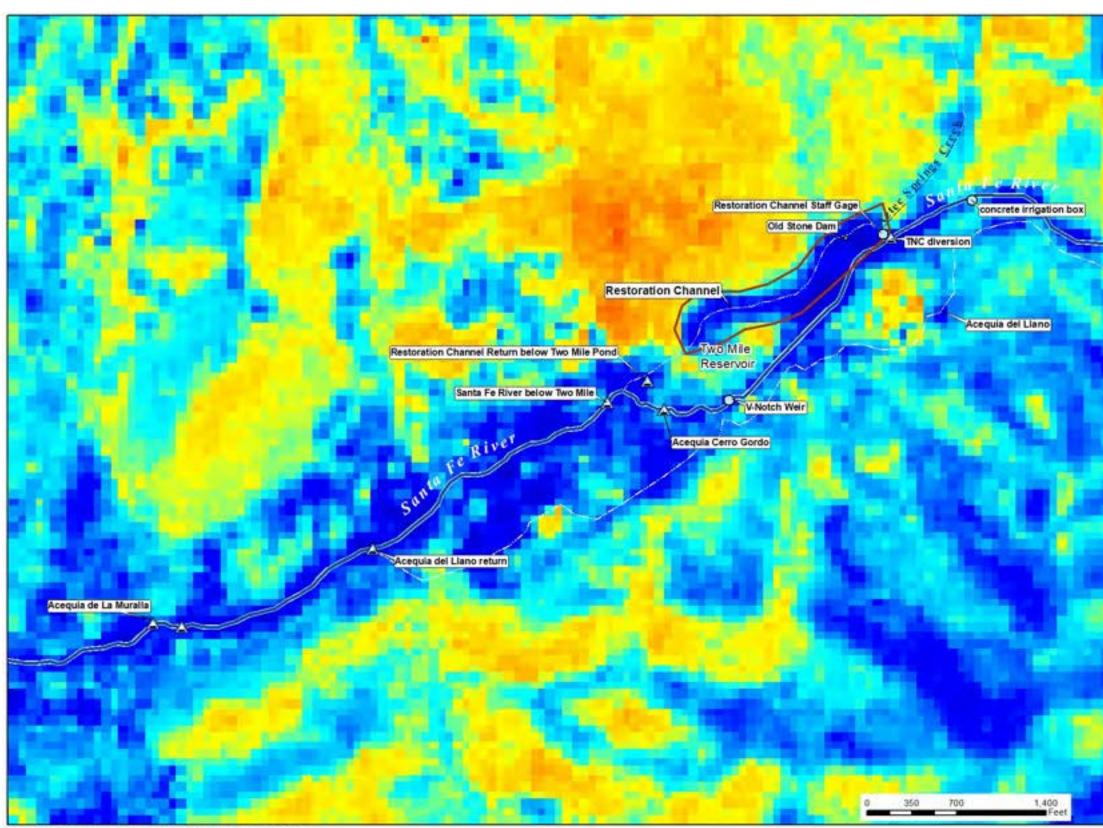




Normalized Difference Moisture Index (NDMI) August 13, 2024

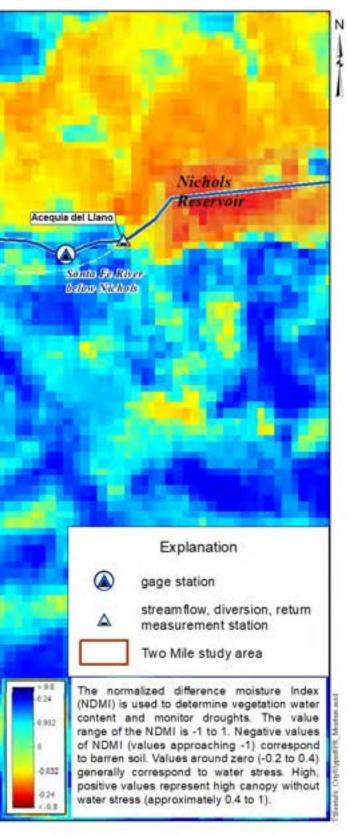
Figure B8. NDMI image of Two-Mile Pond Complex for August 13, 2024.





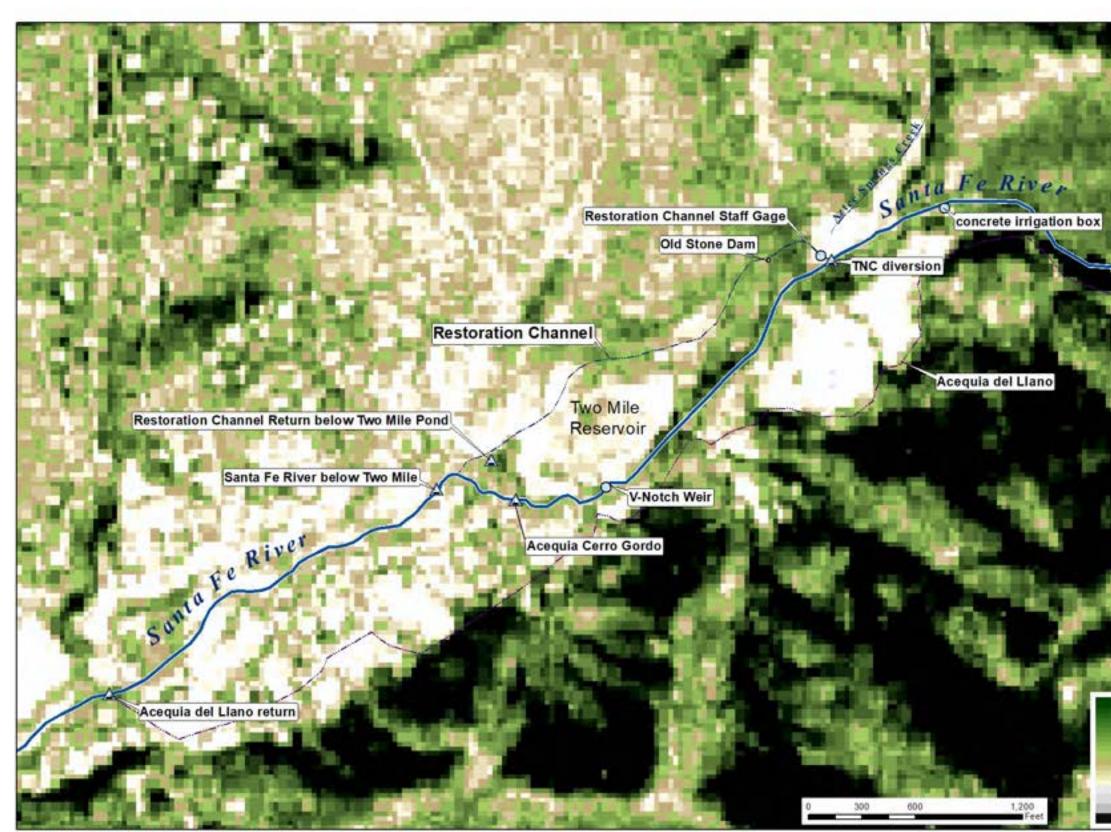
Normalized Difference Moisture Index (NDMI): September 12, 2024

Figure B9. NDMI image of Two-Mile Pond Complex for September 12, 2024.



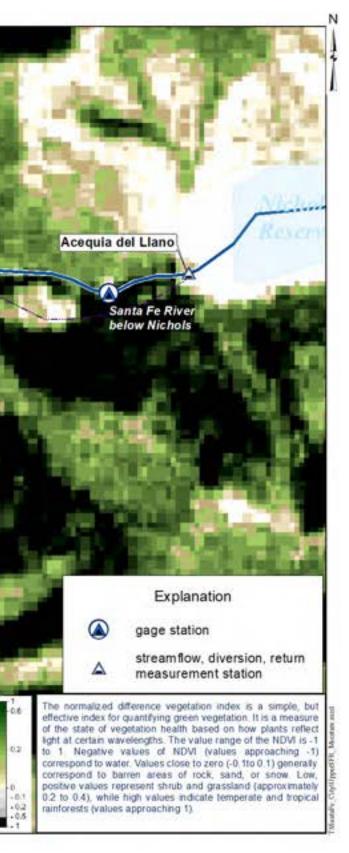
Appendix C.

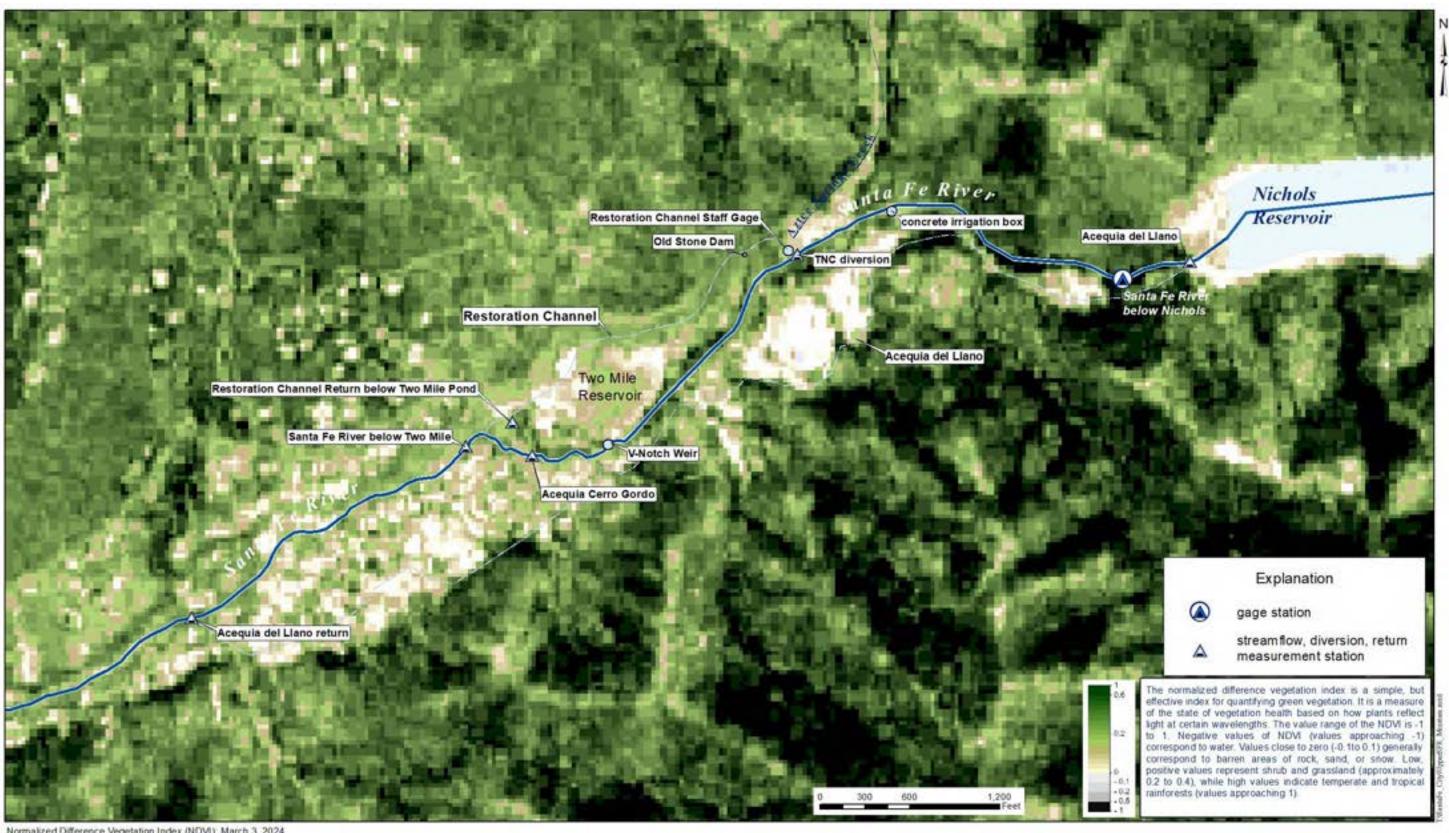
NDVI Images for Two-Mile Pond Complex



Normalized Difference Vegetation Index (NDVI): Jan 16, 2024

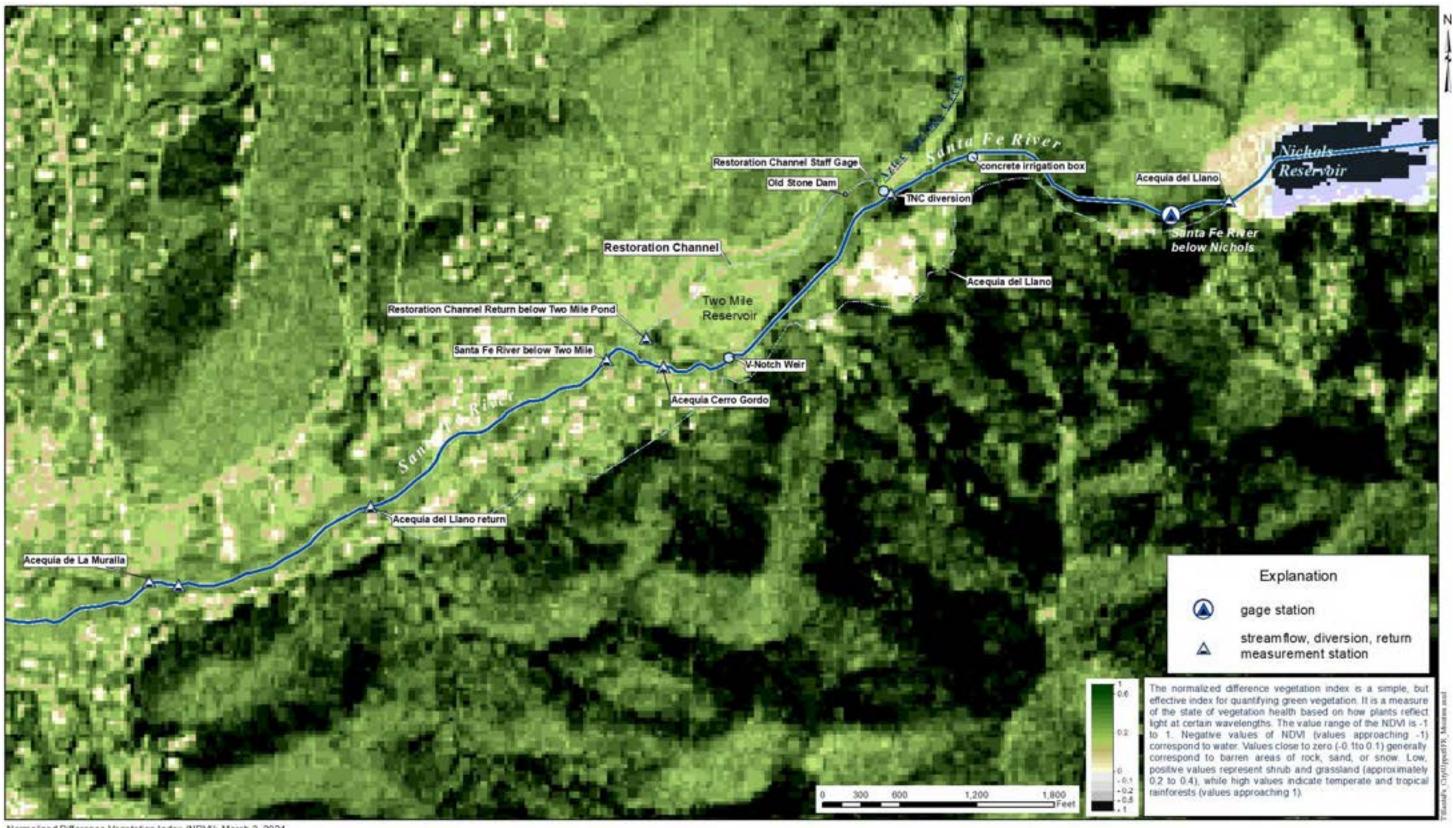
Figure C1. NDVI image of Two-Mile Pond Complex for January 16, 2024.





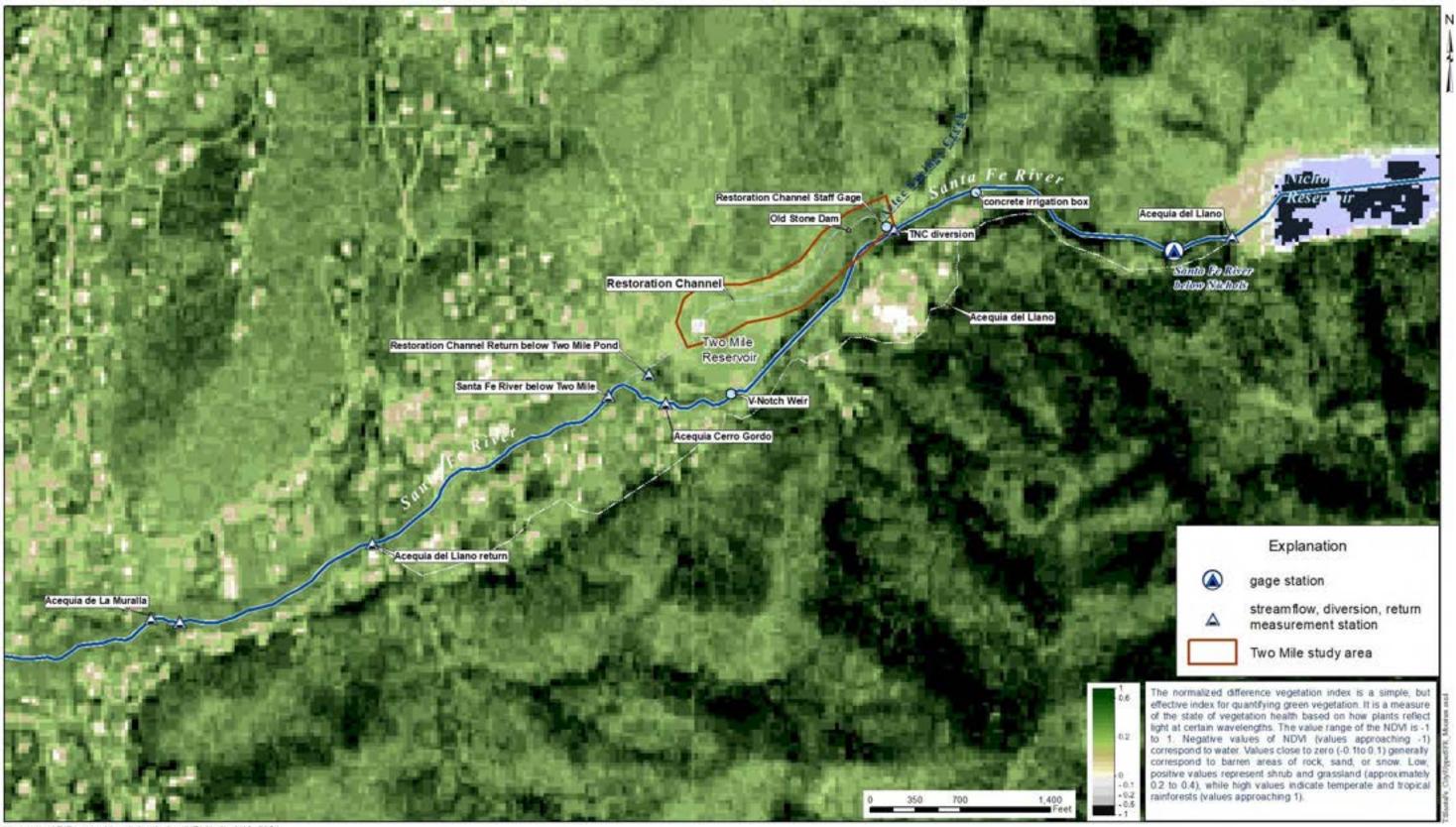
Normalized Difference Vegetation Index (NDVI): March 3, 2024

Figure C2. NDVI image of Two-Mile Pond Complex for February 5, 2024.



Normalized Difference Vegetation Index (NDVI): March 3, 2024

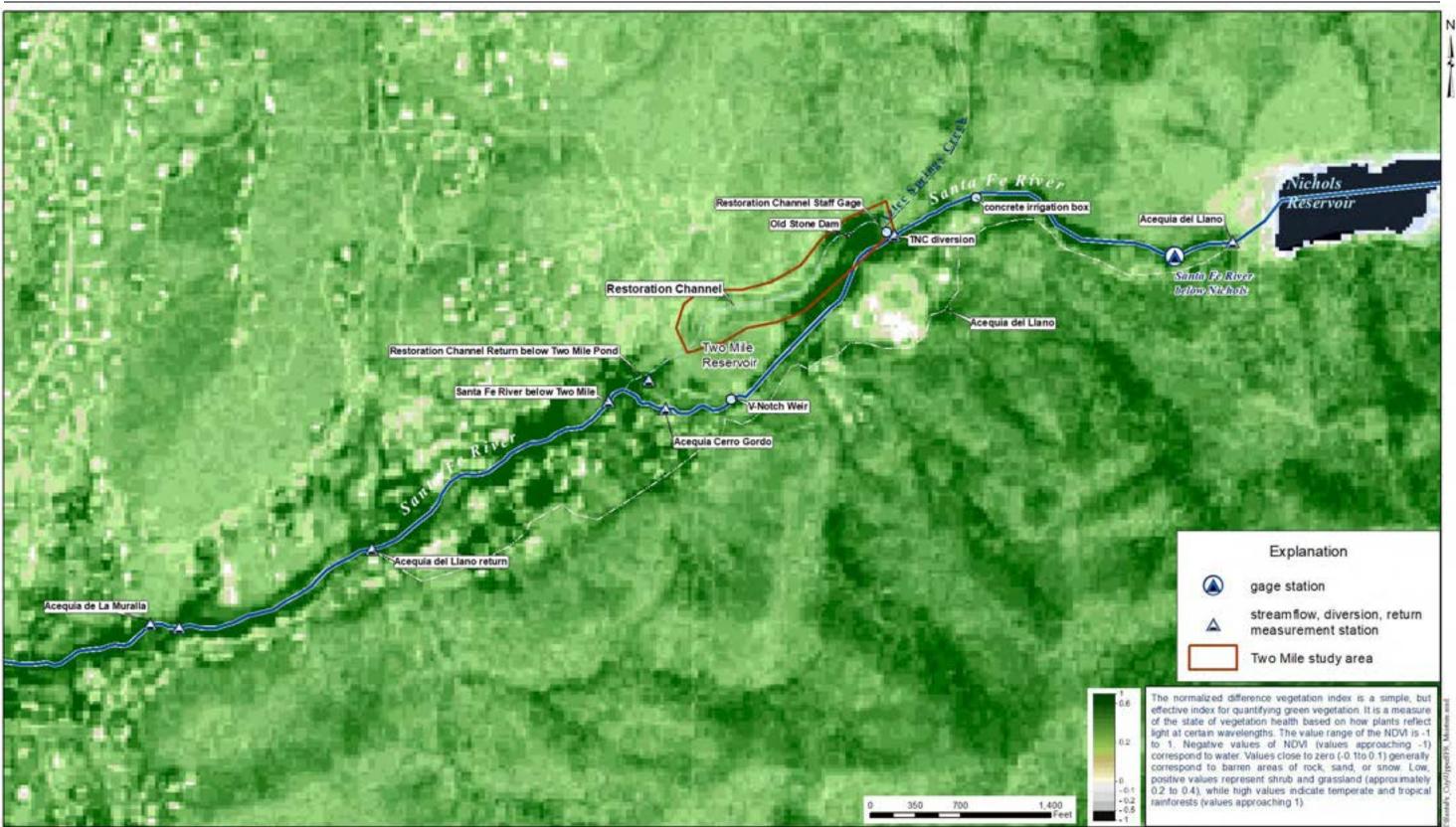
Figure C3. NDVI image of Two-Mile Pond Complex for March 3, 2024.



Normalized Difference Vegetation Index (NDVI): April 10, 2024

Figure C4. NDVI image of Two-Mile Pond Complex for April 10, 2024.

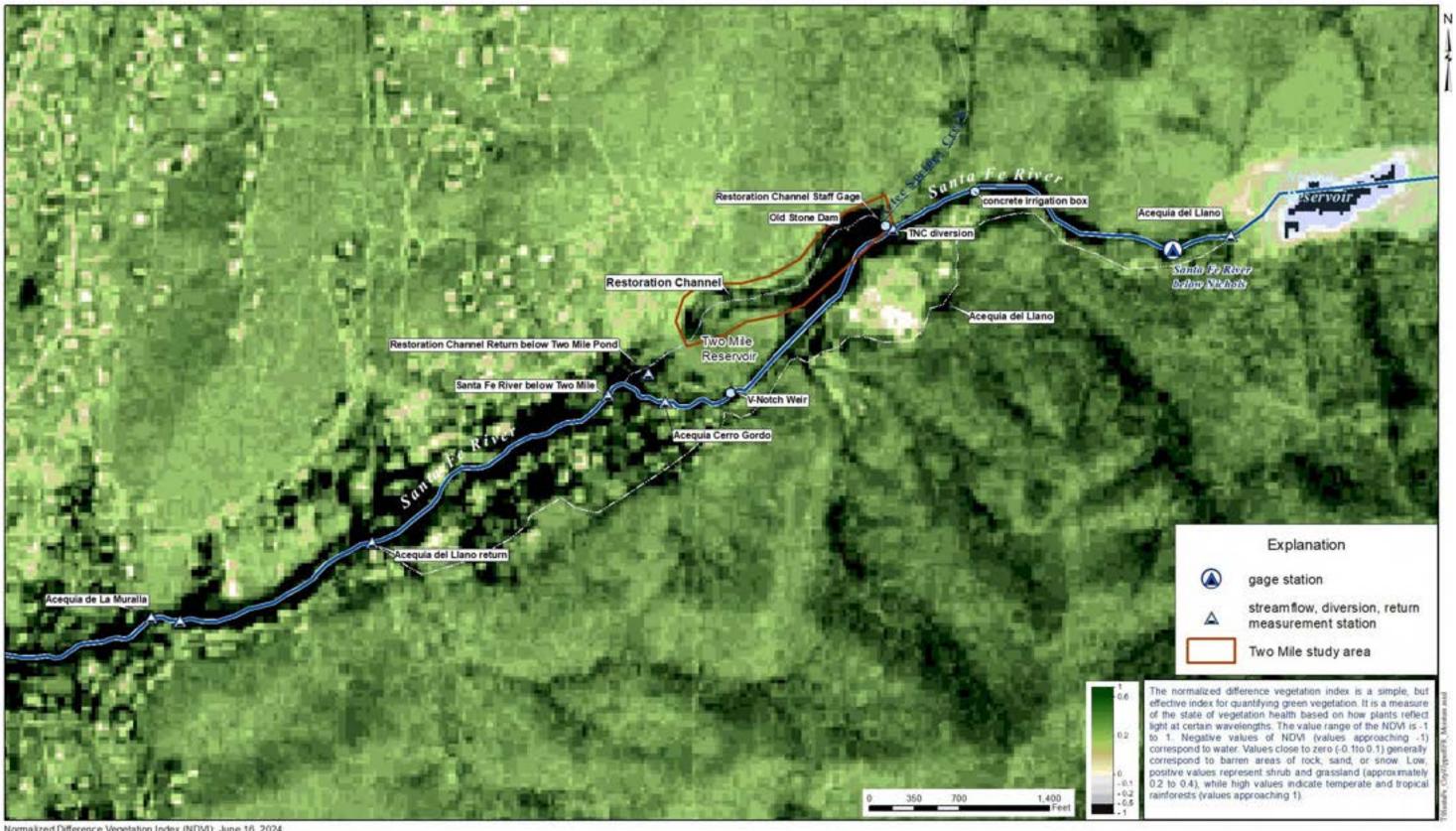
Appendix C.



Normalized Difference Vegetation Index (NDVI): May 17, 2024, 2024

Figure C5. NDVI image of Two-Mile Pond Complex for May 17, 2024.

Appendix C.

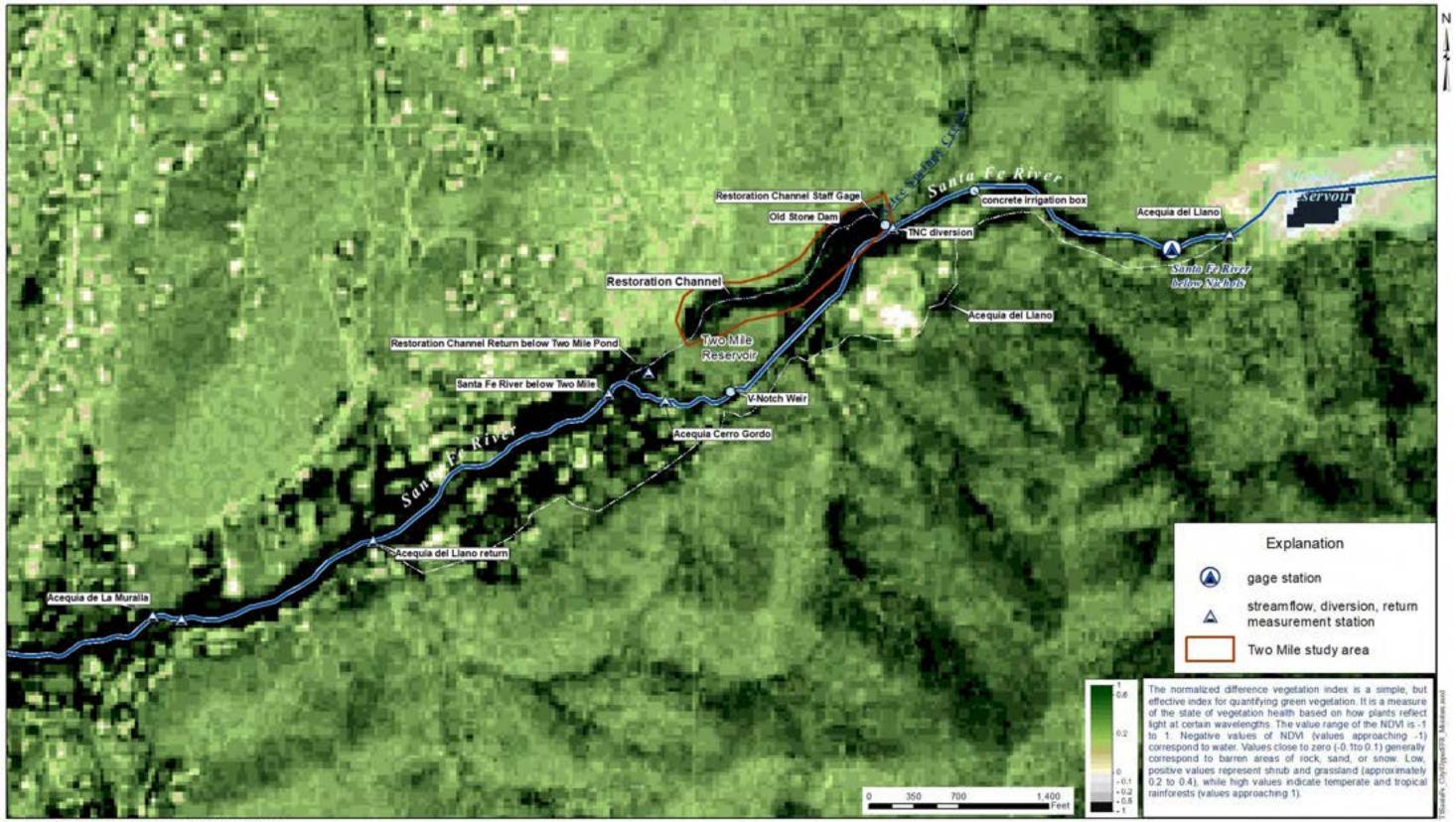


Normalized Difference Vegetation Index (NDVI): June 16, 2024

Figure C6. NDVI image of Two-Mile Pond Complex for June 16, 2024.

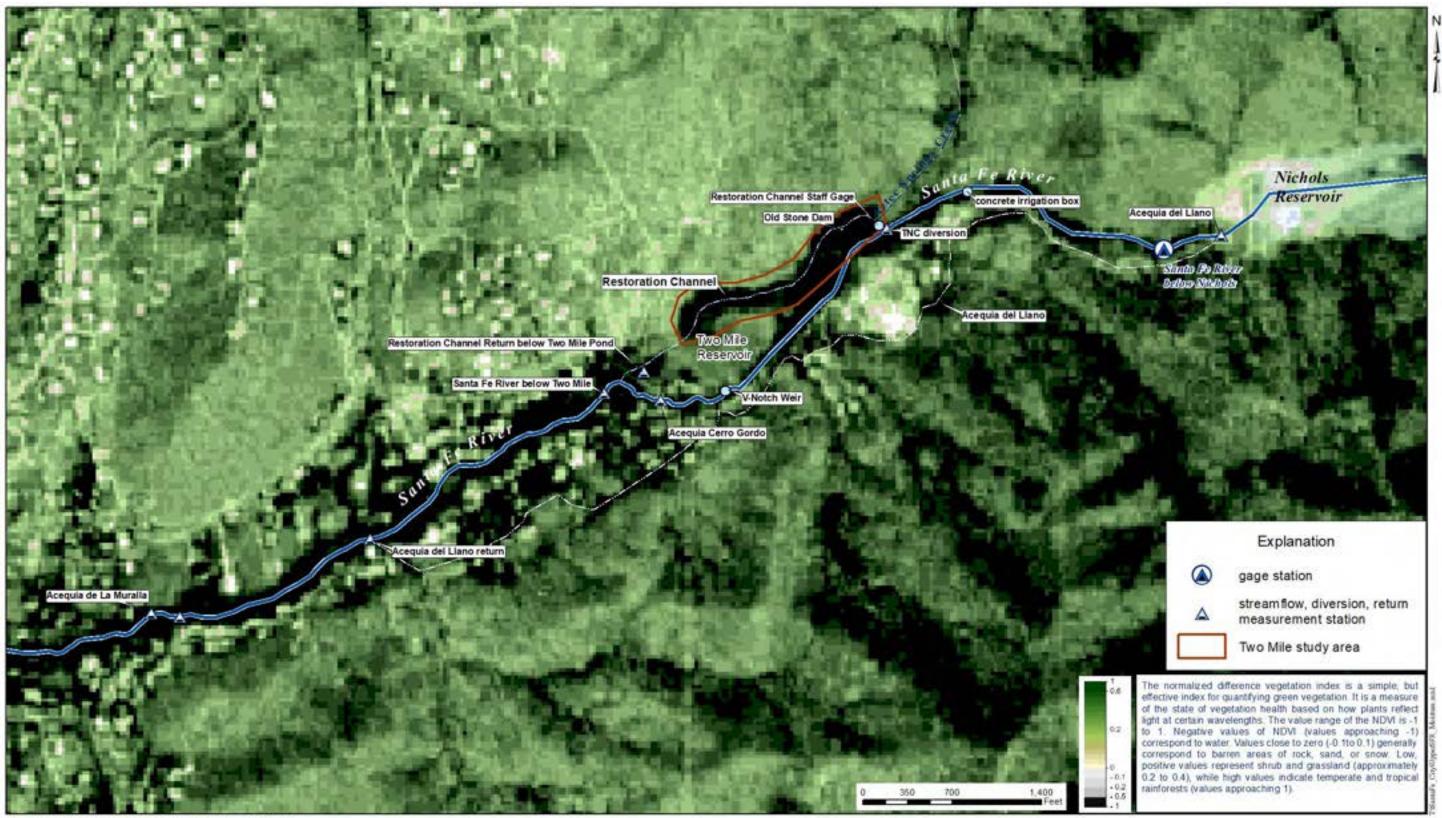
Appendix C.

JOHN SHOMAKER & ASSOCIATES, INC. WATER-RESOURCE AND ENVIRONMENTAL CONSULTANTS



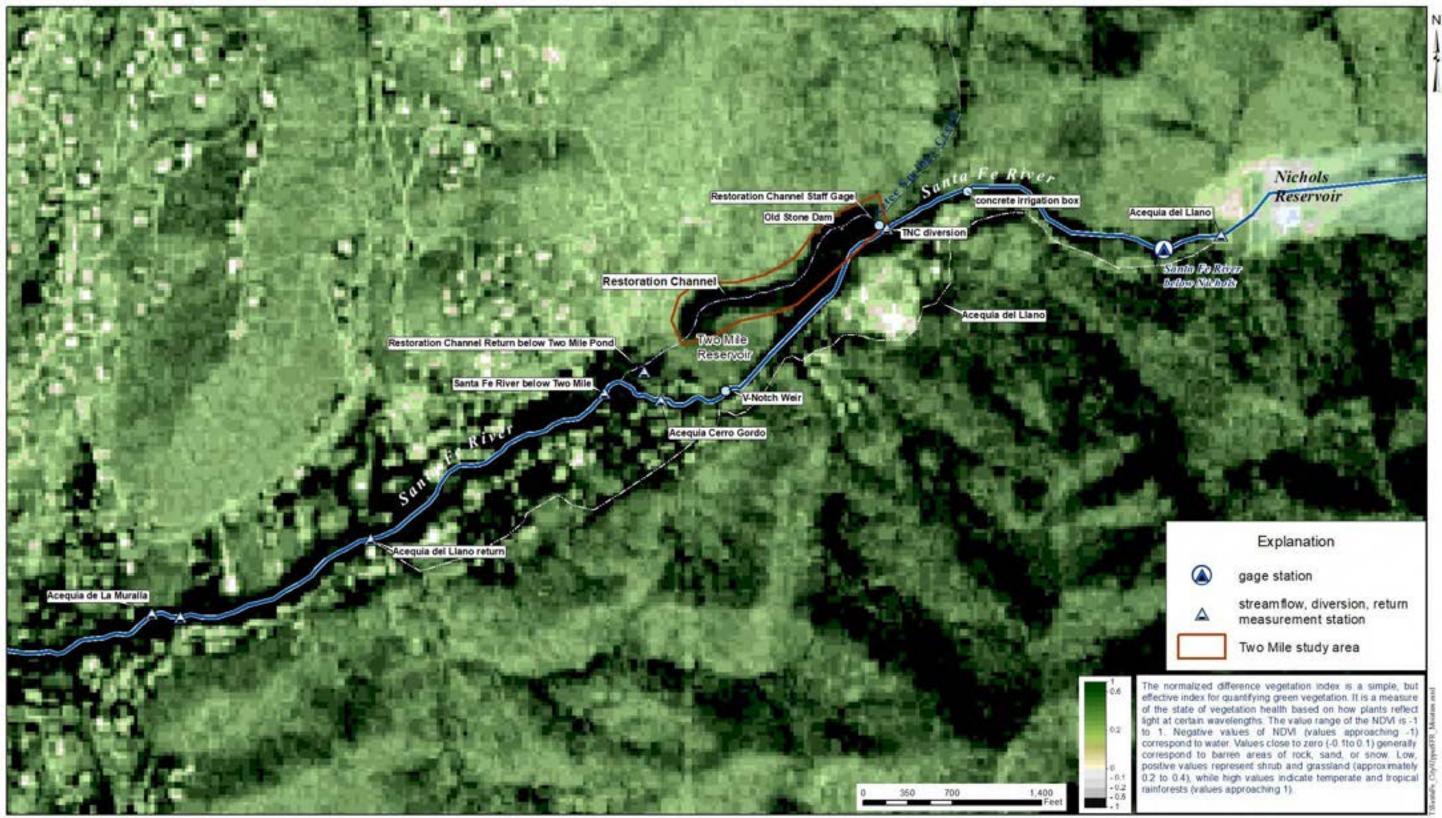
Normalized Difference Vegetation Index (NDVI) July 16, 2024

Figure C7. NDVI image of Two-Mile Pond Complex for July 16, 2024.



Normalized Difference Vegetation Index (NDVI): August 13, 2024

Figure C8. NDVI image of Two-Mile Pond Complex for August 13, 2024.



Normalized Difference Vegetation Index (NDVI): September 12, 2024

Figure C9. NDVI image of Two-Mile Pond Complex for September 12, 2024.

Appendix D.

Field Investigations Forms

NMRAM Montane Riverine Wetlands Version 2.5

1

		SA Cover	Worksheet		· - · · · ·		<u> </u>
A Code SF2MI [1] SA Name : Two Mile Pond Reservoir					Project : Riparian Assesement		
A de Tsct[]]	sct [1] AU Name : Transect [1]				WOI : Two Mile Pond Reservoir		
County Santa Fe HUC 12 Headwaters Santa Fe River Elevation (ft) 7299					(m) 2224,7 Eco		coregion 6.0 NWFM
A riparian system decommissioned of water rights. Driving Directions Driving to Santa	ind Boundary (Rationale, that leads into a pond k due to safety concerns r Fe from Albuquerque yo	ocated on the east side o regarding the reservoir a 	nd a water diver	sion to t	ne area was	recently :	shut down due to lack
	ui you reach the reservoi	r located to the North.	·····		to client		served in
	e Conservative and The	Santa Fe National Forest	Restrictions only.		to cherit	Wetland?	
Surveyor Role	Surveyor Role Surveyor Name				Surveyor Initials		
Landscape Dustin and Annie							DSTAM
Biotic							
Abiotic							11 11
Stressors	11		• (11
Easting (m)	Northing (m)	Zone	Datum		Latitude (DD ft)		Longitude (DD ft)
-105° 53' 24" W	35° 41' 23" N	13	NAD-83 UTM		35.689722		-105.89
Survey Date	4/9/24	Start Time	09:18		End T	Time 13:05	
A Biotic Condition (S A Abiotic Condition sturbance and other S f Cor isessment Summar	viron mont is wing for, info vegetation patterns, cor ome baby Not much of grater (hydrological alteration site impacts; explain the off very du off very du off very du	nposition and structure, poles and s the life, d s (e.g., dams, walls etc.); i e hydrologic breaks or ot y landscope be leaved in summary and comments	exotics and inva Prouts a Currant flooding charact her factors that o Version Jindowe s after the field d	sives, dis rc a rid eristics a define th ing fo lata is col	nd evidence e SA limits)	idence, fi	ire and herbivory) ar ting to pank flooding; soil Some
¢.	Environment is	almost iden	tical to	las l	Marst	his is	nuesligation
	k <u>R</u> Surveyor(s)	more pub				1997 - 1997 	, 19-

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect []]

Surveyor Initials : DS

NMRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5			
Metric Description	Rating	Wt	Final Score
Landscape Context	and the second second	Σ 1.0	3.25
L1. Buffer Integrity Index	3	0.25	0.75
L2. Riparian Corridor Connectivity	4	0.25	1.0
L3. Relative Wetland Size	4	0.25	1.0
L4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
B1. Relative Native Plant Community Composition	2	0.2	
B2. Vegetation Horizontal Patch Structure	2	0.2	
B3. Vegetation Vertical Structure	3	0.2	
B4. Native Riparian Tree Regeneration	Z	0.2	
B5. Invasive Exotic Plant Species Cover	3	0.2	
Abiotic		Σ	
A1. Floodplain Hydrologic Connectivity		0.3	
A2. Physical Patch Diversity	Z	0.2	
A3. Channel Equilibrium	4	0.2	
A4. Stream Bank Stability and Cover	4	0.2	
A5. Soil Surface Condition	4	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic		0.35	
Abiotic		0.35	1
SA WETLAN	D CONDITIO	N SCORE 2	3.01
SA WETLAN	D RANK =		B

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1	Construction
			2	No Flow in channel
			3	Trails

Stressor Comments (Evaluation of risk)

No water could affect the willows from growing back

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [\mathcal{I}_{-}]

Surveyor initials: DS

Landscape Context

L₁ - Buffer Integrity Index

Box below. Rate the sub-metric using Table L1a and enter the rating on the Buffer Integrity Summary Worksheet 1d. Rating Buffer Percent (%)= 85% Yorksheet 1c. Buffer Width Sub-metric. Measure the length of each buffer line in meters in the Buffer Width Sub-metric. Measure the length of each buffer line in meters in the Buffer Width Sub-metric. Measure the length of each buffer line in meters in the Buffer Width Sub-metric. Measure the length of each buffer line in meters in the Buffer Width Sub-metric. Measure the length of each buffer line in meters in the Buffer Width (ft) C 2 Line Buffer Width (ft) Line Buffer Width (ft) Table L1b. Enter the rating on the Buffer Width (ft) A 164.26 538.91 E 161.93 531.26 C 4 B 125.25 410.92 F 231.48 759.44 C 2 C 115.39 378.57 G 121.25 397.80 C 1 1 D 111.07 364.40 H 155.87 511.38 Table L1c. Summary line L1c. Summary line L1c. Summary line L1c. Summary line L1b babove to calculate the Buffer Integrity Index Score using the formula in the box line L1b babove to calculate the Buffer Integrity Index Score using the formula in the box line L1b babove to calculate the Buffer Integrity Index Score using the formula in the box line L1b babove to calculate the Buffer Integrity Index Score us	ors that are either allow v type and date (season	area or RCC corridors that ar ndicate the imagery type and	r area or RCC indicate the ir	ouffer vity. Ir	in the l	its with stem co	eleme: t ecosy	nd cover lat disrup	Check off la elements th	ecklist n-buffer	nd RCC Ch idered nor	a. Buffer a ed and cons nagery).	sheet 1 exclud ear of in	Work or are and ye
Buffer RCC Buffer RCC Buffer RCC X X Natural or semi-natural vegetation patches X X Commercial/residential develop dams, bridges, revetments, and X X Small irrigation ditches without levees Lawns, parks, golf courses, sport Old fields, unmaintained Allocads Maintained levees, sediment pile materials, staging areas X X Non-channel open water Intensive livestock areas, horse principal dams, or developed secon row crops, orchards, and vineyar X Non-functioning abandoned vegetated levees, or naturally occurring levees X Paved roads or developed secon row crops, orchards, and vineyar X Non-functioning abandoned vegetated levees, or naturally occurring levees X Paved roads or developed secon graded roads Y Non-functioning abandoned vegetated levees, or naturally occurring levees X Paved roads or developed secon graded roads Y Non-functioning abandoned vegetated levees, or naturally occurring levees X Open water bounded by a levee structure I Other Other Other Y Y Norksheet 1b. Buffer Percent Sub-metric. Measure or estimate the percentage of the the sub-metric using Table L1a and enter the rating on the Buffer T <				/23	6	e Date	Imag							-
Buffer RCC Buffer RCC X Natural or semi-natural vegetation patches X X Commercial/residential develop dams, bridges, revetments, and X X Small irrigation ditches without levees Lawns, parks, golf courses, sport O Old fields, unmaintained Railroads X X Foot trails, horse trails, unpaved bike trails (low intensive) Intensive livestock areas, horse privation intensive intensive special ture: maintained row crops, orchards, and vineyar intensity X X Non-channel open water Intensive agriculture: maintained row crops, orchards, and vineyar intensive livestock areas, horse private add row crops, orchards, and vineyar intensive livestock areas, horse private row crops, orchards, and vineyar intensive livestock areas, horse private row crops, orchards, and vineyar intensive livestock areas, horse private row crops, orchards, and vineyar intensive livestock areas, horse private row crops, orchards, and vineyar intensive lives courting levees X Non-functioning abandoned vegetated levees, or instructure X Paved roads or developed secon graded roads X Non-functioning abandoned vegetated levees, or ox	+c	land cover elements	land cover e	RCC	<u> </u>	led nor	Exclu			nents	cover elen	er/RCC land		
Image: Small irrigation ditches without levees Image: Comparison of the set	<u> </u>				}	RCC	Buffe						RCC	Buffer
A Small intrgation diches without levees Lawns, parks, golf courses, sport Old fields, unmaintained Railroads Open range land Maintained levees, sediment pilk materials, staging areas X Foot trails, horse trails, unpaved bike trails (low intensive divector areas, horse particulture: maintained row crops, orchards, and vineyar row crops, orchards, and row row crops, orchards, and row	pments, parking lots,	/residential developments, pess, revetments, and other stu	al/residential of a second sec	nercial bridge	Comn dams,	X	×							
Image: Construction of the second							$\uparrow \neg$		ut levees	s witho	ion ditche	Small irriga		X
Image: Construction of the server of the										ed	nmaintaine	Old fields, u		
Image: Second	les, construction	evees, sediment piles, const aging areas	levees, sedim taging areas	ined i	Mainta		$\uparrow _$	Open range land						
Image: Second	paddocks, feedlots							(low	ed bike trails	unpave	orse trails,	Foot trails, H	×	<u> </u>
X Non-functioning abandoned vegetated levees, or naturally occurring levees X Paved roads or developed secon graded roads Imaturally occurring levees X X Open water bounded by a levee structure Imaturally occurring levees X X Open water bounded by a levee structure Imaturally occurring levees X X Open water bounded by a levee structure Imaturally occurring levees X X Open water bounded by a levee structure Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally Summary Worksheet 1d. Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imatural of the leve worksheet 1d. Imaturing levees Imaturally occurring levees	d pastures, hay fields, rds	iculture: maintained pasture chards, and vineyards	riculture: mai	ve agr ops, or	Intensi row cre							_		
Impleted two tracks roads Implet		or developed second-order	or developed	roads	Paved		X	/ees, or	regetated lev	ioned v ees	ning aband turring leve	ion-functio	× r	
In the product of the p	or other manmade	bounded by a levee or other	bounded by a	vater k re	Open v structu	×,	X			ids	o tracks roa			
Buffer Vidth Sub-metric using Table L1a and enter into the Buffer Percent (%)= Rating Buffer Vidth Sub-metric. Measure the length of each buffer line in meters in e GIS or on the map. Average the line lengths and rate using Table L1b. Enter the rating on the Buffer Width (m) C 2 Buffer Width Sub-metric. Measure the length of each buffer line in meters in the Buffer Width (m) C 2 Ime Buffer Width Buffer Width (m) Buffer Width (m) C 1 Ime Summary Worksheet 1d. Image: Signal (m) Table L1b. Enter the rating on (ft) Table L1b. Ine Buffer Width (m) E 161.93 531.26 C 4 Image: C 115.39 378.57 G 121.25 397.80 C 1 Image: C 111.07 364.40 H 155.87 511.38 Table L1c. Summary inter the sub-metric Ratings from Tables L1a Rating Image: C 148.31 Image: C Simmary Enter the sub-metric Ratings from Tables L1a Rating					Other [)then		
Buffer Percent (%)=85%C4orksheet 1c. Buffer Width Sub-metric. Measure the length of each buffer line in meters in Buffer Integrity Summary Worksheet 1d.C2Buffer Width Sub-metric. Measure the length of each buffer line in meters in Buffer Integrity Summary Worksheet 1d.C1ImeBuffer Width (ft)Buffer Width (ft)Buffer Width (m)Buffer Width (ft)Buffer Width (ft)Table L1b.A164.26538.91E161.93531.26C4B125.25410.92F231.48759.44C2C115.39378.57G121.25397.80C2D111.07364.40H155.87511.38Table L1c. Summary Inter Integrity Summary. Enter the sub-metric Ratings from Tables L1a Meter to calculate the Buffer Integrity Index Score using the formula in the box ow. Using the Buffer Integrity Index Score using the formula in the box ow. Using the Buffer Integrity Index Score using the formula in the boxC4	Buffer Percent	Table L1a. Buffer I Rating Buffer				6 D	+ha Du	antar inta	ements and a	utter els	allowed bi etric using	the sub-m	ow. Rate	ox belo
(X 3Orksheet 1c. Buffer Width Sub-metric. Measure the length of each buffer line in meters in e GIS or on the map. Average the line lengths and rate using Table L1b. Enter the rating on Buffer Integrity Summary Worksheet 1d.(X 3IneBuffer Width (m)Buffer Width (ft)LineBuffer Width (m)Buffer Width (ft)Table L1b.A164.26538.91E161.93531.26C4B125.25410.92F231.48759.44C4C115.39378.57G121.25397.80C2D111.07364.40H155.87511.38Table L1c. Summary Inter the sub-metric Ratings from Tables L1aTable L1c. Summary InterOrksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1aTable L1c. Summary InterRatingOw. Using the Buffer Integrity Index Score using the formula in the box ow. Using the Buffer Integrity Index Score using the formula in the boxRating	100%	C 4 11	<u>C</u> 4							Desser		ory workshi		
Buffer Integrity Summary Worksheet 1d.Buffer Width (ft)LineBuffer Width (m)Buffer Width (ft)Table L1b.A164.26538.91E161.93531.26C4B125.25410.92F231.48759.44C4C115.39378.57G121.25397.80C1D111.07364.40H155.87511.38Table L1c. SummaryAverage148.31(m)486.58(ft)Table L1c. Summaryorksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a ow. Using the Buffer Integrity Index Score using the formula in the box ow. Using the Buffer Integrity Index Score using the formula in the boxRating	≥80% - <100%	(x 3 ≥80%	A 3				., <u> </u>				· · · · · · · · · · · · · · · · · · ·	<u> </u>		
Buffer line lengths and rate using Table L1b. Enter the rating on Buffer Integrity Summary Worksheet 1d.IneBuffer Width (ft)Buffer Width (ft)Buffer Width (ft)Buffer Width (ft)Table L1b.A164.26538.91E161.93531.26C4B125.25410.92F231.48759.44C4C115.39378.57G121.25397.80C1D111.07364.40H155.87511.38Table L1c. SummaryAverage148.31(m)486.58(ft)Table L1c. SummaryIntersteet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a ow. Using the Buffer Integrity Index Score using the formula in the box 	≥50% - <80%	C 2 ≥50%	C 2	rs in	n mete	er line i	ch buff	igth of ea	asure the len	ric. Me	h Sub-met	Buffer Widt	et 1c. E	orkshe
Buffer Width (m)Buffer Width (ft)LineBuffer Width (m)Buffer Width (ft)Table L1b.A164.26538.91E161.93531.26C4B125.25410.92F231.48759.44C4C115.39378.57G121.25397.80C1D111.07364.40H155.87511.38Table L1c. SummaryAverage148.31(m)486.58(ft)Table L1c. SummaryIntegrity babye to calculate the Buffer Integrity Index Score using the formula in the box ow. Using the Buffer Integrity Index Score. enter rating for Buffer Integrity in Tables L1aRating	<50%	C 1 <5	<u>C 1</u>	on	rating	nter the	L1b. E	ing Table	is and rate us	lenatr	ide the line	map, Avera	on the	. 010 0
A164.26538.91E161.93531.26RatingAvB125.25410.92F231.48759.44(% 3C115.39378.57G121.25397.80(2D111.07364.40H155.87511.38Average148.31(m)486.58(ft)Table L1c. Summaorksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1aRatingRatingOwn Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Tables L1aRatingRating	o. Buffer Width	Table L1b. Buffer	Tał	i				Buffer W	[idth	Buffer W	r Width	Buffe	
B 125.25 410.92 F 231.48 759.44 (x 3) C 115.39 378.57 G 121.25 397.80 (2) D 111.07 364.40 H 155.87 511.38 Average 148.31 (m) 486.58 (ft) Table L1c. Summa linte orksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a Rating Integrity in Tables L1a ow. Using the Buffer Integrity Index Score. enter rating for Buffer Integrity in Tables L1a Rating Integrity in Tables L1a	verage buffer width	Rating Average b	Rating	<u> </u>										Δ
C 115.39 378.57 G 121.25 397.80 C 2 D 111.07 364.40 H 155.87 511.38 C 1 Average 148.31 (m) 486.58 (ft) Table L1c. Summa linte orksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a Rating Integrity in the box ow. Using the Buffer Integrity Index Score. enter rating for Buffer Integrity in Tables L1a Rating C	≥190m	C 4 ≥19	<u>C</u> 4	- []	31.26	53			E					
D 111.07 364.40 H 155.87 511.38 Average 148.31 (m) 486.58 (ft) Table L1c. Summa linte Drksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a Rating Rating Own. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Tables L1a Rating Rating	≥130 - <190m	(Х 3 ≥130-	(⊼ 3		9.44	75		231.48	F		410.92	.25	125	<u>в</u>
D 111.07 364.40 H 155.87 511.38 Average 148.31 (m) 486.58 (ft) Table L1c. Summa linte orksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a Rating Rating dL1b above to calculate the Buffer Integrity index Score using the formula in the box ow. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Tables L1a Rating	≥65 - <130m	1			7.80	39		121.25	G		378.57	.39	115	c
Average 148.31 (m) 486.58 (ft) Table L1c. Summa Integrity Summary. Enter the sub-metric Ratings from Tables L1a orksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a Integrity Integrity Index Score using the formula in the box low. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table 11. Rating	<65m	C 1 <6						155.87	н+-		364.40	.07	111	D
Intersect 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a 11b above to calculate the Buffer Integrity Index Score using the formula in the box ow. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table 11.	· _ · · ·	· _ ·		_	1.38 	511								
ow. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table 1.1		Table L1c. Summary Ratin Integrity	Table L1c.	[- 7 1	tings 6	motrie Ba	ter the sub-	Jary Fr	rity Summ	Buffer Inter	et 1d. 1	orkshe
our osing the puner integrity index score, enter rating for Buffer Integrity in Table 11-	Score	Rating Sco	Rating		a 1	بماه ماد دا	a farm.	using the	index Score	ntearit∖	ne Butter Ir	z calculate t	IDOAG fe	
on the SA Summary Worksheet.	>3.5	C 4 >3.	C 4	1	ole L1c	y in Tab	Integrit	or Buffer	enter rating f	Score, e	inty index	panet litter	ուց ազ	011. 03
I the SA Summary Worksheet.	>2.5 - ≤3.5		(X 3							_	ksneet.		- JU - JU	<u> </u>
ffer % Rating + Buffer Width Rating /2 = Buffer Integrity Index Score	>1.5 - ≤2.5		<u> </u>		(Score	y index	ntegrit	Buffer 1	/2 ≔	Rating	fer Width F	+ Buf	Rating	ffer %
3 + 3 /2= 3	≤1.5		<u>C</u> 1	- [┼────			2			3

SA Name: Two Mile Pond Reservoir Transect []]

Date: 4/9/24 Surveyor Initials: DB

2 - Riparian Corridor Connectivity (RCC)

Vorksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for xcluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter he summed values in meters for excluded element lengths for each bank within each egment upstream and downstream of the SA. Sum the values for each segment and alculate % Segment Disruption for the upstream side and the downstream side. Add the otal disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and he data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	m Segment	
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
3) Total Disruption by Segment (m)	1	0		0	
C) % Segment Disruption = (B/1000)*100		0	(0	
D) Total Disruption both segments	1		0		
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.	

Table L2. RCC Rating							
Rating	Description						
Q 4	0% total disruption on both segments combined.						
C 3	<15% total disruption on both segments combined.						
C 2	≥15% - <40% total disruption on both segments combined.						
C 1	≥40% total disruption on both segments combined.						

3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshr

		RSR						R	WSI		
Current Size	1	Historic Size	=	RSR	1		RSR	х	100	=	RWSI (%)
0		10	=	0.9	1	-	0.1	x	100	=	10

Table L3. Relative Wetland Size Rating						
RWSI Score	Description					
≤10%	Wetland is at or only minimally reduced from its full natural extent					
>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size					
>40% - ≤70%	Wetland has been reduced by more than 40% its natural size					
>70%	Wetland has been reduced by more than 70% its natural size					
	>10% - ≤40% >40% - ≤70%					

Date: 4/9/24

SA Name: Two Mile Pond Reservoir Transect [|]

Surveyor Initials :

A.S.

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) is surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1		0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.1	0	
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads) Ski area	0.3	00	0
	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
riculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Nature old fields and other fallow lands with natural composition, introduced hay field and pastures e.g., perennial vegetation cover)	0.7	0	0
estoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
laying of native grassland (e.g., no tillage, haying and baling only)	0.9		0
leavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) emoved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
ommercial tree plantation, Christmas tree farms	0.6	0	0
elective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) emoved	0.8	0	0
lature restoration areas returned to natural conditions (re-converted)	0.9	0 -	0
atural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area	- -	100	75

Table L4. Surrounding Land Use Rating						
Rating	LUI Score					
<u> </u>	≥95 - 100					
	≥80 - <95					
x 2	≥40 - <80					
	<40					

		_	
-		٢.	
=	2		
144	Ę		
ដ	2		
ü	ñ		
	•	•	
	-	۰.	
1	č	5	
1	č	š	
-		ŝ	
-		-	

SA Name: Two Mile Pond Reservoir Transect | |

Date: 7/7/07

1 1 minutes includes

Biotic Metrics

number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and invasive Exotic Plant Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique

1MIMIMI2M2MIMe seriesNoneMaple Rinery, Juniper, Chimisin, Prickly Part3MIMMiMe seriesNoneMaple Rinery, Juniper, Chimisin, Prickly Part4MBMMiMiMaple Rinery, Juniper, Chimisin, Prickly Part5MBMiMiMiMi6MBMiMiMiMi7MBMiMiMiMi8MiMiMiMiMi9MiMiMiMiMi10MiMiMiMi11MiMiMiMi12MiMiMiMi13MiMiMiMi14MiMiMiMi15MiMiMiMi16MiMiMiMi17MiMiMi18MiMiMi10MiMiMi11MiMiMi12MiMiMi13MiMiMi14MiMiMi15MiMiMi16MiMiMi17MiMiMi18MiMiMi19MiMiMi10MiMiMi11MiMiMi12MiMi1	Polygon	B3 Vertical Structure Type	B4 Tree Regeneration % Cover	85 Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
No. Mayole Diversity Juncper, Chinitish NM No. Mayole Diversity Juncper, Chinitish NM S2% M.Main Chinish, Uillah, dry grass NM S2% M.Main Chinish, Uillah, Grass NM S3% <t< td=""><td>-</td><td>IAI</td><td></td><td></td><td></td><td></td></t<>	-	IAI				
uxi uxi uxi uei 0% $>2\%$ $M_{A,i}$ $C_{A,iui}$ $d_{P,V}$ Nei $>2\%$ $>2\%$ $M_{A,i}$ $C_{A,iui}$ $d_{P,V}$ Nei $>$ $>$ $>$ $>$ $>$ Nei $>$ $>$ $>$ <td< td=""><td>2</td><td>142</td><td>10%</td><td>Ne e sertics</td><td>None</td><td>de Pinen, Juniper, Chimisa,</td></td<>	2	142	10%	Ne e sertics	None	de Pinen, Juniper, Chimisa,
Int D% >2% M. Main Chiniss purillaru dry MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB	m	IMI				
Inci 0% $>2\%$ $M_h h_h h_h$ $Chinal Sa_1 \mu_h h_h h_h$ MB	4	IIB1				
	s	IIICI	0%		M. Main	willow dry
	9	INEI				
8 9 10 11 12 13 14 15 16 17 18 19 10 11 12 13 14 15 16 17 18 19 19 10	2	INF1				
9 10 10 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 10 1 10 1 11 1	80					
10 1 11 12 13 14 15 16 17 18 19 10 11 12 13 14 15 16 17 18 19 10 11 12	6					
11 1 12 13 14 15 16 17 18 19 19 10 10 11 12 13	10					
12 1 1 13 1 1 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 20 1 1	=					
13 14 14 14 14 14 15 16 16 16 1 16 17 16 16 18 16 16 19 16 16 20 20 16	12					
14 14 15 16 17 18 19 19 19 10 20	13					
15 16 16 16 1 1 17 1 1 18 1 1 19 1 1 10 1 1 20 20 1	14					
16 1 17 1 18 1 19 1 19 1 10 1	15					
17 17 18 19 19 10 20 10	16					
18 19 20 20 20 20 20 20 20 20 20 20 20 20 20	17					
20	18					
20	19					
	20					

work domir which	ant spe- it is mo	worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	pecies an stratum tl L Each poi	d Polygon hat appear lygon is eit	Assign s in the her assi	ments polygo gned to	. Starting In. See foc 2 the sam	with CT strotes f e CT if it	A, enter the or special i has the sar	e numbe nstructic ne comp	ir of the firs ons. If a spe position or	st polygo :cies app a new CT	with CT A, enter the number of the first polygon from Worksheet 5. Enter traces for special instructions. If a species appears in more than one strate CT if it has the same composition or a new CT is created for the polygon.	ksheet 5 e than or or the po	. Enter the ie strata, as olygon.	species c sign the	odes for species t	the two i to the str	top atum in
				Tal! W	Tall Woody Stratum ¹	tratum	1		Short Woody Stratum 2	ody Strat	um 2		Herbaceo	is/Sparse	Herbaceous/Sparse Stratum 3		CT Score 4	4	
ե Ե	Polygon Nos.	Nos.		Species 1	s 1 E N		Species 2	ш Z	Species 3	<u>ш 2</u>	Species 4	<u>ш ¤</u>	Species 5	<u> </u>	Species 6	шZ	Raw4	SA5	Wt Score6
<	2			Paple		N	Pires	N	Chine 50		3			2		z			l. 2
8	S			-	-				W.	2		2	Dry		B/Le Stem	2	2.0	2.02	7.
Ų						_							<~~0			, .			,
Δ				 		<u> </u>			5										
μ					<u> </u>	<u> </u>		ĺ											
μ.																			
U					 														
r					 														
_																			
- -						 						_							
×																			
Σ																			
z																			
0																			
														Final	Final Weighted Score ⁷	Score ⁷			2.5
1. Tree stratun	s and sh i cover.	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover; 4. Alaw Score is from Table B1a (Annendiv R). 5% c.a. is the neuron of the c.a.	(20 feet) ¿ is from Ta	and > 25% ble Bta (A	total str mendiv	ratum c v Rì- 59	over; 2. Tr	ees and	shrubs ≤6r	n (20 fe	et) and >2(5% total :	tratum cov	er; 3. Hei	baceous (g	raminoi	ds and fc	rbs)>109	6 total
equal 1 for Rel₅	; ⁶ Wt. S. tive Nat	equal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	roduct of mmunity	the Raw Sc Compositi	ore * % on on t	SA; 71 be SA F	the Final V bank Sumi	yeightei Veightei nary Wo	d Score is th xiksheet.		st the Wt. S	cores. Ra	na express te the CT Fi	ed as a d nal Weig	ecimal num hted Score	iber, the on Table	total are e B1 and	a %SA m enter the	ust e Rating
									Page 7 of 17	of 17		5							

Date: ソノタノション Surveyor Initials: 心

SA Name: Two Mile Pond Reservoir Transect []]

SA CODF · SF2MI []

SA Name : Two Mile Pond Reservoir Transect []

Surveyor Initials : $(j_{ij})_{ij}$

Table B1	. Relative Native Plant C	Community Composition Rating
Rating	CT Fin	al Weighted Score
4	≥ 3.75	<10% non-native
<u>`</u> 3	≥ 3.25 and <3.75	10% ≤20% non-native
٢ 2	> 2.0 and <3.25	20% ≤50% non-native
<u> </u>	<2.0	>50% non-native

2 - Vegetation Horizontal Patch Structure

orksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

orizontal Patch Structure pattern A,B,C, or D:

Table B2. Rating for Vegetation Horizontal Patch Structure

Description
Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

3 - Vegetation Vertical Structure

Forksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ame VST) x 100. Enter the total %SA for each VST below.

	VST 1	VST 2	VST 5	VST 6S	VST 6W	VST 6H	VST 7
	High Structure	Low Structure	Tall Shrubland	Short	Herbaceous	Herbaceous	Sparse
	Forest	Forest		Shrubland	Wetland	Vegetation	Vegetation
Total % of SA		40%)		60%			

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for ne rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
` 4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
<	2 or 1 and 2	5	
3	2 or 1 and 2	6W	
	5	6W	
	2 or 1 and 2		
2	5		
	6W		
	65		
1	6H		
	7		

SF2MI[/] SA CODE :

Date: 4/9/24

Two Mile Pond Reservoir Transect [/] SA Name :

Surveyor initials : 05

<1%

B4 - Native Riparian Tree Regeneration

	5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
C 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few.
× 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
$\overline{1}$	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5.	Ratings for Invasive Exotic Plant Species Cov
Rating	Invasive Species Cover %
<u> </u>	(0%
<u> </u>	>0% - <1%
1 2	≥1%-<10%
<u>C 1</u>	≥10

Additional CTs and Biotic Metric Comments:

SA Name: Two Mile Pond Reservoir Transect [/]

Date: 4/9/24

11 1

Surveyor Initials :

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
	\square		Abandoned channels
			Backwater/eddy
			Riffles or rapids
			Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
	X		Terraces
			Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Tabl	ie A2.	Rating for Physical Patch Complexity
Ratiı	ng	Description
ſ	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).
C	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).
R	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.

Date: 41/9/24

SA Name: Two Mile Pond Reservoir Transect []

Surveyor Initials :

DS

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		R		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		X		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ŕ		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		X		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		R		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
[R		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

SF2MI[]] SA CODE :

Date: 4/9/22 Surveyor Initials: 0.2

Two Mile Pond Reservoir Transect [/] SA Name :

	Table A3. Rating for Channel Equilibrium
Rating	Description
X 4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.
C 3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.
C 2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.
C 1	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	⊠4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	<u> </u>	□3	3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	2	2	2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	<u> </u>	_ 1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	⊠14	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	3	□3	3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u></u> 2	<u> </u>	2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	[]1	1	1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Rating	Description			
× 4	>3.5 - 4.0			
	>2.5 - ≤3.5			
C 2	>1.5 - ≤2.5			
C 1	1.0 - ≤1.5			

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [1]

Surveyor initials : $f() \leq f()$

A5 - Soil Surface Condition

...orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	X		Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating					
Rating	Description					
C 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
Я 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

SA CODE: SF2MI

SA Name : Two Mile Pond Reservoir Transect [1]

Surveyor Initials :

Date: η/α .

orksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign tegories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknov nk Major Stressors in Dominant Stressor column(Pick up to 3)

ink	k Affect				Stressor Group/Stressor	Comments
	Major	Minor	Absent	Unknown		Continearts
				r	Adverse water management	
	Ø				Extended low flow dam releases	
			Ø		Timing of flow releases not concordant	
			Ø		Extended high flow dam releases	
			Ø		Agriculture/Urban flow diversion upstream	
		(Adverse sediment management	
			Ø		Adverse sediment retention by dams	
			Ø		Sediment loss by dredging	
			Ø		Adverse sediment input (roads/development)	
					Artificial water additions	
			Ø		Sewer treatment effluent	
					Point source urban runoff	
			Ø		Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
			Ø		Mining waste	
					Ground water pumping	
			Ø		Urban depletions	
			Ø		Fracking	
			Ø		Agriculture irrigation wells	
					Watershed alteration	
			Ø		Extensive recent fires in watershed	
			Ø		Extensive recent timber harvest	
			Ø		Extensive open pit mining in watershed	
			Ø		Livestock/wildlife overgrazing	
					Local biodiversity impacts	
			Ø		Evidence of excessive grazing (local)	
			Ø		Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	
litior	al Comme	nts [Dry L.	sh.	doing to prater Now	ing through ald changel

Schema: Montane 2.5

SA Code			SA Cover	Worksheet	- Provide Street		-
	SF2MI[]] SA Name : Two	Mile Pond Reservoir		Project : R	iparian Asses	ement
A)de	Tsct[[]	AU Name : Trar	sect []]			Mile Pond R	and the second sec
County	Santa Fe	HUC 12 Head	waters Santa Fe River	Character (6) and			
SA Genera	al Location a	nd Roundany (Pationala		Elevation (ft) 72		X 3 100.00	egion 6.0 NWFM
of wa Driving Di Drivir	ter rights. rections ng to Santa F	that leads into a pond k due to safety concerns r fe from Albuquerque yo il you reach the reservoi	u head north on Old Dea	nu u water uiver	sion to the area was	recently shu	t down due to lack
		e Conservative and The S	is the field of the field of the		and we and	Fish Observ	ved in
Surve	yor Role		Survey	or Name	only.	Wetland	
Land	iscape	Austin					Surveyor Initial
Bi	otic	# Washing	+ Annie				DS+AM
	iotic			11			4° 11
	ssors	4		<u>u</u>			"
	ng (m)						*
-105° 53'	ALCONT OF A	Northing (m) 35° 41' 23" N	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft
			13	NAD- 83 UT	TM 35.68972	2	-105.89
Surve	y Date	5/15/24	Start Time	09.15	End T	ïme	13:07
						Contraction (1)	
			SA Desc				15.01
A Landsc En	ape Contex	t (summarize the wetlan	d and surrounding land	scape; include o	ondition and impact	(5)	
En P A Biotic C Ne	condition (vice Mexico	egetation patterns, com	d and surrounding land to be gree is border position and structure, e	scape; include o ning up between xotics and invas	even if high desc lives, disturbance evi leaf Willow, C	it is intend i idence, fire an ihimisa ,	s ti'll forest nd herbivory) sult bush
En P A Biotic C Ne	condition (vice w Mexico dite &	egetation patterns, com Whip tail, Pra- butterfiles, Fleab,	d and surrounding land to be gree is border position and structure, e ie Wer Borben	xotics and invas	even if high desc leaf Willow, C	it is intend i idence, fire an ihimisa ,	s ti'll forest nd herbivory) sult bush
En P A Biotic C Ne In	condition (v condition (v condition (v condition (v green Condition ()	egetation patterns, com Whip tail, Pra- Whip tail, Pra- butterfiles, fleab, more, maple	d and surrounding land to be gree is border position and structure, e ie Wet Borben not, globe mallow, etarting to	scape; include o ning up between xotics and invas xotics and invas a Narrow golden as golden as golden as	even if high dese leaf Willow, C iter, Willow, ves	it is interdent idence, fire and ihimisa, is begin	s ti'll forest nd herbivory) S. It bus h why to
En P A Biotic C Ne In	iretty condition (v on Marica dite & green Condition () and others	egetation patterns, com Whip tail, Pra- butterfles, fleab, pore, maple hydrological alterations ite impacts; explain the	d and surrounding land to be gree is border position and structure, e is Borben and globe mallow, etarthing to le.g., dams, walls etc.); flo hydrologic breaks or oth	scape; include o ning up between xotics and invas xotics and invas a, Narrow golden as <u>golden as</u> <u>golden as</u> <u>golden as</u> <u>golden as</u> <u>golden as</u>	even if high desc ives, disturbance even leat Willow, C iter, Willow, ves	it is idence, fire and idence, fire and inimisa, is begin of overbank	s ti'll forest nd herbivory) s. It bus h paing to flooding; soil
En P A Biotic C Ne In	iretty condition (v on Marica dite & green Condition () and others	egetation patterns, com Whip tail, Pra- butterfles, fleab, pore, maple hydrological alterations ite impacts; explain the	d and surrounding land to be gree is border position and structure, e is Borben and globe mallow, etarthing to le.g., dams, walls etc.); flo hydrologic breaks or oth	scape; include o ning up between xotics and invas xotics and invas xotics and invas xotics and invas yolden as <u>golden as</u> <u>golden as</u> <u>golden as</u> <u>golden as</u> <u>golden as</u>	even if high desc ives, disturbance even leat Willow, C iter, Willow, ves	it is idence, fire and idence, fire and inimisa, is begin of overbank	s ti'll forest nd herbivory) s. It bus h paing to flooding; soil
E n P A Biotic C Ne in A Abiotic C	Condition (v condition (v condition (v dite & <u>green</u> Condition () con dv	egetation patterns, com Whip tail, Pra- butterfles, fleab, pore, maple hydrological alterations ite impacts; explain the straction goin y high J	d and surrounding land to be gree is border position and structure, e ie Wet Borben ne, globe mallow, etarthy to le.g., dams, walls etc.); flo hydrologic breaks or oth g on near escrt area	scape; include o wing up between xotics and invas xotics and invas police as golder as	even if high desc ives, disturbance ev leaf Willow, C iter, Willow, C iter, Willow, ristics and evidence efine the SA limits) Andobon Fac	it is idence, fire and himisa, is begin of overbanks	s ti'll forest nd herbivory) s. It bus h ming to flooding; soil
E n P A Biotic C Ne in A Abiotic C	Condition (v condition (v condition (v dite & <u>green</u> Condition () con dv	egetation patterns, com Whip tail, Pra- butterfles, fleab, pore, maple hydrological alterations ite impacts; explain the straction goin y high J	d and surrounding land to be gree is border position and structure, e ie Wet Borben ne, globe mallow, etarthy to le.g., dams, walls etc.); flo hydrologic breaks or oth g on near escrt area	scape; include o wing up between xotics and invas xotics and invas police as golder as	even if high dese ives, disturbance ev leaf Willow, C iter, Willow, C iter, Willow, ristics and evidence efine the SA limits) Andobon Fac	it is idence, fire and himisa, is begin of overbanks	s ti'll forest nd herbivory) s. It bus h ming to flooding; soil
E n P A Biotic C Ne in A Abiotic C	Condition (v condition (v condition (v dite & <u>green</u> Condition () con dv	egetation patterns, com Whip tail, Pra- buttarfles, fleab, pore, maple hydrological alterations ite impacts; explain the straction goin y high J	d and surrounding land to be gree is border position and structure, e ie Wet Borben ne, globe mallow, etarthy to le.g., dams, walls etc.); flo hydrologic breaks or oth g on near escrt area	scape; include o wing up between xotics and invas xotics and invas police as golder as	even if high dese ives, disturbance ev leaf Willow, C iter, Willow, C iter, Willow, ristics and evidence efine the SA limits) Andobon Fac	it is idence, fire and himisa, is begin of overbanks	s ti'll forest nd herbivory) s. It bus h ming to flooding; soil

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials : DS

MRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	Rating	Wt	Final Score
Metric Description	naung	Σ 1.0	3.25
andscape Context			0.75
1. Buffer Integrity Index	3	0.25	1.0
2. Riparian Corridor Connectivity	4	0.25	-
3. Relative Wetland Size	4	0.25	1.0
4. Surrounding Land Use	2	0.25	0.5
lotic		Σ	1
1. Relative Native Plant Community Composition	2	0.2	
2. Vegetation Horizontal Patch Structure	3	0.2	
33. Vegetation Vertical Structure	3	0.2	
34. Native Riparian Tree Regeneration	3	0.2	
35. Invasive Exotic Plant Species Cover	4	0.2	
Abiotic		Σ	
		0.3	
A1. Floodplain Hydrologic Connectivity	1	0.2	
A2. Physical Patch Diversity	U U	0.2	
A3. Channel Equilibrium	7	0.2	-
A4. Stream Bank Stability and Cover	9	1.000	-
A5. Soil Surface Condition	3	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic		0.35	
Abiotic	A	0.35	
SA WETLAN	D CONDITIO	N SCORE 2	3.08
SA WETLAN	D RANK :	-	B

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
c	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

essor Summary	Major	Minor	Top Three	
	0	0	1	Construction
			2	Trails
			3	No Water

Stressor Comments (Evaluation of risk)

Stre

Willows appear to be slightly behind the willows below the dam

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect []]

Surveyor Initials : $f(x) \in f(x)$

Landscape Context

L. - Buffer Integrity Index

 Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

 Imagery
 Google Earth KMZ. file

 Image Date
 6/23

	Ľ		Image Date 6/23				
Allowe	ed buf	fer/RCC land cover elements	_ Evclue		a huffor/DCCI		
Buffer	RCC		Buffer		n-buffer/RCC I	and cover ele	ments
×	×	Natural or semi-natural vegetation patches	X		Commercial/ dams, bridge	residential de	velopments, parking lots, , and other structures
	×	Small irrigation ditches without levees	\Box			, golf courses,	
	Old fields, unmaintained			뉴	Railroads		<u>sports rields</u>
		Open range land				evees, sedime ging areas	nt piles, construction
	×	Foot trails, horse trails, unpaved bike trails (low intensity)					orse paddocks, feedlots
×		Non-channel open water			Intensive agri row crops, orc	Culture: maini	tained pastures, hay fields,
	X	Non-functioning abandoned vegetated levees, or naturally occurring levees	X				econd-order unpaved but
		unpaved two tracks roads	×			ounded by a l	evee or other manmade
		Other			Other		
Box belo	w. Rat	D. Buffer Percent Sub-metric. Measure or estimate t composed of allowed buffer elements and enter into the sub-metric using Table L1a and enter the rating nary Worksheet 1d.	+L - D	entage	of the	Table Rating	EL1a. Buffer Percent Buffer Percent
		Buffer Percent (%)= 85%				<u> </u>	100%
		8370			ł [x 3	≥80% - <100%

Worksheet 1c. Buffer Width Sub-metric. Measure the length of each buffer line in meters in the GIS or on the map. Average the line lengths and rate using Table L1b. Enter the rating on the Buffer Integrity Summary Worksheet 1d.

Line	Buffer Width (m)	Buffer Width (ft)	Line	Buffer Width (m)	Buffer Width (ft)
_A	164.26	538.91	E	161.93	531.26
8	125.25	410.92	F	231.48	759,44
c	115.39	378.57	G	121.25	397.80
D	111.07	364.40	— — Н	155.87	511.38
	Average	148.31 (m)	!	486.58	(ft)

nating	Durrer Percent
<u>C 4</u>	100%
(X) 3	≥80% - <100%
<u> </u>	≥50% - <80%
$\bigcirc 1$	<50%
Tabl	e L1b. Buffer Width
Rating	Average buffer width

	e Lib. Butter Width
Rating	Average buffer width
<u>(</u> 4	≥190m
(X 3	≥130 - <190m
<u> </u>	≥65 - <130m
C_{1}	<65m

Worksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a and L1b above to calculate the Buffer Integrity Index Score using the formula in the box below. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table L1c on the SA Summary Worksheet.

Buffer % Rating	+ Buff	fer Width Rating	/2 ≕	Buffer Integrity Index Score	3
3	- <u>+</u> -	3	/2 ≈	3	(

L		Integrity
R	ating	Score
C	4	>3.5
R	3	>2.5 - ≲3.5
\subseteq	2	>1.5 - ≤2.5
\mathbf{C}	1	≤1.5

Table L1c. Summary Rating for Buffer

SA CODE: SF2MI[]]

SA Name : Two Mile Pond Reservoir Transect []

Page 4 of 17

2 - Riparian Corridor Connectivity (RCC)

orksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for cluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter e summed values in meters for excluded element lengths for each bank within each egment upstream and downstream of the SA. Sum the values for each segment and alculate % Segment Disruption for the upstream side and the downstream side. Add the otal disruption for upstream and downstream segments and then calculate the % Total isruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and ne data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	m Segment
Banks	Left Bank	Right Bank	Left Bank	Right Bank
) Total Bank Disruption (m)	0	0	0	0
) Total Disruption by Segment (m)		0		0
) % Segment Disruption = (B/1000)*100		0	(D
D) Total Disruption both segments			0	
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.

Та	ble L2. RCC Rating
Rating	Description
	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
0 1	≥40% total disruption on both segments combined.

3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshe

		RSR						R	WSI		
Current Size	1	Historic Size	-	RSR	1	14	RSR	х	100	=/)=-	RWSI (%)
Current Size	1	Thatone sale	-Persil 1	1.12223.1	1. 15	-	0.1	v	100	=	10
9	1	10		0.9	1	-	0.1	X	100	-	

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(8.4	≤10%	Wetland is at or only minimally reduced from its full natural extent
	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
		Wetland has been reduced by more than 40% its natural size
CI		Wetland has been reduced by more than 70% its natural size

Surveyor Initials : DCS

Date: 5/15/24

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect []]

Surveyor Initials : DCS

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0,1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1		
Filling or dumping of sediment or soils		0	0
intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.1	0	0
hip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0 0	0
Ski area	0.4	- - -	
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	ł	
Artificial/Constructed wetfands, irrigation ditches	-	10	
Developed/Managed trail system (high use trail)	0.7	20	14
Agriculture - active tilled crop production	0.8	5	4
riculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.2		0
vanicured lawns, sport fields, and golf courses; urban manicured parks	0.3	_ 0	0
Did fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, sussian thistle, mustards, annual vegetation)	0.5	0	0
Nature old fields and other fallow lands with natural composition, introduced hay field and pastures e.g., perennial vegetation cover)	0.7	0	0
estoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
aying of native grassland (e.g., no tillage, having and haling and haling and haling	0.9		-0
eavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) moved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
ommercial tree plantation, Christmas tree farms	0.6	0	0
elective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) moved	0.8	0	0
ature restoration areas returned to natural conditions (re-converted)	0.9	0+	0 - 1
atural area, land managed for native vegetation - No agriculture, logging, development	1	0	0 -
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surr	ounding Land Use Rating
Rating	LUI Score
<u> </u>	≥95 - 100
	≥80 - <95
<u> </u>	≥40 - <80
	<40

-
-
-
_
:2MI
S
E.4.
5
ŝ
CODE
-
0
- 63
-
4
SA

SA Name: Two Mile Pond Reservoir Iransect 1

nave. U. in

Biotic Metrics

Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use the Tables in Appendix B and the Field Guide for metric instructions. Enter the species codes for the invasive exotic species found in the polygon (from NM Noxious Weed List -Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

1IntIntInt2 $IetaIetaIetaIeta3IetaIetaIetaIeta4IntIetaIetaIeta5IntIetaIetaIeta6IntIetaIetaIeta7IntIetaIetaIeta8IntIetaIetaIeta9IntIetaIetaIeta10IntIntIetaIeta11IntIntIntInt12IntIntInt13IntIntInt14IntIntInt15IntIntInt16IntInt17IntInt18IntInt19IntInt11IntInt12IntInt13IntInt14IntInt15IntInt16IntInt17IntInt18IntInt19IntInt19IntInt10IntInt11IntInt12IntInt13IntInt14IntInt15IntInt16IntInt17IntInt18Int19Int$	obygon	83 Vertical Structure Type	84 Tree Regeneration % Cover	85 Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
No 30% No No No No No No No	-	IA1				1.11 T 11 T 11 T
Inti Inti <th< td=""><td>2</td><td>IA2</td><td>30%/ 6</td><td>No children</td><td></td><td>C, Chimisa, Prickle parcigoloben aster moa co</td></th<>	2	IA2	30%/ 6	No children		C, Chimisa, Prickle parcigoloben aster moa co
Inst 10% 22% deed m.ler1 C.m.ise.w.llow, precise backbara, pl MB MB 10% 22%, deed deed m.ler1 C.m.ise.w.llow, precise backbara, pl MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB MB	m	IIA1				
Incr 10% > 2% dead Muleij Chunija under jerebana	4	1181				11 11 11
	2	IIIC1	10%	22%	è,	35. Willow, pravie berbara, 9'
	9	MB				
	2	INFI				
	00					
	6					
	10					
	:					
	12					
	13					
	14					
	15					
	16					
	17					
	18					
	19					
	20					

任 Polygon No. Speciel 5 L And Work Stratum 2 Hebbeeous Speciel 5 L Rank 8,245 Histore 3 N Speciel 5 L Rank 8,245 Histore 4 Speciel 5 L Rank 8,245 Histore 5 L 5 L Rank 8,445 Histore 5 L Ran		Tall Woodu stratim 1	V Stratur			" It is use same composition or a new CT is created for the polygon.		JOSILION OF A		is created to	or the pc	iygon.	1			
A Z M Species J R	1					Short Woc	ody Strat			Herbaceou	s/Sparse	Stratum 3		CT Score	4	
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	- [-	Species 1	<u>, z</u>	Species 2	чZ	Species 3	<u>ш 2</u>		ωž	Species 5	ω z		+		< <u>45</u>	
B D C	2	naple	2	0. 11.e	N	Chis 20							T			
	_					N.S.	- ·			V hear		8/2c		5	_ _	
									2		2	×#5	\geq	5.2	_	$\left \right $
	· ·								-							
			\square						-			-				
									T		- -			- -		
	9								1				- -		- +-	
										- -			- +			
										- -	— - 		- +			
										- +-	- -	[
											-					
											- -			-	_	
	5							-			-			-	- +	
											-+-	_ -				
							_				 	- 	_			
	Turner and the first of the first of										Einal W			-		

Date: S//S/2 9 Surveyor Initials:

SA Name : Two Mile Pond Reservoir Transect [¹]

SA CODE : SF2Mi []

.

SF2MI[]] SA CODE :

Two Mile Pond Reservoir Transect [] SA Name :

Surveyor Initials : $\int \int \int \int$

Table B1	Relative Native Plant C	ommunity Composition Rating
Rating	CT Fina	I Weighted Score
4	≥ 3.75	<10% non-native
3	≥ 3.25 and <3.75	10% ≤20% non-native
2	> 2.0 and <3.25	20% ≤50% non-native
	≤2.0	>50% non-native

Vegetation Horizontal Patch Structure

rksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch tern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

rizontal Patch Structure pattern A,B,C, or D:

	Table B2. Rating for Vegetation Horizontal Patch Structure
Rating	Description
4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may Pattern B. SA has a moderate degree of patch diversity (3 patch types presented and have more than one occurrence in the SA.
2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present, nowever, a single,
1	dominant patch type exists with the others occupying a small portion of the SA is dominated by a single patch type. Other patch Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.
8 - Veg	etation Vertical Structure

orksheet 8. Percentage of SA by vertical structure type (VST). Using the St om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ne VST) x 100. Enter the total %SA for each VST below.

		VST 2 Low Structure	VST S Tail Shrubland	VST 65 Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation	
Total % of SA	Forest	Forest 50		SD				

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for he rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ating on the SA Rank Summary Worksheet.

D-Alm m	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
Rating			6W and/or 6H
	1	J	
` 4 -	1	6W	
· ·	2 or 1 and 2	5	6W and/or 6H
· _ ·· ·- [· · ·-	1		
	2 or 1 and 2	5	
(3 ┝──	2 or 1 and 2	6W	
} -	S	6W	
<u>- ···-</u> ·· <u></u> -	2 or 1 and 2		
2	S		
	6W		
	65		
~ 1 [6Н		
	7		· · · · · · · · · · · · · · · · · · ·

SF2MI[/] SA CODE :

Date: 5/15/ 24

SA Name : Two Mile Pond Reservoir Transect [/] Surveyor Initials : DCS

B4 - Native Riparian Tree Regeneration

F	Rating	Description
C	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
R	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Rating	is for Invasive Exotic Plant Species Cove
Rating	Invasive Species Cover %
C 4 X	0%
	>0% - <1%
(2	≥1% - <10%
C 1	≥10

Additional CTs and Biotic Metric Comments:

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials :

Dec

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description	Cross-section:	1	2	3
1: Bankfull width	This is a critical step requiring familiarity with field indicators Measure the distance between the right and left bankfull con	of the bankfull contour. tours with a tape.			
2: Maximum bankfull depth	Keeping the take level between the right and left bankfull con of the line above the thalweg (the deepest part of the channe help here.	ntdurs, measure the height I). A pocket line level can			
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2	. \ \			
4: Flood-prone width	Using a tape, measure the length of a level line at a height eq from Step 8 to where it intercepts the right and left banks.	ual to the flood prone depth			
5: Calculate Entrenchment Ratio	Divide the filood-prone width (Step 4) by the bankfull width (Step 1).			
6: Calculate average ratio	Calculate the average for Step 5 for all three replicate cross-se using Table A1a. Enter the rating in the A1 box on the SA Ran	ections. Enter the average he ik Summary Worksheet.	re and	rate	

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

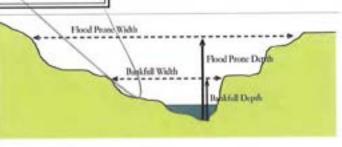
 Rating
 Description

 \bigcirc 4
 Average entrenchment ratio is \geq 2,2;

 \bigcirc 3
 Average entrenchment ratio is \geq 1.9 - \langle 2.2

 \bigcirc 2
 Average entrenchment ratio is \geq 1.5 - \langle 1.9

 \bigcirc 1
 Average entrenchment ratio is < 1.5



Worksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Worksheet in conjunction with Table A1c. Check the boxes for all that apply to each

regmi	ent. \		
U	M	L	Indicator
		D	Bankful is slightly below bank height
	Q		Bankful is well below bank height and channel is incised
	D		Channel widening, due to bank failure
		Q	Constructed levees preclude floodplain inundation
		Ø	Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

		Rating for Floodplain Hydrologic ty in single-channel step-pool systems
R	ating	Description
C	4	Average entrenchment ratio is ≥ 1.9
C	3	Average entrenchment ratio is ≥1.4 - <1.9
0	2	Average entrenchment ratio is ≥1.2 - <1.4
C	1	Average entrenchment ratio is < 1.2

Two Mile Pond Reservoir Transect [/] SA Name :

Date: 5/15/24

Surveyor Initials : DCS

Method 2

A select the narrative description that best describes the floodplain hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence-that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

Rating	Description
4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.
3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.
2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).
1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.
	4 3 2

Tal A1d. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1						
2						
3						

Not on JSAL Manness

Floodplain Hydrologic Connectivity Comments:

Date: 5/15/27

SA Name: Two Mile Pond Reservoir Transect [/]

Surveyor Initials : $\int \mathcal{J}_{1}^{2} \leq \int$

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
			Abandoned channels
			Backwater/eddy
			Riffles or rapids
			Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
	<u> </u>		Теггасез
			Channei pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Tabl	e A2.	Rating for Physical Patch Complexity
Rating		Description
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).
C	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).
×.	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, ≤ 5 unique indicators are present in the SA.

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect []]

Surveyor Initials : DC5

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		X		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		X		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		X		There is leaf litter, thatch, or wrack in most pools.
Indicators of		X		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		X		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		X		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
[Ø		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
			ı 🗆	here are avulsion channels on the floodplain or adjacent valley floor.

Date: [] 8.74

SA Name : Two Mile Pond Reservoir Transect []

Surveyor Initials : DLS

	Table A3. Rating for Channel Equilibrium					
R	ating	Description				
8	4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.				
ſ	3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.				
C	2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.				
	1	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.				

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators	
	4	X 4	□4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.	
Indicators of Bank	□3	□3	3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.	
Soil Stability	□2	2	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.	
	1	1		Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.	
	4	反4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.	
	□3	□3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.	
Indicators of Stream Bank Erosion Potential	□2	2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.	
	1		[] [] []	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.	

Average Indicator Score

Table A4. Stream Bank Stability and Cover Rating					
Rating Description					
X 4	>3.5 - 4,0				
C 3	>2.5 - ≤3.5				
C 2	>1.5 - ≤2.5				
	1.0 - ≤1.5				

Date: 5/15/24

Des

SA Name : Two Mile Pond Reservoir Transect [[]

Surveyor Initials :

A5 - Soil Surface Condition

orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment Middle Segment Lower Segme		Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	×		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			FIII
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating						
R	lating	Description					
С	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
R	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
Ç	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas, and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials : DCD

rksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign egories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow here

nk	Affect			Stressor Group/Stressor	Comments	
	Major	Minor	Absent	Jnknown		
					Adverse water management	
					Extended low flow dam releases	
			Ø		Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
					Adverse sediment management	
					Adverse sediment retention by dams	
			Ø		Sediment loss by dredging	
			Ø		Adverse sediment input (roads/development)	
	·				Artificial water additions	
					Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
			Ø		Mining waste	
	l	<u> </u>		<u> </u>	Ground water pumping	
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
			<u> </u>		Watershed alteration	
					Extensive recent fires in watershed	
			Ø		Extensive recent timber harvest	
			Ø		Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
	<u>.</u>		<u></u>	<u> </u>	Local biodiversity impacts	
			_ ₫		Evidence of excessive grazing (local)	
	Ø				Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	

dditional Comments

Schema: Montane 2.5

1

NMRAM Montane Riverine Wetlands Version 2.5

······		SA Cov	ver Worksheet		······································	
SA Code SF2MI [I SA Name : Two	Mile Pond Reservoir				
Tode Tsct []				Project : Riparian A		
County Santa Fe		waters Santa Fe River		WOI : Two Mile Pond Reservoir		
SA General Location	and Boundary (Patienal				coregion 6.0 NWFM	
Driving Directions Driving to Santa			e of Santa Fe bordering t r and a water diversion t ecos Trail. Then head ea	o the area was recently	shut down due to lac	
	e Conservative and The	··· ··· ··· ··· ··· ··· ··· ··· ··· ··		ilts to client Fish Ob	served in land?	
Surveyor Role		Surve	ayor Name			
Landscape	Dustin Schwart	tz	······································		Surveyor Initia	
Biotic	Annie McCoy				DS	
Abiotic	Dustin Schwar				AM	
Stressors	Dustin Schwart	tz			DS	
Easting (m)	Northing (m)	Zone		· <u> </u>	DS	
-105° 53' 24" W	35° 41' 23" N	13	Datum	Latitude (DD ft)	Longitude (DD f	
Survey Date	6/11/24	······	NAD- 83 UTM	35.689722	-105.89	
		Etayt Thurse	1 0.00			
A Landscape Contex	(t (summarize the wetlar	nd and surrounding lar	9:00 scription ndscape; include condition (contractions)	End Time on and impacts) Irday but A	15:00 * <0.50	
A Landscape Contex Lo n/ A Biotic Condition (v glob mallen	egetation patterns, com	SA De nd and surrounding lar from sanda which shares position and structure ter buillour	scription ndscape; include condition (conditions) (condit	on and impacts) Icolary Ionit Al	S - E Ligger	
A Landscape Contex Lo A Biotic Condition (v glob mallen Salt bush	egetation patterns, com green and dense	SA De Ind and surrounding lar Lieni Sanda Lieni Sanda	scription indscape; include condition if is a second invasives, d bush second invasives, d bush second ve and invasives, d	on and impacts) Irday but A listurbance evidence, fir ry full chimi borc	e and herbivory)	
A Landscape Contex Lo A Biotic Condition (v glob mallen Salt bush A biotic Condition (turbance and other s T 16, 80	tt (summarize the wetlar t5 of water 15 of water regetation patterns, com getation patterns, com	SA De Ind and surrounding lar I rem Sanda Marchander position and structure ter Willow Millow Millow (e.g., dams, walis etc.]; hydrologic breaks or o 7.60 p.4	scription idscape; include condition if a characteristics pexotics and invasives, d bush seems ve and how y w flooding characteristics ther factors that define t 6 10 wt	on and impacts) Icolary but A listurbance evidence, fir ry full Chimi hc, C and evidence of overba he SA limits)	e and herbivory)	
A Landscape Contex Lo A Biotic Condition (v glob mallew Galt bush A biotic Condition (turbance and other s T 16,8% No	egetation patterns, com green and dense hydrological alterations ite impacts; explain the Control of the Waley Lac	SA De Ind and surrounding lar I ION SANDA Dosition and structure ter Willow Why hub, (e.g., dams, walls etc.); hydrologic breaks or o V. 60 p.4	scription Indscape; include condition (C. C. C	on and impacts) Irday but A listurbance evidence, fir ry full Chimi how c and evidence of overba he SA limits)	e and herbivory)	
A Landscape Contex Lo A Biotic Condition (v glob mallew Galt bush Abiotic Condition (Abiotic Condition (et (summarize the wetlar to of water man Alex regetation patterns, com getation patterns, com get	SA De Ind and surrounding lar from sanda main charger position and structure fer Willow Why chuby le.g., dams, walls etc.]; hydrologic breaks or o 7.60 p from mmary and comment	scription indscape; include condition (c c c c c c c c c c c c c c c c c c c	on and impacts) Irolay but A listurbance evidence, fir ry full Chipm hc. C and evidence of overba he SA limits)	e and herbivory) Second nk flooding; soil	
A Landscape Contex Lo A Biotic Condition (v glob mallen Salt bush A Abiotic Condition (sturbance and others T 16,8° No sessment Summary Site	egetation patterns, com green and dense hydrological alterations ite impacts; explain the l C 60, 7, 10 Walky 10 (Overall site condition su e is craw/ite	SA De Ind and surrounding lar I rem Sanda Dosition and structure ter Willow Millow Millow (e.g., dams, walls etc.]; hydrologic breaks or o 7.60 p H Changed Immary and comment og with Lize	scription idscape; include condition if the time of time of the time of time	on and impacts) Icolary built Al listurbance evidence, fir ry full Chimi bc. C and evidence of overba he SA limits) Chimits	e and herbivory)	
A Landscape Contex Lo A Biotic Condition (v glob mallen Galt bush A biotic Condition (A biot	tt (summarize the wetlar $t_{5} \circ f$ water $t_{5} \circ f$ water $t_{7} \circ f$ water $t_{7} \circ f$ water $f_{7} \circ f$ water g_{g} and f_{7} g_{g} and g_{1} f_{7} and g_{1} f_{7} and g_{1} f_{7} and g_{1}	SA De Ind and surrounding lar I rem sanda unda changer position and structure ter Willow why chub, le.g., dams, walis etc.]; hydrologic breaks or o 7.60 pt immary and comment or with lize units Willa. Plate t	scription indscape; include condition (c) (internet) incl. exotics and invasives, d bush seems very official characteristics ther factors that define t 6.10 nternet	on and impacts) Irolay but A listurbance evidence, fir ry full Chipal bc, C and evidence of overba he SA limits) Chipal chipal	e and herbivory) second nk flooding; soil y training fs at W traj t	

Page 1 of 1	ŧ	7	

SA CODE: SF2MI[]]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [] Surveyor Initials : DS/AM

IMRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	Rating	Wt	Final Score
Metric Description		Σ 1.0	3.25
andscape Context	. 3	0.25	0.75
1. Buffer Integrity Index	4	0.25	1.0
.2. Riparlan Corridor Connectivity	4	0.25	1.0
.3. Relative Wetland Size	2	0.25	0.5
L4. Surrounding Land Use		5	
Biotic	11	0.2	
B1. Relative Native Plant Community Composition	9	0.2	-
B2. Vegetation Horizontal Patch Structure			+
83. Vegetation Vertical Structure	2	0.2	-
B4. Native Riparian Tree Regeneration	2	0.2	-
B5. Invasive Exotic Plant Species Cover	4	0.2	
Ablotic		Σ	
A1. Floodplain Hydrologic Connectivity		0.3	-
A2. Physical Patch Diversity	1	0.2	
	4	0.2	
A3. Channel Equilibrium	4	0.2	
A4. Stream Bank Stability and Cover	3	0.1	
A5. Soil Surface Condition)		

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic		0.35	
Abiotic		0.35	
SA WETLAN	D CONDITIC	N SCORE Σ	3.08
SA WETLAN	D RANK		ß

St

Rank	Score	Description
А	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1	Construction
			2	Trails
			3	No water

1No	ngder	going these	agh	char	ne!	and	many	
trails	but	Willow 5	7/1	pear	to	be	Flowing	
nori								_
		Page 2 g	\$17					

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

Image <th< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th><u> </u></th><th></th><th></th><th></th><th>r area or RCC (Indicate the in</th><th></th></th<>							<u> </u>				r area or RCC (Indicate the in	
Buffer RCC Included information in the set of the submetric Rect Submetrix RC and cover elements Image: State in the submetric rest of the submetric Rect Submetrix Rect Rect Rect Rect Rect Rect Rect Rect	-	1					Imag	e Date	6/3	23		
Buffer RCC Buffer RCC Image: Second Secon	Allov	ved butfer/F	ICC lan	d cover elements			Exclu	Ided no	n-buffer	/RCC	land cover e	ements
Image: Simili irrigation ditches without levees Image: Simili irrigation ditches without levees Image: Simili irrigation ditches without levees Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields Image: Dit of fields, unmaintained Image: Lawns, parks, golf courses, sports fields							Buffe	RCC	ļ			
Image: State of the submetric without levees Image: Lawns, parks, golf courses, sports fields Image: State of the submetric without levees Image: Lawns, parks, golf courses, sports fields Image: State of the submetric without levees Image: Lawns, parks, golf courses, sports fields Image: State of the submetric without levees Image: Lawns, parks, golf courses, sports fields Image: State of the submetric without levees Image: Lawns, parks, golf courses, sports fields Image: State of the submetric without levees Image: Lawns, parks, golf courses, sports fields Image: State of the submetric without levees Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, sports fields Image: Lawns, parks, golf courses, parks, golf courses, sports fields Image: Lawns, parks, golf courses, parks, golf courses, sports fields Image: Lawns, parks, golf courses, parks, golf course, parks, golf co									Comme dams, t	ercia bridg	l/residential o jes, revetmen	levelopments, parking lots, ts, and other structures
L Open range land Image land	<u>[2</u>]				out levee	5						
Imaterials, horse trails, unpaved bike trails (low intensity) Imaterials, staging areas Imaterials, horse trails, unpaved bike trails (low intensity) Intensive livestock areas, horse paddocks, feedlots Imaterials, horse trails, unpaved bike trails (low intensity) Intensive livestock areas, horse paddocks, feedlots Imaterials, horse trails, unpaved bike trails (low intensity) Intensive livestock areas, horse paddocks, feedlots Imaterials, horse trails, unpaved bike trails (low intensity) Intensive agriculture: maintained pastures, hay fiel fow crops, orchards, and vineyards Imaterials, horse trails, unpaved bike trails (low intensity) Intensive agriculture: maintained pastures, hay fiel fow crops, orchards, and vineyards Imaterials, horse trails, horse trails, unpaved bike trails (low intensity) Intensive agriculture: maintained pastures, hay fiel fow crops, orchards, and vineyards Imaterials, horse trails, unpaved bike trails (low intensity) Imaterials, and vineyards Imaterials, horse trails, unpaved to allow curring levees Imaterials, and vineyards Imaterials, and rate is the part of the primeter composed of allowed buffer elements and rate using Table L1a and enter the rating on the Buffer Imaterials, staging areas Imaterials, training, the percent (%)= 85% Imaterials, staging areas Imaterials, training, training to the line of each buffer line in meters in Buffer Width Imaterials, training on the Buffer Width			fields,	unmaintained					Railroad	ds		
Image: Second state is an analysis of the sub-metric state is state is state in the sub-metric state is st									Maintai materia	ined is, st	levees, sedim	ent piles, construction
X Non-channel open water Intensive agriculture: maintained pastures, hay fiel row crops, orchards, and vineyards X Non-functioning abandoned vegetated levees, or naturally occurring levees Paved roads or developed second-order unpaved is graded roads X Impaved two tracks roads X Paved roads or developed second-order unpaved is graded roads Impaved two tracks roads X X Paved roads or developed second-order unpaved is graded roads Impaved two tracks roads X X Paved roads or developed second-order unpaved is graded roads Impaved two tracks roads X X Paved roads or developed second-order unpaved is graded roads Impaved two tracks roads X X Impaved two tracks roads X Impaved two tracks roads X X Open water bounded by a levee or other manmade structure Impaved two tracks roads X X Impaved tracks roads X Impaved two tracks roads X X Impaved two tracks roads X Impaved two tracks roads X X Impaved tracks roads X X Impaved two tracks roads X X Impaved tracks roads X X X Pa		I Foo	t trails, nsity)	horse trails, unpav	ed bike ti	rails (low			1			horse paddocks, feedlots
Imaturally occurring levees Imaturally occurring levees or other manmade structure Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees or other manmade structure Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees or other manmade structure Imaturally occurring levees Imaturally occurring levees or other manmade structure Imaturally occurring levees or other manmade structure Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees or other manmade structure Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturally occurring levees Imaturevees Imaturally occurring levees			_						Intensiv	e ag	riculture: maii	ntained pastures, hav fields
Image: construction of the sub-metric weaks roads Image: construction of the sub-metric weaks read read wind weaks roads Image: construction of the sub-metric weaks read read read read read wind read read read read read read read rea	X	Non	-functio	oning abandoned curring levees	vegetated	t levees, or	X		Paved ro	bads	or developed	
□ Other □ □ ○ □ ○ Other □ □ ○ □ ○ Other □ □ ○ <tr< td=""><td></td><td>🔲 unpa</td><td>aved tw</td><td>o tracks roads</td><td></td><td></td><td>×</td><td><u>ري</u></td><td>Open wa</td><td>ater</td><td></td><td>levee or other manmade</td></tr<>		🔲 unpa	aved tw	o tracks roads			×	<u>ري</u>	Open wa	ater		levee or other manmade
Drksheet 1b. Buffer Percent Sub-metric. Measure or estimate the percentage of the perimeter composed of allowed buffer elements and enter into the Buffer Percent k below. Rate the sub-metric using Table L1a and enter the rating on the Buffer Percent (%)= Table L1a. Buffer Percent Regrity Summary Worksheet 1d. Buffer Percent (%)= 85% Rating Buffer Percent C 4 100% C 2 250% - <80%		🔲 Othe	rr									
A below. Rate the sub-metric using Table L1a and enter into the Buffer Percent egrity Summary Worksheet 1d. Rating Buffer Percent Buffer Percent (%)= 85% Rating Buffer Percent C 4 100% (X 3 ≥80% - <100%	orks						- 11	- 1 []	Other			
RatingBuffer Victor Submetic Using Table L1a and enter the rating on the BufferBuffer Victor Submet 1d.Buffer Percent (%)= 85% RatingBuffer PercentC4100%C2 $\geq 50\% - <80\%$ C2 $\geq 50\% - <80\%$ C1 $< 50\%$ Buffer WidthBuffer WidthBuffer WidthBuffer WidthBuffer WidthBuffer Width(m)(ft)LineBuffer Width164.26538.91E125.25410.92F231.48759.44111.07364.40H111.07364.40H111.07364.40H111.07364.40H111.07364.40H111.08SoreKsheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1aL1b above to calculate the Buffer Integrity index Score using the formula in the box on the SA Summary Worksheet.RatingScoreState 1 and enter the sub-metric Ratings from Tables L1aRatingScoreC42 ≥ 3.5		heet 1b. Bu	ffer Pe	rcent Sub-metric.	Measure	Or estimate t						
Buffer Percent (%)= 85% C4 100% Rksheet 1c. Buffer Width Sub-metric. Measure the length of each buffer line in meters in Buffer Integrity Summary Worksheet 1d.C4 100% Buffer Nidth Buffer Width (m)Buffer Width (ft)LineBuffer Width (m)Buffer Width (ft)Buffer Width (ft)Buffer Width (ft)Buffer Width (ft)C2 $\geq 50\% - <80\%$ Buffer Width (m)Buffer Width (ft)LineBuffer Width (m)Buffer Width (ft)Buffer Width (ft)Buffer Width (ft)Table L1b. Buffer Width (ft)I 164.26538.91E161.93531.26C4 $\geq 100\%$ 1 25.25410.92F231.48759.44(% 3 $\geq 130 - <190m$ 1 11.07364.40H155.87511.38Table L1c. Summary Rating for Buffer IntegrityAverage148.31(m)486.58(ft)Table L1c. Summary Rating for Buffer Integrity in Table L1cL b above to calculate the Buffer Integrity index Score using the formula in the box w. Using the Buffer Integrity index Score, enter rating for Buffer Integrity in Table L1cRatingScoreC4 >3.5 C4 >3.5 C426 Pabler 0 ff utward								centage	e of the	<u> </u>	Tab	le L1a. Buffer Percent
(X 3 ≥80% - <100% (X 3 ≥80% - <100% GIS or on the map. Average the line lengths and rate using Table L1b. Enter the rating on Buffer Width (ft) C 2 ≥50% - <80% Buffer Width Buffer Width (ft) Line Buffer Width (ft) C 1 <50% Table L1b. Enter the rating on 164.26 S38.91 E 161.93 S31.26 C 4 ≥100% 125.25 410.92 F 231.48 759.44 C 2 ≥65 - <130% 115.39 378.57 G 121.25 397.80 C 1 <65m	x bel	low. Rate the	e sub-m	etric using Table I				centage	e of the	<u> </u>	· · · · · · · · · · · · · · · · · · ·	······································
Buffer Integrity Summary Worksheet 1d. Buffer Width (ft) Line Buffer Width (m) Buffer Width (ft) Table L1b. Buffer Width 1 164.26 538.91 E 161.93 531.26 C 4 ≥190m 1 125.25 410.92 F 231.48 759.44 C 4 ≥190m 111.07 364.40 H 155.87 511.38 C 1 <65m	x bel	low. Rate the	e sub-m	netric using Table L	ita and ei	nd enter into nter the ratin		centage	e of the		Rating	Buffer Percent
Buffer Width (m)Buffer Width (ft)LineBuffer Width (m)Buffer Width 	x bel egrit	low. Rate the y Summary	≥ sub-m Worksh	netric using Table L neet 1d. Buffer Percer	ements a .1a and er nt (%)=	nd enter into nter the ratin 	the Bu g on th	centage iffer Per e Buffe	e of the rcent r		Rating (4 (X 3	Buffer Percent
Buffer Width (m)Buffer Width (ft)LineBuffer Width (m)Buffer Width (ft)Table L1b. Buffer Width Rating164.26538.91E161.93531.26(~ 4≥190m125.25410.92F231.48759.44(~ 3≥130 - <190m	x bel egrit rksh	ow. Rate the y Summary	er Widt	hetric using Table L heet 1d. Buffer Percer	ements a .1a and er nt (%)=	nd enter into nter the ratin 85%	g on th	centage iffer Per e Buffe	e of the rcent r	sin	Rating C 4 (X 3 C 2	Buffer Percent 100% ≥80% - <100%
164.26538.91E161.93531.26RatingAverage buffer width125.25410.92F231.48759.44 $(\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ $	x bel egrit rksh GIS c	ow. Rate the y Summary eet 1c. Buff or on the ma	er Widt	th Sub-metric. Me age the line length	ements a .1a and er nt (%)=	nd enter into nter the ratin 85%	g on th	centage iffer Per e Buffe	e of the rcent r	s in Sn	Rating C 4 (X 3 C 2	Buffer Percent 100% ≥80% - <100%
125.25410.92F231.48759.44 $(\bigcirc 3)$ $\geq 130 - <190m$ 115.39378.57G121.25397.80 $(\bigcirc 2)$ $\geq 65 - <130m$ 111.07364.40H155.87511.38 $(\bigcirc 1)$ $<65m$ Average 148.31 (m)486.58 (ft) Table L1c. Summary Rating for Buff Integrity Summary. Enter the sub-metric Ratings from Tables L1aL1b above to calculate the Buffer Integrity index Score using the formula in the boxw. Using the Buffer Integrity index Score, enter rating for Buffer Integrity in Table L1c Rating ScoreC4>3.5($\bigcirc 4$ >3.5($\bigcirc 4$ >3.5($\bigcirc 7$ $2 \cdot 5 - \leq 3.5$	x bel egrit ksh GIS c Buffe	low. Rate the y Summary eet 1c. Buff or on the ma er Integrity S Buffer W	er Widt umma	th Sub-metric. Me age the line length y Worksheet 1d. Buffer Width	ements a 1a and en nt (%)= resure the ns and rat	nd enter into nter the ratin 85% length of ea e using Table Buffer W	ch buff	centage iffer Per e Buffe er line i nter the	e of the rcent r in meters e rating o fer Widt	n	Rating (4 (X 3) (2) (1) Tabl	Buffer Percent 100% ≥80% - <100%
115.39378.57G121.25397.80 $(X \ 3)$ $\geq 130 - <190m$ 111.07364.40H155.87511.38 (111.07) $\langle 65m$ Average148.31(m)486.58(ft)Table L1c. Summary Rating for BufferIntegrity Summary. Enter the sub-metric Ratings from Tables L1aRatingScoreUsing the Buffer Integrity index Score, enter rating for Buffer Integrity in Table L1cRatingScoreC4>3.5 $(X \ 3)$ >2.5 - <3.5	x bel egrit rksh GIS c Buffe	eet 1c. Buff or on the ma r Integrity S Buffer W (m)	er Widt umma	Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Vidth (ft)	ements a la and en nt (%)= easure the ns and rat	nd enter into nter the ratin 85% Plength of ea e using Table Buffer W (m)	ch buff	centage ffer Per e Buffe er line i nter the Buf i	e of the rcent r in meters e rating o fer Widtl (ft)	n	RatingC4(X3C2C1TableRating	Buffer Percent 100% ≥80% - <100%
Image	x bel egrit rksh GiS c Buffe	eet 1c. Buff or on the ma er Integrity S Buffer W (m) 164.26	er Widt umma	Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Vidth (ft) 538.91	ements a la and en nt (%)= resure the ns and rat Line E	nd enter into nter the ratin 85% length of ea e using Table Buffer W (m) 161.93	the Bu g on th ch buff L1b. E idth	centage ffer Per e Buffe er line i nter the Buf i	e of the rcent r in meters e rating o fer Widtl (ft) 31.26	n h	RatingC4(X3C2C1TableRatingC4	Buffer Percent 100% ≥80% - <100%
H 155.87 511.38 Average 148.31 (m) 486.58 (ft) Table L1c. Summary Rating for Buff ksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a Rating Score L1b above to calculate the Buffer Integrity index Score using the formula in the box Rating Score W. Using the Buffer Integrity index Score, enter rating for Buffer Integrity in Table L1c C 4 >3.5 er % Pating M >2.5 - ≤3.5	x bel egrit rksh GIS c Buffe	eet 1c. Buff or on the ma er Integrity S Buffer W (m) 164.26 125.25	er Widt umma	thowed burler en netric using Table L neet 1d. Buffer Percer Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	ements a 1a and en nt (%)= resoure the resoure the s and rat Line E F	nd enter into nter the ratin 85% Plength of ea e using Table Buffer W (m) 161.93 231.48	the Bu g on th ch buff L1b. E	centage ffer Per e Buffe fer line i nter the Buf f 5: 75	e of the rcent r in meters e rating o fer Widtl (ft) 31.26	n h	Rating C 4 (X 3 C 2 C 1 Table Rating C 4 (X 3	Buffer Percent 100% ≥80% - <100%
ksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a Table L1c. Summary Rating for Buff L1b above to calculate the Buffer Integrity index Score using the formula in the box Integrity W. Using the Buffer Integrity index Score, enter rating for Buffer Integrity in Table L1c Rating Score C 4 >3.5 (X) 3 >2.5 - ≤3.5	x bel egrit rkshi GIS c Buffe	eet 1c. Buff or on the ma er Integrity S Buffer W (m) 164.26 125.25 115.39	er Widt umma	thowed burler en netric using Table L neet 1d. Buffer Percer Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	ements a 1a and en nt (%)= resoure the resoure the s and rat Line E F	nd enter into nter the ratin 85% Plength of ea e using Table Buffer W (m) 161.93 231.48	the Bu g on th ch buff L1b. E	centage ffer Per e Buffe fer line i nter the Buf f 5: 75	e of the rcent r in meters e rating o fer Widtl (ft) 31.26	>n h	Rating C 4 (X 3 C 2 C 1 Table Rating (C 4 (X 3 (C 4 (X 3 (C 2	Buffer Percent 100% ≥80% - <100%
w. Using the Buffer Integrity index Score, enter rating for Buffer Integrity in Table L1c C 4 >3.5 C 3 >2.5 - ≤3.5	x bel egrit ksho GiS c Buffe	eet 1c. Buff or on the mater Integrity S Buffer W (m) 164.26 125.25 115.39 111.07	er Widt umma	thowed burler en netric using Table L neet 1d. Buffer Percer Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	ements a la and en nt (%)= basure the is and rat Line E F G	nd enter into nter the ratin 85% e length of ea e using Table Buffer W (m) 161.93 231.48 121.25	the Bu g on th ch buff L1b. E	centage ffer Per e Buffe er line i nter the Buf f 5: 75 39	e of the rcent r in meters e rating o fer Widtl (ft) 31.26 59.44 7.80	>n h	Rating C 4 (X 3 C 2 C 1 Table Rating (C 4 (X 3 (C 4 (X 3 (C 2	Buffer Percent 100% ≥80% - <100%
(X 3 >2.5 - ≤3.5	x bel egrit ksho GiS c Buffe ne ksho	eet 1c. Buff or on the ma er Integrity S Buffer W (m) 164.26 125.25 115.39 111.07 Average	er Widt p. Aver idth	hetric using Table L hetric using Table L Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	ements a Ta and en It (%)= Pasure the resure the s and rat Line E F G H	nd enter into nter the ratin 85% elength of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58	the Bu g on th ch buff L1b. E idth	centage ffer Per e Buffe er line inter the Buf i 51 75 39 511 (ft)	e of the rcent r in meters e rating o fer Widtl (ft) 31.26 59.44 7.80 1.38	>n h	Rating (2) (2) (1) Table Rating (2) (2) (2) (2) (2) (2) (3) (4) (7) 3) (2) (1)	Buffer Percent 100% ≥80% - <100%
	x bel egrit ksho GiS c Buffe ne kshe L 1b w. U	eet 1c. Buff or on the ma er Integrity S Buffer W (m) 164.26 125.25 115.39 111.07 Average eet 1d. Buff above to cal sing the Buf	er Widt p. Aver ummar idth er Inter culate t	the buffer line length betric using Table L beet 1d. Buffer Percer bh Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. En the Buffer Integrity grity index Score of	ements a la and en nt (%)= basure the sand rat Line E F G H	nd enter into nter the ratin 85% Plength of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 ub-metric Ra	tings fr	centage ffer Per e Buffe er line i nter the Buf i 51 75 39 511 (ft)	e of the rcent r in meters e rating o fer Widtl (ft) 31.26 59.44 7.80 1.38	>n h 	RatingC4(X3C2C1TableRatingC4(X3C2C1Table L1c. 5Rating	Buffer Percent 100% ≥80% - <100%
	x bel egritt rksho GIS c Buffe ne kshe L1b	eet 1c. Buff or on the ma er Integrity S Buffer W (m) 164.26 125.25 115.39 111.07 Average eet 1d. Buff above to cal sing the Buf	er Widt p. Aver ummar idth er Inter culate t	the buffer line length betric using Table L beet 1d. Buffer Percer bh Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. En the Buffer Integrity grity index Score of	ements a la and en nt (%)= basure the sand rat Line E F G H	nd enter into nter the ratin 85% Plength of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 ub-metric Ra	tings fr	centage ffer Per e Buffe er line i nter the Buf i 51 75 39 511 (ft)	e of the rcent r in meters e rating o fer Widtl (ft) 31.26 59.44 7.80 1.38		RatingC4(X3C2C1TableRatingC4(X3C2C1Table L1c. SRatingC4	Buffer Percent 100% ≥80% - <100%
+ 3 /2= 3 ≤1.5	x bel egrit ksho GiS c Buffe ne kshe L 1b w. U: on th	eet 1c. Buff or on the ma er Integrity S Buffer W (m) 164.26 125.25 115.39 111.07 Average eet 1d. Buff above to cal sing the Buff ne SA Summ	er Widt p. Aver iummai idth er Inter culate t fer inter ary Wo Buf	the buffer line length betric using Table L beet 1d. Buffer Percer bh Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. En the Buffer Integrity grity index Score of	ements a Ta and en the (%)= the sand rate the sand rate E F G H H	nd enter into nter the ratin 85% elength of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 ub-metric Ra ore using the ng for Buffer	the Bu g on th L1b. E idth tings fr formu	centage ffer Per e Buffe er line i nter the Buf i 51 75 39 511 (ft) om Tab	e of the rcent r in meters e rating o fer Widtl (ft) 31.26 59.44 7.80 1.38		RatingC4(X3C2C1TableRatingC4(X3C2C1Table L1c. SRatingC4	Buffer Percent 100% ≥80% - <100%

SA CODE: SF2MI[]]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect []

2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparlan Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	m Segment	
-	Left Bank Right Bank		Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
B) Total Disruption by Segment (m)		0		0	
C) % Segment Disruption = (B/1000)*100		0		0	
D) Total Disruption both segments			0		
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.	

Т	able L2. RCC Rating
Rating	Description
Q 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
0 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Worksheet.

	_	RSR		- 1				R	WSI		
		Kan				10.000	1.220	19237		-	RWSI (%)
Current Size	1	Historic Size	=	RSR	1		RSR	X	100		611 511
Concin one	100					-	0.1	v	100	=	10
9	1	10	=	0.9	1	*a -	0.1	~	100		1000

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(8.4	≤10%	Wetland is at or only minimally reduced from its full natural extent
03		Wetland remains equal to or more than 60% of its natual size
02	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
01		Wetland has been reduced by more than 70% its natural size

Survey

DS/AM

Date :

Surveyor Initials :

SA Name: Two Mile Pond Reservoir Transect [/]

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1		0
Filling or dumping of sediment or soils	0.1	0	
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	<u> </u>	<u> </u>	
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads) Ski area	0.3	0	0 0
	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2		0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
lanicured lawns, sport fields, and golf courses; urban manicured parks	0.3		0
Did fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, ussian thistle, mustards, annual vegetation)	0.5	0	0
Nature old fields and other fallow lands with natural composition, introduced hay field and pastures e.g., perennial vegetation cover)	0.7	0	0
estoration areas in process to natural conditions (re-conversion in process)		65	52
aying of native grassland (e.g., no tillage, having and baling only)	0.9	0	0
eavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) moved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Difficiencial tree plantation, Christmas tree farms	0.6		-0
elective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) moved	0.8	0	0
ature restoration areas returned to natural conditions (re-converted)	0.9	0	0
atural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area	·	100	75

Table L4. Surr	ounding Land Use Rating
Rating	LUI Score
<u>C 4</u>	≥95 - 100
<u> </u>	≥80 - <95
<u> </u>	≥40 - <80
	<40

: 6/11/24

DS/AM

Date: 6/11/24

Biotic Metrics

Species Cover (BS) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use the Tables in Appendix B and the Field Guide for metric instructions. Enter the species codes for the invasive exotic species found in the polygon (from NM Noxious Weed List -Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

Polygon	83 Vertical Structure Type	84 Tree Regeneration	BS Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
-	IA1				
5	IA2	20%	Hew ending	golton Astor	globe mellow
m	IMI				
4	181	50%	Nonescen		Salt bush, chimisa.
5	IIIC1				
9	NB				
1	NF1				
00					
6					
10					
:					
12					
13					
14					
15					
16					
17		-			
18					
19					
20	1				
					Page 6 ur 17

wo don whic	kshe tinant th it is	et 6. C specie more	T Plan es in ea abund	t Species a sch stratun lant. Each j	and P n that polyg	worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	ignmen the poly assigned	ts. Starting gon. See foo I to the sam	with CT stnotes f e CT if _{it}	vith CT A, enter the number of the first polygon from Worksheet 5. Enter t notes for special instructions. If a species appears in more than one strate CT if it has the same composition or a new CT is created for the polygon.	e numbe nstructio ne comp	r of the firs ons. If a spe osition or a	t polygoi cies appe a new CT	n from Wor Pars in more is created f	ksheet 5 than or or the p	. Enter the s he strata, as olygon.	sign the s	odes for species t	the two the str	top atum in
						Tall Woody Stratum ¹	ly Stratur			Short Woody Stratum 2	ody Strat	um 2		Herbaceo	is/Spars(Herbaceous/Sparse Stratum ³	 	CT Score 4	4	
ъļ		Polygon Nos.	S.			Species 1	ш 2	Species 2	шZ	Species 3	<u>щ Z</u>	Species 4	шz	Species 5	<u> </u>	Species 6	ш 2	Raw ⁴	SA5	Wt Score ⁶
<	2					Map is	\geq	2.20	2	Cirac		6.12 6.12	N	Solden						à. 1
В		5								W.Z.	2	Chinese Star	2	R/ne	$\left \right\rangle$					267
υ							ĺ						<u>,</u>	2.3.5	>			5	9)
۵																				
ш	1				-	 					_	_								
<u>ц</u>	İ	-			┢		<u> </u>													
U			 																	
τ																				
																		1		
										2										
К		 	 			 														
		ļ																		
ž																				
z					 															
0	 				 													-		
ł															Final	Final Weighted Score ⁷	Score7			100
1. Tr stratu	ees ar im co	id shrt ver. ⁴ B	aw Scر کا	m (20 fee ore is from	it) and Table	Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total tratum cover. 4Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R). 5% to table stratum cover: 4. Raw Score is from Table R1a (Amendix R).	il stratum ndiv B)- [1 cover; 2. Ti 5%sA is the	rees and	shrubs ≤6r	n (20 fei	et) and >25	% total s	tratum cov	er; 3. Hei	tbaceous (g	raminoid	is and fo	rbs)>109	6 total
equa for Re	(1;6V Mative	Vt. Sco Mativ	ire is th e Plant	e product	of the	equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score work of and enter the Rating for Relative Native Plant Community Communit	* % SA;	The Final V The Final V	Veighter	dge or ure. d Score is ti	ok area (he sum o	coverea by of the Wt. So	the LI al cores. Rai	nd expresse ie the CT Fi	id as a di nal Weig	ecimal num ihted Score	ber; the f on Table	total are • B1 and	a %SA m enter the	ust e Rating
1									any we	Page 7 of 17	of 17							,		

Surveyor Initials : * \M

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Tr - ect [|]

SA COF SF2MI []]

SA CODE: SF2MI []

SA Name :	Two Mile Pond Reservoir Transect (]
SA Name :	Two write Yong Reservoir Transect [

```
Surveyor Initials : DS/AM
```

Ta	able B1	. Relative Native Plant C	ommunity Composition Rating		
Rating		CT Final Weighted Score			
Ø	4	≥ 3.75	<10% non-native		
Ĉ	3	≥ 3.25 and <3.75	10% ≤20% non-native		
C	2	> 2.0 and <3.25	20% ≤50% non-native		
Ć	1	≤2.0	>50% non-native		

2 - Vegetation Horizontal Patch Structure

Vorksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch battern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

Iorizontal Patch Structure pattern A,B,C, or D:

		Table B2. Rating for Vegetation Horizontal Patch Structure
R	ating	Description
	4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
Ø	3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
C	2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
C	1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

33 - Vegetation Vertical Structure

Worksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA from Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with same VST) x 100. Enter the total %SA for each VST below.

· · · · ·	VST 1	VST 2	VST 5	VST 6S	VST 6W	VST 6H	VST 7
	High Structure	Low Structure	Tail Shrubland	Short	Herbaceous	Herbaceous	Sparse
	Forest	Forest	,	Shrubland	Wetland	Vegetation	Vegetation
Total % of SA		30%	100/0				

Table B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the row that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. Percentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for the rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the table down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the rating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
C 4 -	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
	2 or 1 and 2	5	
C 3 -	2 or 1 and 2	6W	
) 	5	6W	
/	2 or 1 and 2		· · · · · · · · · · · · · · · · · · ·
¥ 2	5		
· · · · · · · · · · · · · · · · · · ·	6W		
	65		
	6Н		
	7		

SA CODE: SF2MI[/]

Date :

SA Name : Two Mile Pond Reservoir Transect [/]

B4 - Native Riparian Tree Regeneration

B4. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from Worksheet 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet. Rating Description Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% C 4 cover, typically multiple size (age) classes. Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few. 3 Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically 8 2 <1% cover, little size class differentiation. Native poles, saplings, and/or seedlings absent (0% cover). 1

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Rating	gs for Invasive Exotic Plant Species Cover
Rating	Invasive Species Cover %
C 4 X	
<u>∩_</u> 3	>0% - <1%
2	≥1% - <10%
C 1	≥10

Additional CTs and Biotic Metric Comments:

B T W Date: 6/11/24

Surveyor Initials : DS/AM

1

SA CODE: SF2MI[]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect []

Surveyor Initials : DS/AM

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

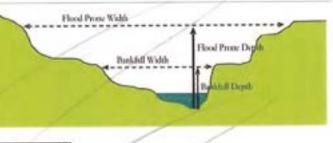
Worksheet 10a: Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description Cross-section:	1	2	3
1: Bankfull width	This is a critical step requiring familiarity with field indicators of the bankfull contour. Measure the distance between the right and left bankfull contours with a tape.			
2: Maximum bankfull depth	Keeping the tape level between the right and left bankfull contours, measure the height of the line above the thalweg (the deepest part of the channel). A pocket line level can help here.			
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.			
4: Flood-prone width	Using a tape, measure the length of a level line at a height equal to the flood prone depth from Step 3 to where it intercepts the right and left banks.			
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull width (Step 1).			
6: Calculate average ratio	Calculate the average for Step 5 for all three replicate cross-sections. Enter the average her using Table A1a. Enter the rating in the A1 box on the SA Rank Summary Worksheet.	e and r	ate	

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description
C 4	Average entrenchment ratio is ≥ 2.2;
C 3	Average entrenchment ratio is ≥1,9 - <2.2
C 2	Average entrenchment ratio is ≥1.5 - <1.9
C 1	Average entrenchment ratio is < 1.5



		oodplain Hydrologic Connectivity Indicators. Use this nction with Table A1c. Check the boxes for all that apply to each
segm	50. 19 4 .	5 / / / / /

U	M	L	Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
			Channel widening due to bank failure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

	Rating for Floodplain Hydrologic ty in single-channel step-pool systems
Rating	Description
C 4	Average entrenchment ratio is ≥ 1.9
0 3	Average entrenchment ratio is ≥1.4 - <1.9
0 2	Average entrenchment ratio is ≥1.2 - <1.4
0 1	Average entrenchment ratio is < 1.2



SF2MIL 1 SA CODE :

Date : 6/11/24

SA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials : DS/AM

Method 2

Jle A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

F	Rating	Description
C	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.
C	3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.
Ċ	2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).
C	1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.

h A1d. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream Bani	Right Bank Left
1					
2			S.	······································	· · · · · · · · · · · · · · · · · · ·
3					

Floodplain Hydrologic Connectivity Comments:

.

Not used in JSAI Assosment

Page 11 of 17

SA CODE: SF2MI[]]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect []]

Surveyor Initials : DS/AM

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
<u> </u>	X		Abandoned channels
			Backwater/eddy
_ <u></u>			Riffles or rapids
			Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
<u> </u>	<u> </u>		Terraces
			Channel pools
<u> </u>			Beaver ponds
	<u>├───</u> ───		Swales, depressional features on floodplains
	<u>├</u>		Debris jams in channel
			Woody wrack piles on the floodplain
		<u> </u>	Floodplain micro-topography (mounds, pits)
	<u>+</u>	<u> </u>	Downed logs
			Natural levees
<u>~</u>	┼───────		Standing snags
<u>~</u>	<u> </u>	<u> </u>	Variegated, convoluted, or crenulated foreshore
<u>~</u>	<u>+</u>		Undercut banks in channels
<u>_</u>		·	No. of unique Patch Types

Table A2. Rating for Physical Patch Complexity							
Rating		Description					
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).					
ſ	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).					
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).					
X	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.					

SA CODE: SF2MI[/]

Date: 6/11/24

Surveyor Initials :

DS/AM

SA Name: Two Mile Pond Reservoir Transect [/]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
				The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
				Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
				There is leaf litter, thatch, or wrack in most pools.
Indicators of				The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		\square		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
}		Ø		Channel and point-bars consist of well-sorted bed material.
}		X		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		Ø		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbies or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
· · · · · · · · · · · · · · · · · · ·				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				here are avulsion channels on the floodplain or adjacent valley floor.

SF2MI[] SA CODE :

1

Date: 6/11/24

Surveyor Initials :

DS/AM

Two Mile Pond Reservoir Transect [1] SA Name :

_	Table A3. Rating for Channel Equilibrium
Rating	Description
7. 4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.
- 3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.
~ 2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	[X]4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	□3	□3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	<u></u> 2	2	2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	<u> </u>	[]1	<u></u> 1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	[X]4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
		□3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	 2	<u></u> 2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	1	_ 1	[]1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Rating	Description
K 4	>3.5 - 4.0
C 3	>2.5 - ≤3.5
C 2	>1.5 - ≤2.5
\overline{C} 1	1.0 - ≤1.5

Average Indicator Score

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect []]

A5 - Soil Surface Condition

Jorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	\boxtimes		Multiple livestock and other (fishing, hiking) trails,
	\overline{X}		Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

—							
R	ating	Description					
C	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
R	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
ſ	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

Surveyor Initials : DS/AM

I

SA CODE :	SF2MI]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect []

DS/AM Surveyor Initials :

Vorksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign ategories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow ank Major Stressors in Dominant Stressor column(Pick up to 3)

Major Minor Absent Unknown Adverse water management	Rank	Affect				Stressor Group/Stressor	Comments
Image:	NGOK	Major Minor Absent Unknown		Unknown			
Image:		······································					
Image: Second						Extended low flow dam releases	
Image: Section of the sectend of the section of the sectin of the section of the						Timing of flow releases not concordant	
Adverse sediment management Adverse sediment retention by dams Adverse sediment retention by dams Adverse sediment roput (roads/development) Adverse sediment input (roads/development) Adverse sediment returns Adverse sediment returns Adverse sediment returns Adverse sediment effluent Adverse sediment effluent Adverse sediment returns Adverse sediment returns Adverse sediment effluent Adverse sediment returns Adverse sediment returse Advers						Extended high flow dam releases	
Image:	·					Agriculture/Urban flow diversion upstream	
Image: Sediment loss by dredging Image: Sediment loss by dredging loss by dredging Image: Sediment loss by dredging loss by dredging Image: Sediment loss by dredging loss by dredging loss by dredging Image: Sediment loss by dredging l		···				Adverse sediment management	
Image: Second						Adverse sediment retention by dams	
Image:							
Artificial water additions Image: Sewer treatment effluent							
Image: Second		<u>}</u>					
Image:						Sewer treatment effluent	
Image: Second Secon						Point source urban runoff	
Image: Sector of the sector						Factory, feedlot outfall	
Ground water pumping Group						Agricultural irrigation ditch returns	
Image: Image						Mining waste	
Image: Image						Ground water pumping	· · · · · · · · · · · · · · · · · · ·
Image: Second Secon						Urban depletions	
Watershed alteration Watershed alteration Extensive recent fires in watershed Extensive recent timber harvest Extensive open pit mining in watershed Extensive open pit mining in watershed Livestock/wildlife overgrazing Local biodiversity impacts Evidence of excessive grazing (local) Excessive noise affecting wildlife						Fracking	
Image: Second secon]	
Image: Image						Watershed alteration	·····
Image: Solution of the second sec						Extensive recent fires in watershed	
Image: Constraint of the constraint						Extensive recent timber harvest	
Local biodiversity impacts Image: Constraint of the second seco						Extensive open pit mining in watershed	
Image: Second							
Image: Second							
0 0 Counts by Intensity						Excessive noise affecting wildlife	
		0	0		0	Counts by Intensity	

Additional Comments

NMRAM Montane Riverine Wetlands Version 2.5

			r Worksheet	-,,		, ,, <u></u> , ,,
SA Code SF2M1[o Mile Pond Reservoir		Project : R	iparian A	ssesement
A de Tsct[Z] AU Name : Tra	insect [2]		— — — — — —		nd Reservoir
County Santa Fe	HUC 12 Head	dwaters Santa Fe River	Elevation (ft) 72		— — ,	Ecoregion 6.0 NWFM
decommissione of water rights. Driving Directions Driving to Santa	and Boundary (Rationale m that leads into a pond ed due to safety concerns a Fe from Albuquerque yo ntil you reach the reservo	located on the east side or regarding the reservoir a		sion to the area was	ational F recently	orest. This reservoir wa shut down due to lac
***	re Conservative and The			Results to client only.	Fish Ol	oserved in
Surveyor Role		Survey	or Name		we	tland?
Landscape	Dustin +			- / / / /	 ;,	Surveyor Initia
Biotic		- ANNUE				DS+Ar
Abiotic	11	<u>\</u>				
Stressors	10				<u> </u>	
Easting (m)	Northing (m)	Zone	Dation			
-105° 53' 24" W	35° 41' 23" N	13	Datum NAD- 83 UT	Latitude		Longitude (DD)
Survey Date	4/9/24	Start Time				-105.89
··· ··· · ··· · · · · · · · · · · · ·	1/1/61	SA Desc	69:18	End T	ime	13:05
A Biotic Condition (re the dam, is are star <u>cotten woods</u> , <u>vegetation patterns, com</u> Area Los a form	position and structure, e	xotics and invasi	ves disturbance qui		
Corre	section aros T_ aros	and the char	and and	l and m	9 16	they high
Abiotic Condition	(hydrological alterations site impacts; explain the	(e.g., dams, walls etc.); fit	poding character	ristics and evidence	of overb	ank flooding; soil
The	sbandon st	rom still si		aine the SA limits)	14	
		and the proved	leaves,		f (1915	999 - Ned 202
sessment Summary	(Overall site condition si	ummary and comments a	after the field dat	a is collected.)		
/tr	Ca Scens	similar to 1	last vi	sit same	new	growth
		2.11				
	B surveyor(s)	but intercolo	to sec	how will	laws	grow.

SA CODE: SF2MI[2]

Date: 4/9/24

05

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials :

MRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	Rating	Wt	Final Score
Metric Description		Σ 1.0	3.25
andscape Context	3	0.25	0.75
1. Buffer Integrity Index	4	0.25	1.0
2. Riparian Corridor Connectivity			1.0
3. Relative Wetland Size	4	0.25	0.5
4. Surrounding Land Use	2	0.25	0.5
lotic		Σ	-
31. Relative Native Plant Community Composition	4	0.2	-
2. Vegetation Horizontal Patch Structure	2	0.2	
33. Vegetation Vertical Structure	3	0.2	
34. Native Riparian Tree Regeneration	Ч	0.2	
35. Invasive Exotic Plant Species Cover	3	0.2	
		Σ	
Ablotic	X	0.3	
A1. Floodplain Hydrologic Connectivity	2	0.2	
A2. Physical Patch Diversity	4	0.2	
A3. Channel Equilibrium	1	0.2	-
A4. Stream Bank Stability and Cover	7	1.555	-
A5. Soil Surface Condition	L	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	3.2	0.35	
Abiotic	2.75	0.35	
SA WETLAN	D CONDITION	SCORE E	3,058
SA WETLAN	D RANK =		B

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

ssor Summary	Major	Minor	Top Three	
	0	0	1	Construction
			2	Low Water
			3	Trail use

Stressor Comments (Evaluation of risk)

Stres

Trails and park usage as well as no water affects tlis aven the most,

SA CODE: SF2MI [2]

Date: 4/9/94

SA Name: Two Mile Pond Reservoir Transect [2]

Surveyor initials :

Landscape Context

L - Buffer Integrity Index

	<u> </u>			ter eleme	ents that disru	pt ecos	ystem	conne	ectivit	y. Indi	icate the i	corridors that are either all magery type and date (sea	
limag			arth KMZ. file			Imag	Image Date 6/						
Allow	ved but	ffer/RCC la	and cover elements	<u> </u>		 Evclu	udod n						
випе	RCC	+				Buffe	er RCC		mer/R	CClar	nd cover e	lements	
X	\downarrow	+		r semi-natural vegetation patches			+	Cor	nmer	cial/residential developments, parking l			
		Small irri	jation ditches without levees		┤─┌╕	┝┌═			lages,	revetmen	its, and other structures		
		Old fields	s, unmaintained				╉╧╡		/ns, pa	arks, g	olf course	s, sports fields	
		Open ran	ge land					Maii	roads ntaine	d leve	es, sedim	ent piles, construction	
X	ি ন	Foot trails	s, horse trails, unpa	ved hike	trails (low	+−.	<u> </u>	mat	erials,	stagii	ng areas		
								Inter	nsive	livesto	ock areas,	horse paddocks, feedlots	
× 	;	ļ	nel open water					Inter row a	nsive a	agricu orchz	lture: main and y	ntained pastures, hay fields	
	X	naturally c	ioning abandoned occurring levees	vegetate	d levees, or	X		Pave	d road ed road	ds or o	leveloped	second-order unpaved bu	
		unpaved to	wo tracks roads			×	 [X]	Open	wate		nded by a	levee or other manmade	
		Other				[struct	ture			-	
					1	5							
orksh	eet 1h	Buffor D						Other	· [
orksh perir	neter c	Buffer Pr	arcent Sub-metric	. Measure	or estimate t	he perc	entag	e of th	r[
x belo	ow. Rate	e the sub-r	ercent Sub-metric of allowed buffer el metric using Table i	. Measure lements a	e or estimate t	he perc	entag	e of th	ie]		Tabl	le L1a. Buffer Percent	
x belo	ow. Rate	• Buffer Pr omposed e the sub-r nary Works	netric using Table I heet 1d.	L1a and e	e or estimate t and enter into enter the rating	he perc the Bu g on th	entag	e of th	ie le		Tabi Rating	e L1a. Buffer Percent Buffer Percent	
x belo tegrity	ow. Rati / Summ	e the sub-r nary Works	netric using Table i heet 1d. Buffer Perce	L1a and e nt (%)=	nter the rating	the Bu g on th 	centagi ffer Per e Buffe	e of th rcent r	ie	r	Rating 4		
x belo tegrity rkshe	ow. Rati / Summ	e the sub-r hary Works	metric using Table i heet 1d. Buffer Perce	L1a and e	85%	the Bu g on th	entagi ffer Pei e Buffe	e of th rcent r	ie	r	Rating 4 3	Buffer Percent	
x belo tegrity rkshe GIS or	ow. Rati	e the sub-r hary Works Buffer Wid	metric using Table i heet 1d. Buffer Perce I th Sub-metric. Me	L1a and e	85%	the Bu g on th	entagi ffer Pei e Buffe	e of th rcent r	ie		Rating 4	Buffer Percent	
x belo tegrity rkshe GIS or	et 1c. I r on the	e the sub-r nary Works Buffer Wid e map. Ave ity Summa	netric using Table i heet 1d. Buffer Perce	L1a and e	85%	the Bu g on th	entagi ffer Pei e Buffe	e of th rcent r	ie	r	Rating 4 3	Buffer Percent 100% ≥80% - <100%	
x belo tegrity rkshe GIS or Buffer ne	et 1c. I r on the Buffe	e the sub-r nary Works Buffer Wid map, Ave ity Summa er Width (m)	metric using Table i heet 1d. Buffer Perce I th Sub-metric. Me	L1a and e	85% e length of eac te using Table	g on the Bu g on the ch buffe L1b. Er	centagi ffer Per e Buffe er line i nter the	e of th rcent r in met e ratin fer Wi	ters in g on		Rating 4 3 2 1 Tabl	Buffer Percent 100% ≥80% - <100%	
x belo tegrity rkshe GIS or Buffer	et 1c. I r on the Integr	e the sub-r nary Works Buffer Wid map, Ave ity Summa er Width (m)	metric using Table i heet 1d. Buffer Perce Ith Sub-metric. Me rage the line lengti ary Worksheet 1d. Buffer Width	nt (%)=	85% e length of ead	g on the Bu g on the ch buffe L1b. Er	centag ffer Per e Buffe er line i nter the Buf i	e of th rcent r in met e ratin fer Wi (ft)	ters in g on		Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
x belo tegrity rkshe GIS or Buffer ne	et 1c. I r on the Buffe	e the sub-r nary Works Buffer Wid map. Ave ity Summa er Width (m) .26	metric using Table i heet 1d. Buffer Perce Ith Sub-metric. Me rage the line length try Worksheet 1d. Buffer Width (ft)	nt (%)=	85% e length of eac te using Table Buffer Wi (m) 161.93	g on the Bu g on the ch buffe L1b. Er	centagi ffer Per e Buffe er line i nter the Buf i 53	e of th rcent r in met ratin fer Wi (ft) 31.26	ters in g on		Rating 4 3 2 1 Tabl Rating 4	Buffer Percent 100% ≥80% - <100%	
x belo tegrity rkshe GIS or Buffer ne	ow. Rat. / Summ eet 1c. I r on the r Integr Buffe	e the sub-r hary Works Buffer Wid map. Ave ity Summa er Width (m) .26 .25	metric using Table i heet 1d. Buffer Perce Ith Sub-metric. Me rage the line length ary Worksheet 1d. Buffer Width (ft) 538.91 410.92	Lia and e nt (%)= easure the hs and rat Line E F	85% e length of eac te using Table Buffer Wi (m) 161.93 231.48	g on the Bu g on the ch buffe L1b. Er	centagi ffer Per e Buffe er line i nter the Buf i 53 75	e of th rcent r in met ratin fer Wi (ft) 31.26 9.44	ters in g on		Rating 4 3 2 1 Tabl tating 4 3	Buffer Percent 100% ≥80% - <100%	
x belo tegrity rkshe GIS or Buffer ne	ew. Rati y Summ eet 1c. I r on the r Integr 164 125. 115.	e the sub-r hary Works Buffer Wid e map. Ave ity Summa er Width (m) .26 .25 .39	metric using Table i heet 1d. Buffer Perce ith Sub-metric. Me rage the line length bry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	Lia and e nt (%)= easure the hs and rat Line E F G	Buffer Wi (m) 161.93 231.48 121.25	g on the Bu g on the ch buffe L1b. Er	centagi ffer Per e Buffe er line i nter the Buf i 53 75	e of th rcent r in met ratin fer Wi (ft) 31.26	ters in g on		Rating 4 3 2 1 Table Rating 4 3 2	Buffer Percent 100% ≥80% - <100%	
rkshe GIS or Buffer	w. Rat. / Summ eet 1c. I r on the r Integr 164 125 115 111.	e the sub-r nary Works Buffer Wid e map. Ave ity Summz er Width (m) .26 .25 .39 .07	metric using Table i heet 1d. Buffer Perce ith Sub-metric. Me rage the line length ary Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40	Lia and e nt (%)= easure the hs and rat Line E F	Buffer Wi (m) 161.93 231.48 121.25 155.87	g on the Bu g on the ch buffe L1b. Er	er line i ter line i ter the Buf i 53 75 39	e of th rcent r in met ratin fer Wi (ft) 31.26 9.44	ters in g on		Rating 4 3 2 1 Tabl tating 4 3	Buffer Percent 100% ≥80% - <100%	
rkshe GIS or Buffer ne	w. Rat. / Summ eet 1c. I r on the r Integr 164 125. 115. 111. verage	e the sub-r nary Works Buffer Wid e map. Ave ity Summa r Width (m) .26 .25 .39 .07	metric using Table i heet 1d. Buffer Perce ith Sub-metric. Me rage the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	Lia and e nt (%)= easure the hs and rat Line E F G H	85% e length of each te using Table Buffer Wi (m) 161.93 231.48 121.25 155.87 486.58	the Bu g on the ch buffi L1b. Er dth	er line i the Buffe er line i ther the Buff 53 75 39 511	e of th rcent r In met ratin fer Wi (ft) 31.26 9.44 7.80 .38	ters in g on idth		Rating 4 3 2 1 Tabl tating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
rkshe GIS or Buffer ne A kshee L1b at w. Usit	et 1c. I r on the r Integr Buffe 164 125. 115. 111. verage et 1d. B bove to ng the	e the sub-r hary Works Buffer Wid e map. Ave ity Summa er Width (m) .26 .25 .39 .07 e Buffer Inte Buffer Inte	metric using Table i heet 1d. Buffer Perce ith Sub-metric. Me rage the line length ary Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. En the Buffer Integrity grity Index Score	Lia and e nt (%)= easure the hs and rat Line E F G H	85% e length of eac te using Table Buffer Wi (m) 161.93 231.48 121.25 155.87 486.58 ub-metric Rat	the Bu g on the ch buffe L1b. Er dth	centagi ffer Per e Buffe er line i nter the Buf i 53 75 39 511 (ft)	e of th rcent r in met ratin fer Wi (ft) 31.26 9.44 7.80 .38	ters in g on idth		Rating 4 3 2 1 Table tating 4 3 2 1 le L1c. Su	Buffer Percent 100% ≥80% - <100%	
rkshe GIS or Buffer ne A kshee L1b at w. Usin in the	et 1c. I r on the r Integr Buffe 164 125 115 111. verage et 1d. B bove to ng the e SA Sur	e the sub-r hary Works Buffer Wid e map. Ave ity Summa er Width (m) .26 .25 .39 .07 Buffer Inte Buffer Inte mmary Wo	metric using Table i heet 1d. Buffer Perce ith Sub-metric. Me rage the line length ary Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. En the Buffer Integrity grity Index Score	Lia and e nt (%)= easure the hs and rat Line E F G H	85% e length of eac te using Table Buffer Wi (m) 161.93 231.48 121.25 155.87 486.58 ub-metric Rat	the Bu g on the ch buffe L1b. Er dth	centagi ffer Per e Buffe er line i nter the Buf i 53 75 39 511 (ft)	e of th rcent r in met ratin fer Wi (ft) 31.26 9.44 7.80 .38	ters in g on idth		Rating 4 3 2 1 Table tating 4 3 2 1 the L1c. Subtriance 4	Buffer Percent 100% ≥80% - <100%	
rkshe GIS or Buffer ne A kshee L1b at w. Usin in the	et 1c. I r on the r Integr Buffe 164 125. 115. 111. verage et 1d. B bove to ng the	e the sub-r hary Works Buffer Wid e map. Ave ity Summa er Width (m) .26 .25 .39 .07 Buffer Inte b calculate Buffer Inte mmary Wo	metric using Table i heet 1d. Buffer Perce ith Sub-metric. Me rage the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. Er the Buffer Integrity grity Index Score, e rksheet.	Lia and e nt (%)= easure the hs and rat Line E F G H H	85% e length of eac te using Table Buffer Wi (m) 161.93 231.48 121.25 155.87 486.58 ub-metric Rat ore using the ng for Buffer Ir	the Bu g on the ch buffe L1b. Er dth dth	entage ffer Per e Buffe er line i nter the Buf i 53 75 39 511 (ft)	e of th rcent r in met e ratin fer Wi (ft) 31.26 9.44 7.80 .38 .38 .38	ters in g on idth		Rating 4 3 2 1 Table lating 4 3 2 1 ble L1c. Su sting 4 3	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Ummary Rating for Buffer Integrity Score	
rkshe GIS or Buffer ne A kshee L1b at w. Usin in the	et 1c. I r on the r Integr Buffe 164 125 115 111. verage et 1d. B bove to ng the e SA Sur	e the sub-r hary Works Buffer Wid e map. Ave ity Summa er Width (m) .26 .25 .39 .07 Buffer Inte b calculate Buffer Inte mmary Wo	metric using Table i heet 1d. Buffer Perce ith Sub-metric. Me rage the line length ary Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. En the Buffer Integrity grity Index Score	Line Line Line E F G H M Conter the set Conter ratio	85% e length of eac te using Table Buffer Wi (m) 161.93 231.48 121.25 155.87 486.58 ub-metric Rat	the Bu g on the ch buffe L1b. Er dth dth	entage ffer Per e Buffe er line i nter the Buf i 53 75 39 511 (ft)	e of th rcent r in met e ratin fer Wi (ft) 31.26 9.44 7.80 .38 .38 .38	ters in g on idth		Rating 4 3 2 1 Table tating 4 3 2 1 the L1c. Subtriance 4	Buffer Percent 100% ≥80% - <100%	

SA CODE: SF2MI [2]

Date: 4/9/29

SA Name : Two Mile Pond Reservoir Transect [2]

DS Surveyor Initials :

- Riparian Corridor Connectivity (RCC)

orksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for cluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter e summed values in meters for excluded element lengths for each bank within each gment upstream and downstream of the SA. Sum the values for each segment and lculate % Segment Disruption for the upstream side and the downstream side. Add the tal disruption for upstream and downstream segments and then calculate the % Total isruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and e data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments		n Segment	Downstrea	m Segment
	Left Bank	Right Bank	Left Bank	Right Bank
) Total Bank Disruption (m)	0	0	0	0
) Total Disruption by Segment (m)		0		0
;) % Segment Disruption = (B/1000)*100	0		0	
)) Total Disruption both segments			0	
E) % Total Disruptions = (D/2000)*100	Zero di	sruption notic	eable along	the banks.

Table L2. RCC Rating					
Rating	Description				
o⊼ 4	0% total disruption on both segments combined.				
C 3	<15% total disruption on both segments combined.				
C 2	≥15% - <40% total disruption on both segments combined.				
C 1	≥40% total disruption on both segments combined.				

3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshr

100328-0								R	WSI		
		RSR			-				100		RWSI (%)
Current Cire	1	Historic Size		RSR	1		RSR	X	100	-	0.000
Current Size	1	Thistoric size	-		1	-	0.1	Y	100	=	10
9	1	10	-	0.9	1		0.1	^	1.00	-	

Table L3. Relative Wetland Size Rating					
RWSI Score	Description				
<10%	Wetland is at or only minimally reduced from its full natural extent				
>10%- <40%	Wetland remains equal to or more than 60% of its natual size				
>40% - <70%	Wetland has been reduced by more than 40% its natural size				
>70%	Wetland has been reduced by more than 70% its natural size				
	≤10% >10% - ≤40% >40% - ≤70%				

SA CODE: SF2MI[2]

Date: 4/9/24

DS

SA Name: Two Mile Pond Reservoir Transect [2]

Surveyor Initials :

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) Isurrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads		0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	+	+	
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (0.1	0	0
	0.1	0	0
Intense recreation (all-terrain vehicle use camping popular 6.11	0.1	0	0
	0.3	0	0
human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads) Ski area	0.3	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.4	0	0
Abandoned artificial impoundments (page do not)	0.5	0	0
bandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones artificial/Constructed wetlands, irrigation ditches	0.5	10	5
Developed/Managed trail system (high use trail)	0.7	20	14
griculture - active tilled crop production	0.8	5	4
Inculture - permanent crop (vinovorde and unit	0.2	- <u>-</u> +	0
Jriculture - permanent crop (vineyards, orchards, nurseries, berry production) anicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	
Id fields and other disturbed falls and goil courses; urban manicured parks	0.3	0	
Id fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, ussian thistle, mustards, annual vegetation)	0.5	0	0
ature old fields and other fallow lands with natural composition, introduced hay field and pastures g., perennial vegetation cover) storation areas in process to public for the second second second second second	0.7	0	0
storation areas in process to natural conditions (re-conversion in process)	0.8	65	52
ying of native grassland (e.g., no tillage, haying and baling only) avy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) noved, woodland/shrub vegetation conversion (chaining, achieved)	0.9	0	0
noved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping) mmercial tree plantation, Christmas tree farms	0.3	0	0
	0.6		~ -
ective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) noved ture restoration areas returned to	0.8	0	0
ture restoration areas returned to natural conditions (re-converted)	0.9	0	0
tural area, land managed for native vegetation - No agriculture, logging, development	1		-
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surrounding Land Use Rating					
Rating	LUI Score				
	≥95 - 100				
3	≥80 - <95				
8 2	≥40 - <80				
1	<40				

-
2
-
₹.
3
5
~,
0
0
σ
•
10

SA Name : Two Mile Pond Reservoir Transect 1 💪

1.2.16/1 :aven

Biotic Metrics

number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use the Tables in Appendix B and the Fleid Guide for metric instructions. Enter the species codes for the invasive exotic species found in the polygon (from NM Noxious Weed List -Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique

olygon	83 Vertical Structure Type	B4 Tree Regeneration % Cover	BS Invasive Exotic Species % Cover	트르	Comments	
-	IA1	¥		Possible vine	1	1 1
2	DA2	gran par	5>.	Elm? anhown	Horse ter 5	
m	IA1	Stouth				
4	11B1	Cetter wand	8			
s	IIIC1		10011			
9	INE					
2	INF1					
6						
10						
=						
12						
13						
14						
15						
16						
17						
18						
19						
20						

A Z Provide it is not stated by an assignment. Starting which is more than a set of the hourd of a return in the option. Starting it is not stated in the option. Starting it is not stated in the option. Inter it is not a stated in the it is not a stated in the option is stated in the it is not a stated in the iteration in the iteratio	proficie merce revision and sector and Polynom Assignments. Standing with <i>C</i> have the first publicant of the first publicant as precises approximate the maximum metal metal magnetic metal assignments. Standing with <i>C</i> have provided in the product code for the more trans. assign the strend in	B1 Wo	F K	elat	ivel	Nati	Ve P	lant	ů Ľ	Ĩ.	unity.	Con	sodi	B1 - Relative Native Plant Community Composition												10/11	Ň	rveyo	surveyor Initials :			Þ
The result of the same of it has the same comparison or a rew of it cast as sign the species to the stream Porgon No. Species 1 Species 2 Species 3 Max Mass Species 1 C C C N Species 5 N Species 5 N Species 5 C C N Species 5 N N Species 5 N </td <td>If the same composition or a reard press in the the none state a.m. Intervene assigned to the same Cifit that the same composition or a reard in the physical and the same composition or a reard in the physical and the same composition or a reard in the physical and the same can be same composition or a reard in the same can be same can and be same can be</td> <td>don whic</td> <td>i i i i i i i i i i i i i i i i i i i</td> <td>ant si t is m</td> <td>oecie. Yore a</td> <td>s in e S bun</td> <td>ach s ach s dant.</td> <td>ecie: tratu Each</td> <td>ant D th D by</td> <td>at ap</td> <td>rgon pears</td> <td>Assign in the</td> <td>poly</td> <td>ts. Sta Jon. S</td> <td>rting v se foot</td> <td>vith C notes</td> <td>r A, en for spe</td> <td>ter the</td> <td>: numt</td> <td>ber of t jons, if</td> <td>he first a sner</td> <td>polyg</td> <td>ion fro</td> <td>m Wo</td> <td>rkshee</td> <td>et S. En</td> <td>ter the</td> <td>specie</td> <td>s code</td> <td>s for th</td> <td>e two</td> <td></td>	If the same composition or a reard press in the the none state a.m. Intervene assigned to the same Cifit that the same composition or a reard in the physical and the same composition or a reard in the physical and the same composition or a reard in the physical and the same can be same composition or a reard in the same can be same can and be same can be	don whic	i i i i i i i i i i i i i i i i i i i	ant si t is m	oecie. Yore a	s in e S bun	ach s ach s dant.	ecie: tratu Each	ant D th D by	at ap	rgon pears	Assign in the	poly	ts. Sta Jon. S	rting v se foot	vith C notes	r A, en for spe	ter the	: numt	ber of t jons, if	he first a sner	polyg	ion fro	m Wo	rkshee	et S. En	ter the	specie	s code	s for th	e two	
Polygon Nos. Species 1 R Species 2 Netrobaccous/spanse Stratum 3 Cr Score 4 Z L L L Species 3 Species 4 Species 4 Species 5 R Read	II. Polygon Nos. Species 1 R Species 2 N Machacous/sparse stratum A Z Species 3 N Species 4 N Species 6 S Species 5 S<		╎──┼╵	.							ail Wo	ody St	gned ratun	a 16	same		t has the	Te sar	le con	npositic	n or a	new (T is cr	n moj eated	e thar for the	r one st e polyg	trata, a on.	ssign tł	le spec	ies to 1	the str	atum
1 2 1 <td>A Z A Z A Z A Z A Z A Z A Z Z Z Z Z Z Z</td> <td>нÍ</td> <td>ă </td> <td>⁶</td> <td>N N N N</td> <td><u>ې</u></td> <td></td> <td></td> <td></td> <td>s</td> <td>cries (</td> <td><u> u 2</u> -</td> <td></td> <td>Speci</td> <td><u>1</u> 2 55</td> <td></td> <td></td> <td></td> <td></td> <td>un v</td> <td></td> <td> LL</td> <td>Herl</td> <td>baceo</td> <td>us/Sp</td> <td>Irse Str</td> <td>atum</td> <td></td> <td>ц С</td> <td>core 4</td> <td></td> <td></td>	A Z A Z A Z A Z A Z A Z A Z Z Z Z Z Z Z	нÍ	ă	⁶	N N N N	<u>ې</u>				s	cries (<u> u 2</u> -		Speci	<u>1</u> 2 55					un v		 LL	Herl	baceo	us/Sp	Irse Str	atum		ц С	core 4		
2.10 2.11 2.11 2.12 2.15 1.05 3.75 1.05	B A. A	<	<u></u>						 -	12	136		5	ū					z			12	2 bě	cies 5		<u>5</u>	cies 6		Raw	1	SA5 V	Vt Sco
Image: stand Structure Struct	es and shrubs > 6 m (20 feet) and > 25% total stratum cover. 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and shrubs s6m (20 feet) and > 25% total stratum cover. 3. Herbaceous (great and stotal stratum cover. 3. Herbaceous (great and	~		· · · · · ·			<u> </u>	 	+	+		<u> </u>	. [2	- - -]	5	2		\geq		i'r s	2	12	- 445 52	_ /		18 1. 1975	4	3,9	5 10	1	M
Early 1 Image: Second Structure Stru	and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Tees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. The Final Weighted Score 16 More than cover; 3. The Final Weighted Score 16 More than cover; 3. The Final Weighted Score is the sum of the uve score ed as a decimal number at the Native frame of the score score ed as a decimal number at the Native score is the score score ed as a decimal number at the score score ed as a decimal number at the score score ed as a decimal number at the score score ed as a decimal number at the score score ed as a decimal number at the score score ed as a decimal number at the score score ed as a decimal number at the score score ed as a decimal number at the score score ed as a decimal number at the score score education at the score score score education at the score score education at the			 			+		╉╼	+								-†						i					 			
Image: Section of the section of t	es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (gran file) we cover set on the same cover do y the C1 and expressed as a decimal number of the Sta new cover set on the same cover set of the sam	T	L			T	+-			╶╁╴		_ -														 			<u> </u>		-	
1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10 1.10	es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaceus (grant in the sum of the we covered by the CT and expressed as a decimal number at the Batevelaxes and strate score is the sum of the su	-	ł	\square			+		-+																	_ _			4	-+	-+	
Se and Strucks > 6 m (20) feet) and > 25% total Strucks < 6 m (20) feet) and Strucks	es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (granting the Plattice Pl								·									+-			-		_ _									
S and Shubbs > 6 m (20 feel) and > 25% total stratum cover; 2. Tree and shubb s 6 m (20 feel) and > 25% total stratum cover; 2. Tree and shubb s 6 m (20 feel) and > 25% total stratum cover; 2. Tree and shubb s 6 m (20 feel) and > 25% total stratum cover; 2. Tree and shubb s 6 m (20 feel) and stratum cover; 3. Tree and shubb s 6 m (20 feel) and stratum cover; 3. Tree and shubb s 6 m (20 feel) and stratum cover; 3. Tree and shubb s 6 m (20 feel) and stratum cover; 3. Tree and shubb s 6 m (20 feel) and stra	es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (granting the dative high the dati											-	-		_ _			-+-			-+									 	<u> </u>	
Stand Shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs 2.0.0	es and shrubs > 6 m (20'feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20'feet) and >25% total stratum cover; 3. Herbaceous (grant of the Weighted Sci 15 Weigh	1	1			1-	┢	╉╾					-†-		_			- +								 						
s and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs	as and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbacous (granter National Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number to the Raw Score is Store is the sum cover is the sum cover is the sum cover stratum cover stratum cover as an decimal number to the Raw Score is stratum cover is the sum cover is the sum cover stratum cover stratum cover as a decimal number to the Raw Score is the sum cover is the sum cover stratum cover stratum cover as a decimal number to the Raw Score is the sum cover is the sum cover stratum cov	_ ļ	1	T	+	╈	+	-	-	╾┟		_				_					 									-	+	
Sand shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and stratum cover; 2. Trees and str	as and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (grantive Native Plant Community Com		1												 			+-			+											
Sand shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs	and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs 56m (20 feet) and > 25% total stratum cover; 3. Herbaceous (grantive Native Plant Community Convertioned Science is the sum of the Native Plant Community Convertioned Science is the sum of the Native Plant Community Convertioned Science is the sum of the Native Plant Community Convertioned Science is the sum of the Native Plant Community Convertioned Science is the sum of the Native Plant Community Convertioned Science S					 			 	<u> </u>		╀-	+-								-											ĺ
Sand Shrubs > 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total Stratum cover; 2. Trees and Stratum cover; 2. Trees and Stratum cover; 2. Trees and Stratum cover; 2. Trees a	s and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 3. Herbaceous (grantine black) from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number three blant Community	:				┢				<u></u>		<u> </u>	+-								-+										<u> </u>	
Stand shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs 1 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 / 0 /	It is and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 3. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 3. Herbaceous (grar 5 Wr. Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal numbe aftive Native Plant Community Commonstratements and the wr. Score is the sum of the wr. Score is a decimal number attive Native Plant Community Commonstratements and shrups and store is the sum of the wr. Score is the			1	 	╂──	┣	<u> </u>					-+-		_						-+			—						 	<u> </u>	
Sand shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups <	ss and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (grar n cover: 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal numbe aftive Native Plant Community Components	í	†	<u>† </u>	┼╌	+	<u> </u>												-+		-+			——			<u> </u>				┥—-	
es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrups < 7 m (20 feet) and >	as and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 3. Areas and shrubs s6m (20 feet) and >25% total stratum cover; 3. Herbaceous (grar i fow Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal numbe aftive Native Plant Community Composition of the two Score is the sum of two Score is the sum of two Score is the sum Score is the sum of two Score is the sum of the two Score is the sum of the two Score is the sum of two Score is two Score	I	<u>† – – – – – – – – – – – – – – – – – – –</u>	 	┾	╂							-		_ _	- -			-†		-+										┥	
es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 7 m (20 feet) and >	es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (grar n cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal numbe ative Native Plant Community C		 	<u> </u>	┣										_ _	- -			-+		-+							·			<u> </u>	
es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and s	es and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and >25% total stratum cover; 3. Herbaceous (grar n cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal numbe ative Native Plant Community Composition		┡╍╼╍┥	<u> </u>	┣	 									_	_		-+-	-+-								┝━╉	╎──┼			┥━┤	
m cover 40	The sum of the set of the set of the set of a stratum cover; 2. Trees and shrubs set (20 feet) and >25% total stratum cover; 3. Herbaceous (grar cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number of the Nt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Score is the sum of the sum of the Wt. Score is the sum of th	lă		4											-	-		-			_	-		{		}						
	1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Score, by the CT and expressed as a decimal numbe ative Native Plant Community Commonstances.	ΓĒ	i 5	5 17 19 1 19 1		E S	1 20 1	eet)	and	> 25%	s total	stratu	0 E	ver; 2.	Trees	and sh	lrubs <	6m (2(feet			.			Final	Weigh	ted Sc	ore7			3	le e
	and the second			I											limary	WORK	sheet.						2		ifia M		ore on	Table	B1 and	enter	the Ra	ing

SA Name : Two Mile Pond Reservoir Transect [\mathcal{Z}]

SA CODF · SF2MI [2]

÷

SF2MIE 21 SA CODE :

Date: 4/9/23

· > 10 T - 20/

Two Mile Pond Reservoir Transect [📿] SA Name :

Surveyor initials : 7 5

able B1.	Relative Native Plant C	ommunity Composition Rating
ating	CT Fina	l Weighted Score
4	> 3.75	<10% non-native
	≥ 3.25 and <3.75	10% ≤20% non-native
<u></u>	> 2.0 and <3.25	20% ≤50% non-native
		>50% non-native
1	≤2.0	/

- Vegetation Horizontal Patch Structure

ksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch ern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

izontal Patch Structure pattern A,B,C, or D:

C

_ , , ,	Table B2. Rating for Vegetation Horizontal Patch Structure
Rating	Description Description Description Description Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would
	Most closely matches Pattern A. SA has a diverse patch structure of the
4	be difficult to determine.
	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and completion one occurrence in the SA.
3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity (4 patch types present) and complexity (4 patch types be present) and complexity (4 patch types may be present; a single, be present, although the other patch types would be well represented and have more than one occurrence in the SA. Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, Pattern C. SA has a low degree of patch diversity and complexity.
	Pattern C. SA has a low degree of patch diversity and complexity the state SA
2	Pattern C. SA has a low degree of paten diversity of pattern of the SA. dominant patch type exists with the others occupying a small portion of the SA. Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch Pattern D. SA has essentially little to no patch diversity or complexity. The SA.
	Pattern D. SA has essentially little to no patch diversity of complexity. The article of the SA
1	Pattern D. SA has essentially little to no patent environment of the SA. types, if present, occur infrequently and occupy a small portion of the SA.
3 - Vea	etation Vertical Structure
	for humanical structure type (VST). Using the Structure Type Horn Worksheet and the Change

om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with the total %SA for each VST below.

ame VST) x 100	. Enter the total	%5A101 each v5		VST 65	VST 6W	VST 6H	VST 7	
	VST 1	VST 2	VST 5	• • •	Herbaceous	Herbaceous	Sparse	l
	High Structure	Low Structure	Tall Shrubland	Shrubland	Wetland	Vegetation	Vegetation	Í.
	Forest	Forest	<u> </u>	5/1105/2010				ĺ
m . 101 - 500				50				1

Table B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. Percentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for the rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the table down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the rating on the SA Rank Summary Worksheet.

ating on the solid		Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
Rating	Dominant VST	Co- or Sub-dominant V31 21270	6W and/or 6H
	1	5	
	1	6W	
^ 4		5	6W and/or 6H
	2 or 1 and 2		
	1		
	2 or 1 and 2		
≰ 3 ├-	2 or 1 and 2		
<u>}</u> —→	5	6W	
	2 or 1 and 2		
~ 2	5		
	6W		
	65		
$C \downarrow \downarrow$	6H		
· –	7		

SA CODE: SF2MI [2]

Date: $\frac{1}{2} \frac{1}{2} \frac{1}{2} \frac{1}{2}$ Surveyor Initials: $\frac{1}{2} \frac{1}{2} \frac$

SA Name : Two Mile Pond Reservoir Transect [🙄]

B4 - Native Riparian Tree Regeneration

Ta34. M Worksheet :	lative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from b, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
8 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	Native poles, saplings and/or seedlings common, scattered natches or polygons with 19/ 50/
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u>C 1</u>	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

< 1%

Table B5. Rating	s for Invasive Exotic Plant Species Cover
Rating	Invasive Species Cover %
C 4	0%
-3χ	>0% - <1%
<u>ن 2</u>	≥1% - <10%
C_1	≥10

Additional CTs and Biotic Metric Comments:

SA CODE: SF2MI[7]

Date: 4. 9. 24

٦

Surveyor Initials :

SA Name : Two Mile Pond Reservoir Transect [2]

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
			Abandoned channels
			Backwater/eddy
			Riffles or rapids
			Shoals, sparely-vegetated bars
— <u> </u>			Channel boulders
			Oxbow lakes/ponds on floodplains
<u></u>			Vegetated Island and side bars
			Terraces
			Channel pools
<u></u>			Beaver ponds
<u></u>	┼────────		Swales, depressional features on floodplains
<u>_</u>			Debris jams in channel
<u>_</u>	<u> </u>		Woody wrack piles on the floodplain
<u>_</u>	<u> </u>	$+-\frac{2}{1}$	Floodplain micro-topography (mounds, pits)
<u>_</u>			Downed logs
<u>L</u>			Natural levees
			Standing snags
<u> </u>		+ $-$	Variegated, convoluted, or crenulated foreshore
<u> </u>			Undercut banks in channels
<u> </u>			No. of unique Patch Types

Table	e A2. F	lating for Physical Patch Complexity
Ratin	ng	Description
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).
ſ	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).
X	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.

SA CODE: SF2MI[2]

419124 Date :

DS.

Surveyor Initials :

SA Name : Two Mile Pond Reservoir Transect [2]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
				Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
				There is leaf litter, thatch, or wrack in most pools.
Indicators of		Q		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		_ Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		ĘØ		Channel and point-bars consist of well-sorted bed material.
		X		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
! }		Ø		There are channel pools at meander bends and some deep pools within the reach.
ndicators of Active Degradation				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
				Channel bed is scoured to large cobbles or boulders and entrained bank naterial is filling the cobble interstices and pools.
			ין 🗆	here are active headcuts within the channel.
				n obvious historical floodplain has recently been abandoned, as indicated y the age structure of its riparian vegetation.
				here is abundant fresh splays of coarse sediment covering the floodplain bove the natural point bar elevation.
				here are partially buried living tree trunks or shrubs along the banks.
ndicators of Active Aggradation				ne channel bed is planar overall. The stream lacks well-defined channel pols at meander bends, or pools are filled with sediment.
				nere are partially buried or sediment-choked culverts.
			+۲ 🔲	nere are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI[2]

4/9/14 Date :

SA Name : Two Mile Pond Reservoir Transect [2]

DS Surveyor Initials :

Table A3. Rating for Channel Equilibrium Rating Description & 4 Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12. C 3 There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation. C 2 There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation. C 1 The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators	
	[]4	⊠[4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.	
Indicators of Bank	□3	3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.	
Soil Stability	2	<u> </u>	<u> </u>	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.	
	1	<u> </u>		Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.	
· · · · · · · · · · · · ·	<u> </u>	Č 14	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.	
	3	□3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.	
Indicators of Stream Bank Erosion Potential	<u></u> 2	2	□2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.	
	□1	1		Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.	

Average Indicator Score

Table A4. Stream Bank Stability and Cover Rating				
Rating	Description			
¢ 4	>3.5 - 4.0			
<u>с з</u>	>2.5 - ≤3.5			
2	>1.5 - ≤2.5			
$\overline{\begin{array}{c} \\ \hline \end{array}}$	1.0 - ≤1.5			

SA CODE: SF2MI[2]

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [2]

A5 - Soil Surface Condition

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)		
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).		
			Multiple livestock and other (fishing, hiking) trails,		
	<u> </u>		Vehicle tracks including off-road and construction, etc.		
			Impervious compacted surfaces or pavement		
			Grading or plowing		
			Fill		
			Gravel pits		
			Anthropogenic levees and berms		
			Irrigation-driven salinity and mineral crusts		
			Fire pits		
			Other		
			Estimate % soil disturbance by segment area		

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating					
	Rating	Description				
c	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.				
r	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampline area.				
X	2	staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or lass than 10% of the SA.				
<u>ر</u>	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water lis channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.				

Date: 4/9/2 1

125

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials :

rksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign egories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow Ik Major Stressors in Dominant Stressor column(Pick up to 3)

nk	Affect		· · · · · · · · · · · · · · · · ·		Stressor Group/Stressor	Comments
I IK	Major	Minor	Absent i	Inknown	Adverse water management	
	<u> </u>				Extended low flow dam releases	
	X					
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
		<u> </u>	<u> </u>		Adverse sediment management	
					Adverse sediment retention by dams	
					Sediment loss by dredging	
_					Adverse sediment input (roads/development)	
					Artificial water additions	
			Q		Sewer treatment effluent	
					Point source urban runoff	
	<u> </u>	<u></u>			Factory, feedlot outfall	
			<u> </u>		······································	
_					Agricultural irrigation ditch returns	
					Mining waste	
	<u></u>				Ground water pumping	
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
					Watershed alteration	
					Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
			_ <u></u>	<u> </u>	Local biodiversity impacts	
-					Evidence of excessive grazing (local)	
		Ø			Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	
١ddi	tional Com	ments	N,	1.Jp	the second and the second s	

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

SA Code SF2MI	21 644		r Worksheet	A CONTRACTOR		A DESCRIPTION OF THE OWNER OF
A de Tsct [2	e entrance i mo	Mile Pond Reservoir		Project	Riparian /	Assesement
	a providine i ma			WOI : TV	vo Mile Po	nd Reservoir
County Santa Fe	HUC 12 Head and Boundary (Rationale	waters Santa Fe River	Elevation (ft) 72	99 (m) 222	4.7	Ecoregion 6.0 NWFM
decommissione of water rights. Driving Directions Driving to Santa	The from Albuquerque youtil you reach the reservoir	ocated on the east side or regarding the reservoir a		sion to the area w	as recently	y shut down due to laci
Ownership The Natu Surveyor Role	re Conservative and The S	Santa Fe National Forest	Data Sharing Restrictions	Results to client only.		bserved in tland?
The server of the second second	20 1:		or Name			Surveyor Initia
Landscape		nd Annie"				11 1
Biotic	"	x*				DS +AM
Abiotic	"	M.				
Stressors	"	1	1			
Easting (m)	Northing (m)	Zone	Datum	Intitud		
-105° 53' 24" W	35° 41' 23° N	13	NAD- 83 UT	10100010301	le (DD ft)	Longitude (DD f
Survey Date	5/15/24	Start Time			Time	-105.89
	andellons Seen					ground coverage
Biotic Condition ()	Vegetation patterns, comp	osition and structure	entice and to a			
Willow tra Abiotic Condition turbance and other	Norrow last co es, garter smake involved cological alterations for ite impacts; explain the h Area still channel and	e.g., dams, walls etc.]; flo	de TrCe	istics and evidence	ox Ele	ank flooding: soil
TAC essment Summary	(Overall site condition sur	d is the	most pe	destrian i	illed 1	part of the park
) area.	es are flowe Appears to It water	be turning ,	6		seer	despite
sional _ Lo _		changes				

Page 1 of 17

SA CODE: SF2MI[2]

Date: 5/15/24

Surveyor Initials : DS

SA Name : Two Mile Pond Reservoir Transect [2]

MRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5 Final Score Wt Rating Metric Description 1.0 3.25 indscape Context 0.75 0.25 3 . Buffer Integrity Index 1.0 4 0.25 2. Riparian Corridor Connectivity 1.0 0.25 4 3. Relative Wetland Size 0.5 2 0.25 4. Surrounding Land Use iotic 4 0.2 1. Relative Native Plant Community Composition 2 0.2 2. Vegetation Horizontal Patch Structure 0.2 3 3. Vegetation Vertical Structure 0.2 4 4. Native Riparian Tree Regeneration 4 0.2 35. Invasive Exotic Plant Species Cover Abiotic 0.3 A1. Floodplain Hydrologic Connectivity 0.2 1 A2. Physical Patch Diversity 0.2 4 A3. Channel Equilibrium 0.2 4 A4. Stream Bank Stability and Cover 0.1 A5. Soil Surface Condition

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic		0.35	
Abiotic		0.35	-

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

or Summary	Major	Minor	Top Three	
	0	0	1	Construction
			2	No water
			3	Pedestrians

Stressor Comments (Evaluation of risk)

Stresso

No water coming through old channel doesn't appear to affect the wall of willows

SA CODE: SF2MI[7]

Date: 5/15/ 24

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials :

Landscape Context

L₁ - Buffer Integrity Index Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season Google Earth KMZ, file Imagery Image Date 6/23 Allowed buffer/RCC land cover elements Excluded non-buffer/RCC land cover elements Buffer RCC Buffer RCC Commercial/residential developments, parking lots, $[\mathbf{X}]$ X Natural or semi-natural vegetation patches X N dams, bridges, revetments, and other structures X Small irrigation ditches without levees X \Box Lawns, parks, golf courses, sports fields Π Old fields, unmaintained П Π Railroads \square Maintained levees, sediment piles, construction Π Open range land \Box \Box materials, staging areas Foot trails, horse trails, unpaved blke trails (low [X] X intensity) Intensive livestock areas, horse paddocks, feedlots Π \square X Intensive agriculture: maintained pastures, hay fields, Non-channel open water \mathbf{X} \Box row crops, orchards, and vineyards Non-functioning abandoned vegetated levees, or Paved roads or developed second-order unpaved but X X naturally occurring levees X \square graded roads \frown Open water bounded by a levee or other manmade \Box unpaved two tracks roads X X structure Π Other Other Worksheet 1b. Buffer Percent Sub-metric. Measure or estimate the percentage of the SA perimeter composed of allowed buffer elements and enter into the Buffer Percent **Table L1a. Buffer Percent** Box below. Rate the sub-metric using Table L1a and enter the rating on the Buffer Integrity Summary Worksheet 1d. Rating **Buffer Percent** 4 100% Buffer Percent (%)= 85% R 3 ≥80% - <100% $\overline{\mathbf{C}}$ 2 ≥50% - <80%

Worksheet 1c. Buffer Width Sub-metric. Measure the length of each buffer line in meters in the GIS or on the map. Average the line lengths and rate using Table L1b. Enter the rating on the Buffer Integrity Summary Worksheet 1d.

Line	Buffer Width (m)	Buffer Width (ft)	Line	Buffer Width (m)	Buffer Width
A	164.26	538.91	E	161.93	(ft) 531.26
B	125.25	410.92	F	231.48	759.44
с	115.39	378.57	G	121.25	397.80
D	111.07	364.40		155.87	511.38
·	Average	148.31 (m)		486.58	(ft)

Worksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a and L1b above to calculate the Buffer Integrity Index Score using the formula in the box below. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table L1c in the SA Summary Worksheet.

Buffer % Rating	+ Buf	fer Width Rating	/2 ≔	Buffer Integrity Index Score	
3	+	3	/2 =	3	

Table L1c. Summary Rating for Buffer

Table L1b. Buffer Width

<50%

Average buffer width

≥190m

≥130 - <190m

≥65 - <130m

<65m

	integi	rity
- <u>_</u>	·· · · ·	

1

Rating

4

3

2

1

R

Rating	Score
<u>C</u> 4	>3.5
<u> </u>	>2.5 - ≤3.5
<u>C</u> 2	>1.5 - ≤2.5
	≤1.5

SA CODE: SF2MI[2]

SA Name: Two Mile Pond Reservoir Transect [2]

- Riparian Corridor Connectivity (RCC)

orksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for cluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter e summed values in meters for excluded element lengths for each bank within each gment upstream and downstream of the SA. Sum the values for each segment and lculate % Segment Disruption for the upstream side and the downstream side. Add the tal disruption for upstream and downstream segments and then calculate the % Total isruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and e data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segment		
-	Left Bank	Right Bank	Left Bank	Right Bank	
) Total Bank Disruption (m)	0	0	0	0	
) Total Disruption by Segment (m)		0	0		
) % Segment Disruption = (B/1000)*100	0		0		
)) Total Disruption both segments			0		
)% Total Disruptions = (D/2000)*100	Zero disruption noticeable a		eable along	the banks.	

3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshe

		RSR	-					R	WSI		
			-	RSR	1		RSR	x	100	=	RWSI (96)
Current Size	1	Historic Size		0.000		-			100		10
9	1	10		0.9	1		0.1	X	100		

Table L3. Relative Wetland Size Rating				
RWSI Score	Description			
≤10%	Wetland is at or only minimally reduced from its full natural extent			
	Wetland remains equal to or more than 60% of its natual size			
>40%- ≤70%	Wetland has been reduced by more than 40% its natural size			
>70%	Wetland has been reduced by more than 70% its natural size			
	>10% - ≤40% >40% - ≤70%			

Та	ble L2. RCC Rating
Rating	Description
(x 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
0 1	≥40% total disruption on both segments combined.

DS Surveyor Initials :

Date: 5/15/24

Date: 5/15/24

£25

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor initials :

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot		<u> </u>	
Uredging, borrow pits, abandoned mines, water-filled artificial impoundments (new issue)		0	0
	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.1	_0	0
	0.3	0	0
human activities but not a completely concrete channel (that goes under paved roads)), junkyards, trash dumps, disturbed ground (not including roads) ski area	0.3	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.4	0	0
bandoned artificial impoundments (new down it	0.5	0	0
bandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
rtificial/Constructed wetlands, irrigation ditches Developed/Managed trail system (high use trail)	0,7	$-\frac{1}{20}$ +	14
griculture - active tilled crop production	0.8	5	4
riculture - permanent crop (view of the sector)	0.2		
riculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
anicured lawns, sport fields, and golf courses; urban manicured parks	0.3	-0 +	
Id fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, ussian thistle, mustards, annual vegetation)	0.5	0	0
ature old fields and other failow lands with natural composition, introduced hay field and pastures g., perennial vegetation cover)	0.7	0	0
storation areas in process to natural conditions (re-conversion in process)	0.8	65	52
ying of native grassland (e.g., no tillage, having and baling only)	0.9	0	$\frac{32}{0}$
avy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) noved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping) mmercial tree plantation, Christmas tree farms	0.3	0	0
	0.6	0	0
ective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) noved ture restoration areas returned to a set of the set	0.8	0	0
ture restoration areas returned to natural conditions (re-converted)	0.9		0
ural area, land managed for native vegetation - No agriculture, logging, development	1		<u> </u>
LUI Score= Coefficient * % LUZ Area	<u></u>		75

Table L4. Surrounding Land Use Rating		
Rating	LUI Score	
4	≥95 - 100	
3	≥80 - <95	
2	≥40 - <80	
1	<40	

5
-
2M
5
iii.
ö
ខ
A

SA Name: Two Mile Pond Reservoir Iranseur

a la la sono

Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet S. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant the Tables in Appendix B and the Field Guide for metric instructions. Enter the species codes for the invasive exotic species found in the polygon (from NM Noxious Weed List -**Biotic Metrics**

Writch it is move advanced at the family of the same of interactions. If a species advanced at the species code for the samo up of the same of the same advanced at the species code for the samo up of the species of the same of the species of th	Answer Answer <th>m Worksheet 5. Enter the species codes for the two number than one strata, assign the species to the seated for the polygon. Baceous/Sparse Stratum 3 CT Score 4 baceous/Sparse Stratum 3 CT Score 4 Species 6 E Raw4 % SA5 $e = \frac{1}{N} \frac{2er}{\sqrt{2}} \frac{1}{\sqrt{2}}$</th> <th>o top tratum in Wt Score6</th>	m Worksheet 5. Enter the species codes for the two number than one strata, assign the species to the seated for the polygon. Baceous/Sparse Stratum 3 CT Score 4 baceous/Sparse Stratum 3 CT Score 4 Species 6 E Raw4 % SA5 $e = \frac{1}{N} \frac{2er}{\sqrt{2}} \frac{1}{\sqrt{2}} $	o top tratum in Wt Score6
Difference Tail Woody Stratum 1 Joner Woody Stratum 3 To receive 1 Species 1 Species 3 North Carbona North	Tidal Woody Stratum, 1 Species 1 Species 2 Species 3 Species 4 Norway Stratum, 3 In Moody Stratum, 2 Species 3 Species 5 Species 5 Species 6 Rav % S45 Mr Score In Moody Stratum, 3 Species 5 Species 5 Species 6 Rav % S45 Mr Score In Moody Stratum, 3 Species 5 Species 5 Species 6 Rav % S45 Mr Score In Moody Stratum, 3 Species 7 Norway, 3 Mr Score Norway, 3 Mr Score In Moody Stratum, 4 Species 5 Species 6 Rav Wr Score In Moody Stratum, 5 Norway, 3 Mr Score Norway, 3 Mr Score In Moody Stratum, 5 Norway, 3 Mr Score Norway, 3 Mr Score In Moody Stratum, 5 Norway, 3 Mr Score Norway, 3 Mr Score In Moody Stratum, 5 Norway, 3 Mr Score Norway, 3 Mr Score In Moody Stratum, 5 Norway, 3 Mr Score Norway, 3 Nr Score In Moody Stratum, 5 Norway, 3 Nr Score Nr Score Nr Score In Moody Stratum, 5 Nr Score Nr Score Nr Score Nr Score In Moody Stratum, 5 Nr Score	eated for the polygon. Daceous/Sparse Stratum 3 CT Score 4 cies 5 E Species 6 E Raw4 % SA5 たたん イ・00 100 デ	Wt Score6
Species 1 Species 2 Species 3 Species 3 <t< th=""><th>Species 1 Species 2 Species 3 Species 3 Species 5 <t< th=""><th>E Species 6 E Raw⁴ N $2\omega T_{au}$ A 4.00</th><th></th></t<></th></t<>	Species 1 Species 2 Species 3 Species 3 Species 5 Species 5 <t< th=""><th>E Species 6 E Raw⁴ N $2\omega T_{au}$ A 4.00</th><th></th></t<>	E Species 6 E Raw ⁴ N $2\omega T_{au}$ A 4.00	
Notice Notice <td>Mathematical M Control N Three N Three N Control N</td> <td>N Species 6 Raw4 N $\frac{3}{201}$ K $4,00$</td> <td></td>	Mathematical M Control N Three N Three N Control N	N Species 6 Raw4 N $\frac{3}{201}$ K $4,00$	
M M <td>Image: Sector /td> <td>N Siller R</td> <td></td>	Image: Sector	N Siller R	
1 1 <td>Image: Second /td> <td></td> <td>4.0)</td>	Image: Second		4.0)
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>The second se</td> <td></td> <td></td>	The second se		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Image: constraint of the product o</td> <td></td> <td></td>	Image: constraint of the product o		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Index Index ndex Index Index Index Index Index Index Index Index Index Index</td> <td></td> <td></td>	Index ndex Index Index Index Index Index Index Index Index Index Index		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>F I</td> <td></td> <td></td>	F I		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Image: constraint of the product o</td> <td></td> <td></td>	Image: constraint of the product o		
1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <td>Tube > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover</td> <td></td> <td></td>	Tube > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover; 3. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Herbaccous (graminds and fobs)>10% total stratum cover		
Tubs > 6m (20 feet) and > 25% total stratum cover; 2. Trees and shrink com/ to cover; 2. Trees and shrin	Tubs > 6 m (20 feet) and > 25% total stratum cover, 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover, 3. Herbaceus (graminoids and forbs)> 10% total route is the product of the Raw Score *6, 4.7. The sinu ways a second by the CT and expressed as a decimal number the ways a cover a decimal number the ways and solved by the CT and expressed as a decimal number the ways a coverted by the cTT and expressed as a decimal number the ways a coverted by the cTT a coverted by the cTT a coverted by the cTT and expressed as a decimal number the ways a coverted by the cTTT a coverted by the cTTT a coverted by the cTTTT a coverte		
Ubs > 6m (20 feet) and > 25% total stratum cover; 2. Trees and shrink cover; 2. Trees	ubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Trees and shrubs s6m (20 feet) and > 25% total stratum cover; 3. Thereaceous (graminoids and forbs)> 10% total stratum cover; 3. The parcentage of the SA area covered by the CT and expressed as a defined number the reviel		
ubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and sh	Image: constraint of the product of the Raw Score * 0s, Star. 7 The Error words Secore 1 or Start or Start of the Start or Start		
Index Index <td< td=""><td>ubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. The stratum cover; 3. Herbaceous (graminoids and forbs)>10% total or is the product of the Raw Score * % <0. 7 The strutum cover and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total or is the product of the Raw Score * % <0. 7 The strutum cover and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total or is the product of the Raw Score * % <0. 7 The strutum cover</td></td<>	ubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. The stratum cover; 3. Herbaceous (graminoids and forbs)>10% total or is the product of the Raw Score * % <0. 7 The strutum cover and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total or is the product of the Raw Score * % <0. 7 The strutum cover and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total or is the product of the Raw Score * % <0. 7 The strutum cover		
Tubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cove	tubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total or is the product of the Raw Score * % <a> 77ha Stratum cover the SA area covered by the CT and expressed as a decimal number the total stratum cover		
Tubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% total stratum cover; 2. Trees and shrinks c6m (20 feet) and > 25% tota	rubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total to be product of the Raw Score * % Sav 7 The sincl with the Product of the Raw Score * % Sav 7 The sincl with the Product of the Raw Score * % Sav 7 The sincl with the Product of the Raw Score * % Sav 7 The sincl with the Product of the Raw Score * % Sav 7 The sincl with the Product of the Raw Score * % Sav 7 The sincl with the Saves and solve set and solve set as a decimal number the total solve set and solve set and solve set as a decimal number the total solve set and solve set and solve set as a decimal number the total solve set and solve set as a decimal number the total solve set and solve set and solve set as a decimal number the total solve set as a decimal number the total solve set as a decimal number the total set and solve set as a decimal number the total set and solve set as a decimal number the total set and solve set as a decimal number the total set as a decimal number total set as a decimal number total set as a decimal number total set as a decimal set as a decima set as a decima set as a decimal set as a decimal set a		
rubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6 m (20 feet) and > 6 m (20 feet) and	rubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total ARaw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number the total area of total		
rrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <7m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <7m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <7m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <7m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <7m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs <7m (20 feet) and > 25% total stratum cover; 2. Trees and stratum cov	Irubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total core is from Table B1a (Appendix B); 5%5A is the percentage of the SA area covered by the CT and expressed as a decimal number the total decided for total is the product of the Raw Score * % 54. 7the stratum cover stratum cover; 3. Herbaceous (graminoids and forbs)>10% total core is the product of the Raw Score * % 54. 7the stratum cover stratum cover as a decimal number the total decided for total stratum cover is the product of the Raw Score * % 54. 7the stratum cover stratum cover as a decimal number the total decided for total stratum cover is the product of the Raw Score * % 54. 7the stratum cover stratum cover as a decimal number the total decided for total stratum cover is the product of the Raw Score * % 54. 7the stratum cover stratum cover as a decimal number the total decided for total stratum cover is the product of the Raw Score * % 54. 7the stratum cover stratum		
rubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and shruhs <6m (20 feet) and > 25% total stratum cover; 2. Trees and stratum c	rubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total core is the product of the Raw Score *% <a. 7="" a="" and="" area="" as="" by="" cover.<="" covered="" ct="" decimal="" environment="" expressed="" number="" of="" sa="" stratum="" td="" the="" total=""><td></td><td> </td></a.>		
	*Naw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number the total sources of sources and forbs) > 10% total	Final Weighted Score7	200
v Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and exist the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the	Vant Community Composition on the SA Rank Summary Worksheet.		Final Weighted Score? Multiple Final Weighted Score? Multiple Final Weighted Score? Multiple Final Weighted Score? Multiple Final Weighted Score Staminoids and forbs}>10% CT Final Weighted Score on Table B1 and enter the

Date: 5/ 15/24 Surveyor Initials :

SA Name: Two Mile Pond Reservoir Transect [$\gtrsim \,$]

SA CODE: SF2MI[2]

SF2MI[2] SA CODE :

Date: 5/1851 84

11.

Two Mile Pond Reservoir Transect { = Z } SA Name :

Surveyor Initials :

able B1. Relative Native Plant Community Composition Rating					
lating	CT Fina	I Weighted Score			
4	> 3.75	<10% non-native			
	≥ 3.25 and <3.75	10% ≤20% non-native			
<u></u>	> 2.0 and < 3.25	20% ≤50% non-native			
<u></u>	<2.0	>50% non-native			

- Vegetation Horizontal Patch Structure

rksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch tern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

rizontal Patch Structure pattern A,B,C, or D:

	Table B2. Rating for Vegetation Horizontal Patch Structure		
Rating	Description Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would		
4			
3	be difficult to determine. Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, aithough the other patch types would be well represented and have more than one occurrence in the SA. be present, aithough the other patch types would be applicative. Two or three patch types may be present; however, a single,		
2	Pattern C. SA has a low degree of patch diversity and complexity, involve of the SA		
1	dominant patch type exists with the others occupying a small portion of the SA. Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.		
3 - Veg	etation Vertical Structure		

orksheet 8. Percentage of SA by vertical structure type (VST). Using the Struct om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with 100 Enter the total %SA for each VST below.

	VST 1 High Structure Forest	VST 2	VST 5 Tail Shrubland	Shrublarid	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VSI 7 Sparse Vegetation	
Total % of SA	1 MA	Į	1	50		·		1

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. Percentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for he rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the rable down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the rating on the SA Rank Summary Worksheet.

iting on the SA Ra	ank Summary Worksneet.	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5% 6W and/or 6H	
Rating	Dominant VST	Co- or Sub-dominant vos 210%		
	1	5		
. ,		6W		
⁻ 4 –	2 or 1 and 2	5	6W and/or 6H	
	1			
	2 or 1 and 2	5		
3 -	2 or 1 and 2	6W		
	5	6W		
	2 or 1 and 2			
~ 2	5			
	6W			
	65			
	6H			
·	7			

SA CODE: SF2MI[2]

Date: 5/15/24

05

Surveyor Initials :

Ь

SA Name: Two Mile Pond Reservoir Transect [2]

B4 - Native Riparian Tree Regeneration

D-41	Jative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.				
Rating	Description				
<u>9</u> 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.				
<u>3</u>	Native poles, saplings and/or seedlings common scattered natches area to				
2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.				
	Native poles, saplings, and/or seedlings absent (0% cover).				

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the 5A and enter below. Rate using Table B5 and enter the rating on the 5A Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Tal	Table B5. Ratings for Invasive Exotic Plant Species Cover							
	Ratin		Invasive Species Cover %					
\cap	4	X	0%					
Γ	3		>0% - <1%					
l –	_ 2_		≥1% - <10%					
\underline{c}	1		≥10					

Additional CTs and Biotic Metric Comments:

SA CODE: SF2MI[]

Date :

SA Name: Two Mile Pond Reservoir Transect [

Surveyor Initials :

Abiotic Metrics

1

1 - Floodplain Hydrologic Connectivity

Method 1

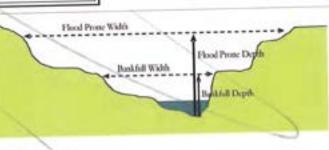
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description	Cross-section:	1	2	3
1: Bankfull width	This is a critical step requiring familiarity with field indicators of the ba Measure the distance between the right and left bankfull contours with	tha tape.			
2: Maximum bankfull depth	Keeping the tape level between the right and left bankfull contours, n of the line above the thalweg (the deepest part of the channel). A po- help here.	neasure the height			
3: Flood-prone depth	od-prone depth Double the estimate of maximum bankfull depth from Step 2.				
4: Flood-prone width Using a tape, measure the length of a level line at a height equal to the flood prone depth from Step 3 to where it intercepts the right and left banks.					
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull width (Step 1).				
6: Calculate average ratio	Calculate the average for Step 5 for all three replicate cross-sections. using Table A1a. Enter the rating in the A1 box on the SA Rank Summ	Enter the average he nary Worksheet.	reand	rate	

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems Rating Description

C 4	Average entrenchment ratio is ≥ 2.2;
0 3	Average entrenchment ratio is ≥1.9 - <2.2
0 2	Average entrenchment ratio is ≥1.5 - <1.9
0 1	Average entrenchment ratio is < 1.5



Worksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Worksheet in conjunction with Table A1c. Check the boxes for all that apply to each

segme	ent.		
UML			Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
		D	Channel widening due to bank failure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

Con	nectivi	Rating for Floodplain Hydrologic ty in single-channel step-pool systems
R	ating	Description
C	4	Average entrenchment ratio is ≥ 1.9
C	3	Average entrenchment ratio is ≥1.4 - <1.9
0	2	Average entrenchment ratio is ≥1.2 - <1.4
0	1	Average entrenchment ratio is < 1.2

SA CODE: SF2MI[]

SA Name : Two Mile Pond Reservoir Transect [

Surveyor Initials :

Date :

Method 2

e A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

1

F	lating	Description						
	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.						
\sim	3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.						
<u></u>	2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).						
~	1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.						

Tal. A1d. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1			and the second se			
2			and the second sec	and the second second		
3						

Floodplain Hydrologic Connectivity Comments:

Not in JSAI Assessment

SA CODE: SF2MI []

Date: 5/ 15/2 4

11

SA Name: Two Mile Pond Reservoir Transect [🐉]

Surveyor Initials :

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Bank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field indicators (check all existing conditions)
			Active side channels
_ <u></u>			Abandoned channels
_ <u></u>			Backwater/eddy
			Riffles or rapids
			Shoals, sparely-vegetated bars
			Channel bouiders
<u></u>			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
			Terraces
			Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channei
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
<u> </u>			Standing snags
$-\underline{-}$			Variegated, convoluted, or crenulated foreshore
<u>_</u>			Undercut banks in channels
	<u></u>		No. of unique Patch Types

Table	e A2. 1	tating for Physical Patch Complexity					
Ratin	ng	Description					
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).					
Ċ	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).					
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 – 8 unique indicators present in the SA (only a few on multiple segments).					
×	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.					

SA CODE: SF2MI [2]

Date: 5/15/24

Surveyor Initials :

DS

SA Name : Two Mile Pond Reservoir Transect [2]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field indicators(check all existing conditions)
Indicators of Channel Equilibrium		Ŕ		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ď		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
		X X		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
		Q		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		X		Channel and point-bars consist of well-sorted bed material.
		Ę≱		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
 <u> </u>		À		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
Indicators of Active Degradation				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
Indicators of Active Aggradation				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
				The channel bed is planar overall. The stream lacks well-defined channel bools at meander bends, or pools are filled with sediment.
			۲ ۲	here are partially buried or sediment-choked culverts.
			· · · · · · · · · · · · · · · · · · ·	here are avuision channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI[乙]

Date :	511	5/	2 (ş
Dates	11.	1		

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials : 👘 👘

Table A3. Rating for Channel Equilibrium Rating Description Image: A string the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12. Image: A string the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation. Image: A string the sector of excessive aggradation or degradation. Image: A string the sector of excessive aggradation or degradation. Image: A string the sector of excessive aggradation or degradation. Image: A string the sector of excessive aggradation or degradation. Image: A string the sector of excessive aggradation or degradation. Image: A string the sector of excessive aggradation or degradation. Image: A string the sector of excessive aggradation. Image: A string the sector of the sector o

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	<u>\</u> 4	1 4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
indicators of Bank	3	3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	<u></u> 2	<u></u> 2	2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	1	1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	<u></u> 4	[]4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	[]3	3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	2	2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	1	1		Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Table A4. Stream Ba	ank Stability and Cover Rating	
Rating	Description	
<u>A</u>	>3.5 - 4.0	
C 3	>2.5 - ≤3.5	
C 2	>1.5 - ≤2.5	
C 1	1.0 - ≤1.5	

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials : 0.5

A5 - Soil Surface Condition

orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table AS and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	Ď		Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

		Table A5. Soil Surface Condition Rating					
F	Rating	Description					
C	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
ø	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
ſ	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

SA CODE: SF2MI [2]

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect (2-1

Surveyor Initials : D \leq

rksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign egories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow is Major Stressors in Dominant Stressor column(Pick up to 3)

nk		Aff			Stressor Group/Stressor	Comments
	Major	Minor	Absent	Jnknown		
					Adverse water management Extended low flow dam releases	
	Ø				Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
					Adverse sediment management	
					Adverse sediment retention by dams	
					Sediment loss by dredging	
					Adverse sediment input (roads/development)	
		<u> </u>	<u> </u>		Artificial water additions	
					Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
	<u> </u>	<u> </u>	<u></u>	· · ·	Ground water pumping	
					Urban depletions	
					Fracking	
			Ø		Agriculture irrigation wells	
		<u> </u>		<u></u>	Watershed alteration	
•					Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
	Ø				Livestock/wildlife overgrazing	
		<u>_h</u>			Local biodiversity impacts	
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	
dditi	onal Comm	ients	N.	 \\/	x la x	

ersion Date: 04/25/2022

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5 Г

}		SA Cour	er Worksheet	_ ;	·	
SA Code SF2M1[2	J SA Name : Two	> Mile Pond Reservoir				
Code Tsct [2					parian Assesement	
County Santa Fe		lwaters Santa Fe River			Mile Pond Reservoir	
SA General Location	and Roundamy (Dettern L		Elevation (ft) 729	J) NWFM
Driving Directions Driving to Santa Canyon Road un	Fe from Albuquerque your fil you reach the reservor	ou head north on Old Pe ir located to the North.	cos Trail. Then hea	sion to the area was r	ecently shut down du	ie to laci
······	e Conservative and The	Santa Fe National Fores	t Data Sharing Restrictions	Results to client only.	Fish Observed in Wetland?	
Surveyor Role			/or Name		Survey	or Initial
Landscape	Dustin Schwar	z		·· · · · · · · ·	DS	
Biotic	Annie McCoy				AM	
Abiotic	Dustin Schwar				DS	
Stressors	Dustin Schwar	tz			DS	
Easting (m)	Northing (m)	Zone	Datum	Latitude (······	
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTI		DD ft) Longitud	
Survey Date	6/11/24	Start Time	9:00	End Tin	·	
Lebor	egetation patterns, com	very with	aron, Tr.	and gore, a	leyich just	
A Biotic Condition (v		Water Com	ing out of	Pipe Inche	a chemich	
Saw a De	egetation patterns, com	position and structure, e	exotics and invasiv	es, disturbance evide	ence, fire and herbivo	ry)
Willows	as a treation	r Tail Aldo	et leafs	have burnes	na leave	
out :	no and smaller and termine Dame amount a	E horse tail	Mandow gr	ass Vires gr	asson filling	
turbance and other s	ite impacts; explain the l	e.g., dams, walls etc.]; fill Nydrologic breaks or oth	ooding characteri	stics and evidence of	overbank flooding; so	<u></u>
Sith	hg wada fro	Das Friting tote	- Carrie		T Charles	
	channel OD	store days	$\hat{E}_{ij} = q_{ij}$	lat lade	Andrey.	
sessment Summary (Overall site condition su	mmary and comments :	after the field date			
o)	area is ver	y green and	meadow gr	rass is fil	Hing up sup mud we	
sional		ino but will	keep eye	and for g	could water	

SA CODE: SF2MI [2]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials : DS/AM

MRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	Rating	Wt	Final Score
Metric Description		Σ 1.0	3.25
andscape Context	3	0.25	0.75
1. Buffer Integrity Index	4	0.25	1.0
2. Riparlan Corridor Connectivity	4	0.25	1.0
3. Relative Wetland Size	2	0.25	0.5
.4. Surrounding Land Use		Σ	
Biotic	4	0.2	
81. Relative Native Plant Community Composition	2	0.2	
82. Vegetation Horizontal Patch Structure	3	0.2	-
B3. Vegetation Vertical Structure	2	0.2	-
B4. Native Riparian Tree Regeneration	1	0.2	
B5. Invasive Exotic Plant Species Cover	1	T	
Abiotic		0.3	
A1. Floodplain Hydrologic Connectivity		0.2	-
A2. Physical Patch Diversity	4	0.2	-
A3. Channel Equilibrium	4	0.2	-
A4. Stream Bank Stability and Cover	4	-	
A5. Soll Surface Condition		0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic		0.35	
Abiotic		0.35	
SA WETLAN	D CONDITIO	N SCORE Σ	3.04
SA WETLAN	ID RANK	=	B

Sti

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

tressor Summary	Major	Minor	Top Three	
	0	0	1	Construction
			2	Trails
			3	Pedestrians

Pedestrio	ins walking	through	the	mad impact.
the tra.	1 significan	thy but	not real	ly any where
else.		5 C		1. Contraction (1997)

SA CODE: SF2MI(2)

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

Work or are and y	ear of i	magery).									
image	· }		rth KMZ. file			Imag	e Date	6/2	23	- <u></u>	
Ailow	ed buff	fer/RCC_lan	d cover elements			 Fyciu	ded nor	L		and cover e	<u></u>
Buffer	RCC					Buffe	r RCC	T		and cover e	lements
$[\mathbf{X}]$		Natural or	semi-natural vege					Comme	ercial/	residential c	levelopments, parking lots
	L							dams, b	oridge	s, revetmen	ts, and other structures
			ation ditches witho	out levees							s, sports fields
	╷╷	Old fields,	unmaintained					Railroad			
		Open rang						Maintaii material	ned le Is. stad	vees, sedim ging areas	ent piles, construction
	×	Foot trails, intensity)	horse trails, unpav	ed bike tra	ails (low		11				horse paddocks, feedlots
X			el open water					Intensive row crop	e agric os, orc	culture: mai hards, and v	ntained pastures, hay fields vineyards
		Non-function naturaily oc	oning abandoned curring levees	vegetated	levees, or	X			oads o		second-order unpaved bu
		unpaved tw	o tracks roads			X		Open wa	ater bo	punded by a	levee or other manmade
I							X	structure	2		
<u> </u>		Other						structure Other	2 		
orksh	teet 1b	. Buffer Pe	rcent Sub-metric.	Measure o	or estimate t			tructure	<u>}</u>		
ox belo	neter c ow. Rat	• Buffer Pe omposed o e the sub-m	i anowed burier en ietric using Table I	amante so		the per-	centage	tructure Other	• - 	Tab	le L1a. Buffer Percent
ox belo	neter c ow. Rat	Buffer Pe	i anowed burier en ietric using Table I	amante so		the per-	centage	tructure Other	2 	Tab Rating	le L1a. Buffer Percent Buffer Percent
ox belo	neter c ow. Rat	• Buffer Pe omposed o e the sub-m	i anowed burier en ietric using Table I	ements an .1a and en		the per-	centage	tructure Other	2 f f	Tab Rating (~ 4	le L1a. Buffer Percent Buffer Percent 100%
bx belo tegrity	n eet 1b meter c ow. Rat y Sumn	Buffer Per omposed o e the sub-m nary Worksh	hetric using Table L heet 1d. Buffer Percer	ements an 1a and en nt (%)=	ter the ratin 85%	the period the Building on th	centage ffer Perc	of the cent		Tab Rating (^4 (X3	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100%
tegrity	neet 1b meter c ow. Rat y Sumn	Buffer Per Omposed o e the sub-m nary Worksh Buffer Widt	hetric using Table L heet 1d. Buffer Percer	ements an 1a and en nt (%)=	ter the ratin 85%	the per-	centage ffer Perc	of the cent		Tab Rating (4 (x 3) (2)	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80%
v belo tegrity rkshe GIS o	neet 1b meter c ow. Rat y Sumn eet 1c. I	Buffer Per omposed o e the sub-m nary Worksh Buffer Widt e map. Aver	hetric using Table L heet 1d. Buffer Percer	ements an 1a and en nt (%)=	ter the ratin 85%	the per-	centage ffer Perc	of the cent		Tab Rating (^4 (X3	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100%
v belo tegrity rkshe GIS o	neet 1b meter c ow. Rat y Sumn eet 1c. I r on the r Integr Buffe	Buffer Per omposed o e the sub-m nary Worksh Buffer Widt e map. Aver	th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Percer	ements an 1a and en nt (%)=	enter into ter the ratin 85% length of ea e using Table Buffer W	the per- the Bu g on th g on th ch buff	centage ffer Perc e Buffer fer line in nter the	of the cent n meters rating o	s in (Tab Rating (^4 (X3 (^2 (^1) Tab	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width
ox belo tegrity orkshe GIS o Buffe	neet 1b meter c ow. Rat y Sumn eet 1c. I r on the r Integr Buffe	Buffer Per omposed o e the sub-m nary Worksh Buffer Width e map. Aver rity Summa er Width	Buffer Percer Buffer Percer Bu	ements and la and en ht (%)= asure the hs and rate	ed enter into ter the ratin 85% length of ea using Table Buffer W (m)	the period the Ba g on the ch buff 2 L1b. E	centage ffer Perce e Buffer	of the cent n meters rating o er Widtl (ft)	s in (Tab Rating (4 (X 3 (2 (1 Tab Rating	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50%
ox belo tegrity orkshe GIS o Buffe ne A	neet 1b meter c ow. Rat y Sumn eet 1c. I r on the r Integr Buffe 164	Buffer Per omposed o e the sub-m nary Worksh Buffer Width e map. Aver rity Summa er Width (m) 1.26	betric using Table L beet 1d. Buffer Percer betric Worksheet 1d. Buffer Width (ft) 538.91	ements an 1a and en ht (%)= hasure the hs and rate Line E	enter into ter the ratin 85% length of ea e using Table Buffer W (m) 161.93	the period the Build g on the ch buff 2 L1b. E	centage ffer Perce e Buffer fer line in nter the Buff 53	of the cent n meters rating o er Widtl (ft)	s in (Tab Rating (^4 (X^3) (^2) (^1) Tab Rating (4)	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m
ox beld tegrity orkshe GIS o Buffe ne A 3	eet 1b meter c ow. Rat y Summ eet 1c. I r on the r Integr Buffe 164	Buffer Per omposed o e the sub-m nary Worksh Buffer Widte e map. Aver rity Summa er Width (m) 1.26 5.25	the sub-metric using Table L neet 1d. Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Vidth (ft) 538.91 410.92	ements and 1a and en ht (%)= basure the hs and rate Line	e using Table Buffer W (m) 161.93 231.48	the period the Build g on the ch buff L1b. E	centage ffer Perce e Buffer fer line in nter the Buff 53	of the cent n meters rating o er Widtl (ft)	s in (Tab Rating (^ 4 (X 3 (^ 2 (^ 1) Tab Rating (^ 4 X 3	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
ox belo tegrity orkshe GIS o Buffe ne A	eet 1b meter c ow. Rat y Summ eet 1c. I r on the r Integr Buffe 164	Buffer Per omposed o e the sub-m nary Worksh Buffer Width e map. Aver rity Summa er Width (m) 1.26	betric using Table L beet 1d. Buffer Percer betric Worksheet 1d. Buffer Width (ft) 538.91	ements an 1a and en ht (%)= hasure the hs and rate Line E	enter into ter the ratin 85% length of ea e using Table Buffer W (m) 161.93	the period the Build g on the ch buff L1b. E	ffer Perce centage ffer Perce e Buffer fer line in nter the Buff 53 75	of the cent n meters rating o er Widtl (ft)	sin n C C C	Tab Rating (2) (2) (1) Tab Rating 4 (2) (2) (2) (3) (2) (3) (4) (7) (8) (9) (10) (le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m
ox beld tegrity orkshe GIS o Buffe ne A 3	eet 1b meter c ow. Rat y Summ eet 1c. I r on the r Integr Buffe 164 125	Buffer Per omposed o e the sub-m nary Worksh Buffer Widte e map. Aver rity Summa er Width (m) 1.26 5.25	the sub-metric using Table L neet 1d. Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Percer Buffer Vidth (ft) 538.91 410.92	ements an 1a and en ht (%)= asure the hs and rate Line E F	e using Table Buffer W (m) 161.93 231.48	the period the Build g on the ch buff a L1b. E	ffer Perce centage ffer Perce e Buffer fer line in nter the Buff 53 75 392	of the cent of the cent n meters rating o er Widtl (ft) 1.26 9.44 7.80	s in (Tab Rating (2) (2) (1) Tab Rating 4 (2) (2) (2) (3) (2) (3) (4) (7) (8) (9) (10) (le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
ox belo tegrity orkshe GiS o Buffe ne A A B C C C C C C C C C C C C C C C C C	eet 1b meter c ow. Rat y Summ eet 1c. I r on the r Integr Buffe 164 125 115 111 Averag	Buffer Per Omposed o e the sub-m hary Worksh Buffer Width e map. Aver rity Summa er Width (m) 4.26 5.39 .07 re Buffer Inte	Allowed burier el hetric using Table L heet 1d. Buffer Percer Buffer Percer Buffer Percer Buffer Percer age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary E	ements an Ta and en It (%)= Dasure the Dasure the Sand rate E F G H	d enter into ter the ratin 85% length of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58	the period the Build g on the ch buff L1b. E	ffer Perce centage ffer Perce e Buffer fer line in nter the Buff 53 75 39 511 (ft)	of the cent of the		Tab Rating (2) (2) (1) Tab Rating 4 (2) (2) (2) (3) (4) (2) (3) (4) (2) (4) (2) (1) (2) (1)	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m
rkshe A B rkshe GIS o Buffe A A C C C C C C C C C C C C C C C C C	eet 1b meter c ow. Rat y Summ eet 1c. I r on the r Integr 164 125 115 111 Averag	Buffer Per omposed o e the sub-m hary Worksh Buffer Width e map. Aver rity Summa er Width (m) 1.26 5.25 5.39 1.07 1.e Buffer Inte o calculate	the function of the set of the se	ements an Ta and en It (%)= Dessure the Dessure the	Id enter into ter the ratin 85% length of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58	the period the Burg on the g on the L1b. E	ffer Perce e Buffer e Buffer fer line in nter the Buff 53 75 39 511 (ft)	of the cent of the cent n meters rating o er Width (ft) 1.26 9.44 7.80 .38		Tab Rating (2) (2) (1) Tab Rating 4 (2) (2) (2) (3) (4) (2) (3) (4) (2) (4) (2) (1) (2) (1)	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer
ne A A rkshe A A A A A A A A A A A A A A A A A A A	eet 1b meter c ow. Rat y Sumn eet 1c. I r on the r Integr Buffe 164 125 115 111 Averag eet 1d. I above t sing the	Buffer Per omposed o e the sub-m nary Worksh Buffer Width e map. Aver rity Summa er Width (m) 1.26 5.25 5.39 1.07 re Buffer Inte o calculate e Buffer Inte	hetric using Table L hetric using Table L heet 1d. Buffer Percer bh Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. E the Buffer Integrity grity Index Score	ements an Ta and en It (%)= Dessure the Dessure the	Id enter into ter the ratin 85% length of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58	the period the Burg on the g on the L1b. E	ffer Perce e Buffer e Buffer fer line in nter the Buff 53 75 39 511 (ft)	of the cent of the cent n meters rating o er Width (ft) 1.26 9.44 7.80 .38		Tab Rating (^ 4 (x 3) (^ 2) (^ 1) Tab Rating (^ 4 x 3) (^ 2) (^ 1) Table L1c. S Rating	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffe Integrity Score
rkshe GiS o Buffe ne A A S rkshe I L1b a ow. Us	eet 1b meter c ow. Rat y Summ eet 1c. I r on the r Integr Buffe 164 125 115 111 Averag eet 1d. I above t sing the ne SA St	Buffer Per omposed o e the sub-m nary Worksh Buffer Width e map. Aver rity Summa er Width (m) 1.26 5.25 5.39 1.07 re Buffer Inte o calculate e Buffer Inte ummary Wo	hetric using Table L hetric using Table L heet 1d. Buffer Percer bh Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. E the Buffer Integrity grity Index Score	ements an Ta and en It (%)= Dessure the Dessure the	Id enter into ter the ratin 85% length of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58	the period the Burg on the g on the L1b. E	ffer Perce e Buffer e Buffer fer line in nter the Buff 53 75 39 511 (ft)	of the cent of the cent n meters rating o er Width (ft) 1.26 9.44 7.80 .38		Tab Rating (^ 4 (x 3) (^ 2) (^ 1) Tab Rating (^ 4) (x 3) (^ 2) (^ 1) (x 3) (^ 2) (x 3) (^ 2) (x 3) (^ 2) (x 3) (x	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m ≥65 - <130m Summary Rating for Buffer Integrity Score >3.5
rkshe GiS o Buffe ne A A S rkshe I L1b a ow. Us	eet 1b meter c ow. Rat y Sumn eet 1c. I r on the r Integr Buffe 164 125 115 111 Averag eet 1d. I above t sing the	Buffer Peroperation Buffer Peroperation omposed or e the sub-mean processes Buffer Width (m) 1.26 5.39 1.07 re Buffer Interore o calculate Buffer Interore ummary Work	hetric using Table L hetric using Table L heet 1d. Buffer Percer bh Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. E the Buffer Integrity grity Index Score	ements an 1a and en 1a and en (%)= assure the s and rate Line E F G H nter the su / index Sco enter ratin	Id enter into ter the ratin 85% length of ea e using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58	the period the period g on the g on the lich buff e L 1b. E lidth	ffer Perce centage ffer Perce e Buffer e Buffer fer line in nter the Buff 53 75 39 511 (ft) for Tab	of the cent of the		Tab Rating (2) (2) (2) (2) (1) Tab Rating (2) (1) Table L1c. S Rating (2) (3) (2)	le L1a. Buffer Percent Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffe Integrity Score

SA CODE: SF2MI[2]

6/11/24 Date :

SA Name : Two Mile Pond Reservoir Transect [2]

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	m Segment
Banks	Left Bank	Right Bank	Left Bank	Right Bank
A) Total Bank Disruption (m)	0	0	0	0
B) Total Disruption by Segment (m)		0		0
C) % Segment Disruption = (B/1000)*100		0	(0
D) Total Disruption both segments			0	
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.

Та	ble L2. RCC Rating
Rating	Description
(₹ 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
C 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshowt

	_	RSR						R	WSI		
Current Size	1	Historic Size	=	RSR	1		RSR	x	100	=	RW5I (%)
Current Size	-	THEOTIC CARS					0.1	v	100	-	10
9	1	10	=	0.9	1	+	0.1	A	100		112.2

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(8 4		Wetland is at or only minimally reduced from its full natural extent
	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
C1		Wetland has been reduced by more than 70% its natural size

Surveyor Initials :

SA CODE: SF2MI[2]

Date: 6/11/24

Surveyor initials :

SA Name : Two Mile Pond Reservoir Transect [🚬]

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Bank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0,1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
\griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Nature old fields and other fallow lands with natural composition, introduced hay field and pastures e.g., perennial vegetation cover)	0.7	0	0
lestoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
laying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
leavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) emoved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
ommercial tree plantation, Christmas tree farms	0.6	0	0
elective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) emoved	0.8	0	0
lature restoration areas returned to natural conditions (re-converted)	0.9	0	0
atural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surr	ounding Land Use Rating
Rating	LUI Score
<u>C</u> 4	≥95 - 100
	≥80 - <95
	≥40 - <80
	<40

DS/AM

	100
ł	V
	_
	-
	≥
	24
	ŝ
	ш
	Ö
	ŭ
	-
	- 55
	10

Biotic Metrics

Worksheet 5. Vegetation Community Factor Polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique

Polygon	83 Vertical Structure Type	84 Tree Regeneration % Cover	85 Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
-	IM				
2	M2	60%	Napessan	Nonc	this is speaking many tray and growths due to record rows
m	IMI				
4	LIB11				
s	IIIC1				
9	INEI				
1	MF1				
-					
6					
10					
Ξ					
12					
13					
14					
15					
16					
17					
18					
19					
20					
	1				Page 6 ur 17

	SA CO	ò,	VI27C	ן אוודר	-			SA Name :	: Two Mi	le Pond F	Two Mile Pond Reservoir T ⁻	-ect [<]	\sim		Date :	6/11/24		Surveyor Initials :	sitials :	۷N	
2	Rel	ative	Nativ	re Pla	int C		B1 - Relative Native Plant Community Composition	Compos	ition	-		:									
don Whit	rkshe ninan chiti:	t spec	CT Plar ies in e ? abund	it Spec ach stra lant. Ea	cies a atum ach p	and P 1 that 1 olygo	olygon A: appears ir on is eithe	ssignmen the poly r assigned	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	with CT. otnotes fi e CT if it	with CT A, enter the number of the first polygon from Worksheet 5. Enter thotes for special instructions. If a species appears in more than one strate CT if it has the same composition or a new CT is created for the polynomial	e number nstructio ne comp	r of the firs ns. If a spe osition or	st polygo cies appe	n from Wor ears in more	ksheet 5 e than or or the pr	Enter the le strata, as	species c	odes for species 1	the two to the str	top atum in
							Tall Woo	Tall Woody Stratum ¹	- -		Short Woody Stratum 2	dy Strati	1m 2		Herbaceo	s/Sparse	Herbaceous/Sparse Stratum 3		CT Score 4	4	
ь	Pol	Polygon Nos.	los.				Species 1	<u>u Z</u>	Species 2	<u> </u>	Species 3		Species 4	<u>ш</u> 2	Species 5	ш :	Species 6	ш :	Raw4	SA5	Wt Score6
۲					<u> </u>		Nevrow Level	1 1	13ar Eler	\geq	Willow	\sim	Age	<u>z</u> 5	Horse	N	Newon	v v			4 /2
£						 	/ 	 			, 						1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	2,		2	3
U				<u> </u>				 													
					┨──																
ω						 															
<u> </u>				-	┨																
0				╉──	┨──	-															
I		}											l s								
					- 	<u> </u>		 													
5	1				_			<u> </u>													
×						<u> </u>															
					<u> </u>																
W					.			 											_ _		
z		 			┣_																
0		 																1			
ļ																Final	Final Weighted Score ⁷	Score ⁷			100
-	ie sau	us pr	o < san	07) E	teet	() and	> 25% tot	al stratun	These and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbis)>10% total	rees and	shrubs ≤6n	n (20 fee	t) and >25	% total s	tratum cov	er; 3. Her	baceous (g	raminoic	ds and fo	rhs\>100	e total
rrau qua or Re	um cc 1 1; 6v slative	over Vt. Sco e Nativ	Raw Sc sre is th /e Plant	ore is t. le prod : Comn	rom Juct c nunit	Table of the tv Cor	: B1a (App : Raw Scon monsition	endix B); e * % SA; on the S/	stratum cover. "Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Modershoot	percenta Veighted	age of the S I Score is th	SA area ci ne sum of	overed by f the Wt. S	the CT ar cores. Rat	nd expresse the CT Fi	id as a de nal Weig	scimal num hted Score	ber; the on Table	total are e B1 and	a %5A mi enter the	ust Rating
		ł						222			Page 7 of 17	of 17									
											3										

SA COF SF2MI[2]

SA Name : Two Mile Pond Reservoir Transect [[]]

```
Surveyor Initials : DS/AM
```

T	able B1.	Relative Native Plant C	ommunity Composition Rating
R	ating	CT Fina	I Weighted Score
R	4	≥ 3.75	<10% non-native
Ċ	3	≥ 3.25 and <3.75	10% ≤20% non-native
C	2	> 2.0 and <3.25	20% ≤50% non-native
	1	≤2.0	>50% non-native

2 - Vegetation Horizontal Patch Structure

Vorksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch pattern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

lorizontal Patch Structure pattern A,B,C, or D:

		Table B2. Rating for Vegetation Horizontal Patch Structure
Ra	ting	Description
	4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
$\widehat{}$	3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
×	2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, idominant patch type exists with the others occupying a small portion of the SA.
<u></u>	1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

83 - Vegetation Vertical Structure

Worksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA from Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with same VST) x 100. Enter the total %SA for each VST below.

	VST 1 High Structure	_	VST 5 Tall Shrubland	VST 6S Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
Total % of SA	Forest 50	Forest		5.5	Wettand	Vegetation	regetation

Table B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the row that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. Percentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for the rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the table down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the rating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%	
	1	5	6W and/or 6H	
C 4 -		6W		
	2 or 1 and 2	5	6W and/or 6H	
	1			
∡ . —	2 or 1 and 2	5		
S 3	2 or 1 and 2	6W		
	5	6W		
	2 or 1 and 2			
<u>2</u>	5			
P	6W			
	65			
C 1 -	6H			
	7			

SF2MI[2] SA CODE :

Date : 6/11/24

Surveyor Initials : DS/AM

0

SA Name : Two Mile Pond Reservoir Transect [👌]

B4 - Native Riparian Tree Regeneration

T B4. M Worksheet	B4. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from Worksheet 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.						
Rating	Description						
X : 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.						
<u> </u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.						
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.						
<u>C</u> 1	Native poles, saplings, and/or seedlings absent (0% cover).						

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

invasive cover (%)

calculate

Tat	Table B5. Ratings for Invasive Exotic Plant Species Cover						
Rating			Invasive Species Cover %				
Ċ.	4	X	0%				
\mathbf{C}_{i}	3		>0% - <1%				
	2		≥1% - <10%				
Ċ.	1		≥10				

Additional CTs and Biotic Metric Comments:

SA CODE: SF2MI[2]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials : DS/AM

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

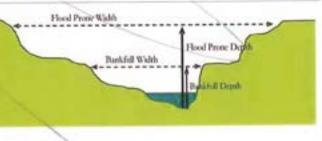
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description	Cross-section:	1	2	3
1: Bankfull width	This is a critical step requiring familiarity with field indicators of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the distance between the right and left bankfull contours of the Measure the second s	bankfull contour. with a tape.			
2: Maximum bankfull depth	Keeping the tape level between the right and left bankfull contours of the line above the thalweg (the deepest part of the channel). A p help here.	, measure the height bocket line level can			
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.				
4: Flood-prone width	Using a tape, measure the length of a level line at a height equal to from Step 3 to where it intercepts the right and left banks.	the flood prone depth			
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull width (Step 1)	. 7			
6: Calculate average ratio	Calculate the average for Step 5 for all three replicate cross-sections using Table A1a. Enter the rating in the A1 box on the SA Rank Surr	s. Enter the average he smary Worksheet.	re and i	rate	

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description	
C 4	Average entrenchment ratio is ≥ 2.2;	
0 3	Average entrenchment ratio is ≥1.9 - <2.2	
C 2	Average entrenchment ratio is ≥1.5 - ≤1.9	
C 1	Average entrenchment ratio is < 1.5	



Worksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Worksheet in conjunction with Table A1c. Check the boxes for all that apply to each segment.

segme	nt.	1	
U	м	L)	Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
	Ø		Channel widening due to bank failure
	Ò,	Q	Constructed levees preclude floodplain inundation
		D	Stream is straightened/channelized
		D	inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow do floodplain
			Floodplain inundation due to beaver activity

	Rating for Floodplain Hydrologic ty in single-channel step-pool systems
Rating	Description
0 4	Average entrenchment ratio is ≥ 1.9
C 3	Average entrenchment ratio is ≥1.4 - <1.9
C 2	Average entrenchment ratio is ≥1.2 - <1.4
C 1	Average entrenchment ratio is < 1.2

Two Mile Pond Reservoir Transect [😕]

Method 2

SA Name :

Je A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

Rat	ing	Description						
C 4	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.						
С 3	3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.						
C (2	2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).						
C 1		Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.						

Ald. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1	. *					
2						
3						

Floodplain Hydrologic Connectivity Comments:

Not in JSAI Assault

Date: 6/11/24

Surveyor Initials : DS/AM

Surveyo

SA CODE: SF2MI[2]

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect [2]

Surveyor Initials : DS/AM

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Bank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
	<u>ک</u>		Abandoned channels
			Backwater/eddy
			Riffles or rapids
			Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
			Terraces
			Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
	· · · · · · · · · · · · · · · · · · ·		No. of unique Patch Types

Table	2 A 2.	Rating for Physical Patch Complexity
Ratin	g	Description
ſ	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).
C	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).
X	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators an present in the SA.

SA CODE: SF2MI[2]

Date: 6/11/24

Surveyor Initials :

DS/AM

SA Name: Two Mile Pond Reservoir Transect [2_]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ľ∕ÿ		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		<u> </u>		There is leaf litter, thatch, or wrack in most pools.
Indicators of		ل لک		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ę.		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
ndicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				here are partially buried or sediment-choked culverts.
				here are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI [2.]

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect { 2]

Surveyor Initials : DS/AM

	Table A3. Rating for Channel Equilibrium					
Rating	Description					
× 4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.					
C 3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.					
C 2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.					
<u> </u>	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.					

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	3	3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability		<u></u> 2	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	[]1	[]1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	1⊠4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	<u> </u>	3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	2	□2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	1		1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Table A4. Stream Bank Stability and Cover Rating				
Rating	Description			
F 4	>3.5 - 4.0			
C 3	>2.5 - ≤3.5			
C 2	>1.5 - ≤2.5			
C 1	1.0 - ≤1.5			

SA CODE: SF2MI(2)

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [2]

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA ablotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	<u>X</u>		Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other:
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating					
Rating	Description					
C 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
¢ 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

Mud is tearing up walking path.

Surveyor Initials : DS/AM

SA CODE :	SF2MI[2]	Date :
SA Name :	Two Mile Pond Reservoir Transect [$[2]$]	Surveyor Initials :

Forksheet 15. Stressor Checklist. Check off stressors by Intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign ategories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow ank Major Stressors in Dominant Stressor column(Pick up to 3)

6/11/24

DS/AM

.

Rank	Affect			Stressor Group/Stressor	Comments	
	Major Minor Absent Unknown		Unknown	Adverse water management		
					Extended low flow dam releases	
			Ø		Timing of flow releases not concordant	
			Ń		Extended high flow dam releases	
			Ó		Agriculture/Urban flow diversion upstream	
		<u> </u>	·		Adverse sediment management	
					Adverse sediment retention by dams	
					Sediment loss by dredging	
					Adverse sediment input (roads/development)	
					Artificial water additions	
			Ø		Sewer treatment effluent	
			<u>}</u>	<u> </u>		
					Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
	<u> </u>				Ground water pumping	
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
		_!	_!	<u></u>	Watershed alteration	· · · · · · · · · · · · · · · · · · ·
					Extensive recent fires in watershed	
			Ģ		Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife_overgrazing	
	_ <u></u>			<u></u>	Local biodiversity impacts	
					Evidence of excessive grazing (local)	
	Í				Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	<u> </u>
Addit	ional Comr	nents	Ne	sieler		

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

	. 2. 1		ver Worksheet			11	
SA Code SF2MI		me : Two Mile Pond Reservoir		Project : Ripa	arian Assesement		
A de Tsct [31 AU Na	me : Transect []]	2	WOI : Two N	VOI : Two Mile Pond Reservoir		
County Santa Fe HUC 12 Headwaters Santa Fe River Elevation (ft) 7299 (m) 2224.7 E					Ecoregion	6.0 NWFM	
A riparian sys decommissio of water right Driving Directions Driving to Sa	stem that leads into oned due to safety o ts. s nta Fe from Albugu	a pond located on the east sic oncerns regarding the reservo erque you head north on Old reservoir located to the North	Pecos Trail. Then head	n to the area was re	cently shut down	due to lack	
Ownership The N	ature Conservative	and The Santa Fe National For	697	esults to client	Fish Observed in Wetland?		
Surveyor Rol	and the second se		eyor Name		Surv	eyor Initial:	
Landscape	Dust	n Schwartz A	moie Malin	,	1000	+MC	
Biotic	4		in the second	ii.	4		
Abiotic	4			*1	11		
Stressors	"	1		¥	11	-	
Easting (m)	Northing	(m) Zone	Datum	Latitude (itude (DD f	
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTM	35.689722	the state of the s	05.89	
Survey Date	4/9/24	Start Time		End Tin			
	1 1 10		escription				
9*0	ground.	still waking u "beever dam"	lots of	dead lead	ves cover	- 16	
SA Biotic Conditi	on (vegetation patte	erns, composition and structu	re. exotics and invasive	s disturbance eule	lance fire and her	hime A	
bee f	lys and el From curn	der buss cum ant smill buds t it very besign	ant blooming or will	and bazzi	is with a		
instandance and of	tion (hydrological al ther site impacts; ex	terations (e.g., dams, walls etc plain the hydrologic breaks or	.]; flooding characteris other factors that defi	tics and evidence o ne the SA limits)			
The 9	round is	covered in	dead leaves	and bri	anches. 1	+	
brave	· dam" s	till holds the	water a 7"	above ou	tside grou	11.	
	the second se					No ce ve	
ssessment Sumn	nary (Overall site co	ndition summary and comme	nts after the field data	is collected.)		NO LEVE	
ssessment Summ	nd is s	Aing to bec	From wint	er but	buss are	NO	

SA CODE: SF2MI[3]

SA Name : Two Mile Pond Reservoir Transect [3]

Date: 4/9/24 Surveyor Initials: DCS

MRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5			
Metric Description	Rating	Wt	Final Score
andscape Context		Σ 1.0	3.25
1. Buffer Integrity Index	3	0.25	0.75
2. Riparian Corridor Connectivity	4	0.25	1.0
.3. Relative Wetland Size	4	0.25	1.0
.4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
81. Relative Native Plant Community Composition	3	0.2	
82. Vegetation Horizontal Patch Structure	Ч	0.2	
B3. Vegetation Vertical Structure	3	0.2	
B4. Native Riparian Tree Regeneration	3	0.2	
B5. Invasive Exotic Plant Species Cover	3	0.2	
Abiotic		Σ	
A1. Floodplain Hydrologic Connectivity		0.3	
A2. Physical Patch Diversity	Ч	0.2	
A3. Channel Equilibrium	ч	0.2	
A4. Stream Bank Stability and Cover	Ŷ	0.2	
A5. Soil Surface Condition	4	0.1	1

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic		0.35	
Abiotic		0.35	
SA WETLAN	D CONDITIO	N SCORE E	
SA WETLAN	D RANK =	-	

Rank	Score	Description
Α	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0-<1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1	
			2	
			3	

Stressor Comments (Evaluation of risk)

SA CODE: SF2MI[3]

Date: 4/9/24

SA Name: Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DCS

Landscape Context

L₁ - Buffer Integrity Index

or are	exclude ear of im	ed and consid	d RCC Checklist. (dered non-buffer e	Theck off land elements that	d cover e t disrupt	elemen ecosys	ts with stem co	in the buffer onnectivity, I	area or ndicate	RCC co the ima	rridors that are either allowed agery type and date (season
Image	· [Google Earth				lmage	Date	6/23		· · ·	
		r/RCC land o	cover elements			Exclud	ied no:	n-buffer/RCC	land co	ver ele	ments
Buffer	RCC					Buffer	RCC				
X	X	Natural or se	mi-natural vegeta	tion patches							velopments, parking lots, , and other structures
X		Small irrigati	on ditches withou	t levees				·			sports fields
		Old fields, ur	maintained					Railroads			
		Open range	land	· · · ·				Maintained materials, st			nt piles, construction
		Foot trails, he ntensity)	orse trails, unpave	d bike trails (l	ow			<u> </u>			orse paddocks, feedlots
X	X	Non-channel	open water					Intensive ag row crops, c			tained pastures, hay fields, neyards
×			ning abandoned ve urring levees	egetated leve	es, or	X	×	Paved roads graded road		loped :	second-order unpaved but
		inpaved two	tracks roads			x	X	Open water structure	bounde	d by a	evee or other manmade
)ther						Other			
Norksi SA perij	neet 1b	Buffer Perc	ent Sub-metric. Mailowed buffer ele	Vieasure or es	stimate t	he per	centag	e of the		Tabl	e L1a. Buffer Percent
3ox bel	ow. Rate	e the sub-me	etric using Table L1	a and enter t	the ratin	g on th	e Buffe	rcent f	Ra	ting	Buffer Percent
megni	y Sunn	hary Workshe		L (0/)			<u> </u>		C	4	100%
	Buffer Percent (%)= 85%					<u> </u>			R	3	≥80% - <100%
/orkshi	orksheet 1c. Buffer Width Sub-metric. Measure the length of ea				ich buf	fer line	in meters in	וב	2	≥50% - <80%	
he GIS or on the map. Average the line lengths and rate using Table he Buffer Integrity Summary Worksheet 1d.				ing Table	e L1b. E	nter th	e rating on		1	<50%	
Line	Buff	er Width	Buffer Width	ffer Width Line Buffer W			Bu	ffer Width		Tabl	e L1b. Buffer Width
		(m) 1.26	(ft)		(m) 161.93		<u> </u>	(ft)	Rat	ting	Average buffer width
A			538.91	E			531.26			4	≥190m
B	125	5.25	410.92	F	231.48		759.		<u> </u>	3	≥130 - <190m
c	115	5.39	378.57	G	121.25		3	97.80		2	≥65 - <130m
D	111	1.07	364.40	н –	155.87		5	511.38		1	<65m
	Average 148.31 (m) 486.58 (ft)					(ft)		Table	e L1c. S	ummary Rating for Buffer	
Norksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ra					atings f	rom Ta	bles L1a		<u>.</u>	Integrity	
na L10 elow. 1	apove l Ising th	io calculate t e Buffer Inter	he Buffer Integrity grity Index Score, e	Index Score	using th	le form	ula in t	he box		ing	Score
on t	he SA S	ummary Wo	rksheet.	anei raung n	or øuner	megr	uy mila	able L1C	-	‡ 3	>3.5
	6 Rating		fer Width Rating	/2 =	D					2	>2.5 - ≤3.5 >1.5 - ≤2.5
			T	14 =	ouner	integri	ity ind	ex Score	C I		<u></u>
3		+	3	/2 =		3			b	<u> </u>	

SA CODE: SF2MI[3]

Date: 4/19/24

SA Name : Two Mile Pond Reservoir Transect [3]

2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	m Segment	
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
B) Total Disruption by Segment (m)		0		0	
C) % Segment Disruption = (B/1000)*100	0		0	0	
D) Total Disruption both segments		()		
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.	

Та	ble L2. RCC Rating
Rating	Description
Q 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
C 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshr

		RSR						R	WSI	8	
Current Size	1	Historic Size	=	RSR	1	-	RSR	х	100	=	RWSI (%)
9	1	10	=	0.9	1	-	0.1	X	100	=	10

	Table L3. Relative Wetland Size Rating
RWSI Score	Description
≤10%	Wetland is at or only minimally reduced from its full natural extent
>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
>70%	Wetland has been reduced by more than 70% its natural size
	>10% - ≤40% >40% - ≤70%

Surveyor Initials: DC5

SA CODE: SF2MI[3]

Date: 4/9/24

SA Name: Two Mile Pond Reservoir Transect [3]

Surveyor Initials :

Des

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	- o	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	-0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surr	ounding Land Use Rating
Rating	LUI Score
<u>C 4</u>	≥95 - 100
3	≥80 - <95
x 2	≥40 - <80
	<40

_	
ч.	λ.
_	
-	
5	
5	
~	
4.7	
~	
**	
1.4	
	•
ы	
-	
-	2
~	÷ .
5	ε.
٤.	
~	
-	•
-	
v	

SA Name: Two Mile Pond Reservoir Iransect | 5

Surveyor Initiatis. LCS

Date: 4/7/24

Biotic Metrics

number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique

Polygon No	83 Vertical Structure Type	B4 Tree Regeneration % Cover	BS Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
-	IAI	7			
2	142	75.%	720%	Mullein	Ground Rull of dead leaves branches, Current aming
m	IA1	4004	NIA	None	Grosses, Everant, elderbugs, onellike bind
4	1811		1		
s	IICI				
9	BM				
7	INF1				
60					
6					
10					
Ħ					
12					
13					
14					
15					
16					
17					
18					
19					
20					
					Page 6 7

CT Polygon Nos. Speciels 1 E Speciels 2 No Speciels 3 No Speciels 4 E Reconstraint No Speciels 4 No<	CT Polygon Nas. Species 1 Species 2 Species 3 Species 4 Species 6 Species 7 Species 6	which it i	which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	n stratum tn nt. Each poly	at appears in the polygon gon is either assigned to Tall Woodv Stratum ¹	the poly ssigned v Stratur	gon. See foo I to the sam m ¹	otnotes l e CT if it	for special i has the sar Short Woo	nstructio	ns. If a specie osition or a n um 2	ew CT is cre	ated for t	n one s he polyc	trata, ass Jon.	ign the <u>s</u>	species t	o the str	atum in
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	A 2 1 E[lon-7 4 Price N Urillon, N E Non-No. Non		gon Nos.		Species 1	u z	Species 2	u Z	Species 3	і 2 2 ш 2	ies 4	Spec	ies 5 E				<u>~</u>	¢45	Mt Score6
8 3 1 Cettorred M N/L/Lass N M 2.5 1.25 5.7 1.25 0 1 1 1 1 1 1 2.5 5.7 1.25 1 1 1 1 1 1 1 2.5 5.7 1.25 1 <t< th=""><th>8 3 Image: Calibrated M Birch N Liftures M N Bachon, IV 2.5 5.5 1.25 D Image: Calibrated M Birch N Liftures M Embryon, IV 2.5 5.5 1.25 E Image: Calibrated M Birch N Liftures M Embryon, IV 2.5 5.5 1.25 E Image: Calibrated M E Image: Calibrated M E<th></th><th></th><th></th><th>Elm</th><th></th><th>Bich</th><th>2</th><th>W. llaws</th><th>Z</th><th></th><th>Rul</th><th>Z</th><th></th><th></th><th></th><th></th><th>-</th><th>4.2</th></th></t<>	8 3 Image: Calibrated M Birch N Liftures M N Bachon, IV 2.5 5.5 1.25 D Image: Calibrated M Birch N Liftures M Embryon, IV 2.5 5.5 1.25 E Image: Calibrated M Birch N Liftures M Embryon, IV 2.5 5.5 1.25 E Image: Calibrated M E Image: Calibrated M E <th></th> <th></th> <th></th> <th>Elm</th> <th></th> <th>Bich</th> <th>2</th> <th>W. llaws</th> <th>Z</th> <th></th> <th>Rul</th> <th>Z</th> <th></th> <th></th> <th></th> <th></th> <th>-</th> <th>4.2</th>				Elm		Bich	2	W. llaws	Z		Rul	Z					-	4.2
	C I				Cettomood		B.z.	2	1. 11	2		t's		1	tate			\$	1.25
	D 1							 		-			· 	<u>}</u>					
E F F F F F F F F F F F F F F F F F F F	E I	Δ								<u> </u>				-					
	F I	ш				<u> </u>				 _									
G -	G H	ų,																	
Image: state stat	H I	ט ש										- 		+					
	1 1	H											+						
Image: Second	J I																		
X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X X	K I												+	-					
M N N N N N N N N N N N N N N N N N N N	L L <thl< th=""> <thl< th=""> <thl< th=""></thl<></thl<></thl<>	¥			5														
M N N N N N N N N N N N N N N N N N N N	M M													_				-	
N N O N Image: Score 7 2,45	N N O O I. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover	¥																	
0 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	0 1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6 m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover, 3. Herbaceous (graminoids and forbs)>10% total	z									-								
Final Weighted Score7	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs 56m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover 4Raw Score is from Table R1a (Annowabis B1, 566.6 is the construction of the cover and stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	0											-					-	
	1. Tees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs 56m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover 4Raw Score is from Table R1a (Annandix B1, 58,58, is the constrated of the stratum cover and forbs) > 10% total stratum cover 4Raw Score is from Table R1a (Annandix B1, 58,58, is the constrated of the stratum cover and forbs) > 10% total stratum cover and forbs (graminoids and forbs) > 10% total stratum cover 4Raw Score is from Table R1a (Annandix B1, 58,58, is the constrated of the stratum cover the stratum cover the strated of the strated of the strated of the strategies of the st													inal We	ighted S	core7			2.5
equal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score and enter the Rating			ב ואפרואב ביקנור		-omposition c	in the S/	A Rank Sumi	mary Wc	orksheet.										n

Date: 4/4/24 Surveyor Initials:

SA Name : Two Mile Pond Reservoir Transect [\Im]

SA CODE · SF2MI[🖒]

Page 7 of 17

.^

- SF2MI[ノ」】 SA CODE :

Date: '1/ 1/1

- Two Mile Pond Reservoir Transect [🤸] SA Name :

Table B1. Relative Native Plant Community Composition Rating Pating CT Final Weighted Score

Racing		inal weighted score
~ 4	≥ 3.75	<10% non-native
ζ <u>3</u>	≥ 3.25 and <3.75	10% ≤20% non-native
ົ 2	> 2.0 and <3.25	20% ≤50% non-native
1	≤2.0	>50% non-native

2 - Vegetation Horizontal Patch Structure

orksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch ittern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

prizontal Patch Structure pattern A,B,C, or D:

Table B2. Rating for Vegetation Horizontal Patch Structure							
Rating	Description						
\$ 4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.						
3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.						
2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.						
1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.						

3 - Vegetation Vertical Structure

Jorksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ame VST) x 100. Enter the total %SA for each VST below.

	VST 1	VST 2	VST 5	VST 6S	VST 6W	VST 6H	VST 7
	High Structure	Low Structure	Tall Shrubland	Short	Herbaceous	Herbaceous	Sparse
	Forest	Forest		Shrubland	Wetland	Vegetation	Vegetation
Total % of SA	50			51			

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for he rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
	2 or 1 and 2	5	
3	2 or 1 and 2	6W	
	5	6W	
	2 or 1 and 2		
2	5		· · · ·
	6W		
	65		
1	6H		-
[7		· · · · · · · · · · · · · · · · · · ·

1)() Surveyor Initials :

SF2MI[3] SA CODE :

Date: 419/24

Two Mile Pond Reservoir Transect [3] Surveyor initials: $\hat{D}CS$ SA Name :

<1

B4 - Native Riparian Tree Regeneration

34. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from Ta. Worksheet 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet. Rating Description Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% 4 cover, typically multiple size (age) classes. Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few. $\overline{\mathcal{N}}$ 3 Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically 2 <1% cover, little size class differentiation. 1 Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover							
F	Rating	}	Invasive Species Cover %				
C	4		0%				
1	3	×	>0% - <1%				
ŧ	2	Í	≥1%-<10%				
C	1		≥10				

Additional CTs and Biotic Metric Comments:

Bee Flystor and elder buss seen in area dam is over flowing causing green grasses currant has bees. ž

SA CODE: SF2MI[3]

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials :

Date :

4/9/24 DC

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Upper Segment Middle Segment Lower Segment		Field Indicators (check all existing conditions)
	Ŕ		Active side channels
	لي (Abandoned channels
	(X)		Backwater/eddy
			Riffles or rapids
	X		Shoals, sparely-vegetated bars
	<u>ل</u> ک		Channel boulders
			Oxbow lakes/ponds on floodplains
	لکا (Vegetated island and side bars
	ĹŽ .		Terraces
	Ϊ		Channel pools
	<u>ک</u>		Beaver ponds
	Ţ Z		Swales, depressional features on floodplains
	Ø		Debris jams in channel
	Z		Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
	Z		Downed logs
	1		Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Table A2. Rating for Physical Patch Complexity								
Ratii	ng	Description						
×	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).						
C	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).						
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).						
C	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, ≤ 5 unique indicators are present in the SA.						

SA CODE: SF2MI[3]

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : 1/2

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		þø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ç2		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Į 🕅		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
		۲ <u>۶</u>		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		_ 🛛		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				here is abundant fresh splays of coarse sediment covering the floodplain bove the natural point bar elevation.
			T	here are partially buried living tree trunks or shrubs along the banks.
ndicators of Active Aggradation				he channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
ļ			т <u>с</u>	here are partially buried or sediment-choked culverts.
				here are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI[3]

Date :	41	l. T	ż	1

Surveyor Initials :

Des

SA Name : Two Mile Pond Reservoir Transect [3]

Table A3. Rating for Channel Equilibrium Rating Description 4 Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12. 3 There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation. 2 There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation. 1 The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	<u></u> 4	[]4	<u></u> 4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	3	□3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	<u></u> 2	<u>2</u>	□2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	<u> </u>	<u> </u>	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	□4	成 4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	3	□3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u></u> 2	<u></u> 2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	1	1	1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

 Table A4. Stream Bank Stability and Cover Rating

 Rating
 Description

 Ø
 4
 >3.5 - 4.0

 C
 3
 >2.5 - ≤3.5

 C
 2
 >1.5 - ≤2.5

 C
 1
 1.0 - ≤1.5

SA CODE: SF2MIE 31

Date: 4/9/24

Surveyor Initials : DCS

SA Name : Two Mile Pond Reservoir Transect [3]

A5 - Soil Surface Condition

...orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	X		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			FIII
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soll disturbance by segment area

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating									
Rat	ting	Description								
X	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.								
C :	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.								
	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.								
	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.								

SA CODE: SF2MI[3]

Date: 4/97.00

1

SA Name : Two Mile Pond Reservoir Transect [🖒]

Surveyor initials : $|_{\hat{t}} / \hat{c} | \hat{\mathcal{I}}|$

orksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign tegories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow ink Major Stressors in Dominant Stressor column(Pick up to 3)

ank	Affect			Stressor Group/Stressor	Comments	
3116	Major	Minor	Absent Unknown			Comments
					Adverse water management	·····
					Extended low flow dam releases	
			Q		Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
					Adverse sediment management	
			Ņ		Adverse sediment retention by dams	
					Sediment loss by dredging	
					Adverse sediment input (roads/development)	
					Artificial water additions	
					Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
	<u> </u>	<u>. </u>	<u> </u>		Ground water pumping	
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
	<u>,</u>				Watershed alteration	
			Ę		Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
			ŀ		Livestock/wildlife overgrazing	
					Local biodiversity impacts	
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	

ditional Comments

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

13

SA Code SF2MI[2 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		Worksheet			
7 1.	Project : Riparian Assesement					
A de Tsct [3] AU Name : Tra	AU Name : Transect [3] WOI : Two Mile Pond Reservoir				
County Santa Fe	HUC 12 Headwaters Santa Fe River Elevation (ft) 7299 (m) 2324 7					
decommissione of water rights. Driving Directions Driving to Santa	and Boundary (Rationale m that leads into a pond l ed due to safety concerns a Fe from Albuquerque yo ntil you reach the reservo	ocated on the east side o regarding the reservoir a	no a water diver	ision to the	area was rec	onal Forest. This reservoir v cently shut down due to la Monte Sol and right on
and a second second second second second	ure Conservative and The		Data Sharing Restrictions	Results to only.	client F	ish Observed in Wetland?
Surveyor Role		Survey	or Name			Surveyor Init
Landscape	Pustin +	2010 9381038				0
Biotic	4	N N				DS+ AI
Abiotic	- 11	,	•		_	
Stressors	*		'n	_		"
Easting (m)	Northing (m)	Zone	Datum		I address of the	
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UT		Latitude (D	
Survey Date	5/15/24	Start Time	1002-03-01	im l	35.689722	-105.89
)	1 2/17/01	SA Desc			End Time	e
hear	Trees and an	nd Narrow leaf	cotton woo	ad, ho	se tails	spronting
A Biotic Condition	trees the an water cus (vegetation patterns, com 'y bird, snakes	position and structure, e	xotics and invas	ives, distur	bance evide	nce, fire and herbivory)
A Biotic Condition Human Flyin A Abiotic Condition sturbance and other Con	(vegetation patterns, com ing bind, snakes is in t (hydrological alterations site impacts; explain the	iposition and structure, e (garter) soen (garter) soen (e.g., dams, walls etc.); flu hydrologic breaks or oth distance, G is slightly ummary and comments a	in area orse tails ooding characte er factors that de round : over	ives, distur Som Spro ristics and efine the Si sh'll Abush ta is collect	bance evide tovidence of o A limits) covered 7.	nce, fire and herbivory) hees seen hear beaver pen overbank flooding; soil

SA CODE: SF2MI[3]

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DCS

MRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	Rating		
Metric Description	Wt	Final Score	
andscape Context		Σ 1.0	3,25
1. Buffer Integrity Index	3	0.25	0.75
2. Riparian Corridor Connectivity	4	0.25	1.0
3. Relative Wetland Size	4	0.25	1.0
.4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
81. Relative Native Plant Community Composition	4	0.2	
82. Vegetation Horizontal Patch Structure	4	0.2	
B3. Vegetation Vertical Structure	3	0.2	
34. Native Riparian Tree Regeneration	3	0.2	
85. Invasive Exotic Plant Species Cover	3	0.2	-
Abiotic			
A1. Floodplain Hydrologic Connectivity		0.3	-
A2. Physical Patch Diversity	4	0.2	-
A3. Channel Equilibrium	Ý	0.2	
A4. Stream Bank Stability and Cover	ı/	0.2	
A5. Soil Surface Condition	ų	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	3.4	0.35	
Abiotic	4	0.35	
SA WETLAN	D CONDITIO	N SCORE 2	
SA WETLAN	D RANK =	3.56	2

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1	
			2	
			3	

Stressor Comments (Evaluation of risk)

SA CODE: SF2MIT 3 1

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : Dc5

Landscape Context

L. Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery). Google Earth KMZ, file Imagery 6/23 Image Date Allowed buffer/RCC land cover elements Excluded non-buffer/RCC land cover elements Buffer RCC Buffer RCC Commercial/residential developments, parking lots, X X Natural or semi-natural vegetation patches х X dams, bridges, revetments, and other structures X X Small irrigation ditches without levees П Lawns, parks, golf courses, sports fields Γ Old fields, unmaintained \square Railroads Π Maintained levees, sediment piles, construction П Open range land П \Box materials, staging areas Foot trails, horse trails, unpaved bike trails (low N X П \square Intensive livestock areas, horse paddocks, feedlots intensity) Intensive agriculture: maintained pastures, hay fields, X X Non-channel open water Π \Box row crops, orchards, and vineyards Non-functioning abandoned vegetated levees, or Paved roads or developed second-order unpaved but X X X X naturally occurring levees graded roads Open water bounded by a levee or other manmade lunpaved two tracks roads П X X structure ப \Box Other П Other Worksheet 1b. Buffer Percent Sub-metric. Measure or estimate the percentage of the **Table L1a. Buffer Percent** SA perimeter composed of allowed buffer elements and enter into the Buffer Percent Box below. Rate the sub-metric using Table L1a and enter the rating on the Buffer Rating **Buffer Percent** Integrity Summary Worksheet 1d.

> Buffer Percent (%)= 85%

4 100% $\overline{\alpha}$ 3 ≥80% - <100% $\overline{2}$ \cap ≥50% - <80% \cap 1 <50%

Table L1b. Buffer Width

Average buffer width

≥190m

≥130 - <190m

≥65 - <130m

>2.5 - ≤3.5

>1.5 - ≤2.5

≤1.5

Worksheet 1c. Buffer Width Sub-metric. Measure the length of each buffer line in meters in the GIS or on the map. Average the line lengths and rate using Table L1b. Enter the rating on the Buffer Integrity Summary Worksheet 1d.

Line	Buffer Width (m)	Buffer Width (ft)	Line	Buffer Width (m)	Buffer Width (ft)
A	164.26	538.91	E	161,93	531.26
В	125.25	410.92	F	231.48	759.44
c	115.39	378.57	G	121.25	397.80
D	111.07	364.40	н	155.87	511.38
I	Average	148.31 (m)	<u> </u>	486.58	(ft)

1 <65m Table L1c. Summary Rating for Buffer Integrity Rating Score 4 >3.5

3

2

1

Rating

4

3

2

R

ā

Worksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a and L1b above to calculate the Buffer integrity Index Score using the formula in the box below. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table L1c on the SA Summary Worksheet.

Buffer % Rating	+ Buff	er Width Rating	/2 =	Buffer Integrity Index Score
3	+	3	/2 =	3

SA CODE: SF2MI[3]

Date: 5/15/24

SA Name: Two Mile Pond Reservoir Transect [3]

Surveyor Initials :

ials: DC)

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	im Segment
Banks	Left Bank	Right Bank	Left Bank	Right Bank
A) Total Bank Disruption (m)	0	0	0	0
B) Total Disruption by Segment (m)	1	0		0
C) % Segment Disruption = (B/1000)*100		0	0)
D) Total Disruption both segments		()	
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notice	eable along t	the banks.

Та	ble L2. RCC Rating
Rating	Description
Q 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
C 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshr

	_	RSR						R	WSI		
Current Size	1	Historic Size	-	RSR	1		RSR	х	100	=	RWSI (%)
9	1	10	=	0.9	1	+	0.1	X	100	=	10

RWSI Score	Description
≤10%	Wetland is at or only minimally reduced from its full natural extent
>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
>70%	Wetland has been reduced by more than 70% its natural size
	≤10% >10% - ≤40% >40% - ≤70%

- 3

SA CODE: SF2MI[3]

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor initials : 1205

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Bate using Table L4 and enter the rating in the SA Bank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
,riculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other failow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Ta	ble L4. Surr	ounding Land Use Rating
Ra	ting	LUI Score
\overline{C}	4	≥95 - 100
Ċ.	3	≥80 - <95
R	2	≥40 - <80
Ĉ	1	<40



SA Name: I wo Mile Pond Heservoir Iransect [<]



CO/ : SIPHILI JOGANING

Biotic Metrics

Worksheet S. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3). Native Tree Regeneration (B4), and Invasive Exotic Plant

IA1 IA1 IA2 IA3 IA3 IA3 IB1 IA3 IB2 IA3 IB1 IA3 IB2 IA3 IB3 IA3 IB3 IA3 IB3 IA3 IB4 IA3 IB4 IA3 IB1 IA3 IB1 IA3 IB1 IA3 IB2 IA3 IB3 IA3 IB1 IA3 IB2 IA3 IB3 IA3 IB3 IA3 IB3 IA3 IB4 IA3 IB5 IA3	Polygon 83 No Ty	83 Vertical Structure Type	84 Tree Regeneration % Cover	B5 Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
uz $60%$ >2% $Multi-n$ $Currant Histold attants for the last restuu80%NaceMulti-nCut tails hills restuu80%NaceMarinCut tails hills restuururururuuurururuuurururuuurururuuurururuuurururuuurururuuurururuuurururuuurururuuurururuuurururuuurururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuururuuuruuuruuuruuuruuuruuu$	+	IA1				p-20 ²⁴
INI 30% NoneNoneCat hilb, these hilb some willowInter <t< td=""><td></td><td>IA2</td><td>6/09</td><td>-</td><td>Muller</td><td>this leaked cotton tails, 1 ye</td></t<>		IA2	6/09	-	Muller	this leaked cotton tails, 1 ye
IIIG1 IIIC1 IIIC1 <td< td=""><td></td><td>IIAT</td><td>80%</td><td>-</td><td>None</td><td>tails, there ails some willow</td></td<>		IIAT	80%	-	None	tails, there ails some willow
		LSII				
		IIICI				
	-	MB				
8 • • • 9 • • • 10 • • • 11 • • • 12 • • • 13 • • • 14 • • • 15 • • • 16 • • • 17 • • • 16 • • • 17 • • • • 18 • • • • 19 • • • •		MF1				
9 > 10 > 11 > 12 > 13 > 14 > 15 > 16 > 17 > 18 > 17 > 18 > 19 > 19 >	8					
10 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 19 1 10 1	6					
11 1 12 13 14 15 16 17 18 19 19	10					
12 13 14 13 14 14 14 15 16 15 16 17 16 17 16 17 17 16 18 17 16 19 19 16	:					
13 14 14 14 15 16 15 17 17 16 17 17 17 18 19 19 19 11	12					
14 14 15 16 16 17 17 18 18 11 19 11	13					
15 16 17 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 19 1 1 19 1 1	14					
16 1 17 1 18 1 19 1	15					
17 18 19 19 19	16					
18 19 19 10 10 10 10 10 10 10 10 10 10 10 10 10	17					
19	18					
	19					
20	20					

	SA C(ODE • 2	SA CODF • SF2Mi [Š			SAI	SA Name :	Two Mile		Pond Reservoir Transect [く]	ansect [آ م		Date:	5/12	Date: 5/15/2 /2 Surveyor Initials:	rveyor in	uitials :	SC S	
	Rela	itive N	lative P	B1 - Relative Native Plant Community Composition	unuu	ity Con	nposit	ion								· · · · · · · · · · · · · · · · · · ·	······································		· · · · · · · · · · · · · · · · · · ·	
whice whice	Kshet Vinant :h it is	et 6. CT species more a	Plant Sp s in each s bundant.	ecies and stratum th Each poly	d Polygo 1at appei ygon is e	on Assign ars in the vither ass	nments e polygo iigned to	. Starting in. See foo o the same	with CT / thotes fa e CT if it I	A, enter the or special ii has the san	e numbe nstructic ne comp	er of the fir. ons. If a spe position or	st polygc ecies app a new C1	worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	ksheet 5 Ethan or or the po	. Enter the te strata, a blygon.	species c ssign the	codes for species	the two to the str	top atum in
					Tall	Tall Woody Stratum ¹	stratum	1		Short Woody Stratum 2	ody Strat	um 2		Herbaceous/Sparse Stratum 3	is/Sparse	s Stratum 5		CT Score 4	4	
ъl	Polyc	Polygon Nos.			Spe(Species 1 E		Species 2	шz	Species 3	ᄪᆂ	Species 4	<u>ш Z</u>	Species 5	<u> </u>	Species 6	ш 2	Raw ⁴	SA5	Wt Score ⁶
۲	2				Nor. 6tts	Norran lan	\geq	willow trees	\sum_{i}	Willows	1	1-	1	N. V.	$ v\rangle$. 10000		3,5		(.75
8	3	. <u></u>			je G	ļ	2	in the	2	W. C. A.	2			C.t.	\geq			4.0		2.00
υ		 													-		,			
۵				···	 															
ш						+														
<u> </u>																				
υ					 														İ	
т					 															
_																				
~																				
×																				
<u>ب</u>																				
Σ																				
z					 															
0						<u> </u>														
															Final	Final Weighted Score ⁷	I Score ⁷			3.75
Г. Т	ees ar	id shrut	os > 6 m (20 feet) ;	and > 25'	% total s	stratum (1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Tre	rees and	shrubs ≤6ì	m (20 fe	et) and >2	5% total	es and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	er; 3. He.	rbaceous (graminoi	ids and fo	orbs)>10	% total
equé	1; 6v	ver. ⁼Ka Vt. Scon	aw Score e is the pi	is trom 18 roduct of	able B1a the Raw	(Append Score * (lix B); ³ 9 % SA; 71	%SA is the The Final V	: percent Veighteo	age of the d Score is tl	SA area he sum (covered b _i of the Wt. <u>5</u>	y the CT a Scores. Ra	stratum cover. "Kaw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score * % SA; ⁷ The Final weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score * % SA; ⁷ The Final weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score * % SA; ⁷ The Final weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score * % SA; ⁷ The Final Weighted * % SA; ⁷ The Final Weighted * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Final * % SA; ⁷ The Fina	ed as a d nai Weio	lecimal nur ihted Score	mber; the	e total are la R1 and	a %SA π Iantar th	lust Dating
or B	elative	e Native	e Plant Co	mmunity	Compos	sition on	the SA I	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	mary Wc	orksheet.								2		6 may 2

Page 7 of 17

Date: 5/5/3 / Surveyor Initials:

SA CODE: SF2MI [3]

Date: 5/15/24

De.

SA Name : Two Mile Pond Reservoir Transect [

Surveyor Initials :

Ti	able B1	. Relative Native Plant C	ommunity Composition Rating
Ra	ating	CT Fina	al Weighted Score
K	4	≥ 3.75	<10% non-native
{	3	≥ 3.25 and <3.75	10% ≤20% non-native
^	2	> 2.0 and <3.25	20% ≤50% non-native
Ŷ	1	≤2.0	>50% non-native

2 - Vegetation Horizontal Patch Structure

orksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

prizontal Patch Structure pattern A,B,C, or D:

Table B2. Rating for Vegetation Horizontal Patch Structure

Rating	Description
- a	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
` 1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

3 - Vegetation Vertical Structure

/orksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ame VST) x 100. Enter the total %SA for each VST below.

	VST 1 High Structure Forest	VST 2 Low Structure Forest	VST 5 Tall Shrubland	VST 6S Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
Total % of SA	50			51			

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for he rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
~ 4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
<i>*</i> , [2 or 1 and 2	5	
	2 or 1 and 2	6W	
	5	6W	
Î	2 or 1 and 2		······································
2	5		
	6W		
ĺ	65		
^ 1	6Н		
	7		

SA CODE: SF2MI[3]

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [3] Surveyor Initials : 1005

B4 - Native Riparian Tree Regeneration

Work		ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.				
Rating		Description				
C	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.				
Ŕ	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.				
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.				
	1	Native poles, saplings, and/or seedlings absent (0% cover).				

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

i

Invasive cover (%)

calculate

>1%

Table B5. Ratings for Invasive Exotic Plant Species Cover					
Rating	Invasive Species Cover %				
C 4	0%				
$C - 3 \chi$	>0% - <1%				
ι <u>2</u>	≥1% - <10%				
C 1	≥10				

Additional CTs and Biotic Metric Comments:

lots of horse tails spronting around bourser down Some Vider steiders, Garden Sockers upon (2)

SF2MI [3] SA CODE :

Date: 5/15/24

SA Name: Two Mile Pond Reservoir Transect [3]

Surveyor Initials :

DCS

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

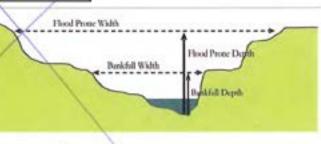
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description	ross-section:	1/	2	3		
1: Bankfull width	full width This is a critical step requiring familiarity with field indicators of the bankfull contour. Measure the distance between the right and left bankfull contours with a tape.						
2: Maximum bankfull depth	of the line above the thalwen (the deenest part of the channel). A pocket line level can						
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.						
4: Flood-prone width	od-prone width Using a tape, measure the length of a level line at a height equal to the flood prone depth from Step 3 to where it intercepts the right and left banks.						
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull width (Step 1).						
6: Calculate average ratio	re and r	ate					

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description
C 4	Average entrenchment ratio is \geq 2.2;
0 3	Average entrenchment ratio is ≥1.9 - <2.2
C 2	Average entrenchment ratio is ≥1.5 - <1.9 /
C 1	Average entrenchment ratio is < 1.5



Norksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Norksheet in conjunction with Table A1c. Check the boxes for all that apply to each

egment.			
U	M	L	Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
			Channel widening due to bank failure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
		P	Bankfull indicators at point of incipient flooding of the floodplain
		6	Indicators of overbank flow on floodplain
	Ó		Floodplain inundation due to beaver activity

	Table A1b. Rating for Floodplain Hydrologic Connectivity in single-channel step-pool systems					
Ratin	ng	Description				
C 4	1	Average entrenchment ratio is ≥ 1.9				
C 3	5	Average entrenchment ratio is ≥1.4 - <1.9				
C 2	8	Average entrenchment ratio is ≥1.2 - <1.4				
C 1	8	Average entrenchment ratio is < 1.2				

SA CODE: SF2MI[3]

Two Mile Pond Reservoir Transect [3] SA Name :

Date: 5/15/24

Surveyor Initials: DCS

Method 2

A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

Rating	Description					
0 4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.					
O 3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.					
C 2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).					
0 1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.					

Ta. A1d. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1						
2						1
3						/

Floodplain Hydrologic Connectivity Comments:

SA CODE: SF2MI [3]

Date: 5/25/24

SA Name : Two Mile Pond Reservoir Transect [$\overrightarrow{2}$]

Surveyor Initials: 1705

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
	Γ <u>λ</u>		Active side channels
			Abandoned channels
	X		Backwater/eddy
			Riffles or rapids
	XI.		Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
	\mathbf{X}		Теггасез
			Channel pools
	Ø		Beaver ponds
	X		Swales, depressional features on floodplains
	\square		Debris jams in channel
	X		Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
	Ø		Downed logs
			Naturai levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
	·		No. of unique Patch Types

Rating		Rating for Physical Patch Complexity Description
K	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).
C	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).
C	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, ≤ 5 unique indicators are present in the SA.

SA CODE: SF2MI[3]

Date: 5/15/2 4

Surveyor Initials : 0c5

SA Name : Two Mile Pond Reservoir Transect [3]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		۲)		There is leaf litter, thatch, or wrack in most pools.
indicators of		\bowtie		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		X		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		A		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avuision channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI[3]

Date: 5/15/~1/

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor	Initials :	DC	

	Table A3. Rating for Channel Equilibrium
Rating	Description
4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.
<u> </u>	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.
C 2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.
<u>(1</u>	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	- 4	₩4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	3	3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	<u> </u>	<u></u> 2	2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	<u> </u>	<u> </u>	□1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	反 4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u></u> 2	2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
1	1	_ 1	. 🗆 1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Table A4. Stream Ba	A4. Stream Bank Stability and Cover Rating	
Rating	Description	
K 4	>3.5 - 4.0	
C 3	>2.5 - ≤3.5	
C 2	>1.5 - ≤2.5	
C 1	1.0 - ≤1.5	

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DC5

A5 - Soil Surface Condition

orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	Ø		Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
		···	Estimate % soil disturbance by segment area

Average % Soil Disturbance:

		Table A5. Soil Surface Condition Rating
R	lating	Description
X	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

Date :	57	191	14
--------	----	-----	----

142

1

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials :

orksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign tegories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow nk Major Stressors in Dominant Stressor column(Pick up to 3)

nk		Affect			Stressor Group/Stressor	Comments
,, IK	Major	Minor	Absent	Unknown	-	
					Adverse water management	
					Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
-					Adverse sediment management	
					Adverse sediment retention by dams	
			ģ		Sediment loss by dredging	
					Adverse sediment input (roads/development)	
					Artificial water additions	
					Sewer treatment effluent	
			\square		Point source urban runoff	
			Ø		Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
				•	Ground water pumping	
					Urban depletions	
					Fracking	
			Ø		Agriculture irrigation wells	
			_		Watershed alteration	
					Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
			Ø		Livestock/wildlife_overgrazing	
		· · · ·			Local biodiversity impacts	••••••••••••••••••••••••••••••••••••••
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	

ditional Comments

Schema: Montane 2.5

ł

NMRAM Montane Riverine Wetlands Version 2.5

SA Code SF2MI		SACO	ver Worksheet		
	3] SA Name : Two	Mile Pond Reservoir		Project : Riparian As	Seconort
Code Tsct [3] AU Name : Trai	nsect [3]		WOI : Two Mile Pone	
County Santa Fe	HUC 12 Head	waters Santa Fe River	Elevation (ft) 7299	— ,	
SA General Location	and Boundany (Dational)			(m) 2224.7 E	coregion 6.0 NWFM
Driving Directions Driving to Santa	n that leads into a pond k d due to safety concerns i Fe from Albuquerque yo itil you reach the reservoi	u hood north Ol (n		o the area was recently s	inut down due to lac
	til you reach the reservoi		st Data Sharing Resu	Its to client Fish Obs	served in
Surveyor Role		Surve	Restrictions only.	Wet	
Landscape	Dustin Schwart				Surveyor Initia
Biotic	Annie McCoy				DS
Ablotic	Dustin Schwart	 Z			AM
Stressors	Dustin Schwart	 Z			DS
Easting (m)	Northing (m)	-		· · · · · · · · · · · · · · · · · · ·	DS
-105° 53' 24" W	35° 41' 23" N	Zone	Datum	Latitude (DD ft)	Longitude (DD (
Survey Date	+	13	NAD- 83 UTM	35.689722	-105.89
	6/11/24	Start Time	9:00	End Time	15:00
A Landscape Conte: Beaver	xt (summarize the wetlan Jam is over 1/	d and surrounding law	scription Idscape; include condition Idvid is higher	on and impacts)	35 CHZ
A Landscape Conte: Besver been, A	xt (summarize the wetlan Jam is over Th Veн Chemids form	d and surrounding law		on and impacts) Align in John	AB CAR Say and a say
Derver been, A A Biotic Condition (v	Ven is over The Ven Chamids form	d and surrounding lar which, water light last, which	ndscape; include condition level 10 higher down 1 higher	e Alman Itali and a sector	
Derver been, A A Biotic Condition (v	Ven is over The Ven Chamids form	d and surrounding lar which, water light last, which	ndscape; include condition level 10 higher down 1 higher	e Alman Itali and a sector	
Derver been, A A Biotic Condition (v Horse	Ven is over The Ven Chamids form regetation patterns, comp built taken on	d and surrounding lar Ling, water by Lat, water position and structure	devel 10 higher devel 10 higher devel 10 higher devel 1 higher exotics and invasives, d.	isturbance evidence, fire	and herbivory)
Derver been, A A Biotic Condition (v Herse Filling	Ven is over Пр Ven Chamido Farmi vegetation patterns, comp Juli fakar эт ир Willows	d and surrounding iar thing, water ight ind, water position and structure ind cotton m	Ascape; include condition level is higher down in the second down in the second down in the second execting and invasives, d. arca, Willow, a pool of contraints	isturbance evidence, fire	and herbivory)
Derver beer, A Biotic Condition (v Horse filling lots Abiotic Condition (Ven is over Пр Ven Chamido Farmi vegetation patterns, comp Juli Takas pro up Willows ak birds (g	d and surrounding lar thing, water ight and structure position and structure and cotter manual and cotter manual and cotter manual and cotter manual	Ascape; include condition level is higher down in higher exotics and invasives, d arca, Willows or dropping lein is se	Hones John isturbance evidence, fire and carther fireway product Along hig	and herbivory)
Derver been, A Biotic Condition (v Horse filling lots Abiotic Condition (sturbance and others	Ven is over The Ven Chamido Farm vegetation patterns, comp to the taken on up willows at birds (g (hydrological alterations { site impacts: explain the f	d and surrounding lar the surrounding lar the surrounding lar (1, 1, 2), water (1, 1, 2), water (1, 1, 2), water (1, 2), water	Ascape; include condition level 10 higher down 1 higher exotics and invasives, d arca, Willow, a good. Drapping Ilein is se flooding characteristics a	Hones John isturbance evidence, fire and carther fireway product Along hig	and herbivory)
Derver been, A Biotic Condition (v Horse Filling Lots Abiotic Condition (sturbance and others T 10.7°C	Ven is over ff Ven Chamido form vegetation patterns, com up fille up birds (s hydrological alterations (site impacts; explain the f 192 US	d and surrounding lar t_{1} y t_{2} y t_{3} y t_{4} y t_{4} position and structure t_{1} y t_{2} y t_{4} y t_{4} y t_{4} t_{1} t_{2} t_{4} t_{4} t_{4} t_{4} t_{4} t_{4} $t_$	Ascape; include condition level 10 higher down 1 higher exotics and invasives, d arca, Willows or dray Price flooding characteristics a ther factors that define th 7.83 m	isturbance evidence, fire and capture (insertion duration	and herbivory)
Derver been, A A Biotic Condition (v Horse Filling lots Abiotic Condition (sturbance and others T 10.7°C	Ven is over The Ven Change form vegetation patterns, comp birls taken on up Willows at birds (of hydrological alterations (site impacts; explain the H 198-US of downed	d and surrounding lar thing, water position and structure and cotter ma e.g., dams, walls etc.]; ydrologic breaks or of 7.32 pt 100	Ascape; include condition level 10 higher down 1 higher exotics and invasives, d arca, Willows or dray Price flooding characteristics a ther factors that define th 7.83 m	isturbance evidence, fire and capture (insertion duration	and herbivory)
Derver been, A A Biotic Condition (v Horse Filling lots Abiotic Condition (sturbance and others T 10.7°C	Ven is over The Ven Chamido form regetation patterns, comp with the taken on up Willows at birds (g (hydrological alterations { site impacts; explain the f 198-115 at downed	d and surrounding lar t_1 in t_1 , water position and structure and cotter manual e.g., dams, walls etc.]; hydrologic breaks or of 7.3 Z pt	Ascape; include condition level 10 higher down 1 higher exotics and invasives, d arca, Willow, a good of graphing Ilein 10 ge flooding characteristics a ther factors that define th 7.83 million 2000 a good	Han John isturbance evidence, fire and calle Convert produce Along hig and evidence of overbar he SA limits)	and herbivory)
Derver been, A Biotic Condition (v Herse filling lote Abiotic Condition (sturbance and others T 10.7°C lote	Ven Chando Farm Ven Chando Farm Vegetation patterns, com Up Willows ak birds (s (hydrological alterations (site impacts; explain the f 198 US af downad 2012 (frame) (Overall site condition su	d and surrounding iar they, water bosition and structure and cotter m e.g., dams, walls etc.); hydrologic breaks or of 7.32 pt 1000 100	Ascape; include condition level 10 higher down of higher exotics and invasives, d. arca, Willows of good. DrayPrity Ilein 10 ge flooding characteristics a ther factors that define the 7.83 million safter the field data is co	isturbance evidence, fire and codes (construction)	e and herbivory)
Derver been, A A Biotic Condition (v Horse Filling lots Abiotic Condition (sturbance and others T 10.7°C Inte sessment Summary Are	Ven Chando France Ven Chando France Vegetation patterns, comp Juli Takan ma up Willows ak birds (g (hydrological alterations (site impacts; explain the F 198-US ak downed (Overall site condition sur a is filling	d and surrounding iar they, water position and structure and cotter man e.g., dams, walls etc.]; hydrologic breaks or of 7.3 Z.pt time define mmary and comments	Ascape; include condition level 10 higher down 1 higher exotics and invasives, do aver, Willow, of aver, Willow, of ther factors that define the 7.83 million ther factors that define the 7.83 million aver, of the field data is co and of the field data is co	isturbance evidence, fire and control (construction) Along high and evidence of overbar he SA limits)	e and herbivory)
Derver been, A A Biotic Condition (v Horse Filling lote A Abiotic Condition (sturbance and others T 10.7°C lote Sessment Summary Aver and	Ven is over The Ven Chamido form regetation patterns, comp with the taken on up Willows at birds (g (hydrological alterations { site impacts; explain the f 198-115 at downed	d and surrounding lar (1,1,1), $(1,1)$, $(1,$	Ascape; include condition level 10 higher down 1 higher exotics and invasives, do aver, Willow, of aver, Willow, of ther factors that define the 7.83 million ther factors that define the 7.83 million aver, of the field data is co and of the field data is co	isturbance evidence, fire and control (construction) Along high and evidence of overbar he SA limits)	e and herbivory)

Page 1 of 17

SA CODE: SF2MI[3]

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DS/AM

MRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	Rating	Wt	Final Score
Metric Description		Σ 1.0	3.25
andscape Context	3	0.25	0.75
.1. Buffer Integrity Index	4	0.25	1.0
.2. Riparlan Corridor Connectivity	4	0.25	1.0
L3. Relative Wetland Size	2	0.25	0.5
L4. Surrounding Land Use		7	
Biotic	L Y	0.2	2
B1. Relative Native Plant Community Composition		0.2	-
82. Vegetation Horizontal Patch Structure	2	0.2	-
B3. Vegetation Vertical Structure)	0.2	-
B4. Native Riparian Tree Regeneration)	0.2	-
B5. Invasive Exotic Plant Species Cover	Э.		
Abiotic		Σ 0.3	
A1. Floodplain Hydrologic Connectivity		-	-
A2. Physical Patch Diversity	4	0.2	-
A3. Channel Equilibrium	4	0.2	-
A4. Stream Bank Stability and Cover	4	0.2	_
A5. Soil Surface Condition	4	0.1	-

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	3.4	0.35	
Abiotic	4	0.35	
SA WETLAN	D CONDITIO	N SCORE Z	a la como
SA WETLAN			3,565

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75-<2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

sor Summary	Major	Minor	Top Three	
	0	0	1	Hiking trails
			2	Over Flowlog Dam
			3	/

Stressor Comments (Evaluation of risk)

Stre

SA CODE: SF2MI[3]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

Work	sheet	a. Buffer a	nd RCC Checklist.	Check off la	nd cover	elemer	its with	in the buf	fer a	rea or BCC c	orridors that are either allowe		
		ed and cons nagery),	sidered non-buffer	elements th	iat disrup	t ecosy:	stem co	nnectivity	y. Ind	dicate the in	orridors that are either allowe agery type and date (season		
													
lmage		Google Eart				Image Date 6/23		6/23	Ļ				
		er/RCC land	l cover elements			Exclue	ded nor)-buffer/R		and cover el			
Buffer	RCC					Buffer	RCC				ements		
X	X	Natural or s	emi-natural veget	ation patche	 'S			Commer dams, bri	cial/	residential d	evelopments, parking lots, s, and other structures		
X		Small irrigat	tion ditches witho	ut levees		$f_{r_{1}}$	\square				, sports fields		
		Old fields, u	inmaintained					Railroads					
		Open range	land	· 				Maintaine	ed le	vees, sedimo ging areas	ent piles, construction		
		Foot trails, h Intensity)	norse trails, unpave	ed bike trails	(low						norse paddocks, feedlots		
X	X	Non-channe	el open water					Intensive row crops	agrig	culture: mair hards, and v	ntained pastures, hay fields,		
X	X	Non-function naturally occ	ning abandoned v curring levees	egetated lev	/ees, or	X	<u>ज</u>		ds o		second-order unpaved but		
		inpaved two	o tracks roads			X				ounded by a	levee or other manmade		
		Other			<u></u>		+	Dther					
i heru	neter Q	ombosed of	cent Sub-metric. allowed buffer ele	ements and a	inter into	the Dui	ffer Dee				e L1a. Buffer Percent		
ox below. Rate the sub-metric using Table L1a and enter the ratir stegrity Summary Worksheet 1d.					ule rating	g on th	e Buffei	·	ļ	Rating	Buffer Percent		
	Buffer Percent (%)= 85%						+						
rkshe	of 1r	Ruffor Mide	h C h		length of each buffer line in meters				(3 ≥80% - <100%				
GIS o	r on the	e map. Avera	rage the line lengths and rate right.			ngth of each buffer line in meters				in $C = 2 \ge 50\% - <80\%$			
Buffe	r Integr	ity Summar	y Worksheet 1d.	s and rate us	ang table	2 L 10. L1	nter the	rating on					
ne	Buffe	er Width (m)	Buffer Width (ft)	Line	Buffer W (m)	idth	dth Buffer Width (ft)			Table L1b. Buffer Width			
A	164	.26	538.91	E	161.93		53	1.26	┥┟	Rating	Average buffer width		
в	125	.25	410.02		231.48		┣──			4	≥190m		
			410.92	F			 	9.44	11-	x 3	≥130 - <190m		
c		5.39	378.57	G	121,25		39	7.80	1	2	≥65 - <130m		
2	111	.07	364.40	н	155.87		511	.38	ျပ	······································	<65m		
	Averag		148.31 (m)		486.58		(ft)		╧	Table L1c. S	ummary Rating for Buffer Integrity		
	anove t	o calculate t	g rity Summary. En the Buffer Integrity	Index Score	using the	o formu	الم الم الم	a h. a		Rating	Score		
000.03	ուց աշ	: puner intec	arity index Score, e	enter rating for	or Buffer	Integrit	sa in th Iy in Tab	e oox ole L1c	1		>3.5		
on th	ne SA St	ummary Wo	rksheet.			5			6		>2.5 - ≤3.5		
fer %	Rating	⊨ + Buf	fer Width Rating	/2 =	Buffer i	ntearit	v index	Score	Ī	I	>1.5 - ≤2.5		
3		Γ	T						1		≤1.5		
		{ +	3	/2 ≕	1				· •	- · · · · · · · · · · · · · · · · · · ·	·····		

SA CODE: SF2MI[3]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DS/AM

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segment		
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0 0		0	
B) Total Disruption by Segment (m)		0		0	
C) % Segment Disruption = (8/1000)*100		0	0)	
D) Total Disruption both segments			0		
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.	

Та	ble L2. RCC Rating
Rating	Description
c⊽ 4	0% total disruption on both segments combined.
O 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
0 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshort.

		RSR				R	WSI		
Current Size	1	Historic Size	 RSR	1	RSR	x	100	=	RWSI (%)
content size	197		 0.0		 0.1	v	100	=	10
9	1	10	 0.9	1	0.1	~	100		1928

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(R 4	≤10%	Wetland is at or only minimally reduced from its full natural extent
	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
C2	>40%-≤70%	Wetland has been reduced by more than 40% Its natural size
01	>70%	Wetland has been reduced by more than 70% its natural size

sa code: SF2MI[3]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [$\frac{3}{3}$]

Jate: 01117

Surveyor Initials :

DS/AM

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0,4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
\griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0,3		0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Aature old fields and other fallow lands with natural composition, introduced hay field and pastures e.g., perennial vegetation cover)	0.7	0	0
lestoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
laying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	-0
leavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) emoved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
ommercial tree plantation, Christmas tree farms	0,6	0	0
elective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) emoved	0.8	0	0
lature restoration areas returned to natural conditions (re-converted)	0.9	0	0
atural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surr	ounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
<u> </u>	≥80 - <95
Ø 2	≥40 - <80
$\overline{(1)}$	<40

SA CODE: SF2MI [3]

SA Name : Two Mile Pond Reservoir Transect [\gtrsim]

Date: 6/11/24

Surveyor Initials : DS/AM

Biotic Metrics

Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

Polygon	Polygon 83 Vertical Structure No Type	84 Tree Regeneration % Cover	BS Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
-	IA1				
2	IA2	20%	72%	Mullein	0
m	RA1	85%	None.	None	Cat tails , Horse tails, Daisys, will a w trees
4	IIIII				
s	IIIC1				
9	MBI				
-	MF1				
80					
6					*
10					
:					
12					
13					
14					
15					
16					
17					
18					
19					
00					

Cf Dolgen Mos. Telebaceus/Spare Stratum Space Stratum End Moody Stratum Crosses Mody Mody	Polygon Nos. Tail Woody Stratum 1 Short Woody Stratum 2 Expected 5 Bank 9,545 CT Score 4 Polygon Nos. Species 1 Species 5 Species 6 Bank 9,545 Species 6 Bank 9,545 Polygon Nos. Cateural N Work N With N With N With N Species 6 Bank 9,545 Polygon Nos. Cateural N With N With N With N With N Species 6 Bank 9,545 Cateural N With N With N With N With N With N Species 6 Bank 9,545 Cateural N With N With N With N With N Species 6 Bank 9,545 Cateural N With N With N With N With N Species 6 Bank 9,545 Cateural N With N With N With N Species 6 N Species 6 Cateural N With N With N With N With N Species 6 N Species 6 Cateural N With N With N With N With N Species 6 N Species 6 Cateural N With N With N With N With N Species 6 N Species 6 Cateural N With N With N	dom whic	dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	ach stratum thi dant. Each poly	at appears in t gon is either a	he polyg issigned	Ion. See foc to the same	thotes f	or special i has the sar	nstruction ne comp	cution of a spectron of a	cies app	ears in more is created	ksneet 5 e than or or the po	. Enter the le strata, as olygon.	species (sign the	codes for species	the two to the str	top atum in
Cf Polygon Ms. Species 1 Non-Norm <	CI Polygon los. Speciera I. Normany Speciera J. Speciera S. Normany Speciera S. Speciera Speciera Speciera S. Speciera Speciera S. Speciera Spe				Tail Wood	y Stratun			Short Woo	ody Strat	um 2		Herbaceo	is/Sparse	e Stratum ³		CT Score	4	
A Image: Market Ma	A Meaning Weith Maile M	<u></u> ธ	Polygon Nos.		Species 1	E N	Species 2	<u>ш Z</u>	Species 3	ωZ	Species 4	<u>ш 2</u>	Species 5	<u>ш 2</u>	Species 6	<u> </u>		SA5	Wt Score ⁶
B Image: Second Sec	B Image: Section of the sectin of the section of the section of the section of the sec	∢			Novice trat	\sim	- the	\geq	2011:20	2	Lunar		200	= L.L.	10100				201
C I	C 1	в			Cotton weed	\geq	Willow	2	Willens				Catha 3		105254	1	67		2 00 2
D 1	D I	U														2			
E I	E I	0																	
F I	F I	ш]														
G I	G I	u.									\$	_							
H H H H H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 3 3 1 1 1 1 1 1 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 <t< td=""><td>H H H H H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <</td><td>0</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></t<>	H H H H H 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 <	0																	
1 1	1 1 1 1 2 1 1 1 1 K K 1 1 1 L 1 1 1 1 1 M M 1 1 1 1 1 M N 1 <td< td=""><td>т</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></td<>	т																	
1 1	J I																	1	
K L <thl< th=""> <thl< th=""> <thl< th=""></thl<></thl<></thl<>	K L <thl< th=""> <thl< th=""> <thl< th=""></thl<></thl<></thl<>																		
L L	L L N M N	×																	
M N	M N																		
N N	N N N Final Weighted Score7 3, 75 0 0 Einal Weighted Score7 3, 75 1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs s6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover. 3. Herbaceous (graminoids and forbs)>10% total stratum cover. 3. Herbaceous (graminoids and forbs)>10% total squal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating or Relative Native Plant Community Composition on the SA Rumary Worksheet	Σ																	
0 Contraction Con	0 Final Weighted Score7 1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6 m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)> 10% total stratum cover; 3. Herbaceous (graminoids and forbs)> 10% total stratum cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating or Relative Plant Community Composition on the SA Rank Summary Worksheet	z																	
1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover, 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover, 3. Herbaceous (graminoids and forbs)>10% total stratum cover. 4Raw Score is from Table B1a (Annendix R): 5% CA is the necrement of the CA and Score deviced by the CA and Score dev	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover, 2. Trees and shrubs ≤ 6 m (20 feet) and > 25% total stratum cover, 3. Herbaceous (graminoids and forbs)>10% total stratum cover. 4Raw Score is from Table B1a (Appendix B); 5% SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating or Relative Native Plant Community Composition on the SA Rank Summary Worksheet	0															-†		
I. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover, 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover, 3. Herbaceous (graminoids and forbs)>10% total stratum cover, 4Raw Score is from Table B1a (Annendix R): 5% K a new second strategies and forbs)>10% total stratum cover. 4Raw Score is from Table B1a (Annendix R): 5% K a new second strategies and forbs)>10% total	I. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating or Relative Native Plant Community Composition on the SA Rank Summary Worksheet													Final	Weighted	Score7			X
	equal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score with Rating or Relative Plant Community Composition on the SA Rank Summary Worksheet	t, Tre Stratu	es and shrubs > 6 m cover. ⁴ Raw Sc	5 m (20 feet) an ore is from Tah	hd > 25% total de 81a (Annen	stratum Miv Ri- 5	cover, 2. Tr %SA is the	ees and	shrubs ≤6r	n (20 fee	et) and >25	% total s	tratum cov	er; 3. Her	baceous (g	Iraminoi	ds and fo	rbs)>10	% total

Date: 6/11/24 Surveyor Initials: r \M

sa cor SF2MI [کے]

SA CODE : SF2MI [🛬]

SA Name : Two Mile Pond Reservoir Transect [2,]

```
Surveyor Initials : DS/AM
```

Ť	able B1.	Relative Native Plant C	ommunity Composition Rating
R	ating	CT Fina	al Weighted Score
K	4	≥ 3.75	<10% non-native
Č	3	≥ 3.25 and <3.75	10% ≤20% non-native
Ĉ	2	> 2.0 and <3.25	20% ≤50% non-native
Ċ,	1	≤2.0	>50% non-native

2 - Vegetation Horizontal Patch Structure

Vorksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch wattern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

Iorizontal Patch Structure pattern A,B,C, or D:

		Table B2. Rating for Vegetation Horizontal Patch Structure
R	ating	Description
X	4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
	3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
ί.	2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
Ċ.	1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

33 - Vegetation Vertical Structure

Worksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA from Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with same VST) x 100. Enter the total %SA for each VST below.

	VST 1 High Structure Forest	VST 2 Low Structure Forest	VST 5 Tall Shrubland	VST 65 Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
Total % of SA	50			50			

Table B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the row that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. Percentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for the rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the table down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the rating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	<u> </u>	5	6W and/or 6H
C 4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
<u> </u>	2 or 1 and 2	5	
× 3 –	2 or 1 and 2	6W	
	5	6W	······································
	2 or 1 and 2		
	5		
	6W		<u></u>
	65		
	6H		
	7		

SA CODE: SF2MI [3]

SA Name: Two Mile Pond Reservoir Transect [💆]

B4 - Native Riparian Tree Regeneration

Rating	5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
	Description
`4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% Native poles, saplings and/one with >5%
	cover, typically multiple size (and) closes well represented, obvious regeneration, many patcher exactly
3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few,
2	Mative poles, saplings and/or seedlings present human and patches or polygons with 1% -5% cover, size classes for
	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few. <1% cover, little size class differentiation. Native poles, saplings, and/or seedlings present but uncommon, restricted to one or two patches or polygons with typical
1	Native poles, saplings, and/or seedlings absent (0% cover).

85 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive	cover	(%)

calculate

Destin	as for Invasive Exotic Plant Species Cov
Rating	Invasive Species Cover %
4	0%
<u>3 X</u>	>0% - <1%
2	≥1% - <10%
1	≥10

Additional CTs and Blotic Metric Comments:

Black header Groubenk, spatial make American Robin House Lich, Pine Sching, Jellin Grasted Chat Warbling Vireo, Lesser Gold, Western Wood Perce Com Warmine)

Date: 6/11/24

Surveyor Initials : DS/AM

%

SF2MI[1 SA CODE :

6/11/24 Date :

Surveyor Initials :

DS/AM

SA Name : Two Mile Pond Reservoir Transect [

Abiotic N	Aetrics
-----------	---------

1

1 - Floodplain Hydrologic Connectivity

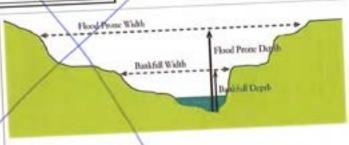
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffie pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA phy of each cross-section are required and recorded in Table A1d.

Rank Summary Workshee	t. Photographs of each closs sector and a	Cross-section:	1	2	5
	Deteriotion	Wall contour.			
1: Bankfull width	This is a critical step requiring familiarity with field indicators of the bar Measure the distance between the right and left bankfull contours with Keeping the tape level between the right and left bankfull contours, m	easure the height			1
2: Maximum bankfull depth	of the line above the tharweg (the deepest part of a below the below the tharweg) the deepest part of a below the below the tharweg the deepest part of a below the be	ket line level can		/	-
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.	flood prone depth	1	-	1
4: Flood-prone width	Using a tape, measure the length of a level line at a height equal to the from Step 3 to where it intercepts the right and left banks.		-	-	+
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull width (Step 1). Calculate the average for Step 5 for all three replicate cross-sections.	Enter the average he	ere and	rate	+
6: Calculate average	Calculate the average for Step 5 for all three replicate closs section using Table A1a. Enter the rating in the A1 box on the SA Rank Summ	hary Worksheet.			_

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description Average entrenchment ratio is ≥ 2.2;	
C A		
C 2	Auerage entrenchment ratio is ≥1.9 - <2.2	
	Average entrenchment ratio is ≥1.5 - <1.9	
0 2	Average entrenchment ratio is < 1.5	



Worksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Worksheet in conjunction with Table A1c. Check the boxes for all that apply to each

segme			Indicator
U	M	L	
			Bankful is slightly below bank height
F			Bankful is well below bank height and channel is incised
H			Channel widening due to bank failure
H	H	F	Constructed levees preclude floodplain inundation
븜	H	H	Stream is straightened/channelized
븜	H	Fi	Inset floodplain formation
+	금	H	Decreased peak flows due to hydrologic modification
	남	大	Bankfull indicators at point of incipient flooding of the floodplai
님	17	1-	Indicators of overbank flow on floodplain
님	H	TE	Floodplain inundation due to beaver activity
			Page 10 of 17

Table A1b. Rating for Floodplain Hydrologic Connectivity in single-channel step-pool systems					
Rating	Description				
C A	Average entrenchment ratio is ≥ 1.9				
0 3	Augusta entrenchment ratio is ≥1.4 - <1.9				
0 2	Average entrenchment ratio is 21.2 - < 1.4				
0 1	Average entrenchment ratio is < 1.2				

SA CODE : SF2MIT

SA Name : Two Mile Pond Reservoir Transect [

Date : 6/11/24

Surveyor Initials : DS/AM

Method 2

Je A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

1

	Rating	
0	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.
0	3	connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain guarantic floodplain supports
0		Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation may vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian due to incision,
5	1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.

A1d. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer whe facing in the direction of flow or downstream.) See Appendix E for additional details

Section	- and they	Northing	decidential details.			the subscriver when	
1	(Latitude)	(Longitude)	Upstream	Downstream	Bank Right	Bank Left	
2							
3							

Floodplain Hydrologic Connectivity Comments:

SA CODE: SF2MI [2]]

Date: 6/11/24

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect [🤌]

2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

nter the rating on t	he SA Rank Summar	Y WOLKSHEEK	Field Indicators (check all existing conditions)
Upper Segment	Middle Segment	Lower Segment	
Opper segment	X		Active side channels
			Abandoned channels
		Π	Backwater/eddy
<u>L</u>	↓ <u> </u>	+	Riffles or rapids
		+	Shoais, sparely-vegetated bars
	<u> </u>	+	Channel boulders
		+	Oxbow lakes/ponds on floodplains
		- <u> </u>	Vegetated island and side bars
		<u>_</u>	Terraces
		<u> </u>	Channel pools
	X	L	Beaver ponds Swales, depressional features on floodplains
			Swales, depressional reduced of
<u>L</u>			Debris jams in channel
			Woody wrack piles on the floodplain
LL	-+		Floodplain micro-topography (mounds, pits)
		-+	Downed logs
		-+	Natural levees
		<u></u>	Standing snags
	<u>Ø</u>		Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
		l	No. of unique Patch Types

abie	A2. R	ating for Physical Patch Complexity Description
iatin	g	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic, large woody debris, undercut banks, etc.). As a guide, 12 etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 etc.) or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple or more unique indicators are pres
		lsegments).
с С	3	present, several nuvial geomotiphic terms on multiple segments).
с С	2	Limited physical patch complexity scattered across the floodplain. There are use some floodplain, and there are 6 - 8 some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 some fluvial geomorphic surfaces, and there is limited in-channel complexity.
с С	1	some name generation of the second s

SA CODE ; SF2MI[3]

Two Mile Pond Reservoir Transect [3] SA Name :

A3- Channel Equilibrium

A

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from

Condition		Upper			Low	er	Τ
ļ	╾╼┼	Segme	nt Segn	ent	Segm	ent	Field Indicators(check all existing conditions)
			Ø]]	The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
			<u> </u>]			Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
			<u> </u>				There is leaf litter, thatch, or wrack in most pools.
Indicators of Channel							The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Equilibrium							There is little or no active undercutting or burial of riparian vegetation.
						1	There are no bars that are densely vegetated with perennial vegetation neither mid-channel bars or point bars).
						ſ	hannel and point-bars consist of well-sorted bed material.
						T	he channel bed is not planar and without an abundance of fine materials lling the interstitial spaces between larger stream substrate.
 						T	here are channel pools at meander bends and some deep pools within the each.
						TI ro	ne channel is characterized by deeply undercut banks with exposed living nots of trees or shrubs.
						Tł	ere are abundant bank slides or slumps, or the lower banks are uniformly oured and not vegetated.
						Ba	nk vegetation is declining in stature or vigor, or many riparian trees and rubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation	? 					-j¢n	annel bed is scoured to large cobbles or boulders and entrained bank aterial is filling the cobble interstices and pools.
						1	ere are active headcuts within the channel.
						An by i	obvious historical floodplain has recently been abandoned, as indicated the age structure of its riparian vegetation.
				1-		The	re is abundant fresh splays of coarse sediment covering the floodplain we the natural point bar elevation.
						ł	re are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation	[The	channel bed is planar overall. The stream lacks well-defined channel Is at meander bends, or pools are filled with sediment.
	[e are partially buried or sediment-choked culverts.
]					e are avulsion channels on the floodplain or adjacent vailey floor.

Date : 6/11/24

Surveyor Initials : DS/AM

SF2MI[3] SA CODE :

Date: 6/11/24

DS/AM

Two Mile Pond Reservoir Transect [3] SA Name :

Surveyor Initials :

<u> </u>	Table A3. Rating for Channel Equilibrium
	Description
Rating	for the SA is in equilibrium condition with little evidence of excessive aggradation of
X 4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.
C 3	degradation based on the field indicators listed in Worksheet 12. There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation. There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary There is evidence of severe aggradation or degradation throughout most of the channel through the SA.
C 2	There is evidence of severe aggradation or degradation throughout most enabled
C 1	process: aggradation or degradation. The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	[]4	€]4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	<u> </u>	 [] 3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	2	 2	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	 []]		Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	 4	1]4	 [] []4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	 []]]3	<u> </u>	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potentia	I []2	2	 []2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	ı		ī	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.
ł	1			

able A4. Stream Bank Stability and Cover Rating			
Description			
>3.5 - 4.0			
>2.5 - ≤3.5			
>1.5 - ≤2.5			
1.0 - ≤1.5			
	Description >3.5 - 4.0 >2.5 - ≤3.5 >1.5 - ≤2.5		

Average Indicator Score	
-------------------------	--

SA CODE: SF2MI[3]

SA Name : Two Mile Pond Reservoir Transect [β]

A5 - Soil Surface Condition

Jorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or iow-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	⊠		Active erosion features due to anthropogenic disturbance (eg. rills, guilies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			irrigation-driven salinity and mineral crusts
		(Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

 	<u> </u>	Table A5. Soil Surface Condition Rating
F	Rating	Description
8	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fiil, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of Impervious surfaces are minimal in extent. Total disturbance, including erosion, Impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5%.
Ċ	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance is a stage of the specific areas.
	1	or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA. Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

Surveyor Initials : DS/AM

Date: 6/11/24

Date: 6/11/24

DS/AM

c,	\ Name	• •	Mile Deed	Recentoir	Fransect [3]	Surveyor Initials :
rksh	or union d	tressor C	hecklist. dence wh	Check off s		ffecting wetland ecological condition of the 5A and WOI. Assign rrwise. If the presence of the stressor is uncertain, mark as "Unknov""
ik Ma	jor Stress		fect		Stressor Group/Stressor	Comments
	Major	Minor	Absent	Unknown	Adverse water management	
	Ø				Extended low flow dam releases	
	<u></u>				Timing of flow releases not concorda	ent
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upst	ream
		<u></u>			Adverse sediment management	
					Adverse sediment retention by dar	ns
			10		Sediment loss by dredging	
					Adverse sediment input (roads/development)	
			<u></u>		Artificial water additions	
		$\top \Box$			Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfall	
				- 	Agricultural irrigation ditch retur	ns
					Ground water pumping	
		TC	TE		Urban depletions	
			1 2		Fracking	
					Agriculture irrigation wells	
		•			Watershed alteration	
				1 [C] Extensive recent fires in watersh	ned
] [2		Extensive recent timber harve	st
	<u> </u>				Extensive open pit mining in wate	ershed
			<u> </u>	· <u>····</u>	Livestock/wildlife overgrazir	lg
		<u></u>			Local biodiversity impacts	

Additional Comments Version Date: 04/25/2022

 \Box

0

 \Box

0

 \Box

0

Schema: Montane 2.5

Evidence of excessive grazing (local)

Excessive noise affecting wildlife

Counts by Intensity

NMRAM Montane Riverine Wetlands Version 2.5

	······································	<u> </u>	r Worksheet			
SA Code SF2MI [4	J SA Name : Two	Mile Pond Reservoir		Project	Riparian As:	sesement
AJdeTsct [[[]]	AU Name : Trar	nsect [4]		WOI : TV	vo Mile Pond	1 Reservoir
County Santa Fe	1	waters Santa Fe River	Elevation (ft) 72	.99 (m) 222	4.7 E	coregion 6.0 NWFM
A riparian system decommissioned of water rights. Driving Directions		ocated on the east side o regarding the reservoir a		rsion to the area w	as recently s	hut down due to laci
Driving to Santa F Canyon Road unt	e from Albuquerque yo Il you reach the reservoi	u head north on Old Pec r located to the North.	os Trail. Then he	ead east on Camin	o Del Monte	Sol and right on
······································	Conservative and The	Santa Fe National Forest	Data Sharing Restrictions	Results to client only.	1	served in and?
Surveyor Role		Survey	or Name		~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Surveyor Initia
Landscape	Dustin		_			105
Biotic	Annie					AM
Abiotic	Dustin					1/5
Stressors	Bath					175-
Easting (m)	Northing (m)	Zone	Datum	Latitu	de (DD ft)	Longitude (DD I
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM 35.689	722	-105.89
Survey Date	4/9/24	Start Time		End	d Time	
f_{xy}	ne the	to still winter See	p app	rors to l	ic day	/
A Biotic Condition (v	regetation patterns, com	position and structure, i	exotics and invest	siver disturbance		
h.ill	aus Still	acount Flance		iles, disturbance	evidence, fir	e and herbivory)
Experie in	inter. Al	aremt Flower	The product	any yes	100 11	and y
(L.	ant stard	Noticentite <u>S to turn</u> (e.g., dams, walls etc.): f	Linds	in 14in	frantic	Car seca
Abiotic Condition (hydrological alterations	<u>15 Yo Yumn</u> (e.g., dams, walis etc.]; fl	<u>JECCH.</u> looding characte	eristics and eviden		nk floordings sell
the second	me impacts, explaint the	rivulologic breaks of oth	her factors that c	define the SA limit	c)	
seep	is a stry	evarked	- 9 CO ,	Area is	all 3.	the readily
sessment Summary	(Overall site condition s	ummary and comments	after the field d			
Area	is sti	I woking h	p From	dor Mapl	Rive	
vicional d						
1 Score 3, 4/7 Rank	3.11/8 Surveyor(s)	$\gamma < (Final \leq i$	178 Rank A	Initiala (10-	Date 4/9/24

SA CODE: SF2MI[4]

SA Name : Two Mile Pond Reservoir Transect [4]

Surveyor Initials :

Date: 4/9/24

DS

NMRAM – SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	and the second second		
Metric Description	Rating	Wt	Final Score
andscape Context		Σ 1.0	3.25
1. Buffer Integrity Index	3	0.25	0.75
.2. Riparian Corridor Connectivity	4	0.25	1.0
3. Relative Wetland Size	4	0.25	1.0
.4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
81. Relative Native Plant Community Composition	4	0.2	
82. Vegetation Horizontal Patch Structure	3	0.2	
B3. Vegetation Vertical Structure	3	0.2	
B4. Native Riparian Tree Regeneration	4	0.2	
B5. Invasive Exotic Plant Species Cover	3	0.2	-
Abiotic		Σ	
A1. Floodplain Hydrologic Connectivity		0.3	
A2. Physical Patch Diversity	3	0.2	
A3. Channel Equilibrium	ÿ	0.2	
A4. Stream Bank Stability and Cover	Ч	0.2	
A5. Soil Surface Condition	4	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	3.4	0.35	1.44
Abiotic	2.75	0.35	
SA WETLAN	D CONDITION	SCORE Σ	3,472
SA WETLAN	D RANK =		A

Rank	Score	Description
А	≥3.25 - 4.0	Excellent Condition
в	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

у	Major	Minor	Top Three	
	0	0	1	Recovery from winter
			2	less notor
			3	steep edage

Stressor Comments (Evaluation of risk) No Water coming from seep

Stressor Summary

Page 2 of 17

SA CODE: SF2MIT 41

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [1

Surveyor initials : DS

Landscape Context

La - Buffer Integrity Index

or are	sheet 1 exclude ear of im	ed and cons	nd RCC Checklist. idered non-buffer	Check of element:	f land cover s that disrup	elemen t ecosy:	ts withi stem co	n the buffer nnectivity. li	area or RCC co ndicate the ima	rridors that are either allowed, agery type and date (season
Image		Google Eart				Image	Date	6/23		
		r/RCC land	cover elements			Exclue	ded nor	-buffer/RCC	land cover ele	ments
Buffer	RCC					Buffer	RCC		·	· · · · · · · · · · · · · · · · · · ·
		Natural or s	emi-natural vegeta	tion pat	ches	X				velopments, parking lots,
	 									, and other structures
			tion ditches withou	it levees		누브			s, golf courses,	sports fields
		Ola fielas, u	inmaintained					Railroads		
		Open range							levees, sedime aging areas	nt piles, construction
X		Foot trails, F ntensity)	torse trails, unpave	d bike tr	ails (low			Intensive liv	estock areas, h	orse paddocks, feedlots
X			el open water						riculture: main rchards, and vi	tained pastures, hay fields, neyards
X			ning abandoned v curring levees	egetatec	f levees, or	X		Paved roads graded road		second-order unpaved but
		inpaved tw	o tracks roads			X		Open water structure	bounded by a	levee or other manmade
		Other						Other		
Works	heet 1b	. Buffer Per	rcent Sub-metric.	Measure	or estimate	the per	centag	e of the l		
SA peri	meter c	omposed o	f allowed buffer ele	ments a	nd enter into	the Bu	iffer Per	cent		e L1a. Buffer Percent
box Del integrit	ow. Rate v Summ	e the sub-m hary Worksh	etric using Table L	la and ei	nter the ratin	ng on th	ie Buffe	r	Rating	Buffer Percent
	<u>, oann</u>	iary morital	Buffer Percer	t (%)~	85%			i	<u> </u>	100%
	· · · ·		·		<u> </u>	_			(x 3	≥80% - <100%
orksh	eet 1c. l	Buffer Widt	th Sub-metric. Me	asure the	e length of ea	ach buf	fer line	in meters in		≥50% - <80%
he Buffi	er Integr	rity Summa	age the line length ry Worksheet 1d.	s and rat	te using Tabl	e L 1 b. E	inter th	e rating on		<50%
Line	Buff	er Width (m)	Buffer Width (ft)	Line	Buffer W		But	fer Width	li	le L1b. Buffer Width
A		4.26	538.91	Ē	(m) 161.93			(ft)	Rating	Average buffer width
					·		°	31.26	<u>C</u> 4	≥190m
B	125	5.25	410.92	F	231.48	8	7.	59.44	(X 3	≥130 - <190m
c	119	5.39	378.57	G	121.25	β –	3	7.8 0	C 2 C 1	≥65 - <130m
D	111	1.07	364.40	н	155.87	7	51	1.38	ال <mark>ر ا</mark>	<65m
					486.58			· · ·	Table I 1c	ummary Rating for Buffer
Norkeh	Averag		148.31 (m)				(ft)			Integrity
Norksh Ind L1b	eet 1d.	Buffer Inte	grity Summary. E	nter the	sub-metric R	atings	from Ta	bles L1a	Rating	· · · · ·
ind L1b pelow, t	eet 1d. above t	Buffer Inte to calculate e Buffer Inte	grity Summary. E the Buffer Integrity egrity Index Score,	/ Index S	sub-metric R	atings he form	from Ta ula in ti	he box		Integrity
ind L1b pelow, t	eet 1d. above t	Buffer Inte	grity Summary. E the Buffer Integrity egrity Index Score,	/ Index S	sub-metric R	atings he form	from Ta ula in ti	he box	Rating	Integrity Score
ind L1b below. t on t	eet 1d. above t	Buffer Inte to calculate e Buffer Inte ummary We	grity Summary. E the Buffer Integrity egrity Index Score,	y Index S enter rat	sub-metric R core using th ing for Buffe	latings ne form r Integr	from Ta ula ín ti ity in Ta	he box	Rating	Integrity Score >3.5

SA CODE: SF2MI[[]

Date: 4/9/29

SA Name : Two Mile Pond Reservoir Transect [[]

Surveyor Initials: 05

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	im Segment
Banks	Left Bank	Right Bank	Left Bank	Right Bank
A) Total Bank Disruption (m)	0	0	0	0
B) Total Disruption by Segment (m)		0		0
C) % Segment Disruption = (B/1000)*100	1	0	c)
D) Total Disruption both segments		()	
E) % Total Disruptions = (D/2000)*100	Zero dis	uption notic	eable along t	the banks.

Та	ble L2. RCC Rating
Rating	Description
(x 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
C 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Worksh-

		RSR			6	1	R	WSI		
Current Size	1	Historic Size	=	RSR	1	RSR	х	100	=	RWSI (%)
9	1	10	=	0.9	1	0.1	x	100	=	10

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(8.4	≤10%	Wetland is at or only minimally reduced from its full natural extent
C3	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
C 2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
C1	>70%	Wetland has been reduced by more than 70% its natural size

SA CODE :

SF2MI[4]

Date :

Surveyor Initials :

4/1124

DY

SA Name : Two Mile Pond Reservoir Transect [\mathcal{G}]

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0 0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
jriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Su	rrounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
	≥80 - <95
K 2	≥40 - <80
$\bigcirc 1$	<40

Weinschlusser Section Section<	24.0				Biotic Metrics	Aetrics
By Ventical Soucture By Three Invasive Exotic Speciels Comments y_{Pe} e_{Peres} By Three Invasive Exotic Speciels Comments u_1 e_{Peres} $(u_1 c_2 c_2 e_{Peres})$ $(u_1 c_2 c_2 e_{Peres})$ u_1 e_{Peres} $(u_1 c_2 c_2 e_{Peres})$ $(u_1 c_2 c_2 e_{Peres})$ u_1 u_2 u_2 u_2 u_2 u_1 u_2 u_1 u_2 u_2 u_1 u_2 u_2 u_2 u_2 u_1 u_2 u_1 u_2 u_2 u_1 u_2 u_1 u_2 u_2 u_1 u_2 u_2 u_2	Works numbe Specie: the Tak Append	heet 5. Vegetation er assigned from the s Cover (B5) metrics bles in Appendix B a dix D). Use the com	n Community e SA Biotic Mi s. Enter the Vi and the Field ments box fo	y Patch Polygo ap. Each polygo ertical Structure Guide for metric yr documenting	n Data for Biotic Metrics n is evaluated with respect Type (VST) for B3, tree reg : instructions. Enter the sp and describing vegetation	B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polyge t to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Inva peneration % cover within the polygon for B4 and the % cover of invasive exot necies codes for the invasive exotic species found in the polygon (from NM No n community patch features.
INI<	Polygon No		84 Tree Regeneration % Cover	B5 Invasive n Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
NSNSNoCurrant scon graving not asIM $\beta_0 \gamma_n$ K_{ne} M_{oec} $Currant scon graving not asINC\gamma_0 \gamma_n\chi_0 \gamma_n\Sigma_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}INC\gamma_0 \gamma_n\Sigma_{me}J_{me}INC\gamma_0 \gamma_nJ_{me}J_{me}INC\gamma_0 \gamma_nJ_{me}J_{me}INCJ_{me}J_{me}J_{me}INCJ_{me}J_{me}J_{me}INCJ_{me}J_{me}J_{me}INCJ_{me}J_{me}J_{me}INCJ_{me}J_{me}J_{me}INCJ_{me}J_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INCJ_{me}J_{me}INC<$	-	IA1				
INI<	2	IA2				
IIII $60%$ NoneNoneCurrierly scorn graving not asINCI 40% $\approx 10\%$ $\Lambda_{slor}/M_{$	m	IA1				
Incl 40% $\approx 10\%$ Λ_{15} Λ_{15} Δ_{11} <	4	1811	60%	Nene	None	soon growing not as
	5	IIIC1	4004		Mister & Muller	Oumpers 15alt back 10
	9	INEI				
8 9 9 9 9 9 10 1 1 11 1 1 12 1 1 13 1 1 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 19 1 1	1	INF1				
9 10 10 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 10 1	00					
10 11 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 10 1 11 1 12 1	6					
11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 20 2	10					
12 1 13 14 15 16 17 18 19 19 20	:					
13 14 14 1 15 1 16 1 17 1 18 1 19 1 10 1 10 1	12					
14 1 15 16 16 17 18 19 19 20	13					
15 16 17 17 17 18 18 19 19 20 20	14					
16 17 17 1 18 1 19 1 20 20	15	2 0				
17 18 18 19 20 20	16					
18 19 10 19 20 10	17					
20	18					
20	19					
	20					

81,	SA C Rel	sa cobr Relative N	SF2MI [// Native Pla	الا م Plant C	omr	SA CODF SF2MI [2] SA Name : Tw B1 - Relative Native Plant Community Composition	SA Name : Composit	e: Two Mile sition	le Pond R	Pond Reservoir Tramact [🖌]	arract [5		Date :		Date: 1022 Surveyor Initials:	veyor ln	itials:	, t	
Wor	kshe	et 6. C	r Plant S	Decies a	d pu	olvaon Ac	signmen	te Starting		0 onto the				- E	 - -	 - -		 	ļ	
dor whic	tinan thiti	t specie s more s	is in each abundar	n stratum it. Each p	that olygo	appears ir on is either	the poly r assigned	dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	otnotes fr e CT if it 1	A, enter une or special ir has the sam	e numpe nstructio ne comp	ir or the rirs ins. If a spe osition or a	it polygo cies appi a new CT	n from Woi ears in mor is created f	rksheet 5 e than or for the p	. Enter the he strata, as olygon.	species c sign the	odes for species	the two to the str	top atum in
						Tail Woo	Tail Woody Stratum ¹	m 1		Short Woody Stratum 2	ody Strati	um 2		Herbaceo	us/Spars	Herbaceous/Sparse Stratum ³		CT Score 4	e 4	
<u></u> ნ	Pol	Polygon Nos.	S.			Species 1	ш Z ∓	Species 2	ᆈᆂ	Species 3	<u>ய</u> 2	Species 4	<u>ш </u>	Species 5	<u> </u>	Species 6	<u>ш</u> 2	Raw ⁴	SA5	Wt Score6
۲	2			 						Salt 2.	2	A. Sec.		Hedon	\searrow	blue strun		4.0 10%	i	
В	4							 		N. Her	5	Carley -	>	Catto, 1	 			206 V H	20%	
U																				
٥				[-													
ш					ļ								 							
ц.					 															
ט					<u> </u>															
н																				
_					 		-													
					.								_							
×																				
ب																			_	
٤																				
z												}								
0																				
															Final	Final Weighted Score ⁷	Score7			4.0
1 1 1	ees a	nd shru An	tbs > 6 rr	5 (20 fee:	t) and	l > 25% to	tal stratur	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	rees and	shrubs ≤6r	m (20 fet	et) and >25	5% total	stratum cov	/er; 3. He	rbaceous (c	graminoi	ds and fi	orbs)>10	% total
strat equa	11; Qi 11; Qi 11; Qi	over. 48 Wt. Scol	taw Scor re is the	e is from product	Table of the	e B1a (App : Raw Scor	endix B); e * % SA;	stratum cover. "Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	e percent Weightec	age of the l d Score is th	SA area (he sum c	covered by of the Wt. 5	r the CT a cores. Ra	nd express te the CT Fi	ied as a d inal Weig	lecimal nun phted Score	nber; the ? on Tabl	: total an e B1 and	ea %SA m I enter th	tust e Rating
2	elauv	/e Nativ	e Plant L	unuuuo	ity Co	mposition	n on the S	Tor Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	mary Wo	orksheet.										1

Page 7 of 17

SA Name :

Date: $\frac{1}{9}/\frac{9}{2}$ Surveyor Initials: ()^C)

Two Mile Pond Reservoir Transect [^L]

Table B1.	e B1. Relative Native Plant Community Composition Rating				
Rating	CT Final Weighted Score				

X	4	2	3.75	<10% non-native
	3	≥ 3.25	and <3.75	10% ≤20% non-native
<u> </u>	2	> 2.0 a	and <3.25	20% ≤50% non-native
(1	:	≤2.0	>50% non-native

2 - Vegetation Horizontal Patch Structure

orksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

D

orizontal Patch Structure pattern A,B,C, or D:

Table B2. Rating for Vegetation Horizontal Patch Structure				
Rating	Description			
`4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.			
(3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.			
`2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.			
· 1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.			

3 - Vegetation Vertical Structure

Jorksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA for Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ame VST) x 100. Enter the total %SA for each VST below.

	VST 1	VST 2	VST 5	VST 6S	VST 6W	VST 6H	VST 7
	High Structure	Low Structure	Tall Shrubland	Short	Herbaceous	Herbaceous	Sparse
	Forest	Forest		Shrubland	Wetland	Vegetation	Vegetation
Total % of SA			50		50		

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for ne rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
` 4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
с з	2 or 1 and 2	5	
	2 or 1 and 2	6W	
	5	6W	
	2 or 1 and 2		
2	5		
	6W		
	65		
` 1	6H		
	7		

SA Name: Two Mile Pond Reservoir Transect [4]

B4 - Native Riparian Tree Regeneration

Ta. Worl	Ta. 34. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from Worksheet 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.					
Rating		Description				
7	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.				
\overline{C}	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.				
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.				
C	1	Native poles, saplings, and/or seedlings absent (0% cover).				

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover					
1	Rating	Invasive Species Cover %			
C	4	0%			
1	3 %	>0% - <1%			
ι.	2	≥1% - <10%			
C	1	≥10			

Additional CTs and Biotic Metric Comments:

Current growing down by water, magnerits way

Date: 4/9/24

Surveyor Initials : DS

< 1

SA Name: Two Mile Pond Reservoir Transect [$\begin{pmatrix} 4 \\ 1 \end{pmatrix}$]

Date: 1/19/29

Surveyor Initials :

01

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
	Į į		Active side channels
			Abandoned channels
			Backwater/eddy
			Riffles or rapids
	$\overline{\Sigma}$		Shoals, sparely-vegetated bars
	<u>ل</u> ک		Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
	\square		Terraces
			Channel pools
	X		Beaver ponds
			Swales, depressional features on floodplains
	X		Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
	\square		Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Tab	Table A2. Rating for Physical Patch Complexity						
Rati	ng	Description					
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).					
ц¢,	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).					
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).					
C	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.					

SF2MI[4] SA CODE :

Date: 4/9/24 DS

Two Mile Pond Reservoir Transect [4^{\prime}] SA Name :

Surveyor Initials :

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		ß		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		لکل الار		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		X		There is leaf litter, thatch, or wrack in most pools.
Indicators of		X		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
				Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
{				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI [$\frac{4}{1}$]

Two Mile Pond Reservoir Transect [🌾] SA Name :

Date: 11/9/2014

Surveyor Initials : 1/5

	Table A3. Rating for Channel Equilibrium					
Rating	Description					
1 7 ⁽⁴	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.					
<u>С 3</u>	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.					
C 2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.					
<u>C 1</u>	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.					

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	□4	Ď 3 14	<u></u> 4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	□3	□3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	□2	□2	□2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	<u> </u>	1	1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	[∑]4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	<u></u> 3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u></u> 2	□2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	[] 1	<u> </u>	1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Rating	Description
7.4	>3.5 - 4.0
3	>2.5 - ≤3.5
2	>1.5 - ≤2,5
<u>1</u>	1.0 - ≤1.5

Date: 1/9/24

DS

SA Name : Two Mile Pond Reservoir Transect [🥠]

Surveyor Initials :

A5 - Soil Surface Condition

rorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or lowdensity wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table AS and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	لكل ا		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance: $|<\mathcal{I}\%|$

	Table A5. Soil Surface Condition Rating					
Rating	Description					
<i>∞</i> 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
С 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

Date :

11724 Ď

SA Name : Two Mile Pond Reservoir Transect [\mathcal{Y}_{j}] .

Surveyor Initials :

orksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign stegories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow ank Major Stressors in Dominant Stressor column(Pick up to 3)

ank		Afi	fect		Channel Conv. 154	
at i K	Major	Minor	Absent	Unknown		Comments
			<u></u>		Adverse water management	
	Ď				Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
				1	Adverse sediment management	
					Adverse sediment retention by dams	
			Ì		Sediment loss by dredging	
			Q		Adverse sediment input (roads/development)	
					Artificial water additions	
			Ď.		Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
				· · · · · ·	Ground water pumping	
			Ŀ.		Urban depletions	
					Fracking	
					Agriculture irrigation wells	
					Watershed alteration	
			Ŀ		Extensive recent fires in watershed	
			Ċ		Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
,			· · · · · · · · · · · · · · · · · · ·		Local biodiversity impacts	
					Evidence of excessive grazing (local)	
			Ď		Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	

ditional Comments

sion Date: 04/25/2022

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

	H 1 1 1 1 1 1 1 1 1	SA Cover				
SA Code SF2MI		Mile Pond Reservoir		Project	Riparian As	ssesement
/)de Tsct[4		/		WOI : T	vo Mile Pon	d Reservoir
County Santa Fe	HUC 12 Heady	vaters Santa Fe River E	levation (ft) 72	99 (m) 222	4.7 E	coregion 6.0 NWFM
decommissione of water rights.	and Boundary (Rationale, m that leads into a pond lo d due to safety concerns re	cated on the east side of	Santa Fe borde d a water diver	ring the Santa Fe sion to the area w	National Fo	prest. This reservoir wa shut down due to lack
Driving Directions Driving to Santa Canyon Road ur	Fe from Albuquerque you til you reach the reservoir	i head north on Old Pecc located to the North.	os Trail. Then he	ad east on Camin	o Del Monte	e Sol and right on
	ire Conservative and The S	anta Fe National Forest	Data Sharing Restrictions	Results to client only.	1.1311.010	served in tland?
Surveyor Role		Surveyo	r Name			Surveyor Initia
Landscape	Pustin					De
Biotic		Dustin				00
Abiotic	Dustih					
Stressors	Both				-	02
Easting (m)	Northing (m)	Zone	Datum	Latitu	de (DD ft)	12
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UT			Longitude (DD f
Survey Date	5/15/24	Start Time			1 Time	105.05
A Biotic Condition	and is sti leaves budding (vegetation patterns, comp full of leaves, Towhar, Stink June bugs	Box elder show bug, Red	otics and invas	ives, disturbance	evidence, fi	re and herbivory)
A Abiotic Condition isturbance and othe	site impactor explain the t	e.g., dams, walls etc.]; flo hydrologic breaks or othe	er factors that d	efine the SA limit	s)	ank flooding; soil
A Abiotic Condition isturbance and other The	area he	e.g., dams, walls etc.); flo hydrologic breaks or other reis slig the hij	htly	efine the SA limit	s)	ank flooding; soil
A Abiotic Condition isturbance and other The	site impactor explain the t	e.g., dams, walls etc.); flo hydrologic breaks or other reis slig the hij	htly	efine the SA limit	s)	ank flooding; soil

0

1.0

SA Name : Two Mile Pond Reservoir Transect [4/]

Date: 5/15/24

Surveyor Initials: 05

Rating 3 4 4 2	Wt Σ 1.0 0.25 0.25 0.25 0.25	Final Score 3.25 0.75 1.0 1.0
3 4 4	Σ 1.0 0.25 0.25 0.25	3.25 0.75 1.0 1.0
4	0.25 0.25 0.25	0.75 1.0 1.0
4	0.25	1.0
4	0.25	1.0
	-	
2	0.25	
	_	0.5
	Σ	
4	0.2	
3	0.2	
3	0.2	
3	0.2	
3	0.2	
	Σ	
	0.3	
3	0.2	
4	0.2	
4	0.2	
4	0.1	
	4	3 0.2 3 0.2 3 0.2 3 0.2 3 0.2 3 0.2 3 0.2 3 0.2 3 0.2 3 0.2 3 0.2 4 0.3 4 0.2 4 0.2 4 0.2

Major Attribute	Score	Wt.		Wt. S	core
Landscape Context	3.25	0	0.3		975
Biotic	3,2	0.	35		
Abiotic	3.70	5 0.	35		
SA WETLAN	D CONDITI	ON SCORE	Σ	3.	40
SA WETLAN	DRANK	=			A

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
c	≥1.75-<2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

essor Summary	Major	Minor	Top Three				
	0	0	1	Not	05	much	nater
			2	_			
			3				

Stressor Comments (Evaluation of risk)

Still no water from seep but plants budding around it.

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [4] Surveyor Initials : DS

Landscape Context

L. Buffer Integrity Index

		r Integrit		· · ·	•		-		•			
Wor	ksheet	1a. Buffer a	nd RCC Checklist	Check off la	nd cover	elemer	its with	in the buffe	r area o	r BCC re	prridors that are either allowed	
or ar	e exclud year of in	led and con magery).	sidered non-buffer	elements th	hat disrup	t ecosy	stem co	nnectivity.	indicate	the im	prridors that are either allowed agery type and date (season	
Imag			th KMZ. file			Image	e Date	6/23				
		er/RCC land	d cover elements			Exclue	Excluded non-buffer/RCC land cover elements					
Buffe	r RCC					Buffer	RCC		cover elements			
		Natural or	semi-natural veget	ation patche	es	X		Commerci dams, brid	ommercial/residential developments, parking lots, ams, bridges, revetments, and other structures			
			ition ditches witho	ut levees		$\uparrow \Box$			awns, parks, golf courses, sports fields			
		Old fields, (unmaintained			后		Railroads				
		Open rangi	pen range land						l levees,	sedime	ent piles, construction	
	X	Foot trails, horse trails, unpaved bike trails (low intensity)			(low						orse paddocks, feedlots	
X	X	Non-chann	el open water				┝╴╶┥	Intensive ag	gricultur	e: main	tained pastures, hay fields,	
X	X	Non-function naturally oc	oning abandoned v curring levees	regetated lev	vees, or	×			ow crops, orchards, and vineyards aved roads or developed second-order unpaved bu			
		unpaved tw	o tracks roads			x		_	en water bounded by a levee or other manmade			
		Other						Dther				
Works	heet 1b	. Buffer Pe	rcent Sub-metric.	Monstern	<u>_</u>	_ <u></u>						
on het	undiel C	omposed o	i allowed buffer el	imente and i	ontar inta	ALLA DUL	K			Tabl	e L1a. Buffer Percent	
DON DE	tow. nat	e the sub-m hary Worksh	ietric using Table L	1a and enter	r the rating	g on th	e Buffer		Rating Buffer Perce			
			Buffer Percer	nt (%)=	85%				- <u>t</u>	4	100%	
lorkek	oot ic	Duff an Mt di				<u> </u>			(X)	3	≥80% - <100%	
e GIS	or on the	e man. Aver	th Sub-metric. Me age the line length	asure the ler	igth of ea	ch buff	er line i	n meters in		2	≥50% - <80%	
e Buff	er Integr	rity Summa	ry Worksheet 1d.	is and rate u	sing lable	: L1D, EI	iter the	rating on		1	<50%	
Line	Buff	er Width (m)	Buffer Width (ft)	Line	Buffer Wi (m)	idth	Buff	er Width			e L1b. Buffer Width	
A	164	4.26	538.91	E	161.93			(ft)	11	ling	Average buffer width	
B	175	5.25						1.26		4	≥190m	
			410.92	F	231.48		75	9.44		3	≥130 - <190m	
c	115	5.39	378.57	G	121.25		39	7.80		2	≥65 - <130m	
D	111	.07	364.40	н	155.87		511	.38			<65m	
	Averag	e	148.31 (m)		486.58		 (ft)		Table	110 5	ummary Rating for Buffer	
orksh	eet 1d.	Buffer Inte	grity Summary, Fr	iter the sub-	motric Bo	tinas fr	T- t-	lest 1a		<u> </u>	Integrity	
10 11 10	anover	o calculate.	the Buner Intennity	rindex Score	Nucina the	form	In	. t. 1	Rati	ng	Score	
	sund rue	ammary Wo	grity index Score, e	enter rating f	for Buffer	Integrit	y in Tab	le L1c	<u> </u>		>3.5	
_									(X) 3		>2.5 - ≤3.5	
er %	6 Rating	+ Bu	ffer Width Rating	/2 ≔	Buffer I	ntegrit	y Index	Score	<u> </u>	_ 1	>1.5 - ≤2.5	
3		r — —							C_{1}	,	≤1.5	

SA Name : Two Mile Pond Reservoir Transect [[

Date: 5/15/24

Surveyor Initials : 05

2 - Riparian Corridor Connectivity (RCC)

Vorksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each egment upstream and downstream of the SA. Sum the values for each segment and alculate % Segment Disruption for the upstream side and the downstream side. Add the otal disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and he data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segment		
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
B) Total Disruption by Segment (m)	0		0		
C) % Segment Disruption = (B/1000)*100	0		0		
D) Total Disruption both segments	0				
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.	

Table L2. RCC Rating							
Rating	Description						
α 4	0% total disruption on both segments combined.						
C 3	<15% total disruption on both segments combined.						
C 2	≥15% - <40% total disruption on both segments combined.						
0 1	≥40% total disruption on both segments combined.						

13 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshe

		RSR					R	WSI		
Current Size	1	Historic Size	=	RSR	1	 RSR	х	100	=	RWSI (%)
0		10	-	0.9	1	 0.1	X	100	=	10

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(7.4	≤10%	Wetland is at or only minimally reduced from its full natural extent
03	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
C2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
01	>70%	Wetland has been reduced by more than 70% its natural size

SA CODE :

SF2MI [41

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [2^{\prime}]

Surveyor Initials :

DS

L4 - Surrounding Land Use

Trksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) ³ urrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Bank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0,1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
riculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3		0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
laying of native grassland (e.g., no tillage, having and baling only)	0.9	0	0
leavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) emoved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
commercial tree plantation, Christmas tree farms	0.6	0	0
elective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) emoved	0.8	0	0
Nature restoration areas returned to natural conditions (re-converted)	0.9	0	0
latural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table	Table L4. Surrounding Land Use Rating							
Ratin	9	LUI Score						
<u> </u>		≥95 - 100						
<u> </u>		≥80 - <95						
<u> 2</u>		≥40 - <80						
$\int 1$		<40						

_				
	1			
		1		
_		i.		
		1		
	ż			
S	F			
2	ż			
7	٤			
÷,	٢			
r	١			
3	٠	•		
L	L	ı		
1	Ē	ĥ		
ş	2	2		
c)	ł.	
ñ	-	ï	ï	
1	۲	۴		
	đ	۴	l	
2	1	2	ŗ.	
5	,	1	l	

SA Name: Two Mile Pond Reservoir Iransect 1 9 Uate: 2//2/27



Biotic Metrics

Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from 5A Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

Becker he cover 65% None 40% None		Polygon B3 Vertical Structure No	84 Tree Regeneration	B5 Invasive Exotic	Invasive Exotic Species (I ist Code(s))	Comments
us in 65% None None Let Tails starting to span and a men		INI	% COVER	species in Lover		
MI More None None Cat fails starting to gran accided NEI 65% None None None Earthough to gran accided NEI 10% None None None Not much accided NEI 1 10% None None None NEI 1 1 1 1	2	M2				
Inel 65% None None Cat tails starting to grant accurated Incl 40% None Not much accurated accurated Incl 10% None Not much accurated accurated Incl 1 1 None Not much accurated Incl 1 1 1 1	m	IIA1				
Incit 40% None Not much ned life but getting NB Maile Mone Not much ned life but getting NB No No No NB No No No <t< td=""><td>4</td><td>1811</td><td>65%</td><td>None</td><td>Nont</td><td>grav aroug</td></t<>	4	1811	65%	None	Nont	grav aroug
	s	IIIC1	40%	None	None	· but getting
	9	INEI				
8 1 9 1 10 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 17 1 18 1 19 1 10 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 19 1 10 1 11 1 12 1	2	NF1				
9 9 9 10 10 10 11 10 10 12 10 10 13 10 10 14 10 10 15 10 10 16 10 10 17 10 10 18 10 10 19 10 10 10 10 10 10 10 10	00					
10 1 11 12 13 14 15 16 17 18 19 10 10 11 12 13 14 15 16 17 18 19 19 10 11 12	6					
11 1 12 13 14 15 16 17 18 19 10 10 10	10					
12 1 1 13 1 1 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 20 1 1	=					
13 14 14 14 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 19 1 1 10 1 1	12					
14 14 16 17 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 20 20 1	13					
15 1 16 2 17 2 18 2 19 2 20 2	14					
16 1 17 1 18 1 19 1 10 1 20 2	15					
17 1 18 1 19 1 20 1	16					
18 19 19 10 20 10	17					
19 20	18					
20	19					
	20					

				Le 6						1											Τ		;]	
		top atum ir		Wt Score ⁶																4.0	% total	nust e Ratin		
		he two o the str	4	SA5	0	90		-											-		bs)>10	a %SA n enter th		
.:s∎ ⊘		des for t becies to	CT Score 4	Raw4 9	0,4	05								1							and for	otal area B1 and e		
or Initi		cies coc n the sp		<u>č</u>							-									Dre7	ninoids	r; the to Table I		
Survey		he spe t, assigr	۳ ۳	<u>ч</u> 29 Е		2							-			-				ted Sco	is (grar	numbe tore on		
1.4		. Enter t le strata olygon.	e Stratui	Species 6	bluccia	Lawar														Final Weighted Score ⁷	rbaceot	ecimal i phted So		
Date: Surveyor Initials:		sheet 5 than or or the po	Herbaceous/Sparse Stratum ³	<u>س ح</u>	2	2	-													Final	er; 3. He	id as a d nal Wei <u>c</u>		
Date:		m Work in more eated fo	baceou	Species 5	Nach V	6														1	nm cov	ixpresse		
		gon fro ppears i CT is cr	Her	Spe		-															al strat	T and e Rate th		
		st polyc scies ap a new		<u>w z</u>	2		.		<u> </u>												5% tot	y the C Scores.		
-	······	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	m 2	Species 4	(من عم	Cette.1															1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	stratum cover. ⁴ Raw Score is from Table B1a (Appendix B); ⁵ %SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating		
isect []		number tructior compo	Short Woody Stratum 2		2	·															(20 fee	V area c sum of	£ 1 7	11/
oir Tran		er the n cial inst e same	Wood	es 3 E		v ref.															mô≥ sc	f the SA e is the	et.	Prage / of 1/
Reserv		A, ento for spe t has th	Short	Species 3	5	N.S.											 				d shrut	ntage o ed Scor	/orkshe	ĩ
e Pond		with C ^T otnotes e CT if i		ш Z	2																rees an	Percer Veight	mary M	
Two Mile Pond Reservoir Transect [1+	Ę	tarting See foc the same		Species 2	Sex Elder																ver; 2. T	sA is the ie Final V	Tor Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	
ne:	ositio	ents. S olygon. Jed to t	tum 1	Spe	<u>~~</u>								 				 				tum co	8); 5%5 (A; 7th	e SA Ra	
SA Name :	duo	signm The pure the pure of t	dy Stra	<u>ш Z</u>						<u> </u>		 				 	 	 			tal stra	endix l re * % 5	on th	
	B1 - Relative Native Plant Community Composition	/gon A: pears ir is eithe	Tali Woody Stratum ¹	Species 1																	25% to	1a (App aw Scoi	position	
	iu mu	id Poly that ap olygon		S																	< pue -	fable B of the R of	S Com S Com	
.	ŭ z	cies ar ratum iach po																	<u></u>		0 feet)	from] duct o		
sa code · sf2Mi [21]	Ve Pl	it Spe ach sti dant. E						·····						į į							6 m (2	core is he pro		
SF2N	Nati	Es in e abunt		os.					 		ļ		1								< sqn	Raw S Sre is t	Ve Plai	
DE-	tive	t 6. C specie nore		Polygon Nos.									<u> </u>		 						d shri	/er. 4 1. Scc	Nativ	
A CO	čelai	shee nant : it is r		olyg	ഗ	4															es an	1; 6W	ative	
S	- E	Work domir which		<u>а</u> Ե	A	8	U		щ	щ.	ט	Ħ	···· · ···		×		ž	z	0		1. Tre	stratur equal	or Kel	

Date: SISTAN

SA Name : Two Mile Pond Reservoir Transect [l_{f}]

Surveyor Initials : $p_{\rm constant}$

Table B1	. Relative Native Plant C	ommunity Composition Rating
Rating	CT Fina	al Weighted Score
<u>^</u> 4	≥ 3.75	<10% non-native
<u> 3</u>	≥ 3.25 and <3.75	10% ≤20% non-native
<u>2</u>	> 2.0 and <3.25	20% ≤50% non-native
<u>^ 1</u>	≤2.0	>50% non-native

2 - Vegetation Horizontal Patch Structure

orksheet 7. Using Tables B2a and B2c (Appendix 8), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

orizontal Patch Structure pattern A,B,C, or D:

	Table B2. Rating for Vegetation Horizontal Patch Structure
Rating	Description
· 4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
(3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
<u>2</u>	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
` 1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

3 - Vegetation Vertical Structure

Forksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ame VST) x 100. Enter the total %SA for each VST below.

	VST 1	VST 2	VST 5	VST 6S	VST 6W	VST 6H	VST 7
	High Structure	Low Structure	Tall Shrubland	Short	Herbaceous	Herbaceous	Sparse
	Forest	Forest		Shrubland	Wetland	Vegetation	Vegetation
Fotal % of SA			50		50		

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for the rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the atting on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	t	5	6W and/or 6H
4	, t	6W	
<u> </u>	2 or 1 and 2	5	6W and/or 6H
· · · · · · · · · · · · · · · · · · ·	1		
✓ <u> </u>	2 or 1 and 2	5	
(3	2 or 1 and 2	6W	
	s	6W	
	2 or 1 and 2		
2	5		
	6W	-	
["	65		
` 1	6H		
	7		

SF2MI[4] SA CODE :

Date: 5/15/24

SA Name: Two Mile Pond Reservoir Transect [4] Surveyor Initials: 0.5

B4 - Native Riparian Tree Regeneration

	ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
C / 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
7 3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
C: 1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover			
R	Rating	Invasive Species Cover %	
C	4	0%	
C	3-+	>0% - <1%	
	2	≥1% - <10%	
$\left(\right)$	1	≥10	

Additional CTs and Biotic Metric Comments:

Currant is full of green leaves same as box elder

Date :

SA Name : Two Mile Pond Reservoir Transect [

Surveyor Initials :

Abiotic Metrics

1

A1 - Floodplain Hydrologic Connectivity

Method 1

Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Des	cription /	Cross-section:	1	2	3
1: Bankfull width	This is a critical step requiring far Measure the distance between th					
2: Maximum bankfull depth	Keeping the tape level between to of the line above the thalweg (th help here.	the right and left bankfull o e deepest part of the chann	ontours, measure the height iel). A pocket line level can			
3: Flood-prone depth	Double the estimate of maximum	n bankfull depth from Step	2.			
4: Flood-prone width	Using a tape, measure the length from Step 3 to where it intercept	n of a level line at a height e s the right and left banks.	qual to the flood prone depth			
5: Calculate Entrenchment Ratio	Divide the flood-prone width (St	ep 4) by the bankfull width	(Step 1).			
6: Calculate average ratio	Calculate the average for Step 5, using Table A1a. Enter the rating	for all three replicate cross- in the A1 box on the SA Ra	ections. Enter the average here nk Summary Worksheet.	and r	ate	

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in/ Flood Prone Width meandering single-channel riffle-pool systems Rating Description Hood Prone Depth Bankfull Width 4 Average entrenchment ratio is ≥ 2.2 : 3 Average entrenchment ratio is ≥1.9 - <2.2/ 16d Depth 2 Average entrenchment ratio is ≥1.5 - <1.9 1 Average entrenchment ratio is < 1.5

Norksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Norksheet in conjunction with Table A1c. Check the boxes for all that apply to each

egm	ent.		
U	M	L	Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
			Channel widening due to bank failure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

Cont	nectivit	Rating for Floodplain Hydrologic y in single-channel step-pool systems
Ra	ting	Description
C	4	Average entrenchment ratio is ≥ 1.9
C	3 \	Average entrenchment ratio is ≥1.4 - <1.9
0	2	Average entrenchment ratio is ≥1.2 - <1.4
C	1	Average entrenchment ratio is < 1.2

SA Name: Two Mile Pond Reservoir Transect [

Surveyor Initials :

Date :

Method 2

e A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

1

Ra	ting		Description	and a second second second second second second second second second second second second second second second
<u> </u>	4	over-bankfull flows like signs of overbank sedin	natural floodplain. Indicators of bankfull discharge are at th y to inundate a broad area of floodplain. Floodplain suppo tent deposition. Or beaver ponds inundate the entire, norm Ikfull indicators and the active floodplain width.	orts riparian vegetation and shows
_ ر	3	connected streams des	Iplain moderately limited by incision, channelization. Less f cribed above (as noted by bankfull indicators below floodp ome understory plants may be upland. An inset floodplain	lain transition). Floodplain supports a
C.	2	vegetation and sedimer channelization, or flow	modified with an inset floodplain formed, which is regular nt regimes. Or the stream has minimal access to the natural modification, and the natural floodplain does not support r eatophytes (e.g., cottonwood, salt cedar, etc.).	I floodplain due to incision,
\cap	1	modification (i.e., aband	n floodplain, either through incision, bank modification/cha lonment of floodplain due to decreased peak flows). Indica diment deposits on the floodplain, etc.	• •

Ta. A1d. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1						
2						
3						

Floodplain Hydrologic Connectivity Comments:

SA Name: Two Mile Pond Reservoir Transect [\mathcal{U}]

Date: Stister

Surveyor Initials: $\int \int (f')$

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
	<u>X</u>		Active side channels
			Abandoned channels
			Backwater/eddy
			Riffies or rapids
	\square		Shoals, sparely-vegetated bars
	\square		Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
			Terraces
			Channel pools
	\overline{X}		Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
	X		Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Rati	ng	Description
Ç	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).
đ.	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).
C	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, ≤ 5 unique indicators are present in the SA.

Date: 5/15/24/

SA Name : Two Mile Pond Reservoir Transect [(4)]

Surveyor Initials : DCS

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Q		The channel has a well-defined bankfull contour that clearly demarcates the point of inciplent flooding where moderate frequent flow events spread flow across the floodplain.
				Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Q		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Q		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.
		Ā		There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		R		Channel and point-bars consist of well-sorted bed material.
		Q		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
1		Q		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or failing into the channel.
indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Channel Equilibrium				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avuision channels on the floodplain or adjacent valley floor.

Date :

11111

Two Mile Pond Reservoir Transect [💆] SA Name :

Surveyor Initials :

		Table A3. Rating for Channel Equilibrium
R	tating	Description
X	4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.
C	3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.
C	2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.
Ĉ	1	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	\$∮4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank Soil Stability	□3	[]]3	3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
	<u>2</u>	<u></u> 2	2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	<u> </u>	1	[]1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	[]4	<u></u> 4	□4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
	<u></u> 2	<u></u> 2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	1	[]]1	[]]	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Rating	Description	
74	>3.5 - 4,0	_
	>2.5 - ≤3.5	
C 2	>1.5 - ≤2.5	
	1.0 - ≤1.5	

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [1/]

Surveyor Initials : 1005

A5 - Soil Surface Condition

orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			FIL
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

> {**|**

		Table A5. Soil Surface Condition Rating						
R	lating	Description						
C	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.						
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.						
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.						
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.						

SA CODE: 5F2MI [4]

Date: STRACK

Des

SA Name : Two Mile Pond Reservoir Transect [$\begin{pmatrix} l \\ l \end{pmatrix}$]

Surveyor Initials :

/orksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign ategories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow ank Major Stressors in Dominant Stressor column(Pick up to 3)

lank	}	Aff	ect		Channel Constant	
	Major	Minor	Absent	Unknown	Stressor Group/Stressor	Comments
_					Adverse water management	······································
					Extended low flow dam releases	
					Timing of flow releases not concordant	
_					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
	·				Adverse sediment management	······································
					Adverse sediment retention by dams	
					Sediment loss by dredging	
					Adverse sediment input (roads/development)	
					Artificial water additions	
					Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfail	
					Agricultural irrigation ditch returns	
					Mining waste	
	_				Ground water pumping	
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
					Watershed alteration	
					Extensive recent fires in watershed	
_					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
		· · · · · · · · · · · ·			Local biodiversity impacts	
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	

ditional Comments

sion Date: 04/25/2022

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cov	er Worksheet			······································	
SA Code SF2MI [4	·	Mile Pond Reservoir		Project : Rip	parian Ass	esement	
Code Tsct (9] AU Name : Tra	nsect [4]		WOI : Two I			
County Santa Fe	HUC 12 Head	waters Santa Fe River	Elevation (ft) 7299	(m) 2224,7			
decommissioned of water rights.	and Boundary (Rationale n that leads into a pond I d due to safety concerns	ocated on the east state			!	oregion 6.0 NWFM est. This reservoir wa hut down due to laci	
Driving Directions Driving to Santa Canyon Road un	Fe from Albuquerque yo til you reach the reservoi	u head north on Old Pe ir located to the North.	ecos Trail. Then head e	ast on Camino D	el Monte	Sol and right on	
· ·	re Conservative and The	Santa Fe National Fore	st Data Sharing Res Restrictions onl	ults to client y.	Fish Obs Wetia		
Surveyor Role			yor Name		• ,	Surveyor Initia	
Landscape	Dustin Schwar	tz			<u> </u>	DS	
Biotic	Annie McCoy						
Abiotic	Dustin Schwar	tz				 DS	
Stressors	Dustin Schwar	tz				 DS	
Easting (m)	Northing (m)	Zone	Datum	Latitude (DD ft)	Longitude (DD	
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTM	35.689722		-105.89	
Survey Date	6/11/24	Start Time	9:00	End Tir		15:00	
High	From Rain Josef Less	a 107 9000 a 1,7776	mor neor y super then s	he pread	le de la constante de la consta La constante de la constante de	P. A.C.	
	Sound Franklin						
life	vegetation patterns, com why black a ants an Bronze Be	an achoring d'Ilizants e My	ground cover	rye, lat	s of	bury 10%	
Abiotic Condition	(hydrological alterations site impacts; explain the	(e.g., dams, walls etc.);	flooding characteristic	s and evidence o	f overbar	k floodina: soil	
	to wate,			the SA limits)		g, con	
Acces)		, 3€ (11)					
	(Overal! site condition st	ummary and comment	s after the field data is		I of		
sessment Summary		ummary and comment	s after the field data is		W _{ol}		

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [4]

Surveyor Initials : DS/AM

NMRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5	Rating	Wt	Final Score
Metric Description		Σ 1.0	3.25
Landscape Context	3	0.25	0.75
L1. Buffer Integrity Index	4	0.25	1.0
L2. Riparian Corridor Connectivity			1.0
L3. Relative Wetland Size	4	0.25	0.5
L4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	-
B1. Relative Native Plant Community Composition	4	0.2	-
B2. Vegetation Horizontal Patch Structure	3	0.2	_
B3. Vegetation Vertical Structure	3	0.2	-
B4. Native Riparian Tree Regeneration	2	0.2	
B5. Invasive Exotic Plant Species Cover	3	0.2	
		Σ	
Ablotic		0.3	
A1. Floodplain Hydrologic Connectivity	3	0.2	
A2. Physical Patch Diversity	4	0.2	-
A3. Channel Equilibrium		0.2	-
A4. Stream Bank Stability and Cover	4		
A5. Soil Surface Condition	4	0.1	-

Major Attribute	Score	Wt.	Wt. Score	
Landscape Context	3.25	0.3	0.975	
Biotic	3	0.35	100	
Ablotic	3,75	0.35		
SA WETLAN	D CONDITION	SCORE D	3,33	
SA WETLAN	DRANK =		18	

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
в	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1 Not as much m	stor
			2	
			3	

Stressor Comments (Evaluation of risk)

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [4]

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

Work or are and ye	ear of im	nagery).	sidered non-buffer										
lmage			th KMZ. file	<u> </u>	<u></u> `	Image	e Date	6/23	6/23				
		r/RCC land	l cover elements			Excluc	xcluded non-buffer/RCC land cover elements						
Buffer	RCC					Buffer	RCC	<u> </u>					
X		Natural or s	semi-natural vegeta	ation pat	ches	X	X	Commercia	al/residential de	evelopments, parking lots,			
<u> </u>								<u> </u>		s, and other structures			
<u> </u>	X Small irrigation ditches without levees Image: Constraint of the state								ks, golf courses	, sports fields			
	╞╧╧┦		inmaintained			$\lfloor \Box$		Railroads					
		Open range							l levees, sedime taging areas	nt piles, construction			
	X Foot trails, horse trails, unpaved bike trails (low intensity)							Intensive liv	/estock areas, h	orse paddocks, feedlots			
×								Intensive ag row crops, c	priculture: main prchards, and v	tained pastures, hay fields, ineyards			
×	X Non-functioning abandoned vegetated levees, or naturally occurring levees						X	Paved roads graded road	is or developed second-order unpaved but				
		inpaved tw	o tracks roads			×	X	Open water structure	r bounded by a levee or other manmade				
J)ther											
orks			rcent Sub-metric.	Measure	or estimate t	he ner		Other					
a peri ox bel	neet 1b. meter co ow. Rate	Buffer Per		ments a la and e	nd enter into	the perc	centag ffer Pe	e of the	Tabl Rating	e L1a. Buffer Percent Buffer Percent			
a peri ox bel	neet 1b. meter co ow. Rate	Buffer Per omposed o e the sub-m	f allowed buffer ele tetric using Table L1	ments a la and e	nd enter into	the perc	centag ffer Pe	e of the	Rating				
tegrit	neet 1b. meter cc ow. Rate y Summ eet 1c. E	Buffer Per omposed o the sub-m ary Worksh Buffer Widt	f allowed buffer ele netric using Table L neet 1d. Buffer Percen th Sub-metric. Mea	ments a la and e t (%)=	nd enter into nter the ratin 85%	the perc the Bu g on th	centag iffer Pe ie Buffe	e of the rcent er	Rating (4 (x 3)	Buffer Percent			
tegrit	meet 1b. meter co ow. Rate y Summ eet 1c. B or on the	Buffer Per omposed o e the sub-m ary Worksh Buffer Widt e map. Aver	f allowed buffer ele netric using Table L neet 1d. Buffer Percen th Sub-metric. Mea rage the line length	ments a la and e t (%)=	nd enter into nter the ratin 85%	the perc the Bu g on th	centag iffer Pe ie Buffe	e of the rcent er	Rating (4 (x 3)	Buffer Percent 100% ≥80% - <100%			
A peri bx bel tegrit brkshi e GIS c e Buffe	neet 1b. meter cc ow. Rate y Summ eet 1c. E or on the er Integri Buffe	Buffer Per omposed o the sub-m eary Worksh Buffer Widte map. Aver ity Summa er Width	f allowed buffer ele hetric using Table L beet 1d. Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width	ments a la and e t (%)=	nd enter into nter the ratin 85% e length of ea te using Table Buffer W	the perc the Bu g on th ch buff	centag ffer Pe e Buffe fer line nter th	e of the rcent er In meters in e rating on ffer Width	Rating C 4 (X 3 C 2 C 1	Buffer Percent 100% ≥80% - <100%			
vrkshi e GIS c ine	neet 1b. meter cc ow. Rate y Summ eet 1c. B or on the er Integri Buffe	Buffer Per omposed o e the sub-m eary Worksh Buffer Widte e map. Aver ity Summa er Width (m)	f allowed buffer ele netric using Table L Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width (ft)	t (%)= asure the s and rat	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m)	the perc the Bu g on th ch buff L1b. E	centag ffer Pe e Buffe fer line nter th Bu	e of the rcent er in meters in e rating on ffer Width (ft)	Rating C 4 (X 3 C 2 C 1	Buffer Percent 100% ≥80% - <100%			
A peril bx bel tegrit brkshi e GIS c e Buffe ine A	neet 1b. meter cc ow. Rate y Summ eet 1c. E or on the er Integri Buffe	Buffer Per omposed o e the sub-m eary Worksh Buffer Widte e map. Aver ity Summa er Width (m) .26	f allowed buffer ele hetric using Table L beet 1d. Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width	ments a la and e t (%)= asure the s and rai	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m) 161.93	ch buff	centag ffer Pe e Buffe fer line nter th Bu	e of the rcent er In meters in e rating on ffer Width	Rating (4 (x 3) (2) (1) Tab Rating (4)	Buffer Percent 100% ≥80% - <100%			
a perit bx bel tegrit orkshi e GIS c Buffe ine	neet 1b. meter cc ow. Rate y Summ eet 1c. B or on the er Integri Buffe	Buffer Per omposed o e the sub-m eary Worksh Buffer Widte e map. Aver ity Summa er Width (m) .26	f allowed buffer ele netric using Table L Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width (ft)	t (%)= asure the s and rat	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m)	ch buff	centag ffer Pe e Buffe fer line nter th Bu	e of the rcent er in meters in e rating on ffer Width (ft)	Rating (4 (x 3) (2) (1) Tab Rating (4) (x 3)	Buffer Percent 100% ≥80% - <100%			
A peri ox bel tegrit orksh e GIS c	eet 1c. E ow. Rate y Summ eet 1c. E or on the er Integri Buffe 164 125	Buffer Per omposed o e the sub-m eary Worksh Buffer Widte e map. Aver ity Summa er Width (m) .26	f allowed buffer ele netric using Table L Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width (ft) 538.91	t (%)= asure the s and rat Line E	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m) 161.93	ch buff	centag ffer Pe e Buffe fer line nter th But 2 7	e of the rcent er in meters in e rating on ffer Width (ft) 531.26	Rating (4 (x 3) (2) (1) Tab Rating (4 (x 3) (2) (2)	Buffer Percent 100% ≥80% - <100%			
A peril bx bel tegrit prkshi e GIS c e Buffe ine A B	eet 1c. E ow. Rate y Summ eet 1c. E or on the er Integri Buffe 164 125	Buffer Per omposed o e the sub-m eary Worksh Buffer Widte e map. Aver ity Summa er Width (m) .26 .25 .39	f allowed buffer ele netric using Table L Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	t (%)= asure the s and rat Line E F	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m) 161.93 231.48	the perc the Bu g on th L1b. E	centag ffer Pe e Buffe fer line nter th But 7 3	e of the rcent er In meters in e rating on ffer Width (ft) 531.26 59.44	Rating (4 (x 3) (2) (1) Tab Rating (4) (x 3)	Buffer Percent 100% ≥80% - <100%			
A periox bel tegrit borkshi e GIS c e Buffe ine A B C D	eet 1c. E ow. Rate y Summ eet 1c. E or on the er Integri Buffe 164 125 115 111 Average	Buffer Per omposed o e the sub-m eary Worksh Buffer Widte map. Aver ity Summa er Width (m) 	f allowed buffer ele hetric using Table L Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	t (%)= asure the s and rat Line E F G H	nd enter into nter the ratin 85% e length of ea te using Table (m) 161.93 231.48 121.25 155.87 486.58	idth	centag ffer Pe e Buffe fer line nter th But 5 7 3 51 (ft)	e of the rcent er in meters in e rating on ffer Width (ft) 531.26 59.44 97.80 11.38	Rating (4) (3) (2) (1) TabRating (4) (7) <td>Buffer Percent 100% ≥80% - <100%</td> ≥50% - <80%	Buffer Percent 100% ≥80% - <100%			
A period being bei	eet 1c. E ow. Rate y Summ eet 1c. E or on the er Integri 164 125 115 111 Average eet 1d. I above to	Buffer Per omposed o e the sub-m hary Worksh Buffer Widte map. Aver ity Summa er Width (m) .26 .25 .39 .07 e Buffer Inte o calculate	f allowed buffer ele hetric using Table L Buffer Percen th Sub-metric. Mea rage the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) Egrity Summary. En the Buffer Integrity	t (%)= t (%)= asure the s and rat Line E F G H	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 sub-metric Ra core using th	the perc the Bu g on th ch buff L1b. E	centag ffer Pe e Buffe fer line nter th But 7 7 3 51 (ft)	e of the rcent er in meters in e rating on ffer Width (ft) 531.26 59.44 97.80 11.38	Rating (7 4 (8 3 (7 2 (7 1 Tab Rating (7 4 (8 3 (7 2 (7 1 Table L1c. S Rating	Buffer Percent 100% ≥80% - <100%			
A period being bei	eet 1c. E ow. Rate y Summ eet 1c. E or on the er Integri Buffe 164 125 115 111 Average eet 1d. I above to Ising the	Buffer Per omposed o e the sub-m hary Worksh Buffer Widte e map. Aver ity Summa er Width (m) .26 .25 .39 .07 e Buffer Inte o calculate e Buffer Inte	f allowed buffer ele hetric using Table L Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. En the Buffer Integrity egrity Index Score, e	t (%)= t (%)= asure the s and rat Line E F G H	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 sub-metric Ra core using th	the perc the Bu g on th ch buff L1b. E	centag ffer Pe e Buffe fer line nter th But 7 7 3 51 (ft)	e of the rcent er in meters in e rating on ffer Width (ft) 531.26 59.44 97.80 11.38	Rating (4 (x 3) (2) (1) Tab Rating (4 (x 3) (2) (1) Tab Rating (2) (1) Table L1c. S Rating (4)	Buffer Percent 100% ≥80% - <100%			
A period being bei	eet 1c. E ow. Rate y Summ eet 1c. E or on the er Integri Buffe 164 125 115 111 Average eet 1d. I above to Ising the he SA Sc	Buffer Per omposed o e the sub-m hary Worksh Buffer Width (m) 226 .25 .39 .07 e Buffer Inte o calculate e Buffer Inte o calculate	f allowed buffer ele hetric using Table L Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. En the Buffer Integrity egrity Index Score, e brksheet.	t (%)= asure the s and rat Line E F G H H	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 sub-metric Ra core using th	the perc the Bu g on th ch buff L1b. E	centag ffer Pe e Buffe fer line nter th But 7 7 3 51 (ft)	e of the rcent er in meters in e rating on ffer Width (ft) 531.26 59.44 97.80 11.38	Rating (4 (x 3) (2) (1) Tab Rating (4 (x 3) (2) (1) Tab Rating (2) (1) Table L1c. S Rating (4) (3)	Buffer Percent 100% ≥80% - <100%			
A period being bei	eet 1c. E ow. Rate y Summ eet 1c. E or on the er Integri Buffe 164 125 115 111 Average eet 1d. I above to Ising the	Buffer Per omposed o e the sub-m hary Worksh Buffer Width (m) 226 .25 .39 .07 e Buffer Inte o calculate e Buffer Inte o calculate	f allowed buffer ele hetric using Table L Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. En the Buffer Integrity egrity Index Score, e	t (%)= asure the s and rat Line E F G H H	nd enter into nter the ratin 85% e length of ea te using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 sub-metric R core using th ing for Buffer	the perc the Bu g on th L1b. E idth	centag ffer Pe e Buffe fer line nter th But 5 7 3 51 (ft) rom Ta ula in t ity in Ta	e of the rcent er in meters in e rating on ffer Width (ft) 531.26 59.44 97.80 11.38	Rating (4 (x 3) (2) (1) Tab Rating (4 (x 3) (2) (1) Tab Rating (2) (1) Table L1c. S Rating (4)	Buffer Percent 100% ≥80% - <100%			

Surveyor Initials : DS/AM

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segment			
Banks	Left Bank	Right Bank	Left Bank	Right Bank		
A) Total Bank Disruption (m)	0	0	0	0		
B) Total Disruption by Segment (m)		0	0			
C) % Segment Disruption = (B/1000)*100		0	0			
D) Total Disruption both segments	0					
E) % Total Disruptions = (D/2000)*100	Zero disruption noticeable along the banks.					

Table L2. RCC Rating								
Rating	Description							
Q 4	0% total disruption on both segments combined.							
C 3	<15% total disruption on both segments combined.							
C 2	≥15% - <40% total disruption on both segments combined.							
C 1	≥40% total disruption on both segments combined.							

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Worksher

RSR					RWSI						
Current Size	1	Historic Size	=	RSR	1		RSR	х	100		RWSI (96)
9	1	10	-	0.9	1		0.1	x	100	-	10

	Table L3. Relative Wetland Size Rating						
Rating	RWSI Score	Description					
(* 4	≤10%	Wetland is at or only minimally reduced from its full natural extent					
C3	>10%-≤40%	Wetland remains equal to or more than 60% of its natual size					
C2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size					
C1	>70%	Wetland has been reduced by more than 70% its natural size					
	1 10 10 0 C						

SA Name : Two Mile Pond Reservoir Transect [4]

Date: 6/11/24

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [4]

DS/AM

Surveyor Initials :

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
\griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other failow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0,9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surrounding Land Use Rating						
Rating	LUI Score					
C 4	≥95 - 100					
C 3	≥80 - <95					
(X 2	≥40 - <80					
	<40					

-
T
-
F2MI
DDE
AC
ŝ

SA Name: Two Mile Pond Reservoir Transect [4] Date: 6/11/24

Surveyor Initials: DS/AM

Biotic Metrics

Species Cover (BS) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

1 $M1$ $M2$ $M1$ $M2$	Polygon No	83 Vertical Structure Type	B4 Tree Regeneration % Cover	85 Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	-	IA1				
MN M M M Cat $LatLa$	2	IA2				
Imit 26% None None Cat tails Kins in actional all wates coders Mer V0% None None Lonks basically 7 ke same whet seess, chinis, out Mr Lonks basically 7 ke same whet seess, chinis, out Mr Mr Mr Mr Mr Mr Mr Mr Mr Mr Mr Mr Mr Mr Mr Mr	m	IMI				
Incr Stort Monte Monte NMI	4	IBI	20010	None	None	around all waters and
	s	IIIC1	9/0 01	None	Nane	basically the same whent sness, chiming and n
	9	NEI				
8 1 9 1 10 1 11 1 12 1 13 1 14 1 15 1 16 1 17 1 18 1 17 1 18 1 19 1 10 1 11 1 12 1 13 1	2	INFI	_			
9 9 9 10 9 9 11 9 9 12 9 9 13 9 9 14 9 9 15 9 9 16 9 9 17 9 9 18 9 9 19 9 9 10 9 9 11 9 9 12 9 9 13 9 9						
10 1 1 11 1 1 12 1 1 13 1 1 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 10 1 1 11 1 1 12 1 1 13 1 1	6					
11 1 12 13 14 15 16 17 18 19 10 10 10 10 10 10 10 10	10					
12 1 1 13 1 1 14 1 1 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 19 1 1 20 1 1	Ξ					
13 1 14 15 16 17 18 19 19 10 11 12 13 14	12					
14 14 14 15 1 1 16 1 1 17 1 1 18 1 1 19 1 1 20 1 1	13					
15 1 16 17 17 18 19 19 19 10 20	14					
16 1 17 1 18 1 19 1 10 1 20 2	15					
17 1 18 1 19 1 20 1	16					
18 19 19 10 20 10	17					
19 20	18					
20	19					
	20					

		op tum in		Wt Score6																07	6 total	ust Pating	6
Ň	•	the two to o the stra	4	SA5		26	- .				-								- <u> -</u>		orbs)>10%	a %SA mi	
itials :	•	odes for species t	CT Score 4	Raw ⁴		6,2															ds and fo	total are e R1 and	
Surveyor Initials :		species c sign the			2 2															Score7	graminoi	nber; the	5
Sur	· · ·	Enter the strata, as ygon.	Stratum ³	Species 6	bluesta	Current					Í					ļ				Final Weighted Score ⁷	aceous (cimal nun ted Score	
6/11/24		sheet 5. E than one or the pol-	s/Sparse :	<u>с</u> ш 2	$\left \right\rangle$	5		+						 	- 					Final V	ir; 3. Herb	d as a de val Weigh	n
Date: 6/11/24	:	rom Work 's in more created fo	Herbaceous/Sparse Stratum 3	Species 5	Macou	Cattai)															atum cove	l expresse the CT Fir	
		oolygon f es appear ew CT is			2			<u> </u>			-										total stra	he CT and res. Rate	
۲, J		worksheet 6. CI Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	n 2	Species 4 N	Chinse	Cetter Cetter	1	- <u> </u>													Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	tratum cover. "Kaw Score is from Table B1a (Appendix B); ³ %SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	
ect[1]		number (struction e compo	ly Stratur		>	2	<u>+</u>				ĺ		1	 							(20 feet	A area cc e sum of	£13
Pond Reservoir Tr	- - - - - -	enter the I special ins is the same	Short Woody Stratum 2	Species 3	Selteri	U.Tow															hrubs ≤6m	ge of the S. Score is the	csheet. Damo 7 of 17
Pond Re		vith CT A, inotes for CT if it ha	S	ш Z	2																ees and si	percentag	hary Wor
Two Mile	E	Starting w . See foot the same		Species 2	Bex							} 				+ 					over; 2. Tre	SA is the _I he Final W	ank Sumn
SA Name :	npositi	nments. Polygor igned to	tratum ¹		20					<u>}</u>				- 			 				tratum co	ix B);	the SA R
SAI	31 - Relative Native Plant Community Composition	gon Assign pears in the is either ass	Tall Woody Stratum ¹	Species 1 E						İ		 					 				25% total s	la (Append aw Score * 9	or Relative Native Plant Community Composition on the SA Rank Summary Worksheet.
	Commu	and Poly h that ap polygon i	<u> </u>	<u>s</u>					 				 		1	<u> </u>					t) and >	of the R	ity Com
Ĵ,	Plant (Species h stratun nt. Each _j							 					 	 						n (20 fe∈	re is tron	Commur
SF2MIC Ly]	Native	.I Plant es in eac abunda		os.																	ubs > 6 r	Kaw SCO Sre is the	ve Plant
SA COF	lative	ieet b. C nt specia is more		Polygon Nos.																	and shr	cover.	ive Nativ
SA	31 - Re	worksh dominal which it		CT Pol	A S	B 4	U		ш		U	т			×		W	z	0		. Trees	gual 1;	or Relat

SA Name : Two Mile Pond Reservoir Transect [\mathcal{Y}]

Ţ	Table B1. Relative Native Plant Community Composition Rating									
R	ating	CT Final Weighted Score								
	4	≥ 3.75	<10% non-native							
Ĉ	3	≥ 3.25 and <3.75	10% ≤20% non-native							
Ĉ	2	> 2.0 and <3.25	20% ≤50% non-native							
C	1	≤2.0	>50% non-native							

32 - Vegetation Horizontal Patch Structure

Norksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch pattern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

Horizontal Patch Structure pattern A,B,C, or D:

	Table B2. Rating for Vegetation Horizontal Patch Structure								
Ra	ating	Description							
с С	4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.							
71	3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.							
C	2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.							
C	1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.							

B3 - Vegetation Vertical Structure

Worksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA from Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with same VST) x 100. Enter the total %SA for each VST below.

	VST 1	VST 2	VST 5	VST 6S	VST 6W	VST 6H	VST 7
	High Structure	Low Structure	Tall Shrubland	Short	Herbaceous	Herbaceous	Sparse
	Forest	Forest		Shrubland	Wetland	Vegetation	Vegetation
Total % of SA			58		56		

Table B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the row that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. Percentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for the rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the table down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the rating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
C 4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
i 3	2 or 1 and 2	5	
°7 3 —	2 or 1 and 2	6W	
· • • • • • • • • • • • • • • • • • • •	5	6W	
	2 or 1 and 2		
C 2	5		
	6W		
-	65		
	6H		
	7		

SF2MI [} SA CODE :

Date : 6/11/24

Surveyor Initials : DS/AM

Two Mile Pond Reservoir Transect [SA Name :

B4 - Native Riparian Tree Regeneration

1 Wor		ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.				
R	lating	Description				
C	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.				
$\overline{\mathbf{C}}$	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few.				
¢	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.				
ſ	1	Native poles, saplings, and/or seedlings absent (0% cover).				

1

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover						
Rating	Invasive Species Cover %					
C 4	0%					
E 3X	>0% - <1%					
2	≥1% - <10%					
C 1	≥10					

Additional CTs and Biotic Metric Comments:

Red wing block bird, bug life, and timed's are wrig prominent

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [

Surveyor Initials : DS/AM

Abiotic Metrics

1

A1 - Floodplain Hydrologic Connectivity

Method 1

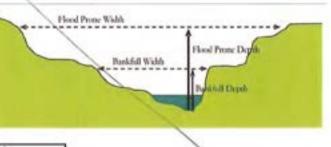
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps		Description	Cross-section:	1	2	3	
1: Bankfull width	This is a critical ste Measure the dista						
2: Maximum bankfull depth	Keeping the tape-level between the right and left bankfull contours, measure the height of the line above the thalweg (the deepest part of the channel). A pocket line level can help here.						
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.						
4: Flood-prone width	Using a tape, measure the length of a level line at a height equal to the flood prone depth from Step 3 to where it intercepts the right and left banks.						
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull width (Step 1).						
6: Calculate average ratio	Calculate the average for Step 5 for all three replicate cross-sections. Enter the average here and rate using Table A1a. Enter the rating in the A1 box on the SA Rank Summary Worksheet.						

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating		Description	1
0	4	Average entrenchment ratio is ≥ 2.2;	Ť
C	3	Average entrenchment ratio is ≥1.9 - <2.2	t
0	2	Average entrenchment ratio is ≥1.5 - <1.9/	
C	1	Average entrenchment ratio is < 1.5	



U	M	L	Indicator			
			Bankful is slightly below bank height/			
			Bankful is well below bank height and channel is incised			
			Channel widening due to bank failure			
			Constructed levees preclude floodplain inundation			
			Stream is straightened/channelized			
			nset floodplain formation			
			Decreased peak flows due to hydrologic modification			
			Bankfull indicators at point of incipient flooding of the floodplain			
			Indicators of overbank flow on floodplain			
			Floodplain inundation due to beaver activity			

Table A1b. Rating for Floodplain Hydrologic Connectivity in single-channel step-pool systems				
Rating		Description		
C	4	Average entrenchment ratio is ≥ 1.9		
0	3	Average entrenchment ratio is ≥1.4 - <1.9		
0	2	Average entrenchment ratio is ≥1.2 - <1.4		
C	1	Average entrenchment ratio is < 1.2		

SA Name : Two Mile Pond Reservoir Transect [

1

Date: 6/11/24

Surveyor Initials : DS/AM

Method 2

Je A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

]

R	ating	• \	Description
ſ	4	over-bankfull flows likely signs of overbank sedime	tural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows end deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude full indicators and the active floodplain width.
C	3	connected streams descr	olain moderately limited by incision, channelization. Less frequent inundation than fully ibed above (as noted by bankfull indicators below floodplain transition). Floodplain supports a me understory plants may be upland. An inset floodplain supporting riparian vegetation may
	2	vegetation and sediment channelization, or flow m	nodified with an inset floodplain formed, which is regularly inundated and supports riparian regimes. Or the stream has minimal access to the natural floodplain due to incision, rodification, and the natural floodplain does not support riparian vegetation except for atophytes (e.g., cottonwood, salt cedar, etc.).
ſ	1	modification (i.e., abando	floodplain, either through incision, bank modification/channelization, or hydrologic inment of floodplain due to decreased peak flows). Indicators may include upland vegetation iment deposits on the floodplain, etc.

1 A1d. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags/indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1			/			
2			/			
3		/	i			

Floodplain Hydrologic Connectivity Comments:

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect []

Surveyor Initials : DS/AM

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
	\square		Active side channels
			Abandoned channels
			Backwater/eddy
			Riffles or rapids
	X		Shoals, sparely-vegetated bars
	X		Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
	\square		Terraces
			Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Tabl	Table A2. Rating for Physical Patch Complexity						
Rating		Description					
ſ	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).					
à	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).					
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).					
ſ	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.					

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
				The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
				Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
\$		Ŋ		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ŋ		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ŀ		Channel and point-bars consist of well-sorted bed material.
		Ð		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
{		6		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Surveyor Initials : DS/AM

ect []

SA Name : Two Mile Pond Reservoir Transect [

Surveyor Initials : DS/AM

	Table A3. Rating for Channel Equilibrium							
Rating		Description						
¢.	4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.						
C	3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.						
C	2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.						
Ĉ	1	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.						

]

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	⋈₄	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank	□3	□3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Soil Stability	<u></u> 2	2	2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	<u>1</u>	[]1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	<u></u> 3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	2	2	. 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	<u> </u>	<u></u> 1	<u> </u>	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Rating	Description			
9X 4	>3.5 - 4.0			
C 3	>2.5 - ≤3.5			
C 2	>1.5 - ≤2.5			
	1.0 - ≤1.5			

SA Name: Two Mile Pond Reservoir Transect [

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

Forksheet 14. Soli Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

]

Upper Segment Middle Segment		Lower Segment	Field Indicators (Check all existing conditions)				
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).				
└────────────────────────────────────	A A		Multiple livestock and other (fishing, hiking) trails,				
			Vehicle tracks including off-road and construction, etc.				
			Impervious compacted surfaces or pavement				
├			Grading or plowing				
	<u> </u>		Fill				
			Gravel pits				
			Anthropogenic levees and berms				
⊢ <u> </u>			Irrigation-driven salinity and mineral crusts				
<u> </u>	<u> </u>		Fire pits				
	<u>├</u>	├ <u>⊢</u>	Other				
· · · · · · · · · · · · · · · · · · ·			Estimate % soil disturbance by segment area				

Average % Soil Disturbance:

~ >	£	
	ŧ.	

Table A5. Soil Surface Condition Rating Description Rating Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic 4 degradation to the soil surface is less than 1% of the SA. Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other 3 anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area. Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, 2 C or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA. Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total 1 disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

SA Name : Two Mile Pond Reservoir Transect (1

DS/AM **Surveyor Initials:**

Worksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign categories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unkno". ". Rank Major Stressors in Dominant Stressor column(Pick up to 3)

Rank	Affect					
	Major	Minor	Absent	Unknown	Stressor Group/Stressor	Comments
	I	т	<u> </u>	·	Adverse water management	······································
					Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	n
	·	r	r	· · · · · · · · · · · · · · · · · · ·	Adverse sediment management	
					Adverse sediment retention by dams	
					Sediment loss by dredging	
					Adverse sediment input (roads/development)	
					Artificial water additions	· · · · · · · · · · · · · · · · · · ·
					Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
					Ground water pumping	·
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
		<u> </u>			Watershed alteration	
					Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
				Local biodiversity impacts	· · · · · · · · · · · · · · · · · · ·	
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0	·	0 0	Counts by Intensity	

dditional Comments

ersion Date: 04/25/2022

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cove	r Worksheet		··	· · · · · · · · · · · · · · · · · · ·			
SA Code SF2MI [🕽	5] SA Name : Two	Mile Pond Reservoir		Project : Ri	oarian Asse	sement 449/14			
n de Tsct [5] AU Name : Tran	(S)	·		Mile Pond F				
County Santa Fe	HUC 12 Heads	waters Santa Fe River	Elevation (ft) 729	19 (m) 2224.7	4.7 Ecoregion 6.0 NWFM				
A riparian syster decommissione of water rights. Driving Directions	and Boundary (Rationale, m that leads into a pond lo d due to safety concerns r	ocated on the east side or regarding the reservoir a	and a water divers	ring the Santa Fe Na ion to the area was	itional Fores	st. This reservoir was ut down due to lack			
Canyon Road ur	a Fe from Albuquerque yo ntil you reach the reservoir	u head north on Old Per r located to the North.	cos Trail. Then hea	id east on Camino [oel Monte S	ol and right on			
Ownership The Natu	are Conservative and The S	Santa Fe National Forest	Data Sharing Restrictions	Results to client only.	Fish Obse Wetlar	ſ			
Surveyor Role		Survey	or Name			Surveyor Initials			
Landscape	Dustin		·			DS			
Biotic	Annie +1)ustik		.		Dis			
Abiotic	Pastin					DS			
Stressors	Both					$D \leq$			
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft)			
-105° 53' 24" W	35° 41° 23" N	13	NAD- 83 UT	M 35.68972	2	-105.89			
Survey Date	4/9/24	Start Time		End 1	ĩime	·			
		SA Des	cription	M		· · · · · · · · · · · · · · · · · · ·			
SA Landscape Cont	text (summarize the wetla	nd and surrounding lan	dscape; include o	ondition and impac	ts)				
	-								
:	ry Very Winter. Au	in leaks 1.	kr it	(//)	lural on	what possible			
			<u> </u>						
	vegetation patterns, con								
	Biotic	,	•	/					
^^	enden grassi	et ist it.	are popp	a Sanga Cayan Ing Tanan	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	Mar & Staling 2			
5A Abiotic Conditio	n (hydrological alteration er site impacts; explain the	s (e.g., dams, walls etc.];	flooding characte	eristics and evidence	e of overba	nk flooding; soil			
	. 1			/		~			
of large cobbles which make II hard to maintering									
	Invge	5366103 h	hich m	4 kc - 1.1	hard :	to major to			
Assessment Summa	ary (Overall site condition	summary and commen	ts after the field d	ata is collected.)					
	Land is	out of	the w	ray and	Seco	with primed			
	to recevir	From Wi	ater,	/	·	Į.			
rovisional ield Score <u>3,5</u> Ra	nk /} Surveyor(s)	Final	S.S. Rank A	Initials DS		Date 4/9/24			
	<u></u>		<u></u> <u>_/</u>	<u> </u>	<u> </u>				

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials: D5

NMRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5			
Metric Description	Rating	Wt	Final Score
Landscape Context		Σ 1.0	3.25
L1. Buffer Integrity Index	3	0.25	0.75
L2. Riparian Corridor Connectivity	4	0.25	1.0
L3. Relative Wetland Size	4	0.25	1.0
L4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
B1. Relative Native Plant Community Composition	4	0.2	
82. Vegetation Horizontal Patch Structure	3	0.2	
83. Vegetation Vertical Structure	3	0.2	
B4. Native Riparian Tree Regeneration	4	0.2	
85. Invasive Exotic Plant Species Cover	3	0.2	
Abiotic		Σ	
A1. Floodplain Hydrologic Connectivity		0.3	
A2. Physical Patch Diversity	3	0.2	
A3. Channel Equilibrium	4	0.2	
A4. Stream Bank Stability and Cover	ý	0.2	1
A5. Soil Surface Condition	ý	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	3.1	0.35	
Abiotic	3,8	0.35	
SA WETLAN	D CONDITIO	N SCORE 2	
SA WETLAN	3.5		

Rank	Score	Description
A	≥3.25 - 4,0	Excellent Condition
в	≥2.5 - <3.25	Good Condition
с	≥1.75-<2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1	Water Maragement
			2	
			3	

Stressor Comments (Evaluation of risk) Not Many stressors along this transect,

Page 2 of 17

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [\int]

Surveyor Initials :

Landscape Context

L1 - Buffer Integrity Index

or are	exclude ar of im	d and consid	d RCC Checklist. C dered non-buffer e	heck off lements	land cove that disru	r elemen pt ecosys	ts withi stem co	n the buffer nnectivity. I	r area or RCC o indicate the in	orridors that are either allowed, hagery type and date (season	
lmage	í L	Google Earth			_	Image	e Date	6/23			
	Allowed buffer/RCC land cover elements							-buffer/RCC	land cover el	ements	
Buffer	RCC					Buffer	RCC				
×	X	Natural or se	emi-natural vegeta	tion pate	hes	X	X			levelopments, parking lots, ts, and other structures	
	N	mall irrigati	ion ditches withou	t levees						s, sports fields	
			nmaintained					Railroads			
		Open range						Maintained	l levees, sedim taging areas	ent piles, construction	
	I IXI	oot trails, h ntensity)	orse trails, unpaved	i bike tra	ils (low		[horse paddocks, feedlots	
X	X	lon-channel	l open water						griculture: mai prchards, and	ntained pastures, hay fields, vineyards	
×	1411		ning abandoned ve surring levees	egetated	levees, or	X		Paved road graded road		d second-order unpaved but	
	u	unpaved two tracks roads X						Open water structure	pen water bounded by a levee or other manmade acture		
		Dther						Other			
Worksheet 1b. Buffer Percent Sub-metric. Measure or estimate the percentage of the SA perimeter composed of allowed buffer elements and enter into the Buffer Percent							e of the	Ta	ble L1a. Buffer Percent		
Box bel	ow. Rate	e the sub-m	etric using Table 11	a and er	ter the rat	ing on th	ne Buffe	r	Rating	Buffer Percent	
integrit	y Sumn	hary Worksh							<u>(</u> 4	100%	
			Buffer Percen	t (%)=	85%				(X 3	≥80% - <100%	
Norksh	eet 1c.	Buffer Widt	h Sub-metric. Mea	sure the	length of	each buf	fer line	in meters ir		≥50% - <80%	
he GIS o	or on the	e map. Avera	age the line length y Worksheet 1d.	s and rat	e using Tal	ole L1b. E	Enter th	e rating on	<u>C 1</u>	<50%	
Line	Buff	er Width	Buffer Width	Line	Buffer	Width	But	ffer Width	Та	ble L1b. Buffer Width	
		(m)	(ft)		(n	·		(ft)	Rating	Average buffer width	
A	164	1.26	538.91	E	161.5	93	5	i31.26	<u>C</u> 4	≥190m	
В	12	5.25	410.92	F	231.	48	7	59.44	(X 3	≥130 - <190m	
с	11	5.39	378.57	G	121.	25	3	97.80	<u>C</u> 2	≥65 - <130m	
D	11	1.07	364.40	н	155.	87	5	1.38		<65m	
	Average 148.31 (m) 486.58						(ft) Table L1c. Summary Rating for Buff			Summary Rating for Buffer Integrity	
Worksh and 11b	eet 1d.	Buffer Inte	grity Summary. Ei the Buffer Integrity	nter the : Index S	sub-metric	Ratings	from Ta	bles L1a	Rating	Score	
below. (Jsing th	e Buffer Inte	grity Index Score, (enter rati	ing for Buf	fer Integi	rity in Ta	able L1c	<u>C 4</u>	>3.5	
201	the SA S	ummary Wo	orksheet.	·					R 3	>2.5 - ≤3.5	
Buffer %	% Ratin	g + Bu	ffer Width Rating	/2 =	Buff	er integr	ity Ind	ex Score	C 2	>1.5 - ≤2.5	
3		+	3	/2 =		3			C 1	≤1.5	

SA Name : Two Mile Pond Reservoir Transect [5]

Date: 4/9/24

Surveyor Initials :

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segment			
Banks	Left Bank	Right Bank	Left Bank	Right Bank		
A) Total Bank Disruption (m)	0 0		0 0			
B) Total Disruption by Segment (m)	0			0		
C) % Segment Disruption = (B/1000)*100	0		0			
D) Total Disruption both segments	0					
E) % Total Disruptions = (D/2000)*100	Zero disi	uption notice	eable along t	the banks.		

Table L2. RCC Rating						
Rating	Description					
(x 4	0% total disruption on both segments combined.					
с з	<15% total disruption on both segments combined.					
C 2	≥15% - <40% total disruption on both segments combined.					
C 1	≥40% total disruption on both segments combined.					

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshr

RSR				2	(2)		R	NSI	·		
Current Size	1	Historic Size	=	RSR	1	-	RSR	х	100	=	RWSI (%)
9	1	10	=	0.9	1	-	0.1	x	100	=	10

Table L3. Relative Wetland Size Rating							
Rating	RWSI Score	Description					
(* 4	≤10%	Wetland is at or only minimally reduced from its full natural extent					
C3	>10%-≤40%	Wetland remains equal to or more than 60% of its natual size					
C 2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size					
C1	>70%	Wetland has been reduced by more than 70% its natural size					

Date: 4/11/24

SA Name: Two Mile Pond Reservoir Transect [5]

Surveyor Initials :

DS

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	%LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0,1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
riculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0,9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Suri	rounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
	≥80 - <95
x 2	≥40 - <80
	<40

	5		
2			
	4		
	ĥ		
	•	•	
		1	
Ì		5	;
		1	
	e	ļ	ĺ



Surveyor Initials :

Biotic Metrics

number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant Species Cover (B5) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique the Tables in Appendix B and the Field Guide for metric instructions. Enter the species codes for the invasive exotic species found in the polygon (from NM Noxious Weed List -

1 IA1 IA1 2 IA2 3 IIA1 4 IIIB1 6 MEI 8 MEI 9 MF1 9			(List Code(s))	Comments
	408	Hullein	Mullici some Muchard	They also down to cat tails stabled w
8 5				
6				
10				
11				
12				
13				
14				
15				
16				
17				
18				
19				
20				

SA Name : Two Mile Pond Reservoir Transect [\sum]

SA CODF · SF2Mt [5]

Date: $4/9/_2$ % Surveyor Initials:

Date: 4/19/20

SA Name : Two Mile Pond Reservoir Transect [🥠]

Surveyor Initials :

Table B1. Relative Native Plant Community Composition Rating Rating **CT Final Weighted Score** 4 ≥ 3.75 <10% non-native 3 ≥ 3.25 and <3.75 10% ≤20% non-native 2 > 2.0 and <3.25 20% ≤50% non-native 1 ≤2.0 >50% non-native

2 - Vegetation Horizontal Patch Structure

Vorksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

B

lorizontal Patch Structure pattern A,B,C, or D:

- · · .	Table R2 Pating for Vorstaling University 12 - 1
Rating	Table B2. Rating for Vegetation Horizontal Patch Structure
	Description
4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
` 1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

3 - Vegetation Vertical Structure

Vorksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ame VST) x 100. Enter the total %SA for each VST below.

<u> </u>	VST 1 High Structure Forest	VST 2 Low Structure Forest	VST 5 Tall Shrubland	VST 6S Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
Total % of SA			80%		20%		

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for he rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
4	1	6W	
í	2 or 1 and 2	5	6W and/or 6H
	1		
3	2 or 1 and 2	5	
	2 or 1 and 2	6W	
	5	6W	
	2 or 1 and 2		·····
2	5		
	6W		
	65		
1	6H		
	7		

Date: 4/9/200

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : 10%

B4 - Native Riparian Tree Regeneration

Rating Description					
X	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.			
\overline{c}	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.			
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.			
\overline{C}	1	Native poles, saplings, and/or seedlings absent (0% cover).			

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

<16

Invasive cover (%)

calculate

<12

Table B5. Ratings for Invasive Exotic Plant Species Cover						
Rating Invasive Species Cover %						
<u> </u>	4	0%				
<u>^</u>	3 X	>0% - <1%				
۱	2	≥1% - <10%				
\overline{c}	1	≥10				

Additional CTs and Biotic Metric Comments:

Still dry but some grosses coming back Ryc, Mensen, Ruch grasses coming back Farming Vellow

SA CODE: SF2MI [(]

SA Name : Two Mile Pond Reservoir Transect [$\frac{6}{2}$]

Date: 4/9/74

Surveyor Initials : ()

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)		
	<u>ل</u> ک		Active side channels		
			Abandoned channels		
			Backwater/eddy		
			Riffles or rapids		
			Shoals, sparely-vegetated bars		
			Channel boulders		
			Oxbow lakes/ponds on floodplains		
	<u> </u>		Vegetated island and side bars		
	Ý		Terraces		
	<u> </u>		Channel pools		
			Beaver ponds		
			Swales, depressional features on floodplains		
			Debris jams in channel		
			Woody wrack piles on the floodplain		
			Floodplain micro-topography (mounds, pits)		
			Downed logs		
			Natural levees		
			Standing snags		
			Variegated, convoluted, or crenulated foreshore		
			Undercut banks in channels		
		· · · ·	No. of unique Patch Types		

Rati	ing	Description							
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).							
Ķ	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).							
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).							
ſ	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.							

Date: 4/9/24

SA Name: Two Mile Pond Reservoir Transect [5]

Surveyor Initials :

DS

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		۶¢		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		<u>ل</u> کل		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		M		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		, Х		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		<u>ل</u> کر		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
· · · · · · · · ·				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avuision channels on the floodplain or adjacent valley floor.

Date: 1/9/:4

1:1

SA Name : Two Mile Pond Reservoir Transect [$|\mathcal{T}_{j}|$]

Surveyor Initials :

Table A3. Rating for Channel Equilibrium Rating Description Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or Ø, 4 degradation based on the field indicators listed in Worksheet 12. There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an 3 equilibrium condition. Circle primary process: aggradation or degradation. There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary 2 process: aggradation or degradation. The channel is artificially hardened, channelized, or is concrete throughout most of the SA. 1

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	[]4	<u></u> 4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank Soil Stability	□3	□3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Jon Stability	2	<u> </u>	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	<u> </u>	[]]	[]1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	□4) [4]	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	[]3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u> </u>	<u></u> 2	<u> </u>	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	[]]1	[]]1		Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Table A4. Stream Bank Stability and Cover Rating					
Rating	Description				
X 4	>3.5 - 4.0				
	>2.5 ~ ≤3.5	-			
C 2	>1.5 - ≤2.5				
	1.0 - ≤1.5				

Date: 4/9/24

SA Name: Two Mile Pond Reservoir Transect [5]

Surveyor initials :

05

A5 - Soil Surface Condition

-- orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)		
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).		
	X		Multiple livestock and other (fishing,hiking) trails,		
			Vehicle tracks including off-road and construction, etc.		
			Impervious compacted surfaces or pavement		
			Grading or plowing		
			Fill		
			Gravel pits		
			Anthropogenic levees and berms		
			Irrigation-driven salinity and mineral crusts		
			Fire pits		
			Other		
			Estimate % soil disturbance by segment area		

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating					
Rating	Description					
¢, 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

Date :	410912	17
--------	--------	----

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials :

forksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign ategories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknov ank Major Stressors in Dominant Stressor column(Pick up to 3)

lank		Affect				
	Major	Minor	Absent	Unknown	Stressor Group/Stressor	Comments
	· · ·				Adverse water management	
	<u>(</u> 2				Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
				Γ	Agriculture/Urban flow diversion upstream	
					Adverse sediment management	
				<u> </u>	Adverse sediment retention by dams	
				·.	Sediment loss by dredging	
					Adverse sediment input (roads/development)	
					Artificial water additions	
					Sewer treatment effluent	
_					Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
					Ground water pumping	
					Urban depletions	
					Fracking	
				<u> </u>	Agriculture irrigation wells	
					Watershed alteration	
				<u> </u>	Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
					Local biodiversity impacts	· · · · · · · · · · · · · · · · · · ·
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	

ditional Comments

sion Date: 04/25/2022

Schema: Montane 2.5

		SA Cove	er Worksheet	and the set		and the second second
A Code SF2MI [5] SA Name : Two I	Mile Pond Reservoir		Project : Rip	arian Asse	sement
Jude Tsct [5]	AU Name : Tran	sect [5]		WOI : Two M	Mile Pond F	Reservoir
ounty Santa Fe	HUC 12 Heady	vaters Santa Fe River	Elevation (ft) 7299	(m) 2224.7	Eco	region 6.0 NWFM
A riparian system decommissioned of water rights. riving Directions Driving to Santa	nd Boundary (Rationale, that leads into a pond lo due to safety concerns n Fe from Albuquerque you il you reach the reservoir	cated on the east side egarding the reservoir head north on Old Pe	and a water diversion	to the area was r	ecently shi	ut down due to lack
wnership The Natur	e Conservative and The S	anta Fe National Fore		sults to client ly.	Fish Obse Wetlar	
Surveyor Role		Surve	yor Name		-	Surveyor Initials
Landscape	Dustih					DS.
Biotic		histin				DS
Abiotic	Dustin					DS
Stressors	Bath					DS
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft
105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTM	35.689722	2	-105.89
Survey Date	5/15/24	Start Time		End Ti	ime	
)		SA De	scription			
A Landscape Conte	xt (summarize the wetlar	nd and surrounding la	ndscape; include con	dition and impact	s)	
	rand sH11 pranches of vegetation patterns, corr	willow .	coming in			
	sillows coning					
Grea of Abiotic Condition	(hydrological alterations site impacts; explain the 。) <i>に、lling i</i> れ	hydrologic breaks or	other factors that defi	tics and evidence ne the SA limits)	of overbar	nk flooding; soil

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : 05

NMRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5			
Metric Description	Rating	Wt	Final Score
Landscape Context		Σ 1.0	3.25
L1. Buffer Integrity Index	3	0.25	0.75
L2. Riparian Corridor Connectivity	4	0.25	1.0
L3. Relative Wetland Size	4	0.25	1.0
L4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
B1. Relative Native Plant Community Composition	2	0.2	
82. Vegetation Horizontal Patch Structure	3	0.2	
B3. Vegetation Vertical Structure	3	0.2	
B4. Native Riparian Tree Regeneration	2	0.2	
B5. Invasive Exotic Plant Species Cover	3	0.2	
Abiotic		Σ	
A1. Floodplain Hydrologic Connectivity		0.3	
A2. Physical Patch Diversity	3	0.2	
A3. Channel Equilibrium	4	0.2	
A4. Stream Bank Stability and Cover	4	0.2	
A5. Soil Surface Condition	4	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	2.6	0.35	
Abiotic	3.8	0.35	
SA WETLAN	D CONDITIO	N SCORE E	
SA WETLAN	D RANK =		3.7

Rank	Score	Description
А	≥3.25 - 4.0	Excellent Condition
в	≥2.5 - <3.25	Good Condition
С	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1	Seems like soil draight
			2	Deesn't get enouch Hil
			3	

Stressor Comments (Evaluation of risk)

Date: 5/15/24	/
---------------	---

SA Name :	Two Mile Pond Reservoir Transect [4
	the mile condition of the meser of	1

Surveyor Initials : DS

51 Landscape Context

L. - Buffer Integrity Index

	ا- مم أم م			iano cover	elemen	ts with	in the buffe	er area or RCC c	orridors that are either allowe		
e cheidia	ca ana com	sidered non-buffer	elements	that disrup	t ecosy:	stem co	nnectivity.	Indicate the im	orridors that are either allowe agery type and date (season		
		th KMZ. file			Image	Date	6/23				
	er/RCC land	i cover elements			J (Exclud	ied nor	L 1-buffer/RC	C land cover el	ements		
r RCC							1				
X	Natural or s	semi-natural veget	ation patci	hes –	X				evelopments, parking lots, s, and other structures		
<u> </u>			ut levees				·	ks, golf courses, sports fields			
	Old fields, u	inmaintained					Railroads				
		_							ent piles, construction		
		horse trails, unpave	ed bike trai	ls (low			Intensive i	ivestock areas, I	norse paddocks, feedlots		
X	Non-channe	el open water					Intensive a row crops,	griculture: mail orchards, and v	ntained pastures, hay fields, ineyards		
X	Non-functic naturally oc	oning abandoned v curring levees	egetated I	evees, or	X		Paved road	s or developed second-order unpaved b			
	unpaved tw	o tracks roads			×		Open wate structure	bounded by a levee or other manmade			
	Other						Other 🗌				
heet 1k	. Buffer Pe	rcent Sub-metric.	Measure o	r estimate t	the perc	entage	of the	Tab	le L1a. Buffer Percent		
low. Kat	the sub-m	tetric using Table L	12 and ont	a entret unfo	лие ви	Her Per	cent i				
tv sume		hoot 1d	ta and ent	er the ratin	g on th	e Buffe	r	Rating	Buffer Percent		
ty Sumr	nary worksr	eet 1d.			g on th	e Buffei	r	<u>C 4</u>	Buffer Percent		
		Buffer Percer	nt (%)=	85%	g on th	e Buffer	r	C 4 (X 3	100% ≥80% - <100%		
ieet 1c.	Buffer Widt	Buffer Percer	nt (%)=	85%	g on th	e Buffer		$\begin{array}{c} \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline $	100% ≥80% - <100% ≥50% - <80%		
ieet 1c. or on th	Buffer Widt e map. Aver	Buffer Percer	nt (%)=	85%	g on th	e Buffer		$\begin{array}{c} \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline $	100% ≥80% - <100%		
eet 1c. or on th er Integ	Buffer Widt e map. Aver	Buffer Percer Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width	nt (%)=	85% ength of ea using Table Buffer W	g on th 	e Buffer er line f nter the	n meters in e rating on fer Width	$ \begin{array}{c} \hline 4\\ \hline (x 3\\ \hline 2\\ \hline 1\\ \hline \\ Tab \end{array} $	100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width		
eet 1c. or on th er Integ Buff	Buffer Widt e map. Aver rity Summa er Width	Buffer Percer Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d.	it (%)= asure the l is and rate	85% ength of ea using Table Buffer W (m)	g on th ach buff a L1b, E Yidth	e Buffer er line f nter the Buf f	n meters in e rating on fer Width (ft)	C 4 (ℜ 3 C 2 C 1 Tab Rating	100% ≥80% - <100%		
eet 1c. or on th er Integ Buff 16	Buffer Widt e map, Aver rity Summa er Width (m) 4.26	Buffer Percer Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	asure the l asure the l is and rate	85% ength of ea using Table Buffer W (m) 161,93	g on th ach buff e L1b, E l idth	e Buffer er line f nter the Buf f	r In meters in e rating on fer Width (ft) 31.26	$ \begin{array}{c} \hline 4 \\ \hline (x 3 \\ \hline 2 \\ \hline 1 \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline$	100% ≥80% - <100%		
eet 1c. or on th er Integ Buff 16- 12	Buffer Widt e map. Aver rity Summa er Width (m) 4.26 5.25	Buffer Percer Buffer Percer In Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	asure the l asure the l as and rate Line E F	85% ength of ea using Table Buffer W (m) 161.93 231.48	g on th ach buff a L1b, E l idth	e Buffer er line f nter the Buff 5: 75	r in meters in e rating on fer Width (ft) 31.26 59.44	$\begin{array}{c} \hline 4 \\ \hline (x & 3 \\ \hline \hline 2 \\ \hline \hline 1 \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline$	100% ≥80% - <100%		
eet 1c. or on th er Integ 16 12 11	Buffer Widt e map. Aver rity Summa er Width (m) 4.26 5.25 5.39	Buffer Percer Buffer Percer th Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	asure the l asure the l is and rate	85% ength of ea using Table Buffer W (m) 161.93 231.48 121.25	g on th ach buff e L1b. E l idth	e Buffer er line f nter the Buff 5: 75	r In meters in e rating on fer Width (ft) 31.26	$ \begin{array}{c} \hline 4 \\ \hline (x 3 \\ \hline 2 \\ \hline 1 \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline$	100% ≥80% - <100%		
eet 1c. or on th er Integ 16 12 11	Buffer Widt e map. Aver rity Summa er Width (m) 4.26 5.25	Buffer Percer Buffer Percer In Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	asure the l asure the l as and rate Line E F	85% ength of ea using Table Buffer W (m) 161.93 231.48	g on th ach buff e L1b. E l idth	e Buffer er line f nter the 5: 75 39	r in meters in e rating on fer Width (ft) 31.26 59.44	$ \begin{array}{c} \hline 4\\ \hline (x \ 3\\ \hline 1 \ \hline 2\\ \hline 1 \ \hline 1\\ \hline \\	100% ≥80% - <100%		
eet 1c. or on th er Integ Buff 16 12 11 11 Averag	Buffer Widt e map. Aver rity Summa er Width (m) 4.26 5.25 5.39 1.07 ge	Buffer Percer Buffer Percer In Sub-metric. Me age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	asure the l asure the l as and rate Line E F G H	85% ength of ea using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58	g on th ach buff e L1b, E f idth	e Buffer Fer line f nter the Buf f 5: 75 39 51 (ft)	r in meters in e rating on fer Width (ft) 31.26 59.44 97.80 1.38	$ \begin{array}{c} \hline 4\\ \hline (x \ 3\\ \hline 1\\ \hline 2\\ \hline 1\\	100% ≥80% - <100%		
eet 1c. or on th er Integ 16 12 11 Averag	Buffer Widt e map, Aver rity Summa er Width (m) 4.26 5.25 5.39 1.07 ge Buffer Inte to calculate	Buffer Percer Buffer Percer Buffer Percer Buffer Vidth length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) Sgrity Summary. E the Buffer Integrity	t (%)= asure the l as and rate Line E F G H H	85% ength of ea using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 b-metric Rates to the second se	g on th ach buff e L1b. E lidth	e Buffer Fer line f Inter the Buff 5: 75 39 51 (ft)	r In meters in e rating on fer Width (ft) 31.26 59.44 97.80 1.38 1.38	$ \begin{array}{c} \hline 4\\ \hline (x \ 3\\ \hline 1\\ \hline 2\\ \hline 1\\	100% ≥80% - <100%		
eet 1c. or on th er Integ Buff 16 12 11 11 Averag eet 1d. above Jsing th	Buffer Widt e map. Aver rity Summa: er Width (m) 4.26 5.25 5.39 1.07 ge Buffer Inte to calculate e Buffer Inte	Buffer Percer Buffer Percer Buffer Percer Buffer Vidth length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) Sgrity Summary. E the Buffer Integrity egrity Index Score, 4	t (%)= asure the l as and rate Line E F G H H	85% ength of ea using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 b-metric Rates to the second se	g on th ach buff e L1b. E lidth	e Buffer Fer line f Inter the Buff 5: 75 39 51 (ft)	r In meters in e rating on fer Width (ft) 31.26 59.44 97.80 1.38 1.38	$ \begin{array}{c} \hline 4\\ \hline (\overline{x} 3\\ \hline 2\\ \hline 1\\ \hline 1\\ \hline 2\\ \hline 1\\	100% ≥80% - <100%		
eet 1c. or on th er Integ Buff 16 12 11 11 Averag beet 1d. above Jsing th the SA S	Buffer Widt e map. Aver rity Summa: er Width (m) 4.26 5.25 5.39 1.07 ge Buffer Inte to calculate e Buffer Inte summary Wo	Buffer Percer Buffer Percer Buffer Percer Buffer Vidth length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) Sgrity Summary. E the Buffer Integrity egrity Index Score, 4	t (%)= asure the l as and rate Line E F G H H	85% ength of ea using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 b-metric Rates to the second se	g on th ach buff e L1b. E lidth	e Buffer Fer line f Inter the Buff 5: 75 39 51 (ft)	r In meters in e rating on fer Width (ft) 31.26 59.44 97.80 1.38 1.38	$ \begin{array}{c} \hline & 4 \\ \hline (\overline{\chi} & 3 \\ \hline \hline & 2 \\ \hline \hline & 1 \\ \hline \hline Table \\ \hline \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\ \hline \\$	100% ≥80% - <100%		
eet 1c. or on th er Integ Buff 16 12 11 11 Averag eet 1d. above Jsing th	Buffer Widt e map. Aver rity Summa er Width (m) 4.26 5.25 5.39 1.07 ge Buffer Inte to calculate e Buffer Inte summary Wo	Buffer Percer Buffer Percer Buffer Percer Buffer Vidth length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) Sgrity Summary. E the Buffer Integrity egrity Index Score, 4	asure the l asure the l as and rate Line E F G H H	85% ength of ea using Table Buffer W (m) 161.93 231.48 121.25 155.87 486.58 b-metric Ra ore using th g for Buffer	g on th ach buff e L1b, E fidth atings f e formu Integri	e Buffer er line i nter the Buff 5: 75 39 51 (ft) rom Tak Ja in th ty in Tal	r In meters in e rating on fer Width (ft) 31.26 59.44 97.80 1.38 1.38	$ \begin{array}{c} \hline 4\\ \hline (x \ 3\\ \hline 2\\ \hline 1\\ \hline 1\\ \hline 1\\ \hline 1\\ \hline 2\\ \hline 1\\	100% ≥80% - <100%		
	ery ved buff rRCC X	ery Google Ear ved buffer/RCC lance r RCC X Natural or s Small irriga Old fields, u Old fields, u Open range X Foot trails, l intensity) X Non-channe X Non-channe Non-function naturally oc unpaved tw Other inter composed of Non-Rate the sub-rr	env Google Earth KMZ. file ved buffer/RCC land cover elements r RCC IX Natural or semi-natural vegetion IX Small irrigation ditches without IX Open range land IX Foot trails, horse trails, unpave intensity) IX Non-channel open water IX Non-functioning abandoned venaturally occurring levees IX unpaved two tracks roads IX Other	ery Google Earth KMZ. file ved buffer/RCC_land cover elements r RCC IX Natural or semi-natural vegetation patch IX Small irrigation ditches without levees IOId fields, unmaintained IOPen range land IX Foot trails, horse trails, unpaved bike trailintensity) IX Non-channel open water IX Non-functioning abandoned vegetated Inaturally occurring levees IX unpaved two tracks roads IX Other	ery Google Earth KMZ. file ved buffer/RCC land cover elements r RCC Image: Ima	ery Google Earth KMZ. file Image ved buffer/RCC land cover elements Exclude rRCC Buffer Image Image rRCC Buffer Image Image Image Image rRCC Buffer Image Image Image Image	ery Google Earth KMZ. file Image Date ved buffer/RCC land cover elements Excluded nor r RCC Buffer RCC X Natural or semi-natural vegetation patches X X Small irrigation ditches without levees Image Date Image Date Image Date X Natural or semi-natural vegetation patches X X Small irrigation ditches without levees Image Date Image Date Image Date Image Date Image Date Image Date Image Date X Natural or semi-natural vegetation patches Image Date Image Date Image Date Image Date Image Date Image Date Image Date X Small irrigation ditches without levees Image Date Image Date Image Date Image Date Image Date	ery Google Earth KMZ. file Image Date 6/23 ved buffer/RCC land cover elements Excluded non-buffer/RC r RCC Buffer RCC Image Date Commercial commercial dams, brick dams	ery Google Earth KMZ. file Image Date 6/23 red buffer/RCC land cover elements Excluded non-buffer/RCC land cover elements rRCC Buffer RCC X Natural or semi-natural vegetation patches X X Small irrigation ditches without levees Lawns, parks, golf courses Old fields, unmaintained Railroads Open range land Maintained levees, sedimi materials, staging areas X Foot trails, horse trails, unpaved bike trails (low intensity) Intensive iivestock areas, for works, or chards, and vegetated levees, or naturally occurring levees X Non-functioning abandoned vegetated levees, or naturally occurring levees X X Y Other Other Other		

3

SA Name : Two Mile Pond Reservoir Transect [5]

Date: 5/15/29

Surveyor Initials : 05

2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the cotal disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segmen		
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
B) Total Disruption by Segment (m)		0		0	
C) % Segment Disruption = (B/1000)*100		0	0		
D) Total Disruption both segments	0				
E) % Total Disruptions = (D/2000)*100	Zero disruption noticeable along the banks.				

T	able L2. RCC Rating
Rating	Description
Q 4	0% total disruption on both segments combined.
С 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
0 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Worksher

RSR					····		R	WSI			
Current Size	1	Historic Size	=	RSR	1	-	RSR	x	100	=	RW5I (%)
9	1	10	=	0,9	1		0,1	X	100	=	10

	Table L3. Relative Wetland Size Rating						
Rating RWSI Score Description							
(8.4	≤10%	Wetland is at or only minimally reduced from its full natural extent					
03	>10%-≤40%	Wetland remains equal to or more than 60% of its natual size					
C2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size					
01	>70%	Wetland has been reduced by more than 70% its natural size					

Date: 5/15/24

DS

SA Name : Two Mile Pond Reservoir Transect [S]

Surveyor Initials :

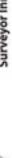
L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	Ö
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	Ö
priculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Sur	rounding Land Use Rating
Rating	LUI Score
<u> </u>	≥95 - 100
3	≥80 - <95
Ø 2	≥40 - <80
$\overline{\bigcirc 1}$	<40

_
_
~
· `
-
-
-
× .
~
ш.
-
\sim
-
~
0
~
•
_
~
-
16
ŝ



Surveyor Initials :

Biotic Metrics

Species Cover (BS) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use the Tables in Anneutice B and the Stand the Stand Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

-	Polygon 83 Vertical Structure No Type	Regeneration % Cover	B4 Tree B5 Invasive Regeneration Exotic % Cover Species % Cover	Invasive Exotic Species (List Code(s))	Comments
t	IA1				
7	IA2				
m	IIA1				
4	181	60%	NA	No Muller Staving	Willow trees until water line, they cat hells.
s	INCI				
9	INE				
~	INF1				
6					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

We investigated. The matched part of composition We investigated and Payson matching Composition and the new part of the state and Payson matching and part of the state and the first payon many worksets. There are appeared of the two to po- dominant vector in each station may provide the composition of the state and the special statem of the state	Relative Native Plant Community Comp rksheet 6. CT Plant Species and Polygon Assignm ninant species in each stratum that appears in the po ch it is more abundant. Each polygon is either assign Tall Woody Stra Polygon Nos. Species 1 E N	Osition nents. Starting with olygon. See footnot ned to the same CT ned to The same CT atum ¹ Species 2 E						······································		·····	
Indexect, C. Farth Species and Starting with C. A cetter free spine in the option free in benchands and and the polygon free the species of the two top unant species in the polygon is either assigned to the same C if it has the same compatibility of its species of mer species of the two top in the more abundant Each polygon is either assigned to the same C if it has the same compatibility of its species of its in the species of the moving polygon vos. Tail Woody Stratum is a species of the same C if it has the same compatibility of its species of its interval in the species of its in	rksheet 6. CT Plant Species and Polygon Assignm ninant species in each stratum that appears in the po ch it is more abundant. Each polygon is either assign Tall Woody Stra Polygon Nos. Species 1 E	ients. Starting with olygon. See footnot ned to the same CT atum ¹ Species 2 E				-					• •
Tail Woody Stratum ¹ Stort Woody Stratum ² Hethaceus/States Stratum ³ CT Score ⁴ Polygon Nos. Species 1 k Species 2 k Species 3 k Species 4 k	Polygon Nos. Species 1 E	atum ¹ Species 2 E	CT A, enter the es for special in: if it has the same	number of th structions. If e compositio	he first poly a species ap yn or a new	gon from W(opears in mo CT is created	orksheet 5 vre than or I for the n	. Enter the siller strata, ass	pecies co Ign the sı	des for the becies to th	wo top e stratum in
Polygon Nos. Species 1 R Species 3 N Species 4 R Species 4 R Species 5 N	Species 1		Short Wood	iy Stratum ²		Herbace	ous/Sparse	Stratum 3		T Score 4	
						Species 5	ш Z				
				N	 -	1		1 -		1	
							<u>}</u>			•	?
			-								
								-			
					. .	 					
Final Weighted Score 7					-						-
							Final	Weighted S	core7		N M

Page 7 of 17

Date: Surveyor Initials:

SA CODE : SF2MI [\supset]

SA CODE: SF2MI (5)

Date: 5/15/09

SA Name : Two Mile Pond Reservoir Transect (🀬]

Surveyor Initials :

Table B1. Relative Native Plant Community Composition Rating CT Final Weighted Score Rating <10% non-native 4 ≥ 3.75 10% ≤20% non-native 3 ≥ 3.25 and <3.75 20% ≤50% non-native 2 > 2.0 and < 3.25 ≤2.0 >50% non-native 1

- Vegetation Horizontal Patch Structure

orksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch ttern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

prizontal Patch Structure pattern A,B,C, or D:

	Table B2. Rating for Vegetation Horizontal Patch Structure
Rating	Description
4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
ξ 3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.
Vogo	Notical Structure

3 - Vegetation Vertical Structure

orksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ime VST) x 100. Enter the total %SA for each VST below.

	VST 1 High Structure Forest	VST 2 Low Structure Forest	VST 5 Tall Shrubland	VST 6S Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
Fotal % of SA			80			20	

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for ne rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the able down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
	2 or 1 and 2	5	
3	2 or 1 and 2	6W	
	5	6W	
	2 or 1 and 2		
2	5		
	6W		· · · · · · · · · · · · · · · · · · ·
	65		······································
1	6Н		
	7		

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [5] Surveyor Initials :

B4 - Native Riparian Tree Regeneration

Rating	Description
4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u>3</u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
Ŷ 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u>^</u> 1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table 85 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

71

calculate

Tab	Table B5. Ratings for Invasive Exotic Plant Species Cove					
R	ating	Invasive Species Cover %				
$\overline{\mathbf{C}}$	4	0%				
\cap	3 X	>0% - <1%				
l	2	≥1% - <10%				
	1	≥10				

Additional CTs and Biotic Metric Comments:

Area has mullein but no sign of New life

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials :

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

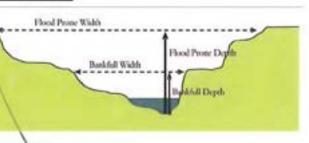
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description	Cross-section:	1	2	3
1: Bankfull width	This is a critical step requiring familiarity with fie Measure the distance between the right and left				
2: Maximum bankfull depth	Keeping the tape level between the right and le of the line above the thalweg (the deepest part help here.				
3: Flood-prone depth	Double the estimate of maximum bankfull dept	th from Step 2.			
4: Flood-prone width	Using a tape, measure the length of a level line a from Step 3 to where it intercepts the right and				
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bar	nkfull width (Step 1).			
6: Calculate average ratio	Calculate the average for Step 5 for all three rep using Table A1a. Enter the rating in the A1 box		e and r	ate	

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description
C 4	Average entrenchment ratio is ≥ 2.2;
0 3	Average entrenchment ratio is ≥1.9 - <2.2
C 2	Average entrenchment ratio is ≥1.5 - <1.9
0 1	Average entrenchment ratio is < 1.5



Norksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Norksheet in conjunction with Table A1c. Check the boxes for all that apply to each regment.

U	M	L	Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
			Channel widening due to bank failure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

Con	nectivit	ty in single-channel step-pool systems
R	ating	Description
0	4	Average entrenchment ratio is ≥ 1.9
C	3	Average entrenchment ratio is ≥1.4 - <1.9
C	2	Average entrenchment ratio is ≥1.2 - <1.4
C	1	Average entrenchment ratio is < 1.2

SA Name: Two Mile Pond Reservoir Transect [5]

Date: 5/15/24

Surveyor Initials :

DS

Method 2

othe	er hydrol	onnectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or ogic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overban
		odplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain.
		ig from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet.
Pho	tograph	are required at each cross-section and recorded in Table A1d.
R	ating	Description
C	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.
ſ	3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.
C	2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).
ſ	1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.

Tak Ald. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1				NA NA		
2		1			A A A A A A A A A A A A A A A A A A A	
3	-					

Floodplain Hydrologic Connectivity Comments:

Date: 04 19201

SA Name: Two Mile Pond Reservoir Transect [🔗]

Surveyor Initials : $-f_{\rm s}/f_{\rm s}$

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Bank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
			Abandoned channels
			Backwater/eddy
			Riffles or rapids
	\square		Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
			Terraces
			Channel pools
	\boxtimes		Beaver ponds
			Swales, depressional features on floodplains
<u> </u>			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Table A2. Rating for Physical Patch Complexity						
Rating		Description				
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).				
Ŕ	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).				
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).				
с -	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, ≤ 5 unique indicators are present in the SA.				

Date: 5/15/24

DS

SA Name: Two Mile Pond Reservoir Transect [5]

Surveyor Initials :

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition Upper Segment		Middle Segment	Lower Segment	Field Indicators(check all existing conditions)	
		Ŕ		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.	
		_ لکا		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.	
		Ø		There is leaf litter, thatch, or wrack in most pools.	
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.	
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.	
		Ø		There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).	
				Channel and point-bars consist of well-sorted bed material.	
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.	
1				There are channel pools at meander bends and some deep pools within the reach.	
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.	
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.	
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.	
indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.	
				There are active headcuts within the channel.	
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.	
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.	
				There are partially buried living tree trunks or shrubs along the banks.	
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.	
_				There are partially buried or sediment-choked culverts.	
				There are avulsion channels on the floodplain or adjacent valley floor.	

Date: 5/15/14

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : 200

Table A3. Rating for Channel Equilibrium					
Rating		Description			
Ø	4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.			
^	3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach ar equilibrium condition. Circle primary process; aggradation or degradation			
	2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.			
<u> </u>	1	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.			

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	⊠4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank Soil Stability	□3	□3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Son Stubinty	2	2	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	<u> </u>	□1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	⊠4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u></u> 2	<u></u> 2	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	_ 1	1		Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Table A4. Stream Bank Stability and Cover Rating				
Rating	Description			
<i>₹</i> 4	>3.5 - 4.0			
<u>3</u>	>2.5 - ≤3.5			
2	>1.5 - ≤2.5			
	1.0 - ≤1.5			

Date: 5/ 15 /24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : 175

A5 - Soil Surface Condition

urksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or lowdensity wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			impervious compacted surfaces or pavement
-			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
\square			Fire pits
<u></u>			Other
	Estimate % soil disturbance by segment area		Estimate % soil disturbance by segment area

Average % Soil Disturbance: > 1%

Table A5. Soil Surface Condition Rating						
Rating	Description					
K 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
<u> </u>	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

Date :	5/10	
	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

SA Name : Two Mile Pond Reservoir Transect [💭]

Surveyor Initials :

Worksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign categories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unkno-Rank Major Stressors in Dominant Stressor column(Pick up to 3)

Rank	Affect					
	Major	Major Minor Absent Unknown		Unknown	Stressor Group/Stressor	Comments
	· · · · · · · · · · · · · · · · · · ·				Adverse water management	I
					Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
			\square		Agriculture/Urban flow diversion upstream	
		r			Adverse sediment management	
					Adverse sediment retention by dams	
			Ď_		Sediment loss by dredging	
					Adverse sediment input (roads/development)	
₁		,			Artificial water additions	
			_Ø		Sewer treatment effluent	
			Ø		Point source urban runoff	
					Factory, feedlot outfail	
			Ø		Agricultural irrigation ditch returns	[
			Ø		Mining waste	
					Ground water pumping	
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
					Watershed alteration	
					Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
					Local biodiversity impacts	
					Evidence of excessive grazing (local)	
			Ø		Excessive noise affecting wildlife	
	0	0		0 C	ounts by Intensity	
_						

litional Comments

ilon Date: 04/25/2022

NMRAM Montane Riverine Wetlands Version 2.5

,

		· · · · · · · · · · · · · · · · · · ·			·				
	····	SA Cover	Worksheet						
SA Code SF2MI [5] SA Name : Two Mile Pond Reservoir Project : Riparian Assessm									
Code Tsct [5]	Code Tsct [5] AU Name : Transect [5] WOI : Two Mile Pond R							r	
County Santa Fe	County Santa Fe HUC 12 Headwaters Santa Fe River Elevation (ft) 7299 (m) 2224.7 Ecor								
A riparian system decommissioned of water rights.	and Boundary (Rationale that leads into a pond k I due to safety concerns i	ocated on the east side o	f Santa Fe borde nd a water diver	ering the sion to tl	Santa Fe Na ne area was	ational For recently s	est. This hut dowr	reservoir was n due to lack	
Driving Directions Driving to Santa Canyon Road un	Fe from Albuquerque yo til you reach the reservoi	u head north on Old Pec r located to the North.	os Trail. Then he	ad east o	on Camino [Del Monte	Sol and r	ight on	
Ownership The Natu	re Conservative and The	Santa Fe National Forest	Data Sharing Restrictions	Results only.	to client	Fish Obs Weti			
Surveyor Role		Survey	or Name				Sur	veyor Initials	
Landscape	Dustin Schwar	tz					D	; ;	
Biotic	Annie McCoy						A	A	
Abiotic	Dustin Schwar	tz					D	DS	
Stressors	Dustin Schwai	tz			·		DS		
Easting (m)	Northing (m)	Zone	Datum		Latitude	e (DD ft)	Longitude (DD ft)		
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	ТМ	35.68972	22		105.89	
Survey Date	6/11/24	Start Time	9:00		End 1	lime	15	:00	
		SA Des	cription			· · · · · ·			
SA Landscape Conte	ext (summarize the wetla	and and surrounding lan	dscape: include (conditio	and impac	-+s}			
Las	ke vroj sie	the to Jack	cvex?	bud	gsoure		. M.9. 1		
	Spotted to	when and R	ed wing	6100	k bid	{ 			
SA Biotic Condition	(vegetation patterns, co	mposition and structure,	exotics and inva	sives, di	sturbance e	vidence, fi	re and he	erbivory)	
All	grade in		A. S. C. P	41 is	ist ∫a,	•			
stij	1 conversion	catt bi	t, h	pro	n George	en en el el el el el el el el el el el el el	1 1945 - 1	Markety.	
SA Abiotic Conditio	n (hydrological alteration	ns (e.g., dams, walls etc.);	flooding charact	teristics a	and evidenc	e of overb			
disturbance and othe	er site impacts; explain th	e hydrologic breaks or o	ther factors that	define ti	ne SA limits)	•			
Assessment Summa	ry (Overal! site condition	summany and comment	s after the field /	data is co			·		
	· · · · · · · · · · · · · · · · · · ·						···		
rovisional ield Score <u>3</u> [] ^{Rai}	nk B Surveyor(s)	DS/AM Final Score	.// Rank	β ^{Ini}	tials 🌒	s	Date 6	/11/24	
		Page 1				<u> </u>			

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

Metric Description	Rating	Wt	Final Score
Landscape Context		Σ 1.0	3.25
L1. Buffer Integrity Index	3	0.25	0.75
L2. Riparian Corridor Connectivity	4	0.25	1.0
L3. Relative Wetland Size	4	0.25	1.0
L4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
B1. Relative Native Plant Community Composition	2	0.2	
B2. Vegetation Horizontal Patch Structure	3	0.2	
B3. Vegetation Vertical Structure	3	0.2	
B4. Native Riparian Tree Regeneration	2	0.2	
B5. Invasive Exotic Plant Species Cover	3	0.2	
Abiotic		Σ	
A1. Floodplain Hydrologic Connectivity		0.3	
A2. Physical Patch Diversity	3	0.2	
A3. Channel Equilibrium	3	0.2	
A4. Stream Bank Stability and Cover	Ч	0.2	
A5. Soil Surface Condition	4	0.1	

Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	2,6	0.35	
Abiotic	3.5	0.35	
SA WETLAN	D CONDITIO	N SCORE E	
SA WETLAN	D RANK =		3.11

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three					
	0	0	1	Seems Dry				
			2	Doesn't get same water,				
			3					

Stressor Comments (Evaluation of risk)

- 、

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

					Image	e Date 6/23						
Allowe	Allowed buffer/RCC land cover elements						Excluded non-buffer/RCC land cover elements					
Buffer RCC						Buffer	RCC					
X	x	Natural or semi-natural vegetation patches					×	Commercial/residential developments, parking lots, dams, bridges, revetments, and other structures				
	X	Small irrigation ditches without levees						Lawns, parks	s, golf	courses, s	ports fields	
		Old fields, un	maintained					Railroads				
		Open range l	and					Maintained levees, sediment piles, construction materials, staging areas				
	X	Foot trails, ho intensity)	orse trails, unpaved	bike tra	ils (low			Intensive livestock areas, horse paddocks, feedlots				
X	X	Non-channel	open water					row crops, o	Intensive agriculture: maintained pastures, hay fields, row crops, orchards, and vineyards			
X	X	Non-functior naturally occ	ling abandoned ve urring levees	getated	levees, or	X	X	graded road				
] unpaved two tracks roads					X	Open water bounded by a levee or other manmade structure				
		Other						Other				
Works	heet 1	b. Buffer Per	ent Sub-metric. N	leasure	or estimat	e the pe	rcentac	e of the		Table	L1a. Buffer Percent	
SA peri	imeter	composed of	allowed buffer elemetric using Table L1	ments ar	nd enter in	nto the B	uffer Pe	ercent		Rating	Buffer Percent	
		ate the sub-m hmary Worksh		a anu ei	iter the fa	ung on t	ne bun		C	4	100%	
-			Buffer Percen	t (%)=	85%				R	3	≥80% - <100%	
		D 66 111 34	h Sub-metric. Mea	nuro the		each bu	ffor lin	a in moters in	ลโต	2	≥50% - <80%	
worksh the GIS	or on 3	the map. Aver	n Sub-metric, wea age the line length	s and rat	e using Ta	ible L1b.	Enter t	he rating on	C	1	<50%	
			y Worksheet 1d.							Table L1b. Buffer Width		
Line	Bu	iffer Width (m)	Buffer Width (ft)	Line		r Width m}	B	uffer Width (ft)		Rating Average buffer widt		
A		64.26	538.91	E	161	.93		531.26		4	≥190m	
	┼──.	25.25	410.92	 F	231	.48		759.44		3	≥130 - <190m	
B	<u> </u>				171	.25		397.80	-1	2	≥65 - <130m	
c	<u> </u>	115.39	378.57	G					-10	1	<65m	
D	ļ	111.07	364.40	Н	155	5.87		511.38				
 ,	Average 148.31 (m) 486.5							1			Summary Rating for Buffer Integrity	
Works	Worksheet 1d. Buffer Integrity Summary. Enter the sub-metri							Ratings from Tables L1a			Score	
land L1	and L1b above to calculate the Buffer Integrity Index Score using below. Using the Buffer Integrity Index Score, enter rating for But							Table L1c	r	4	>3.5	
		A Summary W			-		- /		R	3	>2.5 - ≤3.5	
	uffer % Rating + Buffer Width Rating /2 = But						grity In	dex Score		2	>1.5 - ≤2.5	
										1	≤1.5	
3 + 3 /2=					3]				

SA CODE: SF2MI [5]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Date: 0/11/2

Surveyor Initials :

DS/AM

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstrea	m Segment
Banks	Left Bank	Right Bank	Left Bank	Right Bank
A) Total Bank Disruption (m)	0	0	0	0
B) Total Disruption by Segment (m)		0	(0
C) % Segment Disruption = (B/1000)*100		0	0)
D) Total Disruption both segments		C)	
E) % Total Disruptions = (D/2000)*100	Zero disr	uption notice	able along t	he banks.

Та	ble L2. RCC Rating
Rating	Description
(२ 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
0 1	≥40% total disruption on both segments combined.

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshert.

		RSR			_			R	WSI	-	
Current Size	1	Historic Size	=	RSR	1	-	RSR	х	100	-	RWSI (96)
9	1	10	-	0.9	1	-	0.1	x	100	=	10

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(X 4	≤10%	Wetland is at or only minimally reduced from its full natural extent
C3		Wetland remains equal to or more than 60% of its natual size
	the second second second second second second second second second second second second second second second se	Wetland has been reduced by more than 40% its natural size
C1		Wetland has been reduced by more than 70% its natural size

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect [5]

DS/AM Surveyor Initials :

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or solls	0.1	0	0
intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel (that goes under paved roads)), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Skí area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
\griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	
LUI Score≃ Coefficient * % LUZ Area	1	100	75

Table 1.4. Sur	rounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
C 3	≥80 - <95
(X 2	≥40 - <80
	<40

•

SA CODE: SF2MI [5]

SA Name: Two Mile Pond Reservoir Transect [5] Date: 6/11/24

Surveyor Initials: DS/AM

.

Biotic Metrics

Species Cover (BS) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for BS. Use the Tables in Appendix B and the Field Guide for metric instructions. Enter the species codes for the invasive exotic species for BS. Use Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

1 IA1 2 IA2 3 IIA1 4 IIB1 5 IIC1 6 IVE1 7 IVF1		10 COVER	Species % Cover	(List Code(s))	Comments
		50%	None	1	Willows at rellacion ad wat with the A
	n				vor nos la maria
and a second	E				
80					
6					
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					

	SA COF	þ	К	SF2MI []	ហ				SA Name :		Two Mile	Pond	Two Mile Pond Reservoir T*	ien (Б		Date :	6/11/24		Surveyo	Surveyor İnitials :	N.		
81.	Rel	ativ	e Na	tive	Plant	Ū.	Ĩ	B1 - Relative Native Plant Community Composition	omp	bsìtio	Ę	:					• ;							
Wo don whi	rkshe ninant ch it it	et 6. It spe	. CT P Icies in Te abu	·lant 5 n each undan	pecies stratu t. Each	s and im th: poly	i Poly lat ap (qon	/gon As pears in is either	signm the po assign	ents. S lygon ed to I	starting v . See foo the same	vith CT thotes f CT if it	A, enter th or special i has the sar	e numbe nstructik ne comp	er of the fil ons. If a sp oosition or	st polyg ecies apj a new C	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	rksheet re than o for the r	5. Enter t ne strata oolygon.	he specie , assign t	es codes f he specie	or the tw es to the s	o top tratum in	[
						·		Tall Woody Stratum ¹	dy Stra	tum ¹			Short Woody Stratum 2	ody Strat	um 2		Herbaceous/Sparse Stratum ³	Jus/Spar	se Stratu		5	CT Score 4		
し	Poly	Polygon Nos.	Nos.				<u>_v</u>	Species 1	шZ	Sp	Species 2	шZ	Species 3	ыN	Species 4	<u>ы</u> Z	Species 5	μZ	Species 6	56 E N	Raw4	% SA ⁵	Wt Score ⁶	e6
<									 				Willer	2	Cotto	N	المحادث والمن	177	اردیکوری درخاصک	N 0	3.75	5 30	ŝ	
<u></u>				<u> </u>															24 A		\	\		
<u> </u>																<u>}</u>		×.						
							<u>.</u>										 							
ш	<u> </u>						į –			* 									 				 	
<u>u</u>	ļ						<u> </u>											 		 				<u> </u>
U	_							*	 		-						} 							
x	ļ			·																				1
- -	<u> </u>			<u> </u>		[3 3 1 1									
×	ļ																		 					
<u>ب</u>																 								
Σ												 												
z		ļ	ļ					l					 						}					
0									 		2	 												
								c										Fir	ial Weig	Final Weighted Score ⁷	re7		~ 	
<u> </u>	Trees	and	shrut	os > 6 I	л (20	feet)	and	> 25% t(otal stra	atum o	over; 2. ¹	Írees an	id shrubs ≤	6m (20 1	feet) and >	•25% tot	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	:over; 3. l	Herbaced	ous (gram	ainoids ar	rd forbs)>	10% tota	_
å fr	atum ual 1;'	cove 6Wt.	er. *Ra . Score	aw Sco e is the	re is tr Produ	om T uct of	able	B1a (Ap) Raw Scc	pendix ire * %	8); 34 SA; 71	65A is th The Final	e percei Weight	ntage of th ed Score is	e SA are: : the sum	a covered 1 of the W	by the C t. Scores.	stratum cover. "Raw Score is from Table B1a (Appendix B); ^{-9%} SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	essed as a F Final W	a decima eighted :	l number Score on	; the tota Table B1	l area %5. and enter	A must the Ratir	
ę	Relat	tive N	lative	Plant	Comm	unit	2 CO	npositio	n on th	ie SA F	łank Sun	nmary V	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.											
													Page	Page 7 of 17										

SA CODE: SF2MI(5)

SA Name : Two Mile Pond Reservoir Transect [$\begin{pmatrix} L \\ 0 \end{pmatrix}$]

Table B1. Relative Native Plant Community Composition Rating

Rating	CT Fina	al Weighted Score
C 4	≥ 3.75	<10% non-native
C 3	≥ 3.25 and <3.75	10% ≤20% non-native
K 2	> 2.0 and <3.25	20% ≤50% non-native
<u> </u>	≤2.0	>50% non-native

B2 - Vegetation Horizontal Patch Structure

Worksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch pattern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

Horizontal Patch Structure pattern A,B,C, or D:

		Table B2. Rating for Vegetation Horizontal Patch Structure
Ŕ	lating	Description
C	4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
R	3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
۲ ۲	2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
C	1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

B3 - Vegetation Vertical Structure

Worksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA from Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with same VST) x 100. Enter the total %SA for each VST below.

	VST 1 High Structure Forest	VST 2 Low Structure Forest	VST 5 Tall Shrubland	VST 65 Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
Total % of SA		1	80			2.0	

Table B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the row that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. Percentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for the rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the table down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the rating on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
	1	6W	
	2 or 1 and 2	5	6W and/or 6H
1	1		
K 3	2 or 1 and 2	5	
× 3	2 or 1 and 2	6W	
	5	6W	······································
	2 or 1 and 2		· · · · · · · · · · · · · · · · · · ·
C 2	5		· · · · · · · · · · · · · · · · · · ·
	6W		<u> </u>
	65		
C 1	6H		
	7		· · · · · · · · · · · · · · · · · · ·

Surveyor Initials : DS/AM

SA CODE: SF2MI[5]

Date: 6/11/24

Surveyor Initials : DS/AM

SA Name: Two Mile Pond Reservoir Transect [5]

B4 - Native Riparian Tree Regeneration

B4. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from Worksheet 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.

Rating	Description
<u> </u>	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u>C</u> /3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
X 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
\overline{C} 1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover				
Rating	Invasive Species Cover %			
C 4	0%			
	>0% - <1%			
2	≥1% - <10%			
C 1	≥10			

Additional CTs and Biotic Metric Comments:

lille Ane starting

Date: 6/11/24

SA Name :	Two Mile Pond Reservoir Transect [5
-----------	------------------------------------	---

Surveyor Initials : DS/AM

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

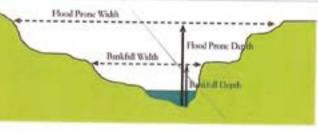
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description	1	2	3			
1: Bankfull width	This is a critical step requiring familiarity with field indicat Measure the distance between the right and left bankfull						
2: Maximum bankfull depth	Keeping the tape level between the right and left bankfu of the line above the thalweg (the deepest part of the cha help here.	Il contours, measure the height					
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.						
4: Flood-prone width	Using a tape, measure the length of a level line at a height equal to the flood prone depth from Step 3 to where it intercepts the right and left banks.						
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull wid						
Calculate average Calculate the average for Step 5 for all three replicate cross-sections. Enter the average here an using Table A1a. Enter the rating in the A1 box on the SA Rank Summary Worksheet.							

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description
C 4	Average entrenchment ratio is \geq 2.2;
C 3	Average entrenchment ratio is ≥1.9 - <2.2
C 2	Average entrenchment ratio is ≥1.5 - <1.9
0 1	Average entrenchment ratio is < 1.5



Worksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Worksheet in conjunction with Table A1c. Check the boxes for all that apply to each segment.

U	M	L	Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
			Channel widening due to bank failure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

Con	nectivi	Rating for Floodplain Hydrologic ty in single-channel step-pool systems		
Rating		Description		
C	4	Average entrenchment ratio is ≥ 1.9		
C	3	Average entrenchment ratio is ≥1.4 - <1.9		
0	2	Average entrenchment ratio is ≥1.2 - <1.4		
0	1	Average entrenchment ratio is < 1.2		

SA CODE: SE2MI[5]

SA Name : Two Mile Pond Reservoir Transect [5]

Date: 6/11/24

Surveyor Initials : DS/AM

Method 2

De A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

F	lating	Description				
C	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.				
C	3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.				
C	2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).				
C	1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.				

Ald. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thaiweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1						
2						
3						l]

Floodplain Hydrologic Connectivity Comments:

SA CODE: SF2MI [5]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
			Abandoned channels
			Backwater/eddy
			Riffles or rapids
			Shoais, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
			Terraces
			Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Table A2. Rating for Physical Patch Complexity						
Rati		Description				
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).				
À	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).				
C	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).				
ſ	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.				

SA CODE: SF2MI [5]

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		D		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Q		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
				There is leaf litter, thatch, or wrack in most pools.
Indicators of				The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.
		- P		There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
				Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
î,				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
}				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

	Table A3. Rating for Channel Equilibrium								
Rating	Description								
X 4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.								
C 3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.								
C 2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.								
	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.								

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	1 4	4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank Soil Stability	<u> </u>	<u> </u>	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Son Stability	<u></u> 2	□2	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	[]1	<u></u> 1	[]1	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	[]4	[]]4	[]]4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	<u>3</u>	[]]3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	□2	<u></u> ∏2́	<u></u> 2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	1	□1	[]1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Rating	Description
2 4	>3.5 - 4.0
3	>2.5 - ≤3.5
2	>1.5 - ≤2.5
	1.0 - ≤1.5

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or lowdensity wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment Middle Segment		Lower Segment	Field Indicators (Check all existing conditions)			
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).			
			Multiple livestock and other (fishing, hiking) trails,			
 			Vehicle tracks including off-road and construction, etc.			
			Impervious compacted surfaces or pavement			
			Grading or plowing			
			Fill			
			Gravel pits			
			Anthropogenic levees and berms			
			Irrigation-driven salinity and mineral crusts			
			Fire pits			
			Other			
			Estimate % soil disturbance by segment area			

Average % Soil Disturbance: 7/1/

	Table A5. Soil Surface Condition Rating								
Rating	Description								
Q: 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.								
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.								
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.								
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.								

SA CODE :	SF2MI(5	1

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

Worksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign categories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknov --- " Rank Major Stressors in Dominant Stressor column(Pick up to 3)

Rank	Affect					
	Major	Minor	Absent	Unknown	Stressor Group/Stressor	Comments
			···	T	Adverse water management	· · · · · · · · · · · · · · · · · · ·
					Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream);
		r			Adverse sediment management	
					Adverse sediment retention by dams	
			Ø		Sediment loss by dredging	
			Ø		Adverse sediment input (roads/development)	
					Artificial water additions	
			<u> </u>		Sewer treatment effluent	
					Point source urban runoff	
			Į Ž		Factory, feedlot outfall	
			Ø		Agricultural irrigation ditch returns	
					Mining waste	
					Ground water pumping	·····
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
	<u> </u>				Watershed alteration	
					Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
	r				Local biodiversity impacts	
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	

dditional Comments

ersion Date: 04/25/2022

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

, <u>, , , , , , , , , , , , , , , ,</u>	· · · · · · · · · · · · · · · · · · ·	SA Cove	er Worksheet	······································		
SA Code SF2MIL] SA Name : Two M	lile Pond Reservoir		Project : Ripa	arian Asses	ement
A de Tsct []	AU Name : Transe	ect [6]		WOI : TWO N	lile Pond Re	eservoir
County Santa Fe	····	aters Santa Fe River	Elevation (ft) 7299	(m) 2224.7	Ecor	egion 6.0 NWFM
A riparian system t decommissioned o of water rights.	id Boundary (Rationale, c hat leads into a pond loc fue to safety concerns re	ated on the east side garding the reservoir	r and a water diversion	to the area was n		
Driving to Santa F	e from Albuquerque you I you reach the reservoir	head north on Old P located to the North.	, 	east on Camino De	Fish Obser	
Ownership The Nature	Conservative and The Sa	anta Fe National Fore	oct [Boote Charles]	nly.	Wetlar	nd?
Surveyor Role		Surv	eyor Name			Surveyor Initials
Landscape	Dustin	·				US
Biotic	Annie					ρς
Abiotic	Dustin					<u>DS</u>
Stressors	Both					D>
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft)
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTM	35.68972	2	-105.89
Survey Date	4/9/24	Start Time		End T	'ime	
••••••••••••••••••••••••••••••••••••••	xt (summarize the wetla		Description	<u> </u>		
	till dry a					e and herbivory)
SA Biotic Condition	(vegetation patterns, con Some blade		9 rowing			1
SA Abiotic Conditio	n (hydrological alteration er site impacts; explain th	ns (e.g., dams, walls e	tc.]; flooding characte	ristics and evidence efine the SA limits	e of overb	ank flooding; soil
4	ved is s winter	till very	dry and	rerove	rei bi g	From
Assessment Summa	ry (Overall site condition	summary and comr	nents after the field da	ata is collected.)		
	Area is	Still	recovering The ye	r From	winte	<i>۲</i>
Provisional Field Score 3,11 Ra	ink <u>B</u> Surveyor(s)	DS Finz Sco Pa	ll re_ <u>(≶_)∦</u> Rank ge 1 of 17	initials <u>f</u>	15	Date 4/9/21

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials: 05

NMRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5 Metric Description Rating Wt Final Score Landscape Context Σ 1.0 3.25 L1. Buffer Integrity Index 3 0.25 0.75 L2. Riparian Corridor Connectivity 4 0.25 1.0 L3. Relative Wetland Size 4 0.25 1.0 L4. Surrounding Land Use 2 0.5 0.25 Biotic 5 B1. Relative Native Plant Community Composition 0.2 **B2. Vegetation Horizontal Patch Structure** 0.2 **B3. Vegetation Vertical Structure** 2 0.2 **B4. Native Riparian Tree Regeneration** 9 0.2 B5. Invasive Exotic Plant Species Cover 2 0.2 Abiotic 5 A1. Floodplain Hydrologic Connectivity 0.3 A2. Physical Patch Diversity 0.2 Z A3. Channel Equilibrium 4 0.2 A4. Stream Bank Stability and Cover 4 0.2 A5. Soil Surface Condition 4 0.1

n Scoring Su	mmary	
Score	Wt.	Wt. Score
3.25	0.3	0.975
2.6	0.35	
3.5	0.35	
CONDITION	SCORE E	
D RANK =	4	3.//
	Score 3.25 26 3.5 D CONDITION	3.25 0.3 Z · ζ 0.35 ζ · ζ 0.35 O.35 0.35 OCONDITION SCORE Σ

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

chance of changes from less water

Stressor Summary	Major	Minor	Top Three				
	0	0	1	Not	Mony	Sterrors	Present he
			2	Less	1	ter	1
			3				

tressor Comments (Evaluation of risk)

Aica Good

Date: 4/9/24)

Date: 4/9/24

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS

Landscape Context

L1 - Buffer Integrity Index

101 010	CACIUU	la. Buffer a led and cons magery).	nd RCC Checklist. sidered non-buffer	Check off la elements th	ind cover e nat disrupt	elemen ecosys	its withi stem co	in the buffer nnectivity. I	r area or RCC co ndicate the ima	prridors that are either allowed agery type and date (season		
lmage		Google Ear				Image Date 6/23			<u> </u>	<u> </u>		
Allowed buffer/RCC land cover elements						Excluded non-buffer/R			land cover ele	ments		
Buffer	Iffer RCC						RCC					
×	×	Natural or s	iemi-natural vegeta	ation patche	ês	X		Commercial/residential developments, parking lots, dams, bridges, revetments, and other structures				
X	X	Small irriga	tion ditches withou	ut levees					<s, courses,<="" golf="" td=""><td></td></s,>			
			inmaintained			1 T		Railroads				
		Open range	e land					Maintained	levees, sedime taging areas	nt piles, construction		
×		Foot trails, I intensity)	norse trails, unpave	d bike trails	(low					orse paddocks, feedlots		
X			el open water					Intensive ag row crops, c	priculture: main prchards, and vi	tained pastures, hay fields, neyards		
X			oning abandoned v curring levees	egetated le	vees, or		X	Paved roads graded road	s or developed is	second-order unpaved but		
۲ - ۲		unpaved tw	o tracks roads			x	X	Open water structure	pen water bounded by a levee or other manmade acture			
		Other						Other	· · · · · · · · · · · · · · · · · · ·			
Norks	neet 1b	. Buffer Per	rcent Sub-metric.	Measure or	estimate t	he perc	centage	of the				
on peri	meter c	composed o	t allowed buffer ele	ments and	enter into	the Ru	ffer Per	cont	Tabl	e L1a. Buffer Percent		
ox per	ow. Kat	e the sub-m nary Worksh	ietric using Table L	la and ente	r the ratin	g on th	ne Buffer Rating Buffer Percent					
<u></u>	<u>,</u>	101 9 1101 131	Buffer Percen	+ (0()	85%			——	<u>C</u> 4	100%		
		<u> </u>			· · · · · · · · · · · · · · · · · · ·	<u>-</u>			(𝔅 3	≥80% - <100%		
orkshi	eet 1c.	Buffer Widt	th Sub-metric. Me	asure the le	ngth of ea	ch buff	fer line i	n meters in		≥50% - <80%		
e GIS C	ir on th	e map. Aver	age the line length ry Worksheet 1d.	s and rate u	ising Table	L1b.E	nter the	rating on		<50%		
line		er Width (m)	Buffer Width (ft)	Line	Buffer W (m)	idth	Buf	fer Width	 	e L1b. Buffer Width		
A	16	4.26	538.91	E -	161.93			(ft) 21.26	Rating	Average buffer width		
			┝━────				<u>↓ </u>	31.26	<u> </u>	≥190m		
B		5.25	410.92	F	231.48		75	9,44	X 3	≥130 - <190m		
C	11	5.39	378.57	G	121.25		39	7.80	C_2	≥65 - <130m		
D	11	1.07	364.40	н	155.87		51	1.38	$\begin{bmatrix} C & 1 \end{bmatrix}$	<65m		
Average 148.31 (m) 486.58							(ft) Table L1c. Summary Rating for Bu					
orksh	eet 1d.	Buffer Inte	grity Summary. E	nter the sub	-metric Ra	tings f	rom Tak	oles L1a	<u> </u>	Integrity		
10 L I D	apoves	to calculate	the Buffer Integrity	Index Scor	e usina th	e formi	ula in th	a hov	Rating	Score		
2low. Using the Buffer Integrity Index Score, enter rating for Buffer on the SA Summary Worksheet.						integri	ty in Tal	bleLTc	<u> </u>	>3.5		
			··	· · · ·					$\left(\begin{array}{c} \mathcal{R} & \mathcal{3} \end{array} \right)$	>2.5 - ≤3.5		
	Ratin	g + Bu	ffer Width Rating	/2 =	Buffer I	ntegri	ty Inde	x Score	$\begin{array}{c} C \\ 2 \\ \end{array}$	>1.5 - ≤2.5		
3	3 + 3 /2=					3						

SA Name : Two Mile Pond Reservoir Transect [4]

Date: 4/9/2/

Surveyor Initials: 05

2 - Riparian Corridor Connectivity (RCC)

Norksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each regment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the rotal disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segment		
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
B) Total Disruption by Segment (m)		0		0	
C) % Segment Disruption = (B/1000)*100		0	0)	
D) Total Disruption both segments			0		
E) % Total Disruptions = (D/2000)*100	Zero dis	ruption notic	eable along	the banks.	

Та	ble L2. RCC Rating
Rating	Description
QC 4	0% total disruption on both segments combined.
C 3	<15% total disruption on both segments combined.
C 2	≥15% - <40% total disruption on both segments combined.
C 1	≥40% total disruption on both segments combined.

.3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshr

		RSR						R	NSI		
Current Size	1	Historic Size		RSR	1	-	RSR	х	100	-	RWSI (%)
9	1	10	=	0.9	1	-	0.1	x	100	=	10

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(* 4	≤10%	Wetland is at or only minimally reduced from its full natural extent
C3	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
C 2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
C1	>70%	Wetland has been reduced by more than 70% its natural size

Date: 4/9/24

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials :

2 DS

L4 - Surrounding Land Use

orksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surr	ounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
C 3	≥80 - <95
x 2	≥40 - <80
C 1	<40

SA CODE: SF2MI LO J

SA Name : Two Mile Pond Reservoir Iransect | 6]

Surveyor Initials :

Date: 4/9/ 47

Biotic Metrics

day for DC 11co Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

Polygon No	B3 Vertical Structure Type	84 Tree Regeneration % Cover	BS Imrasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
-	IA1				
7	IA2				
m	IIA1				
4	181	60%	< 5%	Mallein.	Still day No New life of willow/catels
s	IIICI	60-70%	= 20%	Muster d/Chertenson	Alit of cheat grass. 1sts of New scall
9	INEI		-		
-	INFT				
00					
6					
10					
Ξ					
12					
13					
14					
15					
16					
11					
18					
19					
20					

N Log V	ksheel Ninant s ch it is n	t 6. CT F pecies i nore ab	Hant S In each undant	pecies and stratum th t. Each poly	i Polyge lat appe ygon is t	on Assig tars in th either as	e polyg signed	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	th CT A, otes for T if it ha	enter the special ins is the same	number struction e compo	· of the firs ns. If a spe osition or a	t polygo cies app t new ()	ith CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top notes for special instructions. If a species appears in more than one strata, assign the species to the stratu. CT if it has the same composition or a new CT is created for the polygon.	ksheet 5 e than or for the p	. Enter the : he strata, as olygon.	species (sign the	codes for species 1	the two I to the stri	top atum in
					Tali	Tall Woody Stratum ¹	Stratum	1	s	Short Woody Stratum ²	ły Stratu	im 2		Herbaceo	us/Spars	Herbaceous/Sparse Stratum ³		CT Score 4	4 -	
ъΙ	Polyg(Polygon Nos.			Spe	Species 1	шZ	Species 2 <mark>E</mark> N	S	Species 3	ыN	Species 4	υZ	Species 5	<u>ш Z</u>	Species 6	<u>ш 2</u>	Raw ⁴	% SA5	Wt Score ⁶
<	Ц									Se 1+ 355	N	19:00	2	Cheat grass	w	rye grass	\geq	Q.2	60%	
В	5									U. NoL	1	ce + 5	~2	N. Heir	Ш (CLER +	\geq	¢ђ	204	
υ														{ 		El .				
																	-	 		
ш	 													 						
<u>ц</u>					 							2	_	. <u>-</u>						
ט			i	· · · · ·										-						
Ŧ																				
-												\$				3				, , , ,
_											ļ									
×]													 		
													ļ							
2					 E											*				
z					<u>.</u>			 												
0					 															
															Fina	Final Weighted Score ⁷	1 Score			2.8
[]	rees an	d shrut	π9 <si< td=""><td>5 (20 feet)</td><td>and > 2</td><td>5% total</td><td>stratum</td><td>Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total</td><td>es and s</td><td>ihrubs s6n</td><td>n (20 fe</td><td>et) and >2</td><td>5% tota</td><td>l stratum co</td><td>ver; 3. H</td><td>erbaceous (</td><td>gramino</td><td>oids and 1</td><td>[orbs]>10</td><td>% total</td></si<>	5 (20 feet)	and > 2	5% total	stratum	Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	es and s	ihrubs s6n	n (20 fe	et) and >2	5% tota	l stratum co	ver; 3. H	erbaceous (gramino	oids and 1	[orbs]>10	% total
or lo	tum cu al 1; 6M Relative	ver. "Ne /t. Score Native	iw ocor e is the Plant (e is from 12 product of community	able bia the Rav / Compo	a (Appen v Score ^a osition o	dix b); •% SA; n the S/	stratum cover. "Haw score is from Table 51a (Appendix B); "#SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	ercenta eighted ary Wor	ge of the 3 Score is th ksheet.	sA area le sum (covered o of the Wt. S	/ the LI scores. F	percentage of the SA area covered by the CI and expressed as a decimal number; the total area %SA must /eighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Ra nary Worksheet.	sed as a (Final Wei	decimal nu ghted Scor	mber; tn e on Tał	ie total ar de B1 ani	ea %SA r d enter th	nust ie Rating
													•							

Page 7 of 17

Date: 4/9/5 / Surveyor Initials:

SA CODF - SF2MI[&]

SA Name : Two Mile Pond Reservoir Transect [$\, \mathscr{O} \,$]

SF2MI[[] SA CODE :

Two Mile Pond Reservoir Transect [🔏] SA Name :

Surveyor Initials : 176

Date: 1/9/25

Table B1	. Relative Native Plant C	ommunity Composition Rating
Rating	CT Fina	al Weighted Score
~ <u>4</u>	≥ 3.75	<10% non-native
3	≥ 3.25 and <3.75	10% ≤20% non-native
হ2	> 2.0 and <3.25	20% ≤50% non-native

2 - Vegetation Horizontal Patch Structure

≤2.0

forksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

ß

>50% non-native

orizontal Patch Structure pattern A,B,C, or D:

Table B2. Rating for	Vegetation Horizontal Patch Structure	

Rating	Description
4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
ζ 3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
<u>2</u>	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

3 - Vegetation Vertical Structure

orksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with ame VST) x 100. Enter the total %SA for each VST below.

	VST 1 High Structure Forest	VST 2 Low Structure Forest	VST 5 Tall Shrubland	VST 6S Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
Fotal % of SA				50%		50%	

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for ne rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the ible down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the iting on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
4	1	6W	
	2 or 1 and 2	5	6W and/or 6H
	1		
3	2 or 1 and 2	5	
,	2 or 1 and 2	6W	· · · · · · · · · · · · · · · · · · ·
	5	6W	
	2 or 1 and 2		<u> </u>
2	5		
	6W		
	65		
1	6H		
	7		

Date: 4/9/24

 $D \leq$

5%

Surveyor Initials :

SA Name: Two Mile Pond Reservoir Transect [6]

B4 - Native Riparian Tree Regeneration

Ta d4. N Worksheet 5	ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
× 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u>(1</u>	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

< 5%

Invasive cover (%)

calculate

Table B5. Ratings for invasive Exotic Plant Species Cover				
Rating Invasive Species Cover %				
\overline{c}	4	0%		
	3	>0% - <1%		
ι	2×	≥1% - <10%		
$\overline{\mathbf{C}}$	1	≥10		

Additional CTs and Biotic Metric Comments:

Duck on pond. Tota of new genen grave and herbories erver but mostly day Chinisa greening up

Date: 4/3/27

SA Name: Two Mile Pond Reservoir Transect [$\stackrel{?}{\diamond}$]

Surveyor Initials : 10.5

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
			Abandoned channels
			Backwater/eddy
			Riffles or rapids
			Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
	<u> </u>		Terraces
	<u> </u>		Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Tab	Table A2. Rating for Physical Patch Complexity						
Rati		Description					
ſ	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).					
- C	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).					
X	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).					
- -	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, \leq 5 unique indicators are present in the SA.					

SF2MI[6] SA CODE :

Date: 4/9/24

Two Mile Pond Reservoir Transect [6] SA Name :

Surveyor Initials : 125

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		X		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		X		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		۶		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
				Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
·				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
	•			There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
33				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 4/9/04

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials : $\int f'$

Table A3. Rating for Channel Equilibrium						
Rating	Description					
<i>†</i> 4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12					
~ 3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach ar equilibrium condition. Circle primary process: angradation or degradation					
<u>2</u>	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.					
1	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.					

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	J Z]4	[]4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank Soil Stability	<u></u> 3	3	□3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
	<u> </u>	<u> </u>	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
 	<u>[]</u> 1	[]1	<u> </u>	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4 	⊠4	[]4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	[]3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u></u> 2	<u></u> 2		≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
		<u> </u>	1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

	ank Stability and Cover Rating	
Rating	Description	
5 4	>3.5 - 4.0	
3	>2.5 - ≤3.5	
2	>1.5 - ≤2.5	
· 1	1.0 - ≤1.5	

Date: 4/9/24

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials : D5

A5 - Soil Surface Condition

-- orksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	<u> </u>		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
<u></u>			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
<u> </u>			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
<u></u>			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

Table A5. Soil Surface Condition Rating						
Rating	Description					
×i 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
<u> </u>	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other enthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials : $\mathcal{O}^{\times}.$

Worksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign categories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow Rank Major Stressors in Dominant Stressor column(Pick up to 3)

Rank	Affect		··			
	Major	Minor	Absent	Unknown	Stressor Group/Stressor	Comments
	· · · · · · · · · · · · · · · · · · ·				Adverse water management	
					Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstrear	n
₋			·		Adverse sediment management	
					Adverse sediment retention by dams	
					Sediment loss by dredging	
			<u> </u>		Adverse sediment input (roads/development)	
			· · · · · · · · · · · · · · · · · · ·		Artificial water additions	
			<u> </u>		Sewer treatment effluent	
			<u> </u>		Point source urban runoff	
					Factory, feedlot outfall	
					Agricultural irrigation ditch returns	
					Mining waste	
					Ground water pumping	
					Urban depletions	
					Fracking	
			Ū		Agriculture irrigation wells	
. <u> </u>					Watershed alteration	
					Extensive recent fires in watershed	
_					Extensive recent timber harvest	
			Ď		Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
<u>т</u> .				Local biodiversity impacts		
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0 C	ounts by Intensity	

litional Comments

ion Date: 04/25/2022

Schema: Montane 2.5

SA Name : Two Mile Pond Reservoir Transect []

Date :

Surveyor Initials :

Photo Point Log \setminus

communities, and 3) s direction (AZM=azim)	stream condit uth compass	tion, (See me direction of r	tric description aboto), photo	ons for when point coord	photo docum inates (GPS U	1) general condition of the SA, 2) dor entation is required.) The photograp IM northing and easting location), an the photo was taken and the initials	h number, d latitude and
Photo PT File	AZM	Easting	Northing	Latitude	Longitude	Description	Initial
···							
		<u> </u>				35- MA	
		$\overline{)}$				et.	
······							
					1		
			\mathbf{X}		/		
			\neg	/			
	1						
				7			
				∇			
				\mathbb{N}			
			/				
	-						
				\\			
					\mathbf{N}		
			/		$\left \right\rangle$		
					V		
· ·			·····				
		·					
				·			
				·			

		SA Cover V	Vorksheet							
A Code SF2MI[6] SA Name : Two M	ile Pond Reservoir		Project : Rip	oarian Assese	ment				
de Tsct [6]										
ounty Santa Fe	From 1992 1992 1992 1992 1992 1992 1992 199									
A riparian system decommissioned of water rights.	nd Boundary (Rationale, o that leads into a pond loc due to safety concerns re e from Albuquerque you	ated on the east side of garding the reservoir an	d a water diver	sion to the area was	recently shut	down due to lack				
Canyon Road unt	il you reach the reservoir l	ocated to the North.	S Trail: Therefore							
wnership The Natur	e Conservative and The Sa	nta Fe National Forest	Data Sharing Restrictions	Results to client only.	Fish Observ Wetland	d?				
Surveyor Role	100 200 100	Surveyo	or Name			Surveyor Initials				
Landscape	Dustin					DS				
Biotic	Annie					DS				
Abiotic	Dustin					DS				
Stressors	Both					p5				
Easting (m)	Northing (m)	Zone	Datum	Latitud	e (DD ft)	Longitude (DD f				
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	JTM 35.6897	22	-105.89				
Survey Date	5/15/24	Start Time		End	Time	1				
	0110101	SA Des	cription							
	ext (summarize the wetla		Sale Constant	condition and impa	(rts)	-				
SA Biotic Condition	(wonetation patterns, con	S and Cil	exotics and inv	radd.hg	evidence, fire	and herbivory)				
D - 1	(purple Flower are green cag) Al. chum	Frans	and I.J.	7 1. L'	I Stiered				
disturbance and oth	n (hydrological alteration er site impacts; explain th	e hydrologic breaks or o	other factors that	it define the SA limit	(5)					
Lan	d transition.	s very qu	ickly w	ith char	ge i	7				
	ary (Overall site condition	summary and commer	ts after the field	d data is collected.)						
nasessment Summ	Ground co No Stresso				7,					

_		
$\mathbf{\mu}_{2}$	0.0	1 01

SA CODE: SF2MI[[]

SA Name : Two Mile Pond Reservoir Transect [6]

Date: 5/ 15/ 24

-

Surveyor Initials : D5

NMRAM - SA Rank Summary Worksheet: Montane Riverine Wetlands 2.5			
Metric Description	Rating	Wt	Final Score
Landscape Context	A REAL PROPERTY AND INCOME.	Σ 1.0	3.25
L1. Buffer Integrity Index	3	0.25	0.75
L2. Riparian Corridor Connectivity	4	0.25	1.0
L3. Relative Wetland Size	4	0.25	1.0
L4. Surrounding Land Use	2	0.25	0.5
Biotic		5	0.5
81. Relative Native Plant Community Composition	2	0.2	
B2. Vegetation Horizontal Patch Structure	2	0.2	-
B3. Vegetation Vertical Structure	2	0.2	
84. Native Riparian Tree Regeneration	L. 11	0.2	+
85. Invasive Exotic Plant Species Cover	2	0.2	
Abiotic	5	0.2	
A1. Floodplain Hydrologic Connectivity		4	
A2. Physical Patch Diversity	2	0.3	
A3. Channel Equilibrium	2	0.2	
A4. Stream Bank Stability and Cover	4	0.2	
	Ч	0.2	
A5. Soil Surface Condition	4	0.1	

SA Conditio	n Scoring Sur	nmary	
Major Attribute	Score	Wt.	Wt. Score
Landscape Context	3.25	0.3	0.975
Biotic	2.6	0.35	
Abiotic	3.5	0.35	
SA WETLANI	CONDITION	SCORE S	
SA WETLANI	RANK =		3.11

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
c	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three	
	0	0	1	
			2	
			3	

tressor Comments (Evaluation of risk)

Date: 5/15/ 24

>3.5

>2.5 - ≤3.5

>1.5 - ≤2.5

≤1.5

4

3

2

1

R

 \overline{C}

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS

Landscape Context

L. - Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Imagery	y Google Earth	KMZ. file			image	Date	6/23	_		
Allowed	d buffer/RCC land c	over elements			Exclud	ed nor	n-buffer/RCC la	and c	over elem	ents
Buffer	300				Buffer	RCC				
	X Natural or se	ral or semi-natural vegetation patches			X	×	dams, bridge	es, rev	etments, a	elopments, parking lots, and other structures
	X Small irrigati	on ditches without	levees				Lawns, parks,	, golf	courses, s	ports fields
	Old fields, ur	nmaintained					Railroads			
	Open range	Open range land					Maintained le materials, sta			t piles, construction
	Foot trails, he intensity)	Foot trails, horse trails, unpaved bike trails (low intensity)					Intensive live	stock	areas, ho	rse paddocks, feedlots
X	X Non-channel						Intensive agri row crops, or			ained pastures, hay fields, neyards
X		oning abandoned vegetated levees, or curring levees			×	X	graded roads	5		econd-order unpaved but
	unpaved two	o tracks roads			X	×	Open water b structure	bound	ded by a le	evee or other manmade
tu†	Other						Other			
Worksh	neet 1b. Buffer Per	cent Sub-metric.	Measure	or estimate	the per	rcentag	je of the		Table	e L1a. Buffer Percent
	meter composed of low. Rate the sub-m								Rating	Buffer Percent
	y Summary Worksh	•						<u> </u>	4	100%
		Buffer Percer	nt (%)=	85%				R	3	≥80% - <100%
Waster-t	eet 1c. Buffer Widt	h Sub-matric Ma	asure the	lepath of a	ach bu	ffer line	e in meters in l		2	≥50% - <80%
worksh the GIS (eet 1c. Buffer widt or on the map. Aver	age the line length	is and rat	e using Tab	le L1b. l	Enter ti	he rating on	C	1	<50%
	er Integrity Summa									e L1b. Buffer Width
Line	Buffer Width	Buffer Width (ft)	Line	Buffer \ (m		Bı	uffer Width (ft)	╟	Rating	Average buffer width
~	(m) 164.26	538.91	E	161.9			531.26	11	4	≥190m
A				231.4					3	≥130 - <190m
B	125.25	410.92	F				759.44		2	≥65 - <130m
c	115.39	378.57	G	121.2	25		397.80	lin	1	<65m
Ð	111.07	364.40	н	155.8	37	1	511.38			· · · · · · · · · · · · · · · · · · ·
	L	 	<u> </u>	486.58				Та	ble L1c. S	Summary Rating for Buffer
	Average heet 1d. Buffer Inte	148.31 (m)	L			(ft)]		Integrity

Worksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a and L1b above to calculate the Buffer Integrity Index Score using the formula in the box below. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table L1c in the SA Summary Worksheet.

Bu	uffer % Rating	+ Buff	er Width Rating	/2 =	Buffer Integrity Index Score		
	3	÷	3	/2 =	3		

Date: 5/15/14

SA Name : Two Mile Pond Reservoir Transect [[]

Surveyor Initials: D5

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segmen		
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
B) Total Disruption by Segment (m)	1	0	()	
C) % Segment Disruption = (B/1000)*100		0	0		
D) Total Disruption both segments		C	1		
E) % Total Disruptions = (D/2000)*100	Zero disr	uption notice	able along t	he banks.	

Table L2. RCC Rating									
Rating	Description								
o≈ 4	0% total disruption on both segments combined.								
C 3	<15% total disruption on both segments combined.								
C 2	≥15% - <40% total disruption on both segments combined.								
C 1	≥40% total disruption on both segments combined.								

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshe

RSR						1		R	WSI		v.
Current Size	1	Historic Size	=	RSR	1	10	RSR	х	100	-	RWSI (96)
9	1	10	=	0.9	1	1	0.1	X	100	- 11	10

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(X 4	≤10%	Wetland is at or only minimally reduced from its full natural extent
C3	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
C2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
C1	>70%	Wetland has been reduced by more than 70% its natural size

Date :	5/15/2	۶
--------	--------	---

SA Name : Two Mile Pond Reservoir Transect [-6^{c}]

Surveyor Initials :

DS

L4 - Surrounding Land Use

Drksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) Jurrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
riculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surr	ounding Land Use Rating
Rating	LU! Score
<u> </u>	≥95 - 100
C 3	≥80 - <95
x 2	≥40 - <80
C 1	<40

SALUDE: THE PARTY OF

SA Name: 1 WO Mile Pond Reservoir Transect [6] Da

Date: 5/15/24

Surveyor Initials:

Biotic Metrics

Species Cover (BS) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use Ithe Tables in Appendix B and the Field Guide for metric instructions. Enter the species codes for the invasive exotic species found in the polygon (from NM Noxious Weed List -Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from SA Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

5.8	Polygon B3 Vertical Structure No Type # Her.b	Pegeneration % Cover	B5 Invasive Exotic Species % Cover	Invasive Exotic Species (List Code(s))	Comments
10		10%01	50%	Alysam Parced	Cheatgress Allyson, pro wheed
	Mici ~ were	1.05 mm			
e	IIA1				
*	1811				
NSP.	IIICI				
9	INEI				
2	INF1				
6					
5					
=					
12					
13					
14					
15					
16					
17					
18					
19					
20					
				6	Paper 7

				ore6	 														60	tal	ting
		o top tratum		Wt Score ⁶										 					2.8	10% to	the Ra
		the two o the st	4	% SA5	09	40%														orbs)>	ea %5A I enter
ials:		des for pecies t	CT Score 4	Raw4	2,0	0'}									-					is and f	total ar 81 and
/or lnit		cies cou n the si		<u>~</u>					-										core7	minoic	er; the n Table
Surve)		the spe a, assigi	ш 3	ы Ко Ко		14) ,		· · ·						 		<u> </u>		Final Weighted Score ⁷	ous (gra	l numb Score o
est.		. Enter 1 ne strati olygon.	e Stratu	Species 6	Priver	Hant !													I Weig	erbaced	decima ighted
Date:S/15/5 Surveyor Initials:		sheet 5 than or or the po	Herbaceous/Sparse Stratum 3	шZ	\geq														Fina	er; 3. H	ed as a nal We
ate :S		n Work n more eated fo	paceou	Species 5	Aliysian															um cov	express ae CT Fi
D		jon fror pears li is cre	Hert	Spe	1														-	al strat	T and € . Rate th
		st polyg scies ap a new (<u>ய ஜ</u>		Ē												 	-	25% tol	oy the C Scores
61		of the firs 1s. If a spe bsition or	m 2	Species 4	Bluester	N. Per														et) and >;	covered t of the Wt.
sect [humber Arruction e compo	y Stratu	шZ	>	N														ו (20 fe	sA area ie sum <
Two Mile Pond Reservoir Transect [δ	:	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	Short Woody Stratum 2	Species 3	chamiga	Cet 4														1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	stratum cover. ⁴ Raw Score is from Table B1a (Appendix B); ⁵ %SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.
ond Res		h CT A, otes for T if it ha	<u>s</u>	Ś	N el	N V										- -	 			es and s	ercenta eighted ary Wor
o Mile P(ting wit e footno same C		es 2 E																r; 2. Tre	is the p Final We Summ
	ition	ts. Star gon. Se I to the	т В	Species 2	54 17 wash	U.R.							 							m cove	, ⁵ %SA ; ⁷ The I SA Rank
SA Name :	sodu	gnmen Te poly ssigned	Stratu	ωz												_				il stratu	ndix B), * % SA on the 5
SA	81 - Relative Native Plant Community Composition	gon Assi pears in the second	Tall Woody Stratum ¹	Species 1														1		25% tota	stratum cover. ⁴ Raw Score is from Table B1a (Appendix B); ⁵ %5A is the percentage of th equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score i for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.
	nmm	d Poly hat ap <u>l</u> İygon İ	Ţ	Ś																> and >	Table B of the F ty Com
_	nt Co	cies an atum t ach po				 										 				20 feet	s from oduct « mmuni
9][V	ve Pla	nt Spe each str idant. E								·			 							> 6 m (;	Score i s the pr ant Cor
sa coDF : SF2MI [€	Nati	CT Pla ties in ¢ e abun		Vos.																hrubs	⁴ Raw score is itive PI.
ODF	ative	t spec		Polygon Nos.											<u> </u>					and si	cover. 6Wt. 5 ive Na
SAC	Rel	kshe tinant th it is		Poly	4	\sim											ļ	ļ		rees	tum (al 1; ⁽ ?elati
	2	Wor dom whic		ь	∢	ß	U		ш	u.	0	T	 ~	×	i	Σ	z	0		1. 1	stra equ for j

ï

SA Name : Two Mile Pond Reservoir Transect [6]

Date: Stolet

Surveyor Initials : 15

Table B1.	Relative Native Plant Community Composition Rating
the at a	

Rating	CT Final Weighted Score		
4	≥ 3.75	<10% non-native	
- م (≥ 3.25 and <3.75	10% ≤20% non-native	
Σ ²	> 2.0 and <3.25	20% ≤50% non-native	
1	≤2.0	>50% non-native	

2 - Vegetation Horizontal Patch Structure

forksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

orizontal Patch Structure pattern A,B,C, or D:

	Table B2. Rating for Vegetation Horizontal Patch Structure
Rating	Description
4	Most closely matches Pattern A. SA has a diverse patch structure (≥4 patch types) and complexity. A dominant patch type would be difficult to determine.
χ 3	Pattern B. SA has a moderate degree of patch diversity (3 patch types present) and complexity. A single, dominant patch type may be present, although the other patch types would be well represented and have more than one occurrence in the SA.
2	Pattern C. SA has a low degree of patch diversity and complexity. Two or three patch types may be present; however, a single, dominant patch type exists with the others occupying a small portion of the SA.
1	Pattern D. SA has essentially little to no patch diversity or complexity. The SA is dominated by a single patch type. Other patch types, if present, occur infrequently and occupy a small portion of the SA.

3 - Vegetation Vertical Structure

Forksheet 8. Percentage of SA by vertical structure type (VST). Using the Structure Type from Worksheet 5 and the %SA om Worksheet 6 calculate the total area of the SA occupied by each VST using the formula VST(type) = Sum (%SA for CTs with time VST) x 100. Enter the total %SA for each VST below.

	VST 1 High Structure Forest	VST 2 Low Structure Forest	VST 5 Tail Shrubland	VST 6S Short Shrubland	VST 6W Herbaceous Wetland	VST 6H Herbaceous Vegetation	VST 7 Sparse Vegetation
fotal % of SA				50		50	

able B3. Rating for Vegetation Vertical Structure. Using the data from Worksheet 8 rate the SA based on the criteria in Table B3. Pick the ow that best fits the distribution of VSTs in the SA. Each row specifies the required dominant structure type plus co- and sub-dominants. ercentage cover required per co- or sub-dominant is a minimum. The types listed in the columns must be the most common VSTs in the SA for he rating to be applicable (Worksheet 8). VSTs 1 and 2 can be inverted in dominance and the rating is still applicable. Work from the top of the ble down. As long as the requirements for one row are met, any other types may or may not co-occur without changing the rating. Enter the ting on the SA Rank Summary Worksheet.

Rating	Dominant VST	Co- or Sub-dominant VST ≥15%	Sub-dominant VST ≥5%
	1	5	6W and/or 6H
`4 [1	6W	
· · · · · [2 or 1 and 2	5	6W and/or 6H
	1		
3	2 or 1 and 2	5	······································
	2 or 1 and 2	6W	
	5	6W	
	2 or 1 and 2		· · · · · · · · · · · · · · · · · · ·
(2	5		· · · · · · · · · · · · · · · · · · ·
	6W		
	65		· · · · · · · · · · · · · ·
1	6H		· · · · · · · · · · · · · · · · · · ·
	7		

 .	5	1	15	/	2
Date :	\sim	1	1.0	1	÷

DS

L,

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials :

B4 - Native Riparian Tree Regeneration

T. Worł	34. N ksheet 5	ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
R	ating	Description
R	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u>с</u>	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover		
Rating		Invasive Species Cover %
$\overline{\Gamma}$	4	0%
\cap	3	>0% - <1%
İ.	2	≥1% - <10%
C	1	≥10

Additional CTs and Biotic Metric Comments:

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials :

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

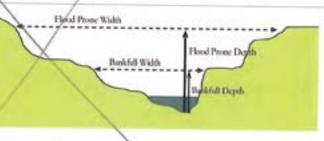
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps	Description	Cross-section:	1	/2	3
1: Bankfull width	This is a critical step requiring familiarity with field indicators of the ban Measure the distance between the right and left bankfull contours with	kfull contour. a tape.	1		
2: Maximum bankfull depth	Keeping the tape level between the right and left bankfull contours, me of the line above the thalweg (the deepest part of the channel). A pock help here.	asure the height			
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.	/			_
4: Flood-prone width	Using a tape, measure the length of a level line at a height equal to the from Step 3 to where it iritercepts the right and left banks.	flood prone depth			
5: Calculate Entrenchment Ratio	Divide the flood-prone width (Step 4) by the bankfull width (Step 1).	/			
6: Calculate average ratio	Calculate the average for Step 5 for all three replicate cross-sections. En using Table A1a. Enter the rating in the A1 box on the SA Rank Summar	ter the average here	and r	ate	

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description
0 4	Average entrenchment ratio is ≥ 2.2;
C 3	Average entrenchment ratio is ≥1.9 - <2.2
0 2	Average entrenchment ratio is ≥1.5 - <1.9
C 1	Average entrenchment ratio is < 1.5



Vorksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Vorksheet in conjunction with Table A1c. Check the boxes for all that apply to each egment.

rgm	ent.	-	
U	M	L	Indicator
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
			Channel widening due to bank failure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

		Rating for Floodplain Hydrologic ty in single-channel step-pool systems
Rating		Description
0	4	Average entrenchment ratio is ≥ 1.9
0	3	Average entrenchment ratio is ≥1.4 - <1.9
0	2	Average entrenchment ratio is ≥1.2 - <1.4
C	1	Average entrenchment ratio is < 1.2

Page 10 of 17

		<i>.</i>	
SA Name :	Two Mile Pond Reservoir Transect [6	3

Date: 5/15/24

Surveyor Initials : D \leq

Method 2

e A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

F	lating	Description
<u>ر</u>	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.
C	3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.
ſ	2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural,floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).
r	1	Fully disconnected from floodplain, either through incision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.

				<u> </u>		<u>∀</u>		
Cross Section	Easting (Latitude)	Northing (Longitude)	je. I	Upstream	Dow	nstream	Bank Right	Bank Left
1								
2		/						
3				<u>. </u>				

Floodplain Hydrologic Connectivity Comments:

SA Name : Two Mile Pond Reservoir Transect [`]
--	---	---

Surveyor Initials : p^*

Date: \$/15/1*

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
[Abandoned channels
			Backwater/eddy
			Riffles or rapids
			Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
			Terraces
	X		Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channei
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Rati	ng	Description
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).
\cap	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).
×	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).
<u>_</u>	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, < 5 unique indicators are present in the SA.

	1		
6			
0			

Date :	5/15/2	4
--------	--------	---

DS

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials :

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ď		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		肉		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ŕ		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
		×		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or failing into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 5/ 15/ 24

 D'_{I}

SA Name : Two Mile Pond Reservoir Transect [

Surveyor Initials :

		Table A3. Rating for Channel Equilibrium
F	Rating	Description
d	4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.
C	3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.
ſ	2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.
	1	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the Indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	4	<u></u> 4	ത4	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank Soil Stability	3	3	3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Son Stability	2	<u></u> 2	2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	<u> </u>	<u> </u>	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	4	∏ 4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	□2	2	2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	1	_ 1	1	Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Rating	Description
* 4	>3.5 - 4.0
3	>2.5 - ≤3.5
2	>1.5 - ≤2.5
	1.0 - ≤1.5

Date: 5/15/24

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials : 05

. .

A5 - Soil Surface Condition

Jrksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	<u> </u>		Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
		· · · · ·	Estimate % soil disturbance by segment area

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating								
Rating	Description								
X 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.								
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.								
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.								
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.								

Date: 0775775	Date :	5/15/2	∂_{i}
---------------	--------	--------	----------------

SA Name :	Two Mile Pond Reservoir Transect (5	1
		· · ·	

Surveyor Initials : DS

Vorksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign ategories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow lank Major Stressors in Dominant Stressor column(Pick up to 3)

Rank	nk Affect Major Minor Absent Unknown					
SOTA			Unknown	Stressor Group/Stressor	Comments	
				······	Adverse water management	
		Ø			Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	
		· · · · ·			Adverse sediment management	
			<u> </u>		Adverse sediment retention by dams	
					Sediment loss by dredging	
			Ń		Adverse sediment input (roads/development)	
					Artificial water additions	
_			Q		Sewer treatment effluent	
			, Z		Point source urban runoff	
					Factory, feedlot outfail	
					Agricultural irrigation ditch returns	
					Mining waste	
					Ground water pumping	
					Urban depletions	
			Q		Fracking	
			Q		Agriculture irrigation wells	
·			T		Watershed alteration	
					Extensive recent fires in watershed	
					Extensive recent timber harvest	
			·		Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
T-					Local biodiversity impacts	
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0	Counts by Intensity	
litional				<u> </u>		

ditional Comments

sion Date: 04/25/2022

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

<u> </u>		SA Cove	r Worksheet					
SA Code SF2MI[6] SA Name : Two M	Aile Pond Reservoir		Project : Ripa	arian Asse	sement		
Tode Tsct [6]	AU Name : Tran:	sect [6]		WOI : Two M	Aile Pond F	d Reservoir		
County Santa Fe	HUC 12 Headv	vaters Santa Fe River	Elevation (ft) 7299	(m) 2224.7	Eco	Ecoregion 6.0 NWFM		
A riparian system decommissioned of water rights. Driving Directions Driving to Santa	and Boundary (Rationale, h that leads into a pond lo I due to safety concerns re Fe from Albuquerque you til you reach the reservoir	cated on the east side (egarding the reservoir a 	and a water diversion to	o the area was r	ecently sh	ut down due to lack		
Ownership The Natu	re Conservative and The S	anta Fe National Fores	t Data Sharing Resu Restrictions only		Fish Obse Wetla			
Surveyor Role		Surve	yor Name		•	Surveyor Initials		
Landscape	Dustin Schwart	ζ	···			DS		
Biotic	Annie McCoy					AM		
Abiotic	Dustin Schwart	2				DS		
Stressors	Dustin Schwart	tz				DS		
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft		
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTM	35.689722	2	-105.89		
Survey Date	6/11/24	Start Time	9:00	End Ti	ime	15:00		
<u>ل</u> ــــــــــــــــــــــــــــــــــــ	it has be	eon raini area is	ng "no Very Wei	past and	140	aays xing,		
Red n lots	ing black bird, of brewn table arsard	mustand he . growth on	ground in Cas part, Brown a	2 Ford alfin, dour	kjen r, alys	and Store and		
SA Abiotic Conditio	n (hydrological alteration	s (e.g., dams, walls etc.)]; flooding characteristi	cs and evidence				
	er site impacts; explain the contribution for cont				* 22 + 2	1 obered		
	7°C (mj 45							
Assessment Summa	ary (Overall site condition	summary and comme	nts after the field data i	s collected.)				
	site seems	to be	coming Th	dense	wift	90%		
	ground cour	r, nl	1	A				
	provind cours	1 luslard	coming fo	201				

SA Name : Two Mile Pond Reservoir Transect [6] Surveyor Initials : DS/AM

Metric Description	Rating	Wt	Final Score
Landscape Context		Σ 1.0	3.25
L1. Buffer Integrity Index	3	0.25	0.75
L2. Riparian Corridor Connectivity	4	0.25	1.0
L3. Relative Wetland Size	4	0.25	1.0
L4. Surrounding Land Use	2	0.25	0.5
Biotic		Σ	
B1. Relative Native Plant Community Composition	2	0.2	
82. Vegetation Horizontal Patch Structure	3	0.2	
83. Vegetation Vertical Structure	2	0.2	
B4. Native Riparian Tree Regeneration	4	0.2	
B5. Invasive Exotic Plant Species Cover	1	0.2	
Ablotic	19 A. A. A. A. A. A. A. A. A. A. A. A. A.	Σ	
A1. Floodplain Hydrologic Connectivity		0.3	
A2. Physical Patch Diversity	2	0.2	
A3. Channel Equilibrium	4	0.2	
A4. Stream Bank Stability and Cover	4	0.2	
A5. Soil Surface Condition	4	0.1	

Major Attribute	Score	Wt.	Wt. Score		
Landscape Context	3.25	0.3	0.975		
Biotic	2.4	0.35			
Abiotic	3.5	3,5 0.35			
SA WETLAN	D CONDITION	SCORE E			
SA WETLAN	D RANK =		3,04		

Rank	Score	Description
A	≥3.25 - 4.0	Excellent Condition
В	≥2.5 - <3.25	Good Condition
с	≥1.75 - <2.5	Fair Condition
D	1.0 - <1.75	Poor Condition

Stressor Summary	Major	Minor	Top Three				
	0	0	1	Less	Water	15	nis nom
			2				
			3				

Stressor Comments (Evaluation of risk)

Not a lot of stressors here.

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

	Imagery Google Earth KMZ. file					image	Date	6/23				
Allowe	ed buffe	r/RCC land o	over elements	_		Exclud	leđ no	n-buffer/RCC	lanc	t cover eler	ments	
Buffer	RCC					Buffer						
X	X	Natural or se	mi-natural vegeta	tion patch	es	X	X		nmercial/residential developments, parking lots, ns, bridges, revetments, and other structures			
X	X	Small irrigati	on ditches withou							sports fields		
		Old fields, un	maintained					Railroads	<u>.</u>			
									leve	es, sedime	nt piles, construction	
		Open range		<u></u>				materials, st				
×		ntensity)	orse trails, unpave	s (low						orse paddocks, feedlots		
X		Non-channel						intensive ag row crops, c			tained pastures, hay fields, neyards	
X			ing abandoned ve urring levees	evees, or	X	X	Paved roads graded road	ds or developed second-order unpaved but ds				
ם ו	unpaved two tracks roads						X	Open water structure	er bounded by a levee or other manmade			
	□ □ Other □ □ Other □											
Works SA peri	heet 1b meter c	Buffer Perc	ent Sub-metric. I allowed buffer ele		Tabl	e L1a. Buffer Percent						
Box bei	ow. Rat	e the sub-me hary Workshe	tric using Table L1	la and ente	er the ratin	ig on th	e Buff	er		Rating	Buffer Percent	
lincogin	y Junn	idi y worksite		A /0/ \	DEN/				C	4	100%	
L			Buffer Percen	t (%)=	85%				R	_	≥80% - <100%	
Worksh	eet 1c.	Buffer Width	Sub-metric. Mea	asure the le	ength of ea	ach buf	fer line	in meters in			≥50% - <80%	
the GIS o	or on th	e map. Avera	ge the line length	s and rate	using Table	e L1b. E	nter th	e rating on		1	<50%	
Line		er Width	/ Worksheet 1d. Buffer Width	Line	Buffer W	/idth	Bu	ffer Width		Tabl	e L1b. Buffer Width	
		(m)	(ft)	Line	(m)			(ft)		Rating	Average buffer width	
A	164	4.26	538. 9 1	E	161.93			531.26		4	≥190m	
В	12	5.25	410.92	F	231.48		 ,	759.44		3	≥130 - <190m	
с		5.39	378.57	G	121.25			97.80	1	2	≥65 - <130m	
D		1.07	364.40	н	155.87			11.38		1	<65m	
	Avera		148.31 (m)	••	486.58		(ft)		T	able L1c. S	ummary Rating for Buffer	
					<u> </u>						Integrity	
and L1b	above	to calculate t	grity Summary. Ei he Buffer Integrity	/ Index Sco	re using ti	he form	ula in :	the box		Rating	Score	
below, l	Jsing th	e Buffer integ	grity Index Score, (enter ratin	g for Buffe	r Integr	ity in T	able L1c	C	4	>3.5	
n don:	the SA S	ummary Wo	rksheet.						R	3	>2.5 - ≤3.5	
Buffer 9	% Ratin	g + Buf	fer Width Rating	/2 =	Buffer	Integri	ity Ind	ex Score	<u> </u>	2	>1.5 - ≤2.5	
3		+	3	/2 =					C	1	≤1.5	
-				/ <u>/ Z</u> =		3						

SA Name : Two Mile Pond Reservoir Transect [6]

L2 - Riparian Corridor Connectivity (RCC)

Worksheet 2. RCC excluded non-buffer elements calculation. Refer to worksheet 1a for excluded non-buffer RCC land cover elements. Following the steps in the Field Guide, enter the summed values in meters for excluded element lengths for each bank within each segment upstream and downstream of the SA. Sum the values for each segment and calculate % Segment Disruption for the upstream side and the downstream side. Add the total disruption for upstream and downstream segments and then calculate the % Total Disruptions for the riparian corridor. Rate Riparian Corridor Connectivity using Table L2 and the data from this worksheet. Enter rating on the SA Summary Worksheet.

Segments	Upstream	n Segment	Downstream Segment		
Banks	Left Bank	Right Bank	Left Bank	Right Bank	
A) Total Bank Disruption (m)	0	0	0	0	
B) Total Disruption by Segment (m)		0		0	
C) % Segment Disruption = (B/1000)*100		0	()	
D) Total Disruption both segments		(0		
E) % Total Disruptions = (D/2000)*100	Zero dis	Zero disruption noticeable along the banks.			

Table L2. RCC Rating					
Rating	Description				
Q 4	0% total disruption on both segments combined.				
O 3	<15% total disruption on both segments combined.				
C 2	≥15% - <40% total disruption on both segments combined.				
0 1	≥40% total disruption on both segments combined.				

L3 - Relative Wetland Size

Worksheet 3a. Calculate the Relative Size Ratio (RSR) between the current WOI size and the historic WOI size. b. Calculate the Relative Wetland Size Score (RWSI (%)) as (1-RSR)*100. Rate Relative Wetland Size Index using Table L3 and enter rating on the SA Summary Workshow

		RSR					R	WSI		
Current Size	1	Historic Size	=	RSR	1	RSR	х	100	=	RWSI (%)
9	1	10		0.9	1	0.1	X	100	=	10

		Table L3. Relative Wetland Size Rating
Rating	RWSI Score	Description
(8.4	≤10%	Wetland is at or only minimally reduced from its full natural extent
03	>10% - ≤40%	Wetland remains equal to or more than 60% of its natual size
C2	>40% - ≤70%	Wetland has been reduced by more than 40% its natural size
O1	>70%	Wetland has been reduced by more than 70% its natural size

SA Name : Two Mile Pond Reservoir Transect [6]

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	<i>'</i> 0,1		
Filling or dumping of sediment or soils	<u> </u>	0	
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.1	0	0 -
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel (that goes under paved roads)), junkyards, trash dumps, disturbed ground (not including roads) Ski area	0.3	0	0 0
	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3		0
Aanicured lawns, sport fields, and golf courses; urban manicured parks	0.3		
Did fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, ussian thistle, mustards, annual vegetation)	0.5	0	0
Nature old fields and other fallow lands with natural composition, introduced hay field and pastures e.g., perennial vegetation cover)	0.7	0	0
estoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
aying of native grassland (e.g., no tillage, having and haling only)	0.9	0	0
eavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) moved, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Sinnercial dee plantation, Christmas free farms	0.6		
elective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height)	0.8	0	0
ature restoration areas returned to natural conditions (re-converted)	0.9	0	0
atural area, land managed for native vegetation - No agriculture, logging, development	1	0	-
LUI Score= Coefficient * % LUZ Area	╺╌╴━━╶┼┼━━	100	75

Table L4. Surr	Table L4. Surrounding Land Use Rating					
Rating	LUI Score					
<u> </u>	≥95 - 100					
	≥80 - <95					
<u>x 2</u>	≥40 - <80					
C 1	<40					

Surveyor Initials : DS

Page 5 of 17

Date: 6/11/24

DS/AM

	-
•	Q
	-
	3
	2
	5
	2
	ö
	Ū
	SA

Biotic Metrics

Species Cover (BS) metrics. Enter the Vertical Structure Type (VST) for B3, tree regeneration % cover within the polygon for B4 and the % cover of invasive exotic species for B5. Use the Tables in Appendix B and the Field Guide for metric instructions. Enter the species codes for the invasive exotic species found in the polygon (from NM Noxious Weed List -Worksheet 5. Vegetation Community Patch Polygon Data for Biotic Metrics B3, B4, and B5 for Polygons from 5A Biotic Map. Enter data for each polygon under a unique number assigned from the SA Biotic Map. Each polygon is evaluated with respect to Vegetation Vertical Structure (B3), Native Tree Regeneration (B4), and Invasive Exotic Plant

Monthair species and Program RL. Starting With CT, writter the number of the first polygon from Worksheet 5. Ever the grave and and the polygon rise starter and the structure of the structure starter and the polygon rise starter and the structure starter and th	B1 - Relative Native Plant Community Composition	ompos	ition										
Which it is more abundant: Excit polygon Steffer an Syndard Strate Strate and Strate Strate Code Stor The Syndard Strate Strate and Strate Strate Code Stor The Syndard Strate Strate and Strate Str	Species and Polygon As	signmen	ts. Starting v	/ith CT A, enter t	he numbe	r of the firet o	<u></u>		:		:	:	
T Polypor Nos. Teal Mocoly Statum 1 Short Woody Statum 2 Short Woody Statum 3 Tear and the statum 3 Tear and thead and and and and and and and and and a	nt stratum that appears in nt. Each polygon is either	the polycassigned	Jon. See fool to the same	notes for special CT if it has the se	l instructic	osition or a number	ionygon froi is appears ii ew 🗂 is cre	n Workshe I more thai ated for th	et 5. Enter th 1 one strata,	te species assign th	codes fo	it the two	o top tratum in
Companyones. Species 1 K Species 2 K Species 4 K Species 5 Species 5<	Tall Wood	dy Stratun	1 1	Short Wo	ody Strat	um 2	Her		e polygon.	~			
A Image With State Mission Bit State Bit State Bit State Bit State Sta	Species 1				<u> </u>	iec 4			arse stratun	2	5 S S	64 	
B Image: Second Se	V.1.	┼───		1			<u>-</u>	<u></u>		브로	Raw4	% SA5	Wt Score
C Prime N <				ν. γ			3			<u></u>	~	5	
D I				Ch. 4: 20			5'au.			<u> </u>	7-	\$	
D F	-+								 		_	3	91
E I				 					_				
F F								-+					
6 1													
G H								 					
H													
1 1							-+	-					
X Final Weighted Score? X Final Weighted Score?													
K									 		+ 		
K Final Weighted Score? A Final Weighted Score? A Final Weighted Score? B Final Weighted Score? Core is the product of the Raw Score * % SA; 7The Final Weighted Score? C Control to the Raw Score * % SA; 7The Final Weighted Score? C Final Weighted Score C A Final Weighted Score? Core is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score is a decimal number; the total area %SA must Relative Native Plant Community Composition on the SA Rank Summary Worksheet							 						
Image: Second State Second Structure Image: Second		<u> </u>											
Image: Control of the product of the Raw Score * % 5A; 7The Final Weighted Score is the product of the Raw Score * % 5A; 7The Final Weighted Score is the sum of the Wt. Scores. Rate and shrups set the Ram Score is the product of the Raw Score * % 5A; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the		-}						-					
Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% tofal stratum cover; 3. Herbaceous (graminoids and forbs)>10% tofal 1; 6Wt. Score is the product of the Raw Score *% SA; 7 The Final Weighted Score is the sum of the Wt. Scores. Rate the CT and expressed as a decimal number; the total area %5A must Relative Native Plant Community Composition on the SA Rank Summary Worksheet													
Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total structum cover; 3. Herbaceous (graminoids and forbs)>10% total 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Bawing													
Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total strum cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must Relative Native Plant Community Composition on the SA areak Summary Worksheet											<u> </u>		
Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total atum cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must Relative Native Plant Community Composition on the SA and Summary Worksheet												 	
atum cover. ⁴ Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must Lal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score area %SA must Relative Native Plant Community Composition on the SA Rank Summary Worksheet	20 feet) and > 25% total s	stratum co	Wer: 2. Trees	and chrube 26				Fina	I Weighted	Score ⁷			
netative Native Plant Community Composition on the SA Rank Summary Worksheet	is from Table B1a (Append oduct of the Raw Score * 9	^J ix B); 5% % SA; 7 <u>T</u> ;	SA is the per	Centage of the S.	A area cov	and >25% to ered by the C	tal stratum T and expr	cover; 3. He essed as a c	erbaceous (g fecimal num	Iraminoid Iber: the t	s and for otal area	bs)>10%	t total
	mmunity Composition on	the SA Ra	Ink Summan	/ Worksheet	e sum of t	he Wt. Scores.	. Rate the C	T Final Wei	ghted Score	on Table	B1 and e	nter the	
	<u> </u>			uturity composition on the SA Rank Summary	uturity composition on the SA Rank Summary Worksheet. Page 7 o	uturity composition on the SA Rank Summary Worksheet. Page 7 of 17	uturity composition on the SA Rank Summary Worksheet. Page 7 of 17	Diminity composition on the SA Rank Summary Worksheet.	Page 7 of 17	Date 7 2617	Dana 7 2673	Diminity composition on the SA Rank Summary Worksheet.	Device 7 of 17

SF2MIE 6 1

SA CO

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS/AM

Table B1. Relative Native Plant Community Composition Rating							
ating CT Final Weighted Score							
≥ 3.75	<10% non-native						
> 3.25 and <3.75	10% ≤20% non-native						
	20% ≤50% non-native						
L	>50% non-native						
	CT Fina						

2 - Vegetation Horizontal Patch Structure

orksheet 7. Using Tables B2a and B2c (Appendix B), choose the schematic pattern that best matches the mapped vegetation patch attern for the SA. Rate using Table B2 and enter rating on the SA Rank Summary Worksheet.

orizontal Patch Structure pattern A,B,C, or D:

) 12011					· · · · · · · · · · · · · · · · · · ·				
			Table B2	. Rating for V	egetation Horizo	ntal Patch Strue	ture	· <u>-</u> · · · · · · · · · · · · · · · · · · ·	<u>. </u>
Ratin	σ							dominant patch	type would
	M	lost closely matche	es Pattern A. SA	has a diverse p	atch structure (≥4	patch types) an	u complexity. A	00	-91
4									
3	 Pa	e difficult to detern attern B. SA has a r	noderate degree	e of patch dive	rsity (3 patch type be well represent	ed and have mo	re than one occu	irrence in the SA	\
	1	be present, although the other patch types would be went represented and the patch types may be present; howev						resent; however	, a single,
2	Pa	attern C. SA has a l Iominant patch typ	ne exists with the	e others occup	ying a small portio	on of the SA.			thor natch
		D. CALLARD	ccontially little to	o no patch div	ersity of complexit	y. The Sh is down	inated by a sing	ie patch type. O	the paren
• 1	t	ypes, if present, oc	cur infrequently	and occupy a	small portion of th	ie SA.			
3 - V								d the OLEA	i i
				acture type (V	ST). Using the Stru	ucture Type from	Worksheet 5 an Worksheet 5 an	A for CTs with	
	larkchee	ot 6 calculate the t	otal area or the s	JY occabica o	each VST using t	he formula VSI (t	ype) = 50111 (7657	A lot C S mo.	
ame V	'ST) x 10	00. Enter the total	%SA for each VS	1 0610.00		VST 6W	VST 6H	VST 7	1
		VST 1	VST 2	VS1.5	VST 6S	Herbaceous	Herbaceous	Sparse	
		High Structure	Low Structure	Tall Shrublan	i Short	Wetland	Vegetation	Vegetation	1
		Forest	Forest		Shrubiand		<u>_</u>		1
				1	1 7 2	1	50	i	1
able ow th Percer	iat best ntage co	ting for Vegetation fits the distribution over required per c	n of VSTs in the o- or sub-domit	SA. Each row s	um. The types list	ed in the column	A based on the acture type plus as must be the m ing is still applic	ost common VS able. Work from	Ts in the SA fi the top of th
Fable ow th Percer the rat	B3. Rat hat best htage co ting to b down. A	ting for Vegetation fits the distribution over required per construction be applicable (Work As long as the required	n of VSTs in the co- or sub-domit rksheet 8), VSTs i irements for one	SA. Each row s	e data from Works becifies the require um. The types liste	ed in the column	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat	Ts in the SA fi the top of th ing. Enter the
Fable ow th Percer the rat table o rating	B3. Rat hat best htage co ting to t down. A on the	ting for Vegetation fits the distribution over required per or be applicable (Work As long as the required SA Rank Summary	n of VSTs in the co- or sub-domir rksheet 8). VSTs irements for one v Worksheet.	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m	ed in the column ance and the rat ay or may not co	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from	Ts in the SA fi the top of th ing. Enter the
able ow th Percer he rat able o rating	B3. Rat hat best htage co ting to b down. A	ting for Vegetation fits the distribution over required per or be applicable (Work As long as the required SA Rank Summary	n of VSTs in the co- or sub-domit rksheet 8), VSTs i irements for one	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat	Ts in the SA fi the top of th ing. Enter the T ≥5%
able ow th Percer he rat able o rating	B3. Rat hat best htage co ting to t down. A on the	ting for Vegetation fits the distribution over required per or be applicable (Work As long as the required SA Rank Summary	n of VSTs in the co- or sub-domir rksheet 8). VSTs irements for one v Worksheet.	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
able ow th Percer he rat able o rating	B3. Rat hat best htage co ting to t down. A on the	ting for Vegetatic fits the distributio over required per c be applicable (Woi As long as the requ SA Rank Summary Dor	n of VSTs in the co- or sub-domit rksheet 8). VSTs irements for one Worksheet. minant VST	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS	Ts in the SA fi the top of the ing. Enter the T ≥5% H
able ow th Percer he rat able o rating	B3. Rat hat best ting to b down. A ton the ting	ting for Vegetatic fits the distributio over required per c be applicable (Woi As long as the requ SA Rank Summary Dor	n of VSTs in the co- or sub-domir rksheet 8). VSTs irements for one v Worksheet.	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
Fable ow th Percer the rat table o rating	B3. Rat hat best ting to b down. A ton the ting	ting for Vegetation fits the distribution over required per construction be applicable (Work As long as the required SA Rank Summary Domesia 2	n of VSTs in the co- or sub-domin rksheet 8). VSTs irements for one Worksheet. Minant VST 1 1 0r 1 and 2 1	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
rable ow th Percer the rat table o rating	B3. Rat hat best ting to b down. A ton the ting	ting for Vegetatic fits the distributio over required per c be applicable (Woi As long as the required SA Rank Summary Don 2	n of VSTs in the co- or sub-domit rksheet 8). VSTs irements for one Worksheet. Minant VST 1 1 0 r 1 and 2 1 0 r 1 and 2	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5 6V 5	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
rable ow th Percer the rat table o rating	B3. Rat hat best htage co ting to b down. A on the ting 4	ting for Vegetatic fits the distributio over required per c be applicable (Woi As long as the required SA Rank Summary Don 2	n of VSTs in the co- or sub-domin rksheet 8). VSTs irements for one Worksheet. Minant VST 1 1 or 1 and 2 1 or 1 and 2 or 1 and 2	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5 6V 5	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
able ow th Percer he rat able o rating	B3. Rat hat best htage co ting to b down. A on the ting 4	ting for Vegetation fits the distribution over required per of be applicable (Work As long as the required SA Rank Summary Dor 2 2 2 2 2	n of VSTs in the co- or sub-domit rksheet 8). VSTs irements for one Worksheet. minant VST 1 1 or 1 and 2 1 or 1 and 2 5	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5 6V 5 6V 5 6V	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
able ow th Percer he rat able o rating	B3. Rat hat best htage co ting to b down. A on the ting 4	ting for Vegetation fits the distribution over required per of be applicable (Work As long as the required SA Rank Summary Dor 2 2 2 2 2	n of VSTs in the co- or sub-domin rksheet 8). VSTs irements for one Worksheet. Minant VST 1 1 or 1 and 2 1 or 1 and 2 or 1 and 2 5 2 or 1 and 2	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5 6V 5 6V 5 6V	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
able ow th Percer he rat able o rating	B3. Rat hat best htage co ting to b down. A on the ting 4	ting for Vegetation fits the distribution over required per of be applicable (Work As long as the required SA Rank Summary Dor 2 2 2 2 2	n of VSTs in the co- or sub-domin rksheet 8). VSTs ilrements for one Worksheet. minant VST 1 1 or 1 and 2 1 or 1 and 2 5 2 or 1 and 2 5	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5 6V 5 6V 5 6V	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H
rable ow th Percer the rat table o rating	B3. Rat hat best htage co ting to b down. A on the ting 4	ting for Vegetation fits the distribution over required per of be applicable (Work As long as the required SA Rank Summary Dor 2 2 2 2 2	n of VSTs in the co- or sub-domit rksheet 8). VSTs irements for one Worksheet. minant VST 1 1 or 1 and 2 1 or 1 and 2 5 2 or 1 and 2 5 2 or 1 and 2 5 6 W	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5 6V 5 6V 5 6V	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA f the top of th ing. Enter the T ≥5% H
Fable row th Percer the rat table of rating	B3. Rat hat best htage co ting to b down. A on the ting 4	ting for Vegetation fits the distribution over required per of be applicable (Work As long as the required SA Rank Summary Dor 2 2 2 2 2	n of VSTs in the co- or sub-domin rksheet 8). VSTs ilrements for one Worksheet. minant VST 1 1 or 1 and 2 1 or 1 and 2 5 2 or 1 and 2 5	SA. Each row s	e data from Works becifies the require um. The types liste inverted in domin any other types m Co- or Sub-domi 5 6V 5 6V 5 6V	ed in the column ance and the rat ay or may not co nant VST ≥15%	A based on the acture type plus is must be the m ing is still applic poccur without o	ost common VS able. Work from changing the rat b-dominant VS 6W and/or 6	Ts in the SA fi the top of the ing. Enter the T ≥5% H

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect [6]

B4 - Native Riparian Tree Regeneration

	Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
X 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u>Ċ 3</u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
C_{1}	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Table B5. Ratin	Table B5. Ratings for Invasive Exotic Plant Species Cover					
Rating	Invasive Species Cover %					
C 4	0%					
<u> </u>	>0% - <1%					
2	≥1% - <10%					
X I	≥10					

Additional CTs and Biotic Metric Comments:

Surveyor Initials : DS/AM

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS/AM

Abiotic Metrics

A1 - Floodplain Hydrologic Connectivity

Method 1

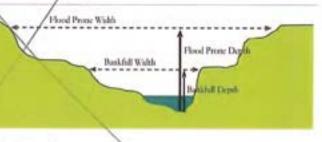
Worksheet 10a. Floodplain Hydrologic Connectivity Measurements. The following six steps are conducted at each of three crosssections at the approximate mid-points along straight riffles and away from deep pools or meander bends. Use a measuring tape and temporary stakes for horizontal measurements, and a stadia rod or similar measuring stick for vertical measurements. If unavailable, use visual estimates. Where straight channel segments do not occur, or if there is excessive ponding or bankfull indicators are obscured, use the narrative rating approach (Method 2). Enter the rating method in the box below, either meander pool, riffle pool or narrative (Method 2) and choose the corresponding Table (A1a, A1b, or A1c) to rate Floodplain Hydrologic Connectivity. Enter the rating on the SA Rank Summary Worksheet. Photographs of each cross-section are required and recorded in Table A1d.

Steps		Description	Cross-section:	1	2	3
1: Bankfull width		g familiarity with field indicators on the right and left bankfull cor				
2: Maximum bankfull depth	Keeping the tape level betw of the line above the thalwe help here.	een the right and left bankfull co g (the deepest part of the chann	entours, measure the height el). A pocket line level can			
3: Flood-prone depth	Double the estimate of maximum bankfull depth from Step 2.					
4: Flood-prone width	Using a tape, measure the length of a level line at a height equal to the flood prone depth from Step 3 to where it intercepts the right and left banks.					
5: Calculate Entrenchment Ratio	Divide the flood-prone widt	h (Step 4) by the bankfull width (Step 1)			
6: Calculate average ratio	Calculate the average for Step 5 for all three replicate cross-sections. Enter the average here and rate using Table A1a. Enter the rating in the A1 box on the SA Rank Summary Worksheet.					

Rating Method

Table A1a. Rating for Floodplain Hydrologic Connectivity in meandering single-channel riffle-pool systems

Rating	Description		
C 4	Average entrenchment ratio is \ge 2.2;		
C 3	Average entrenchment ratio is ≥1.9 - <2.2		
C 2	Average entrenchment ratio is ≥1.5 - <1.9		
C 1	Average entrenchment ratio is < 1.5		



Worksheet 10b. Floodplain Hydrologic Connectivity Indicators. Use this Worksheet in conjunction with Table A1c. Check the boxes for all that apply to each

U	M	L	Indicator /
			Bankful is slightly below bank height
			Bankful is well below bank height and channel is incised
			Channel widening due to bank fáilure
			Constructed levees preclude floodplain inundation
			Stream is straightened/channelized
			Inset floodplain formation
			Decreased peak flows due to hydrologic modification
			Bankfull Indicators at point of incipient flooding of the floodplain
			Indicators of overbank flow on floodplain
			Floodplain inundation due to beaver activity

		Rating for Floodplain Hydrologic ty in single-channel step-pool systems
Rating		Description
Ô	4	Average entrenchment ratio is ≥ 1.9
C	3	Average entrenchment ratio is ≥1.4 - <1.9
0	2	Average entrenchment ratio is ≥1.2 - <1.4
C	1	Average entrenchment ratio is < 1.2

SA Name : Two Mile Pond Reservoir Transect [6]

Page 11 of 17

Surveyor Initials : DS/AM

Method 2

Je A1c. Narratve Floodplain Hydrologic Connectivity Rating. Select the narrative description that best describes the floodplain hydrologic connectivity. At each cross-section, use Worksheet 10b to record channel incision, bank modification, inset floodplain or other hydrologic evidence that would preclude natural floodplain inundation. Conversely, assess indicators and evidence for overbank flow and floodplain inundation. Record whether beaver activity is obscuring bankful indicators due to inundation of the floodplain. Select a rating from the table below. Use data from Worksheets 10b to help select rating. Enter Rating on SA Summary Worksheet. Photographs are required at each cross-section and recorded in Table A1d.

Ĥ	lating	Description
ſ	4	Fully connected to the natural floodplain. Indicators of bankfull discharge are at the bank/floodplain transition, with over-bankfull flows likely to inundate a broad area of floodplain. Floodplain supports riparian vegetation and shows signs of overbank sediment deposition. Or beaver ponds inundate the entire, normally active floodplain and preclude the identification of bankfull indicators and the active floodplain width.
C	3	Flow access to the floodplain moderately limited by incision, channelization. Less frequent inundation than fully connected streams described above (as noted by bankfull indicators below floodplain transition). Floodplain supports a riparian overstory, but some understory plants may be upland. An inset floodplain supporting riparian vegetation may also be present.
C	2	Incised, channelized or modified with an inset floodplain formed, which is regularly inundated and supports riparian vegetation and sediment regimes. Or the stream has minimal access to the natural floodplain due to incision, channelization, or flow modification, and the natural floodplain does not support riparian vegetation except for relatively long-lived phreatophytes (e.g., cottonwood, salt cedar, etc.).
C	1	Fully disconnected from floodplain, either through inčision, bank modification/channelization, or hydrologic modification (i.e., abandonment of floodplain due to decreased peak flows). Indicators may include upland vegetation and lack of overbank sediment deposits on the floodplain, etc.

Ald. Photo Point Log for Cross-Section Photographs. For each cross-section record the digital names/numbers of photographs taken looking Upstream and Downstream from the thalweg and looking Bank Right* and Bank Left* across the stream from each side of the cross-section. Leave the cross-section tape and flags indicating bankful in the ground when taking the Bank Right and Bank Left photos. A photo board with SA name and cross-section information is helpful. (*The bank of a stream or river on the right (left) of the observer when facing in the direction of flow or downstream.) See Appendix E for additional details.

Cross Section	Easting (Latitude)	Northing (Longitude)	Upstream	Downstream	Bank Right	Bank Left
1					<u> </u>	
2						
3			/			

Floodplain Hydrologic Connectivity Comments:

Date: 6/11/24

Date: 6/11/24

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS/AM

A2 - Physical Patch Complexity

Worksheet 11. Physical Patch Complexity checklist. Check off existing physical patch types for the upper, middle and lower segments of the SA; count the number of unique patch types and rate using Table A2 in combination with the narrative description. Enter the rating on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (check all existing conditions)
			Active side channels
			Abandoned channels
			Backwater/eddy
			Riffies or rapids
			Shoals, sparely-vegetated bars
			Channel boulders
			Oxbow lakes/ponds on floodplains
			Vegetated island and side bars
	X		Terraces
	X		Channel pools
			Beaver ponds
			Swales, depressional features on floodplains
			Debris jams in channel
			Woody wrack piles on the floodplain
			Floodplain micro-topography (mounds, pits)
			Downed logs
			Natural levees
			Standing snags
			Variegated, convoluted, or crenulated foreshore
			Undercut banks in channels
			No. of unique Patch Types

Tabl	Table A2. Rating for Physical Patch Complexity							
Rati	ng	Description						
C	4	High degree of physical patch complexity across the floodplain. There are many floodplain micro-habitats present (mounds and pits, woody wrack piles, etc.), many fluvial geomorphic surfaces (swales, side channels, terraces, side bars, etc.), and there is high in-channel complexity (pools and riffles, large woody debris, undercut banks, etc.). As a guide, 12 or more unique indicators are present and well distributed throughout the SA (most indicators are found on multiple segments).						
C	3	Moderate physical patch complexity scattered across the floodplain. There are several floodplain micro-habitats present, several fluvial geomorphic surfaces, and there is moderate in-channel complexity. As a guide, 9 - 11 indicators are scattered throughout the SA (some on multiple segments).						
X	2	Limited physical patch complexity scattered across the floodplain. There are some floodplain micro-habitats present, some fluvial geomorphic surfaces, and there is limited in-channel complexity. As a guide, on average there are 6 - 8 unique indicators present in the SA (only a few on multiple segments).						
C	1	Little or no physical patch complexity on the floodplain. There are few or no floodplain micro-habitats present, few different fluvial geomorphic surfaces, and there is little or no in-channel complexity. As a guide, ≤ 5 unique indicators are present in the SA.						

Date: 6/11/24

Surveyor Initials :

DS/AM

SA Name : Two Mile Pond Reservoir Transect [6]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Þ		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		۲¢		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		ц\$J		There is leaf litter, thatch, or wrack in most pools.
Indicators of		X)		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		<u>ل</u> ک		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		X		Channel and point-bars consist of well-sorted bed materiai.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
·				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
indicators of Active Aggradation				There are partially buried living tree trunks or shrubs along the banks.
				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS/AM

Table A3. Rating for Channel Equilibrium					
Rating	Description				
X 4	Most of the channel throughout the SA is in equilibrium condition with little evidence of excessive aggradation or degradation based on the field indicators listed in Worksheet 12.				
C 3	There is some evidence of excessive aggradation or degradation; the channel throughout the SA seems to approach an equilibrium condition. Circle primary process: aggradation or degradation.				
C 2	There is evidence of severe aggradation or degradation throughout most of the channel through the SA. Circle primary process: aggradation or degradation.				
$\overline{1}$	The channel is artificially hardened, channelized, or is concrete throughout most of the SA.				

A4- Stream Bank Stability and Cover

Worksheet 13. Bank Soil Stability and Streambank Erosion Potential Checklist. Check the indicator that best describes the condition looking a minimum of 25 m upstream and downstream at the channel edge of the upper, middle and lower segment of the SA. Average the six scores for both Bank Soil Stability and Streambank Erosion Potential. Rate using the Table A4 and enter the rating on the SA Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators
	<u></u> 4	[]√4	X 14	Infrequent raw banks, less than 10% of steam bank under stress from trampling, slumping, vegetation removal or active erosion, etc.
Indicators of Bank Soil Stability	[]]3	□3	3	Raw banks and loose soil intermittently and 10%-25% of stream bank under stress from trampling, trail crossing, hoof punching, vegetation removal, erosion etc.
Son stability	2	2	<u></u> 2	Significant raw banks and loose soil, 25%-50% of stream bank under stress, trampled, slumping or eroding etc.
	1	1	<u> </u>	Raw banks almost continuous with greater than 50% of stream bank under stress, loose soil, slumping, trampled or eroding; or channel appear to lack banks due to trampling; or channel that is artificially hardened or concrete along most of its length.
	4	₫4	4	≥ 80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by boulders, large cobbles and/or large woody debris that prevent bank erosion.
	□3	□3	□3	≥50% - <80% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation are protected to allow only minor erosion.
Indicators of Stream Bank Erosion Potential	<u></u> 2	□2	2	≥25% - <50% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those area not covered by vegetation or stabilized by roots, are covered by materials or vegetation that give limited protection.
	<u> </u>	□1		Less than 25% of the stream bank surfaces are covered by vegetation in vigorous condition with dense root mass or by cobble or larger material. Those areas not covered by vegetation provide little or no control over erosion and excess shear stress, and the banks are susceptible to erosion by high water flows.

Average Indicator Score

Table A4. Stream Bank Stability and Cover Rating				
Rating	Description			
X 4	>3.5 - 4.0			
<u>с</u> з	>2.5 - ≤3.5			
C 2	>1.5 - ≤2.5			
	1.0 - ≤1.5			

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect [6]

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	×		Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
<u>_</u>			Gravel pits
			Anthropogenic levees and berms
<u></u>			Irrigation-driven salinity and mineral crusts
			Fire pits
<u></u>			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating
Rating	Description
8 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

Surveyor Initials : DS/AM

SF2MLE 6 1 SA CODE :

Date: 6/11/24

SA Name : Two Mile Pond Reservoir Transect (6]

DS/AM Surveyor Initials :

Worksheet 15. Stressor Checklist. Check off stressors by intensity category that may be affecting wetland ecological condition of the SA and WOI. Assign categories using direct evidence where available or your best professional judgement otherwise. If the presence of the stressor is uncertain, mark as "Unknow"" Rank Major Stressors in Dominant Stressor column(Pick up to 3)

Rank		Affect				J
	Major	Minor	Absent	Unknown	Stressor Group/Stressor	Comments
					Adverse water management	
					Extended low flow dam releases	
					Timing of flow releases not concordant	
					Extended high flow dam releases	
					Agriculture/Urban flow diversion upstream	1
					Adverse sediment management	· · · · · · · · · · · · · · · · · · ·
					Adverse sediment retention by dams	
					Sediment loss by dredging	
					Adverse sediment input (roads/development)	
				·····	Artificial water additions	
					Sewer treatment effluent	
					Point source urban runoff	
					Factory, feedlot outfall	
_					Agricultural irrigation ditch returns	
					Mining waste	
					Ground water pumping	······································
					Urban depletions	
					Fracking	
					Agriculture irrigation wells	
	·	r			Watershed alteration	
					Extensive recent fires in watershed	
					Extensive recent timber harvest	
					Extensive open pit mining in watershed	
					Livestock/wildlife overgrazing	
r			······		Local biodiversity impacts	
					Evidence of excessive grazing (local)	
					Excessive noise affecting wildlife	
	0	0		0 0	Counts by Intensity	
Iditional	Comment					

ersion Date: 04/25/2022

Schema: Montane 2.5

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cove	Worksheet						
SA Code SF2M! []] SA Name : Two A	Mile Pond Reservoir		i	Project : Rip	arian Asso	esement		
Code Tsct []	AU Name : Tran:	sect (/)		,	WOI : Two N	Aile Pond	Reservoi	r	
County Santa Fe	HUC 12 Headw	vaters Santa Fe River	Elevation (ft) 729	99 ((m) 2224.7	Ec	oregion	6.0 NWFM	
A riparian system decommissioned of water rights.	nd Boundary (Rationale, that leads into a pond lo due to safety concerns re	cated on the east side (
	e from Albuquerque you I you reach the reservoir		cos Trail. Then he	ad east oi	n Camino D	el Monte	Sol and r	ight on	
Ownership The Nature	Conservative and The S	anta Fe National Fores	t Data Sharing Restrictions	Results t only.	to client	Fish Obs Weth			
Surveyor Role		Survey	or Name				Sur	veyor Initials	
Landscape	Dustin Schwart	Ζ					DS	5	
Biotic	Annie McCoy						A	A.	
Abiotic	Dustin Schwart	z					DS	5	
Stressors	Stressors Dustin Schwartz						DS	;	
Easting (m)	Easting (m) Northing (m) Zone Datum Latitude (DD ft)				Long	gitude (DD ft)			
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM	35.68972	2	-	-105.89	
Survey Date	7/16/24	Start Time	9:00		End T	ime	15	:00	
	• ••• •• •• ••••••	SA De	scription						
	xt (summarize the wetla								
] /	Aver seems	very simi	las to	las 1	trip o	with f	lowers		
	Area seems Proporting to	ploom an	d licer	J5	ecory w	hac			
SA Biotic Condition (vegetation patterns, cor	nposition and structure	e, exotics and inva	asives, dis	turbance ev	/idence, fi	ire and he	erbivory)	
\mathcal{W}_{ill}	ous are bi	why and ?	willing su	A Solo	Er, Dis	, cha	inne/		
glob	e mollew of b	policy in the	prickly	$\rho_{\ell^{\prime\prime}}$	Angel.	whip	t.:/		
	(hydrological alteration r site impacts; explain th					e of overb	ank floo	ding; soil	
	1,46 n tu				6, 89	1 off]	
					0,,	1			
	1/a†0	r flowing	Normally						
	y (Overall site condition								
	Area scons	to be Joil	c. well	Jasp	ile j	le la	ck		
	Area service St hater	in the	dreca.	~ /					
Provisional Field Score <u>3.07.</u> Ran	ik 📝 Surveyor(s)	DS/AM Final Score	3,02 Rank		ials_DS)	Date	7/16/24	

Date : 7/16/24

SA Name : Two Mile Pond Reservoir Transect [|]

Surveyor Initials : DS/AM

Landscape Context

💵 - Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist.	Check off land cover elements within the buffer a	ea or RCC corridors that are either allowed,
or are excluded and considered non-buffer	elements that disrupt ecosystem connectivity. Inc	icate the imagery type and date (season
and year of imagery).		

Imager	'y	Google Earth	KMZ. file			Image	Date	6/23				
Allowe	d buffe	er/RCC land c	cover elements			Exclud	led nor	n-buffer/RC(Clar	nd co	over elen	nents
Buffer	RCC					Buffer	RCC					
	X	Natural or se	emi-natural vegetat	tion patcl	hes		×	dams, brid	lges,	residential developments, parking lots, s, revetments, and other structures		
X	X	Small irrigati	ion ditches without	t levees				Lawns, par	rks, g	golf	courses, :	sports fields
		Old fields, ur	nmaintained					Railroads				
		Open range l	land					Maintainec materials, s				nt piles, construction
×	X	Foot trails, he intensity)	orse trails, unpavec	d bike tra	iils (low			Intensive li	ivest	tock	areas, ho	orse paddocks, feedlots
×	X	Non-channel	l open water					Intensive a row crops,	_			tained pastures, hay fields, neyards
X	X		ning abandoned ve curring levees	egetated	levees, or	X	X	graded roa	ads			second-order unpaved but
		unpaved two	o tracks roads			X	×	Open wate structure	er bo	ound	ied by a l	levee or other manmade
		Other						Other				
			cent Sub-metric. N				rcentag]	 	Tabl	e L1a. Buffer Percent
SA peri	meter	compared of	f allowed buffer ele									
									ŀ	я П	ating	Buffer Percent
Box be	low. Ra	ate the sub-m	etric using Table L1						-		lating 4	Buffer Percent
Box be	low. Ra		etric using Table L1	1a and er					- L	\mathbf{C}	lating 4 3	Buffer Percent 100% ≥80% - <100%
Box bei Integrif	low. Ra ty Sum	ate the sub-m nmary Worksh	eetric using Table L1 eet 1d. Buffer Percen	1a and er nt (%)=	nter the ra 85%	ting on tl	he Buff	fer			4	100%
Box be Integrit Worksh	iow. Ra ty Sum eet 1c	ate the sub-m nmary Worksh c. Buffer Widt	etric using Table L1 leet 1d. Buffer Percen t h Sub-metric. Mea	1a and er ht (%)= asure the	85% e length of	ting on tl	he Buff	fer e in meters i	in	C &	4 3	100% ≥80% - <100%
Box be Integrit Worksh the GIS	iow. Ra ty Sum eet 1c or on t	ate the sub-m mary Worksh c. Buffer Widt the map. Aver	eetric using Table L1 eet 1d. Buffer Percen	1a and er ht (%)= asure the	85% e length of	ting on tl	he Buff	fer e in meters i	in		4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50%
Box bei Integrit Worksh the GIS the Buff	low. Ra ty Sum eet 1c or on t er Inte	ate the sub-m mary Worksh Buffer Widt the map. Aver- grity Summar iffer Width	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	1a and er ht (%)= asure the hs and rat	85% e length of te using Ta Buffe	ting on tl feach bư ble L1b. l r Width	ffer line	fer e in meters i he rating on uffer Width	in n		4 3 2 1 Tab	100% ≥80% - <100% ≥50% - <80% <50%
Box be Integrit Worksh the GIS	iow. Ra ty Sum eet 1c or on t er Inte Bu	ate the sub-m mary Worksh Buffer Widt the map. Aver- egrity Summar ffer Width (m)	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft)	1a and er at (%)= asure the as and rat	85% e length of te using Ta Buffe	ting on tl feach bư ble L1b. l r Width m)	ffer line	fer e in meters i he rating on uffer Width (ft)	in n	C & C R	4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50%
Box bei Integrit Worksh the GIS the Buff	iow. Ra ty Sum eet 1c or on t er Inte Bu	ate the sub-m mary Worksh Buffer Widt the map. Aver- grity Summar iffer Width	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	1a and er ht (%)= asure the hs and rat	85% e length of te using Ta Buffe	ting on tl feach bư ble L1b. l r Width m)	ffer line	fer e in meters i he rating on uffer Width	in n		4 3 2 1 Tab	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff	iow. Ra ty Sum eet 1c or on t fer Inte Bu	ate the sub-m mary Worksh Buffer Widt the map. Aver- egrity Summar ffer Width (m)	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft)	1a and er at (%)= asure the as and rat	nter the ra 85% e length of te using Ta Buffe (161	ting on tl feach bư ble L1b. l r Width m)	ffer line Enter ti	fer e in meters i he rating on uffer Width (ft)	in n	C & C R	4 3 2 1 Tab ating 4 3	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	1a and er at (%)= asure the as and rat Line E	85% e length of te using Ta Buffe (161 231	ting on tl feach bu ible L1b. l r Width m) .93	ffer line Enter ti	fer e in meters i he rating on uffer Width (ft) 531.26			4 3 2 1 Tab	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	ta and er at (%)= asure the as and rat Line E F G	85% e length of te using Ta Buffe (161 231 121	ting on tl feach bur ible L1b. l r Width m) .93	ffer line Enter ti Bu	fer e in meters i he rating on uffer Width (ft) 531.26 759.44 397.80			4 3 2 1 Tab ating 4 3	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39 111.07	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40	ta and er at (%)= asure the asure the bs and rat Line E F G H	Buffe Buffe 161 231 121 155	ting on tl feach bur ble L1b. l r Width m) .93 .48 .25 5.87	ffer line Enter ti Bu	fer e in meters i he rating on uffer Width (ft) 531.26 759.44		C & C C R C & C C	4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39 111.07	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	ta and er at (%)= asure the asure the bs and rat Line E F G H	85% e length of te using Ta Buffe (161 231 121	ting on tl feach bur ble L1b. l r Width m) .93 .48 .25 5.87	ffer line Enter ti Bu	fer e in meters i he rating on uffer Width (ft) 531.26 759.44 397.80		C & C C R C & C C	4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100%
Box beintegrit	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1 1 Aver heet 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inte	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	ta and er asure the asure the sand rat Line E F G H Enter the	Buffe Buffe	ting on tl feach bur ible L1b. l r Width m) .93 .48 .25 5.87 58 ic Ratings	ffer line Enter ti Bu (ft)	fer e in meters i he rating on uffer Width (ft) 531.26 759.44 397.80 511.38 Tables L1a			4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1 1 Aver heet 1 b abov	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inter re to calculate	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	ta and er asure the asure the sand rat Line E F G H Enter the sy Index S	Buffe e length of te using Ta Buffe (161 231 121 155 486. sub-metri	ting on tl feach bur ible L1b. l r Width m) .93 .48 .25 5.87 58 ic Ratings g the forr	ffer line Enter ti Bu (ft) s from 1 mula in	fer e in meters i he rating on uffer Width (ft) 531.26 759.44 397.80 511.38 Tables L1a h the box			4 3 2 1 Tab ating 4 3 2 1 ble L1c. sating	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below.	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1 1 Aver heet 1 b abov Using	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inter re to calculate	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	ta and er asure the asure the sand rat Line E F G H Enter the sy Index S	Buffe e length of te using Ta Buffe (161 231 121 155 486. sub-metri	ting on tl feach bur ible L1b. l r Width m) .93 .48 .25 5.87 58 ic Ratings g the forr	ffer line Enter ti Bu (ft) s from 1 mula in	fer e in meters i he rating on uffer Width (ft) 531.26 759.44 397.80 511.38 Tables L1a h the box			4 3 2 1 Tab Rating 4 3 2 1 ble L1c. 5	100% ≥80% - <100%
Box bei Integrit Worksh the GIS the Buff Line A B C D Works and L1 below. 'on	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1 1 Aver heet 1 b abov Using the SA	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inter ve to calculate the Buffer Inter A Summary W	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit regrity Index Score, forksheet.	ta and er asure the asure the as and rat Line E F G H inter the cy Index S enter rat	Buffe e length of te using Ta Buffe (1 161 231 121 155 486. sub-metri Score using ting for Bu	ting on the feach burn ble L1b. In the L1b	ffer line Enter ti Bu (ft) s from 1 mula in grity in	fer e in meters i he rating on uffer Width (ft) 531.26 759.44 397.80 511.38 Tables L1a h the box Table L1c			4 3 2 1 Tab Rating 4 3 2 1 ble L1c. S Rating 4 4 4 4 4 3 2 1 1 1 1 1 1 1 1 1 1 1 1 1	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below.	iow. Ra ty Sum eeet 1c or on t fer Inte Bu 1 1 1 1 1 1 Aver b abov Using the SA % Rat	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar ffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inter ve to calculate the Buffer Inter A Summary W	etric using Table L1 Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	ta and er asure the asure the as and rat Line E F G H inter the cy Index S enter rat	a length of te using Ta Buffe (1 161 231 121 155 486. sub-metri Score using ting for Bu	ting on the feach burn ble L1b. In the L1b	ffer line Enter ti Bu (ft) s from 1 mula in grity in	fer e in meters i he rating on uffer Width (ft) 531.26 759.44 397.80 511.38 Tables L1a h the box			4 3 2 1 Tab ating 4 3 2 1 5 ble L1c. 5 cating 4 3	100% ≥80% - <100%

Buffer % Rating	+ Buff	er Width Rating	/2 =	Buffer Integrity Index Score
3	+	3	/2 =	3

SA CODE: SF2MI [1]

Date : 7/16/24

DS/AM

SA Name : Two Mile Pond Reservoir Transect [l]

L4 - Surrounding Land Use

Norksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0_	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]}, junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0,7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0,3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Τ	able L4. Surr	ounding Land Use Rating
R	ating	LUI Score
$\overline{\Gamma}$	4	≥95 - 100
	3	≥80 - <95
8	2	≥40 - <80
C	1	<40

Tall Woody Stratum 1 Short Woody Stratum 2 Herbaceous/Sparse Stratu	Tall Woody Stratum ¹	y Stratun	1 u		Short Woody Stratum ²	dy Stratt	Jm 2		Herbaceous/Sparse Stratum 3	/Sparse	Stratum ³		CT Score 4	4	
CT Polygon Nos.	Species 1	<u> </u>	ecies 2	u Z	Species 3	ш Z	ties 4	w Z	Species 5 E				Raw ⁴	SA5	Wt Score ⁶
× 2		<u></u>	(5) 6	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~		- S.,	1. 1. Sec.		100 m			4	375	2015 SS	 6/04
√` ∞					With	· · ·		P.			blee Stew	2	0.5	55% 55%	£
									· · · · · · · · · · · · · · · · · · ·						
<u>ں</u>												<u> </u>			
W															
		ļ													
0															
										Final	Final Weighted Score ⁷	Score ⁷			3 4

Page 7 of 17

Surveyor Initials : [

Date: 7/16/24

SA Name: Two Mile Pond Reservoir Transct [

-

SA COD* SF2MI [

۶

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials : DS/AM

<1

B4 - Native Riparian Tree Regeneration

		ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Ra	ating	Description
ſ	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
R	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

N/

Invasive cover (%)

calculate

x

Tab	ole B5. Ratin	gs for Invasive Exotic Plant Species Cover
F	Rating	Invasive Species Cover %
Ċ	4	0%
~	3 χ	>0% - <1%
	2	≥1% - <10%
C	1	≥10

Additional CTs and Biotic Metric Comments:

Date: 7/16/24

sA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		7		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Д		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		ø		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avuision channels on the floodplain or adjacent valley floor.

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect []

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
	Q		Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
		· · · · · ·	Estimate % soil disturbance by segment area

Average % Soil Disturbance:

> 5%

Í		Table A5. Soil Surface Condition Rating
R	lating	Description
C	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
R	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cover	Worksheet					
SA Code SF2MI []] SA Name : Two M	file Pond Reservoir			Project : Rip	arian Asse	sement	
ode Tsct[]	AU Name : Trans	ect []]			WOI : Two M	Aile Pond F	leservoi	r
County Santa Fe	HUC 12 Headw	vaters Santa Fe River E	levation (ft) 729	99	(m) 2224.7	Eco	region	6.0 NWFM
A riparian system t	nd Boundary (Rationale, o that leads into a pond loo due to safety concerns re	cated on the east side of						
	e from Albuquerque you I you reach the reservoir		os Trail. Then he	ad east o	on Camino D	el Monte S	ol and ri	ight on
Ownership The Nature	e Conservative and The S	anta Fe National Forest	Data Sharing Restrictions	Results only.	to client	Fish Obse Wetla		
Surveyor Role		Survey	or Name				Sur	veyor Initials
Landscape	Dustin Schwart	Z					DS	<u> </u>
Biotic	Annie McCoy						۸A	vi
Abiotic	Dustin Schwart	Z					D:	5
Stressors	Dustin Schwart	z		.			DS	i
Easting (m)	Northing (m)	Zone	Datum		Latitude	(DD ft)	Long	gitude (DD ft)
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 L	ITM	35.68972	2		-105.89
Survey Date	8/13/24	Start Time	9:00		End T	ime	15	:00
		SA Des	cription					
	xt (summarize the wetla							
Grow Str	nd cover is ong pollen smell	prominent, 1. lots of	Trails 91 Flow From	opear SF	shighdt river.	y ove Drage	m H	rourn 1
SA Biotic Condition ((vegetation patterns, con	nposition and structure,	exotics and inv	asives, d	isturbance ev	vidence, fir	e and h	erbivory)
Virginia	Creeper, gold	len aster in b	loom, globe	mall	low, turk	de na	ed,	Blazing
Star.	Chimisa (2	colors. Matheblue	and grean)	Rac	oon tr	acts	will	ows
gppe.	nr to be c	Joshy well	Many w	hip tar	13 Not	- Man	v bit	d's
SA Abiotic Condition	h (hydrological alteration r site Impacts; explain the	s (e.g., dams, walls etc.);	flooding charac	teristics;	and evidence	e of overba	ank floo	ding; soil
	prownd seems					4 ation	504	nds
	from Andobon 14	trea, Channel	al a	cho .		. 1 . 1 . 1	200	
	From Andobon A 15.5 stu	79 4 S/om	17.4%	Ji yng	017.7	21.369	<i>F1</i> 0	h
Assessment Summa	ry (Overall site condition	summary and commen	ts after the field	data is c	ollected.)			
		irea is still						
	flows and	i: lunvent	y wet	(1000	the Mes	soors,		
Provisional Field Score 2.99 Rar	nk B Surveyor(s)	DS/AM Final Score	.967 Rank	ß_ In	itials 🕧	5	Date	8/13/24

Date: 8/13/24

SA Name : Two Mile Pond Reservoir Transect [/]

Surveyor Initials : DS/AM

Landscape Context

__. - Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Imager	у	Google Earth	KMZ. file			Image	Date	6/23			
Allowe	d buff	er/RCC land c	over elements		<u> </u>	1		n-buffer/RCC	land c	over elen	hents
Buffer	RCC					Buffer	RCC				
X	×	Natural or se	mi-natural vegetat	ion patch	nes	X	X	>			velopments, parking lots, and other structures
	×	Small irrigati	on ditches without	levees				Lawns, parks	s, golf	courses,	sports fields
		Old fields, un	maintained					Railroads			
		Open range l	land					Maintained materials, st			at piles, construction
	X	Foot trails, he intensity)	orse trails, unpavec	l bike tra	ils (low			Intensive liv	estoci	k areas, ho	orse paddocks, feedlots
X	X	Non-channel	l open water					Intensive ag row crops, o			ained pastures, hay fields, neyards
X	X	Non-functior naturally occ	ning abandoned ve urring levees	getated	levees, or	×	X	Paved roads graded road		veloped s	econd-order unpaved but
		unpaved two	o tracks roads			×	X	Open water structure	boun	ded by a l	evee or other manmade
		Other		·				Other	_		
Works	heet 1	b. Buffer Per	cent Sub-metric. M	vieasure (or estimate	the per	centag	e of the		Tabl	e L1a. Buffer Percent
C A		· · · · · · · · · · · · · · · · · · ·	1 1 1 CC								
			allowed buffer ele							Rating	Buffer Percent
Box be	iow. Ra	ate the sub-m	etric using Table L1							Rating	Buffer Percent
Box be	iow. Ra		etric using Table L1 eet 1d.	a and en					C	4	100%
Box be Integrit	low. Ra ty Sum	ate the sub-m mary Worksh	etric using Table L1 eet 1d. Buffer Percen	la and en t (%)=	ter the rat 85%	ing on ti	he Buff	er		4 3	100% ≥80% - <100%
Box be Integrit Worksh	iow. Ra ty Sum	ate the sub-m mary Worksh Buffer Widt	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea	t (%)=	85% length of	ing on ti	he Buff	er In meters in		4	100%
Box be Integrit Worksh the GIS	iow. Ra ty Sum eet 1 c	the sub-mary Worksh Buffer Widt The map. Aver	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length	t (%)=	85% length of	ing on ti	he Buff	er In meters in		4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50%
Box be Integrit Worksh the GIS the Buff	iow. Ra ty Sum eet 1 or on t er Inte	the sub-mary Worksh Buffer Widt The map. Aver	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea	t (%)= asure the s and rat	85% length of	each bu	ffer line	er In meters in		4 3 2 1	100% ≥80% - <100% ≥50% - <80%
Box be Integrit Worksh the GIS	iow. Ra ty Sum eet 1 or on t er Inte	te the sub-m mary Worksh . Buffer Widt he map. Aver grity Summa	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d.	t (%)=	85% length of e using Tal	each bu ble L1b. Width	ffer line	er e in meters in he rating on		4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50%
Box be Integrit Worksh the GIS the Buff	iow. Ra y Sum eet 1 c or on t er Inte	Buffer Widt Buffer Widt Be map. Aver grity Summar ffer Width	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	t (%)= asure the s and rat	85% length of e using Tab	each bu ble L1b. Width	ffer line	er e in meters in he rating on uffer Width		4 3 2 1 Tab	100% ≥80% - <100% ≥50% - <80% <50%
Box be Integrit Worksh the GIS the Buff Line A	eet 1 corrections and the set 1 correction of the set	Buffer Widt Bernary Worksh Buffer Widt Bernar, Aver Grity Summan ffer Width (m) 64.26	etric using Table L1 eet 1d. Buffer Percen ih Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	t (%)= asure the s and rat	85% length of e using Tal Buffer (n	each bu ble L1b. Width 1) 93	ffer line Enter ti	er e in meters in he rating on uffer Width (ft)		4 3 2 1 Tab Rating	100% ≥80% - <100% ≥50% - <80% <50% le L1b. Buffer Width Average buffer width
Box be Integrit Worksh the GIS the Buff Line A B	iow. Raty Sum eet 1 cor on t er Inte Bu 1	Buffer Widt Bernary Worksh Buffer Widt Bernary Summan Street Width (m) 64.26 25.25	etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	t (%)= asure the s and rat Line E F	e using Tal Buffer (n 161. 231.	ing on the search bud ble L1b. Width 1) 93	ffer line Enter ti	er e in meters in he rating on uffer Width (ft) 531.26		4 3 2 1 Tab Rating 4	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C	eet 1 cor on ter Inte	Buffer Widt Be map. Aver. Brity Summar Bre Width (m) 64.26 25.25 15.39	etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	t (%)= asure the s and rat Line E F G	e using Tab Buffer (n 161. 231. 121.	each bu ble L1b. Width 1) 93 48 25	ffer line Enter ti Bu	er e in meters in he rating on affer Width (ft) 531.26 759.44 397.80		4 3 2 1 Tab Rating 4 3	100% ≥80% - <100% ≥50% - <80% <50% L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
Box be Integrit Worksh the GIS the Buff Line A B	eet 1 cor on ter Inte	Buffer Widt Bernary Worksh Buffer Widt Bernary Summan Street Width (m) 64.26 25.25	etric using Table L1 eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40	t (%)= asure the s and rat Line E F G H	85% length of e using Tal Buffer (n 161. 231. 121. 155.	each bu ble L1b. Width 1) 93 48 25 87	ffer line Enter ti Bu	er e in meters in he rating on affer Width (ft) 531.26 759.44		4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C	eet 1 cor on ter Inte	Buffer Widt Buffer Widt the map. Aver- grity Summar ffer Width (m) 64.26 25.25 15.39 11.07	etric using Table L1 eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	t (%)= asure the s and rat Line E F G H	e using Tab Buffer (n 161. 231. 121.	each bu ble L1b. Width 1) 93 48 25 87	ffer line Enter ti Bu	er e in meters in he rating on affer Width (ft) 531.26 759.44 397.80		4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D	eet 1 cor on ter Inter 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	Buffer Widt Bernary Worksh Buffer Widt Bernary Summar Service Service tric using Table L1 eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	t (%)= asure the s and rat Line E F G H	85% length of e using Tal Buffer (n 161. 231. 121. 125. 486.5	each bu ble L1b. Width 1) 93 48 25 87 8 8 87	ffer line Enter ti Bu (ft) s from	er e In meters in he rating on uffer Width (ft) 531.26 759.44 397.80 511.38 511.38		4 3 2 1 Tab Rating 4 3 2 1 2 1	100% ≥80% - <100%	
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1	iow. Raty Sum eet 1 cor on t er Inte Bu 1 1 1 1 Aver heet 1 b abov	Buffer Widt Bernary Worksh Buffer Widt The map. Aver- grity Summar ffer Width (m) 64.26 25.25 15.39 11.07 age d. Buffer Inte re to calculate	etric using Table L1 eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	t (%)= asure the s and rat Line E F G H H	Buffer (n 161. 231. 121. 486.5 sub-metric core using	each bu ble L1b. Width 1) 93 48 25 87 8 8 : Rating: the for	ffer line Enter ti Bu (ft) s from nula in	er e in meters in he rating on affer Width (ft) 531.26 759.44 397.80 511.38 511.38		4 3 2 1 Tab Rating 4 3 2 1 2 1 8 Able L1c. 5	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below.	eet 1 coron ter Inter Bu	Buffer Widt Be map. Aver- grity Summan ffer Width (m) 64.26 25.25 115.39 11.07 age d. Buffer Inte re to calculate the Buffer Inte	etric using Table L1 eet 1d. Buffer Percen age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	t (%)= asure the s and rat Line E F G H H	Buffer (n 161. 231. 121. 486.5 sub-metric core using	each bu ble L1b. Width 1) 93 48 25 87 8 8 : Rating: the for	ffer line Enter ti Bu (ft) s from nula in	er e in meters in he rating on affer Width (ft) 531.26 759.44 397.80 511.38 511.38		4 3 2 1 Tab Rating 4 3 2 1 able L1c. 5 Rating 4	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below. ' on	eet 1 coron ter Inter Bu	Buffer Widt Buffer Widt the map. Aver- grity Summar ffer Width (m) 64.26 25.25 115.39 11.07 age d. Buffer Inte ye to calculate the Buffer Inte A Summary W	etric using Table L1 eet 1d. Buffer Percen age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score, forksheet.	t (%)= asure the s and rat Line E F G H inter the y Index S enter rat	Buffer e using Tal Buffer (n 161. 231. 121. 155. 486.5 sub-metric core using ing for Buf	each bu ble L1b. Width 1) 93 48 25 87 8 87 8 8 5 87 8 7 8 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 8	ffer line Enter ti Bu (ft) s from rula in grity in	er e in meters in he rating on affer Width (ft) 531.26 759.44 397.80 511.38 Fables L1a the box Table L1c		4 3 2 1 Tab Rating 4 3 2 1 2 1 8 Able L1c. 5	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below.	eet 1 coron ter Inter Bu	Buffer Widt Buffer Widt the map. Aver- grity Summar ffer Width (m) 64.26 25.25 115.39 11.07 age d. Buffer Inte ye to calculate the Buffer Inte A Summary W	etric using Table L1 eet 1d. Buffer Percen age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	t (%)= asure the s and rat Line E F G H inter the y Index S enter rat	Buffer e using Tal Buffer (n 161. 231. 121. 155. 486.5 sub-metric core using ing for Buf	each bu ble L1b. Width 1) 93 48 25 87 8 87 8 8 5 87 8 7 8 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 8	ffer line Enter ti Bu (ft) s from rula in grity in	er e in meters in he rating on affer Width (ft) 531.26 759.44 397.80 511.38 511.38		4 3 2 1 Tab Rating 4 3 2 1 2 1 8 Ble L1c. 9 Rating 4 3	100% ≥80% - <100%

Date: 8/13/24

Surveyor Initials :

DS/AM

SA Name: Two Mile Pond Reservoir Transect []

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Bank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0,4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0,3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score Coefficient * % LUZ Area		100	75

Tab	le L4. Surre	ounding Land Use Rating
Rati	ng	LUI Score
C 4		≥95 - 100
C 3		≥80 - <95
🕅 2		≥40 - <80
C 1		<40

white white	rkshu rinan rhiti	eet 6. It spe is mo	CT Pla cies in re abur	int Spec i each stra idant. Éai	tum ti tum ti ch pol	id Pol hat ar lygon	ygon Assi ppears in t is either a	ignment he polyg issigned	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratu which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.		dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.		ns. If a spec osition or a	ies appe new CT	ars in more is created f	than on or the po	te strata, as olygon.	- 	species	to the str	atum in	
	\square					·	Tall Woody Stratum ¹	y Stratun	-		Short Woody Stratum ²	dy Strati	2 m		Herbaceou	s/Sparse	Herbaceous/Sparse Stratum ³		CT Score ⁴	64 64		 _
Ե	Pol	Polygon Nos.	Nos.			~'	Species 1	шZ	Species 2	шZ	Species 3	ωZ	Species 4	ωZ	Species 5	ц	Species 6	<u>ы Z</u>	Raw ⁴	% SA5	Wt Score ⁶	
۲	<u>e</u> st					~	${\cal N}_{[a]p}$:	Ň	Ç. ∽ C	N	G. 5. 5		$r_{2}r_{1}$	1.1	53 / 51/2 25	ш	5.000 Malan	ш	3.50	SN N	1,225	
ß		\sim									W.H.	\sim		N	fe low	41)			2.5	65	1.787	
U																						1
																						<u> </u>
u	ļ							 														1
ш							1	 														<u> </u>
U							{	 														T
표												} 										т —
-													5									ę
-	ļ				[2 2										
×																						<u> </u>
												\$ 								 		T
Σ																[ļ					1
z														 								T
0									5													1
													8			Fina	Final Weighted Score ⁷	d Score ⁷			3.01	1
	rees	and	shrubs	> 6 m (2() feet) and	> 25% tot	al stratur	n cover; 2.] 5	lrees an	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	m (20 fe	et) and >2!	5% total	stratum co	/er; 3. Hc	erbaceous (gramino	ids and	forbs)>1	0% total	
str. legt	itum al 1;	cove: 6Wt.	r. Thaw Score i:	s the prov	from duct o	l able of the	B1a (Appe Raw Score	endix b); e * % SA;	7The Final	e percer Weighti	stratum cover. "Raw Score is from Lable B1a (Appendix B); "%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA: ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	: SA area the sum	covered by of the Wt. S	r the CL : cores. R	and expres: ate the CT F	ied as a (inal Wei	decimal nu ohted Scor	mber; th 'e on Tab	e total a vie B1 an	rea %SA id enter t	must he Ratino	
ق ز	Relat	live N	ative P	lant Com	munit	Ū A	mposition	on the S	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	mary W	orksheet.											
											, 0200	C + 7 ~ C										ì

Page 7 of 17

Date: 8/13/24 Surveyor Initials: r M

SA COL SF2MI [/]

SA Name: Two Mile Pond Reservoir Transect [A]

SA CODE: SF2MI[]]

Date: 8/13/24

SA Name: Two Mile Pond Reservoir Transect []

Surveyor Initials : DS/AM

B4 - Native Riparian Tree Regeneration

Rating	Description
C 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u>3</u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
¢ 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
$\overline{}$	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table 85 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIR

Invasive cover (%)

calculate

Tab	le B	5. Ra	tings for invasive Exotic Plant Species Cover
F	latin	g	Invasive Species Cover %
C	4		0%
	3	X	>0% - <1%
· ۱	2		≥1% - <10%
\cap	1		≥10

Additional CTs and Biotic Metric Comments:

The chimismi have different dolor dependent on plant. One type of chimism requeen flowing chimism almost neon the other "

SA CODE: SF2MI[]]

Date: 8/13/24

Surveyor Initials :

DS/AM

SA Name: Two Mile Pond Reservoir Transect []]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ą		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ŕ		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ę		There is leaf litter, thatch, or wrack in most pools.
Indicators of				The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Q		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Q		Channel and point-bars consist of well-sorted bed material.
		Ę		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		<u>``</u> .		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI[]

Date: 8/13/24

 ≥ 1

Surveyor Initials : DS/AM

SA Name :	Two Mile Pond Reservoir Transect [1]

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

[Table A5. Soil Surface Condition Rating
Rating	Description
A	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
. (3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cove	r Worksheet						
A Code SF2MI (] SA Name : Two M	Aile Pond Reservoir		Project : Riparian	Assesement				
Code Tsct [1]	AU Name : Trans	sect []]		WO} : Two Mile P	ond Reservoi	ir			
County Santa Fe	HUC 12 Headw	vaters Santa Fe River	Elevation (ft) 7299	(m) 2224.7	Ecoregion	6.0 NWFM			
A riparian system decommissioned of water rights. Driving Directions Driving to Santa F	due to safety concerns re	cated on the east side egarding the reservoir head north on Old Pe	of Santa Fe bordering the and a water diversion to t cos Trail. Then head east	he area was recen	tly shut down	n due to lack			
wnership The Natur	e Conservative and The S	ianta Fe National Fores	t Data Sharing Result: Restrictions only.		Observed in Wetland?				
Surveyor Role		Surve	yor Name		Sur	veyor initials			
Landscape	Dustin Schwart	Z			D	s			
Biotic	Annie McCoy				A	M			
Abiotic	Dustin Schwart		······································	······································	D	S			
Stressors	Dustin Schwar	tz			D	S			
Easting (m)	Northing (m)	Zone	Datum	Latitude (DD	ft) Lon	gitude (DD ft			
-105° 53' 24" W	35° 41' 23" N	35° 41' 23" N 13 NAD- 83 UTM 35.689722 -105.89							
Survey Date 9/11/24 Start Time 9:00 End Time 15:00									
bl-e	grandma grass, L	and is prepping	bosa grass is n for fall airplances	/	~				
				/	pr In	· · · · · · · · · · · · · · · · · · ·			
		·····	e, exotics and invasives, d						
			aster all in blo						
					• •				
			Jeer track, prick						
disturbance and othe	er site impacts; explain th	e hydrologic breaks or	other factors that define river Willow	the SA limits)					
SF	Water Q pl	4 7.57 14.9	65 45 m/cm	7,6200 1%	<u>L 31. °</u>	9NTU			
Assessment Summa		· · · · · · · · · · · · · · · · · · ·	ents after the field data is o	· · · · · · · · · · · · · · · · · · ·					
			fell and 1	eaves ar l	star	ling			
	to change	to yellow.				·			
Provisional Field Score 2,89 Ra:						9/11/24			

Page 1 of 17

SA CODE: SF2MI[[]

Date: 9/11/24

SA Name : Two Mile Pond Reservoir Transect []

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Image	у	Google Earth	KMZ. file			image	Date	6/23			
Allowe	d buff	er/RCC land c	over elements			Exclud	ed nor	n-buffer/RCC I	and c	over elem	ents
Buffer	RCC					Buffer	RCC				
X	X	Natural or se	mi-natural vegetati	on patcl	hes	×	X	1			elopments, parking lots, and other structures
	X	Small irrigati	on ditches without	levees				Lawns, parks	, golf	courses, s	ports fields
		Old fields, un	maintained					Railroads			
		Open range l	and					Maintained I materials, sta			t piles, construction
X	X	Foot trails, he intensity)	orse trails, unpaved	bike tra	ils (low			Intensive live	estock	areas, ho	rse paddocks, feedlots
×	X	Non-channel	open water					Intensive agr row crops, or			ained pastures, hay fields, neyards
X	X	Non-functior naturally occ	ning abandoned ve urring levees	getated	levees, or	X	X	graded road:	5	·	econd-order unpaved but
		unpaved two	tracks roads			×	X	Open water l structure	bound	led by a l	evee or other manmade
		Other						Other			
Worksheet 1b. Buffer Percent Sub-metric. Measure or estimate									Table	L1a. Buffer Percent	
SA perimeter composed of allowed buffer elements and enter into Box below. Rate the sub-metric using Table L1a and enter the ratir							F	ating	Buffer Percent		
Integrity Summary Worksheet 1d.								4	100%		
Buffer Percent (%)=				85%				Ŕ	3	≥80% - <100%	
Worksheet 1c. Buffer Width Sub-metric. Measure th				sure the	lenath of	each bul	ffer line	e in meters in		2	≥50% - <80%
the GIS or on the map. Average the line lengths and rate using Ta				e using Ta	ble L1b. I	Enter th	ne rating on		1	<50%	
the Buff			y Worksheet 1d.			887 .141			<u> </u>	Tabl	e L1b. Buffer Width
Line	Bu	ffer Width (m)	Buffer Width (ft)	Line		r Width m)	BU	iffer Width (ft)	R	ating	Average buffer width
A	1	64.26	538.91	E	161.	161.93 53		531.26		4	≥190m
В		25.25	410.92	F	231	.48		759.44	R	3	≥130 - <190m
	ļ	15.39	378.57	·	101			397.80	C.	2	≥65 - <130m
с			121.25			(<u>C 1</u>		<65m			
D					.87 511.38			I			
Average 148.31 (m) 486.5					58	(ft) Table L1c. Summary Rating fo			ummary Rating for Buffer Integrity		
Worksheet 1d. Buffer Integrity Summary. Enter the sub-metric					c Ratinos	from T	ables L1a				
and L1b above to calculate the Buffer Integrity Index Score using					g the forn	nula in	the box		ating	Score	
	-		egrity Index Score, P arkshoot	enter rat	ing for Bu	ffer Integ	rity in '	Table L1c	C	4	>3.5
no גי	une S/	A Summary We	urksneet.	<u>, </u>	· ·				R C	3	>2.5 - ≤3.5 >1.5 - ≤2.5
Buffer	% Rat	ing + Bu	Iffer Width Rating	/2:	= Buf	fer Integ	rity Inc	dex Score	Ċ		≥1.5 - ≤2.5 ≤1.5
3		+	3	/2:	=	Buffer Integrity Index Score				•	ישרואים

SA CODE: SF2MI[]]

Date: 9/11/24

Surveyor Initials:

DS/AM

SA Name : Two Mile Pond Reservoir Transect []

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) (surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	Ö
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Su	rrounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
C 3	≥80 - <95
Ø 2	≥40 - <80
C 1	<40

domir which	lant sp it is m	ectes in becies in fore abur	dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one stratu, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon. Tail Woody Stratum 1 [Tail Woody Stratum 2 [Herbaceous/Sparse Stratum 3 [CT Score 4]]	n that i polygo	appears in the polygon are either assigned to Tall Woody Stratum ¹	the poly assigned	gon. See for i to the sam	otnotes f e CT if it	A, enter the number of the or special instructions. If has the same compositions Short Woody Stratum ²	structio structio se comp dv Stratt	no the first ins. If a spec osition or a	pulygo cies appe new CT	ars in more bars in more is created for Herbaceou	than or the pr	ars in more than one strata, as: is created for the polygon. Herbaceous/Sparse Stratum ³	sign the	species to the CT Score 4	to the str a 4	atum in
<u>ե</u>	olygo	Polygon Nos.			Species 1	<u>u z</u>	Species 2	ωZ	Species 3) uz	Species 4	ᆈᆂ	Species 5	ц Z	Species 6	шZ	Raw4	SA5	Wt Score ⁶
A	2				Made		Pine	2	Chinis,	\sim	W. Haw	5	30 C 4	m	6. he	17	3,50	35	1, 255
m	5					<u> </u>		 	Willow	1.5	ch a x	\geq	an Yar Berer	La.)	Post -	11	2,75	S	1.787
U																			
	 					 													
ш																			
<u>ц</u>																			
U				.															
I																}	- - -		
~													<u> </u>	}					
×	<u> </u>	 				 	 									{ 			
	ļ	 					\$ 	i											
ž												 							
z										[
0												,							
							-							Fina	Final Weighted Score ⁷	1 Score ⁷			3,01
1. Tr	es ant	d shrubs	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	et) ani	d > 25% to	ital stratu	im cover; 2.	Trees an	d shrubs ≤6	m (20 fe	set) and >2:	5% total	stratum co	ver; 3. H	erbaceous (gramino	oids and	forbs)>1)% total
equal	1; 6W	/ег. ткам t. Score i	stratum cover. Thaw score is from Table 514 (Appendix 5); 7%5A is the percentage of the SA area covered by the UT and expressed as a decimal number; the total area %5A must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	tt of th	e bia (Ap) e Raw Sco	oenaix by re * % SA	; ⁷ The Final	ie percer I Weighti	ntage or une ed Score is t	the sum-	of the Wt. S	v the LL scores. R	and expres: ate the CT F	sed as a Inal Wei	decimai nu ighted Scor	mber; tn e on Tab	e total al de B1 an	rea %osA d enter t	must he Rating
for R¢	lative	Native P	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	inity C	ompositio	n on the	SA Rank Sur	nmary M	/orksheet.										:

Page 7 of 17

Date: 9/11/24 Surveyor Initials:

SA Name: Two Mile Pond Reservoir T = ect [/]

sa cor SF2MI [/]

X

SA CODE: SF2MI[]

Date: 9/11/24

SA Name: Two Mile Pond Reservoir Transect []

Surveyor Initials : DS/AM

B4 - Native Riparian Tree Regeneration

	I. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from set 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Ratin	g Description
C 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
x 1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Invasive cover (%)

calculate

Tab	Table B5. Ratings for Invasive Exotic Plant Species Cover					
R	lating	Invasive Species Cover %				
C	4	0%				
$\widehat{}$	3 ×	>0% - <1%				
-	2	≥1% - <10%				
$\widehat{\mathbf{C}}$	1	≥10				

Additional CTs and Biotic Metric Comments:

White breasted not batch, Northern Flicker, Broad hilled humming bird, black apped chickades, leser gold Finch, Russon tracks, water strider, door track, prickly pears blue hilizard

SA CODE: SF2MI[]]

Date: 9/11/24

Surveyor Initials :

DS/AM

SA Name: Two Mile Pond Reservoir Transect [[]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Bate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
}		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		ď		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ц		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
Ē				There are avulsion channels on the floodplain or adjacent valley floor.

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect [/]

A5 - Soil Surface Condition

Worksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	Ø		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
	:		Estimate % soil disturbance by segment area

Average % Soil Disturbance:

> 5%

1	Table A5. Soil Surface Condition Rating							
R	ating	Description						
ĸ	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or igravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.						
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.						
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.						
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.						

NMRAM Montane Riverine Wetlands Version 2.5

SA Code SE2MLE 7		SA Cove	r Worksheet				
A Code SF2MI [2] SA Name : Two Mile Pond Reservoir Project : Riparian Assessment							
Lode Tsct [2.]	AU Name : Trans	eservoir					
ounty Santa Fe	HUC 12 Headw	eglon 6.0 NWFM					
A riparian system decommissioned of water rights. Driving Directions Driving to Santa F	nd Boundary (Rationale, o that leads into a pond lo due to safety concerns re Fe from Albuquerque you	cated on the east side agarding the reservoir head north on Old Pe	and a water divers	sion to th	e area was r	ecently shu	it down due to lack
	il you reach the reservoir e Conservative and The S		t Data Sharing Restrictions	Results only.	to client	Fish Obser Wetlar	
Surveyor Role	1	Surve	yor Name				Surveyor Initials
Landscape	Dustin Schwart	Z				<u> </u>	DS
Biotic	Annie McCoy						AM
Abiotic	Dustin Schwart	tz					DS
Stressors	Dustin Schwart						DS
Easting (m)	Northing (m)	Zone	Datum		Latitude	(DD ft)	Longitude (DD ft
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM	35.68972	2	-105.89
Survey Date 🗸	7/16/24	Start Time	9:00	End Time		15:00	
(2)	j j.				<u> </u>		
	lon From c With less			6		1.24	• •
	with less	suffersmell	No o	Jar	Conser		
SA Biotic Condition 4 9a 6 Lo 8 Lo	With less (vegetation patterns, con where seneskes, and seems which bind	suffersmell mposition and structur Applies even to have grasses co	No o e, exotics and invi ground Madari over ever	Jox asives, di wo Roc 5 b	<u>Conser</u> sturbance e tro n w 1944 n y No	vidence, fin nex o to ho to ho	e and herbivory)
SA Biotic Condition 4 9。 くん。 ちん SA Abiotic Conditio	With less (vegetation patterns, con where sine key, main Seers) 20 bj. J m (hydrological alteration er site impacts; explain th	Suffersmell mposition and structur Apples even for have <u>1 rasses</u> <u>co</u> ns (e.g., dams, walls etc. e hydrologic breaks or	No o e, exotics and invo ground madant over ever .]; flooding charac other factors that	Joy asives, di w, Nov b b y 1 h. 2 teristics i t define ti	<u>Sturbance e</u> turbance e traine tra	vidence, fir v en a to ha to	e and herbivory)
SA Biotic Condition イター くんの おん	With less (vegetation patterns, con where sine key, main Seers) 20 bj. J m (hydrological alteration er site impacts; explain th	suffersmell mposition and structur Apples com to have 10 have 10 have 10 have 10 have 152 a S	No o e, exotics and inve ground madree over ever over ever other factors that 10 °C	Jav asives, di w, Nov 5 1 5 1 to 1 to 1 to 1 to 1 to 1 to 1 to 1 to	$\frac{C_{COM}}{S}$ sturbance e $\frac{1}{2} \frac{1}{N_{0}}$ and evidence he SA limits $\frac{1}{2} \frac{1}{N_{0}} \frac{1}{N_{0}}$	vidence, fir vers to he to	e and herbivory)
SA Biotic Condition 4 9° 6 ho 8 ho SA Abiotic Conditio disturbance and othe	With less (vegetation patterns, con- where sine key, where sine sine key, where sine sine sine sine sine sine sine sin	Suffersmell mposition and structur Apples con to have 1 a seg co 1 s (e.g., dams, walls etc. e hydrologic breaks or 152 a S fill Relevand summary and comme	No o e, exotics and inve ground madain over ever l; flooding charac other factors that 10 °C cond character that field	Joy asives, di w, Nov b k y 1 h.2 teristics of t define the born of born of data is co	$\frac{C_{COM}}{Sturbance e}$ $\frac{1}{12} N_{0}^{2}$ and evidence he SA limits $\frac{1}{12} R_{0}^{2}$ is all oflected.)	vidence, fir vers to ho to n to n to n to n to n to n to n to	e and herbivory)
SA Biotic Condition 4 9° 6 bro 8 bro SA Abiotic Conditio disturbance and othe	With less (vegetation patterns, con where series key, and Seeres A bird on (hydrological alteration er site impacts; explain th 6,07 NFW Path is si ary (Overall site condition Land is	Suffersmell mposition and structur Apples con to have 10 have	No or e, exotics and inve ground madric over ever l; flooding charac other factors that 10 °C and char ents after the field	Joy asives, di w, Nov b k y 1 h.2 teristics of t define the born of born of data is co	$\frac{C_{COM}}{Sturbance e}$ $\frac{1}{12} N_{0}^{2}$ and evidence he SA limits $\frac{1}{12} R_{0}^{2}$ is all oflected.)	vidence, fir vers to ho to n to n to n to n to n to n to n to	e and herbivory)
SA Biotic Condition 4 9° 6 bro 8 biotic Conditio disturbance and othe	With less (vegetation patterns, con- where sine key, where sine sine key, where sine sine sine sine sine sine sine sin	Suffersmell mposition and structur Apples con to have 10 have	No or e, exotics and inve ground madric over ever l; flooding charac other factors that 10 °C and char ents after the field	Joy asives, di w, Nov b k y 1 h.2 teristics of t define the born of born of data is co	$\frac{C_{COM}}{Sturbance e}$ $\frac{1}{12} N_{0}^{2}$ and evidence he SA limits $\frac{1}{12} R_{0}^{2}$ is all oflected.)	vidence, fir vers to ho to n to n to n to n to n to n to n to	e and herbivory)

SA CODE: SF2MI [2]

7/16/24 Date :

SA Name : Two Mile Pond Reservoir Transect [\mathcal{L}]

Surveyor Initials : DS/AM

Landscape Context

Ser - Buffer Integrity Index

												jery type and date (season
Imager	Imagery Google Earth KMZ. file					Image Date 6/23		3				
Allowed buffer/RCC land cover elements					Exclud	xcluded non-buffer/RCC land cover elements			nents			
Buffer	RCC					Buffer	RCC					
X		Natural or se	mi-natural vegetat	ion patches		X	×	Commercial/residential developments, parking lots, dams, bridges, revetments, and other structures				
	X S	imall irrigati	on ditches without	levees				Lawns, parks, golf courses, sports fields				
		Old fields, ur	nmaintained					Railroads				
		Open range	land					Maintain material:				t piles, construction
X	Y I	oot trails, he ntensity)	orse trails, unpaved	l bike trails (low			Intensive	e live:	stock	areas, ho	rse paddocks, feedlots
X	X	Ion-channel	l open water					Intensive row crop				ained pastures, hay fields, neyards
×	1		ning abandoned ve surring levees	getated lev	ees, or	x	X		aved roads or developed second-order unpaved but raded roads			
		inpaved two	o tracks roads			×	×	Open wa structure	Open water bounded by a levee or other manmade structure			
		Dther						Other				
			Worksheet 1b. Buffer Percent Sub-metric. Measure or estimate								Table	1 4
lov hen	A perimeter composed of allowed buffer elements and enter into ox below. Rate the sub-metric using Table L1a and enter the ratin											L1a. Buffer Percent
Box bel						o the Bi	uffer Pe	ercent		- R	ating	Buffer Percent
	ow. Rate		etric using Table L1 eet 1d.	a and enter	the ratir	o the Bi	uffer Pe	ercent		R C		· ····
	ow. Rate	e the sub-m	etric using Table L1	a and enter		o the Bi	uffer Pe	ercent		С 8	ating	Buffer Percent
Integrit	ow. Rate y Summ	e the sub-m nary Worksh	etric using Table L1 eet 1d. Buffer Percen	a and enter t (%)=	the ratir 85%	o the Bi ig on th	uffer Pe ne Buffe	ercent er	rs in [ating 4	Buffer Percent 100%
Untegrit Worksh the GIS o	ow. Rate y Summ eet 1c.	e the sub-m hary Worksh Buffer Widt e map. Aver	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length	a and enter t (%)=	the ratir 85% 9gth of e	o the Bi ng on th	uffer Pe ne Buffe	ercent er e in meter		С 8	ating 4 3	Buffer Percent 100% ≥80% - <100%
Untegrit Worksh the GIS o	ow. Rati y Summ eet 1c. or on the er Integ	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summa	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d.	a and enter t (%)=	the ratir 85% agth of e sing Tabl	ach bui e L1b. 1	uffer Pe ne Buffe ffer line Enter th	ercent er e in meter ne rating o	on		4 3 2 1	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50%
Untegrit Worksh the GIS o	ow. Rati y Summ eet 1c. or on the er Integ	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summan er Width	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	a and enter t (%)=	the ratin 85% ngth of e sing Tabl Buffer V	ach bu e L1b. I	uffer Pe ne Buffe ffer line Enter th	ercent er e in meter ne rating o	on		ating 4 3 2 1 Tabl	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width
Integrit Worksh the GIS of the Buff	ow. Rate y Summ eet 1c. or on the er Integ Buff	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summa	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d.	a and enter t (%)=	the ratir 85% agth of e sing Tabl	ach bur e L1b. f	uffer Pe ne Buffe ffer line Enter th Bu	ercent er e in meter ne rating o	on		4 3 2 1	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width
Untegrit Worksh the GIS of the Buffi Line A	ow. Rate y Summ eet 1c. or on the er Integ Buff 164	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summan er Width (m) 4.26	etric using Table L1 eet 1d. Buffer Percent th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	a and enter t (%)= sure the ler s and rate u Line E	the ratin 85% agth of e sing Tabl Buffer V (m 161.9	o the Bu ig on the ach bu e L1b. f Vidth) 3	uffer Pene Buffe ffer line Enter th Bu	ercent er e in meter he rating of (ft) 531.26	on		4 3 2 1 Tabl	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width
Untegrit Worksh the GIS of the Buffe Line A B	ow. Rate y Summ eet 1c. or on the er Integ Buff 16 12	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summar er Width (m) 4.26 5.25	etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	a and enter t (%)= asure the ler s and rate u Line E F	the ratin 85% agth of e sing Tabl Buffer V (m 161.9 231.4	o the Bu ig on the ach bu le L1b. f Vidth) 3 8	affer Pene Buffe ffer line Enter th Bu	ercent er e in meter ne rating o iffer Widt (ft) 531.26 759.44	on		ating 4 3 2 1 Tabl ating 4	Buffer Percent 100% ≥80% - <100%
Untegrit Worksh the GIS of the Buffi Line A	ow. Rate y Summ eet 1c. or on the er Integ Buff 16 12	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summan er Width (m) 4.26	etric using Table L1 eet 1d. Buffer Percent th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	a and enter t (%)= sure the ler s and rate u Line E	the ratin 85% agth of e sing Tabl Buffer V (m 161.9 231.4 121.2	o the Bi ig on the ach bur ie L1b. I Vidth) 3 8 5	affer Pene Buffe ffer line Enter th Bu	ercent er e in meter he rating of (ft) 531.26	on		ating 4 3 2 1 Tabl ating 4 3	Buffer Percent 100% ≥80% - <100%
Untegrit Worksh the GIS of the Buffe Line A B	ow. Rate y Summ eet 1c. I or on the er Integ Buff 16 12 11	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summar er Width (m) 4.26 5.25	etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	a and enter t (%)= asure the ler s and rate u Line E F	the ratin 85% agth of e sing Tabl Buffer V (m 161.9 231.4	o the Bi ig on the ach bur ie L1b. I Vidth) 3 8 5	affer Pene Buffer ffer line Enter th Bu	ercent er e in meter ne rating o iffer Widt (ft) 531.26 759.44	on		4 3 2 1 Table ating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
Untegrit Worksh the GIS of the Buff Line A B C	ow. Rate y Summ eet 1c. I or on the er Integ Buff 16 12 11	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summar er Width (m) 4.26 5.25 5.39 1.07	etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	a and enter t (%)= asure the ler s and rate un Line E F G	the ratin 85% agth of e sing Tabl Buffer V (m 161.9 231.4 121.2	o the Bi ng on the ach bur e L1b. f Vidth) 3 8 5 7	affer Pene Buffer ffer line Enter th Bu	ercent er e in meter ne rating o iffer Widt (ft) 531.26 759.44 397.80	on		4 3 2 1 Table ating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
Worksh the GIS of the Buffe Line A B C D	ow. Rate y Summ eet 1c. or on the er Integ Buff 16- 12 11 11 Average neet 1d	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summar er Width (m) 4.26 5.25 5.39 1.07 ge . Buffer Inte	etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	a and enter t (%)= asure the ler s and rate u Line E F G H nter the sub	the ratin 85% agth of e sing Tabl Buffer V (m 161.9 231.4 121.2 155.8 486.58	ach burg ach burg e L1b. f Vidth) 3 8 5 7 7 8 8 7	affer Pene Buffer ffer line Enter th Bu S (ft) from T	e in meter ne rating o iffer Widt (ft) 531.26 759.44 397.80 511.38	on th		4 3 2 1 Table ating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
Worksh the GIS of the Buffi Line A B C D	ow. Rate y Summ eet 1c. or on the er Integ Buff 16 12 11 11 Avera neet 1d o above	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summar er Width (m) 4.26 5.25 5.39 1.07 ge . Buffer Inte to calculate	etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	a and enter t (%)= asure the ler s and rate u Line E F G H nter the sub y Index Scor	the ratin 85% 9gth of e sing Tabl Buffer V (m 161.9 231.4 121.2 155.8 486.58 9-metric f e using t	o the Bi ig on the ach bur e L1b. f Vidth) 3 8 5 7 7 Ratings	affer Pene Buffe ffer line Enter th Bu Bu S (ft) ifrom T nula in	e in meter ne rating of (ft) 531.26 759.44 397.80 611.38 ables L1a the box	on th		4 3 2 1 Tabl ating 4 3 2 1 ble L1c. S	Buffer Percent 100% ≥80% - <100%
Worksh the GIS of the Buffi Line A B C D Worksl and L11 below.	ow. Rate y Summ eet 1c. or on the er Integ Buff 16 12 11 12 11 Avera beet 1d. o above Using th	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summar er Width (m) 4.26 5.25 5.39 1.07 ge . Buffer Inte to calculate	etric using Table L1 eet 1d. Buffer Percent in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score,	a and enter t (%)= asure the ler s and rate u Line E F G H nter the sub y Index Scor	the ratin 85% 9gth of e sing Tabl Buffer V (m 161.9 231.4 121.2 155.8 486.58 9-metric f e using t	o the Bi ig on the ach bur e L1b. f Vidth) 3 8 5 7 7 Ratings	affer Pene Buffe ffer line Enter th Bu Bu S (ft) ifrom T nula in	e in meter ne rating of (ft) 531.26 759.44 397.80 611.38 ables L1a the box	on th		ating 4 3 2 1 Tabl ating 4 3 2 1 ble L1c. S ating 4 3 3	Buffer Percent 100% ≥80% - <100%
Worksh the GIS of the Buffi Line A B C D Worksl and L11 below.	ow. Rate y Summ eet 1c. or on the er Integ Buff 16 12 11 12 11 Avera beet 1d. o above Using the SA S	e the sub-m hary Worksh Buffer Widt e map. Aver- rity Summan er Width (m) 4.26 5.25 5.39 1.07 ge 5.39 1.07 ge to calculate he Buffer Inte Summary W	etric using Table L1 eet 1d. Buffer Percent in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score,	a and enter t (%)=	the ratin 85% 9gth of e sing Tabl Buffer V (m 161.9 231.4 121.2 155.8 486.58 9-metric for Buffe	o the Bi ag on the ach bur e L1b. f Vidth) 3 8 5 7 7 8 7 8 7 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 7 8 8 8 7 7 8 8 8 7 7 8 8 8 8 7 7 8	affer Pene Buffe ffer line Enter th Bu Bu (ft) from T nula in prity in T	e in meter ne rating of (ft) 531.26 759.44 397.80 611.38 ables L1a the box	on th		ating 4 3 2 1 Table ating 4 3 2 1 ble L1c. S ating 4	Buffer Percent 100% ≥80% - <100%

SA CODE: SF2MI[?]

SA Name: Two Mile Pond Reservoir Transect [2]

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel {that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0,9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score≔ Coefficient * % LUZ Area	_	100	75

T	Table L4. Surrounding Land Use Rating						
Rating		LUI Score					
C	4	≥95 - 100					
\mathbf{C}	3	≥80 - <95					
R	2	≥40 - <80					
C	1	<40					

Surveyor Initials :

Date: 7/16/24

DS/AM

Surveyor Initials : D

Date: 7/16/24

5

sa copr SF2MI[?]

SA Name: Two Mile Pond Reservoir Tree root [\gtrsim]

SA CODE: SF2MI [之]

Date: 7/16/24

SA Name: Two Mile Pond Reservoir Transect [2]

Surveyor Initials : DS/AM

0%

B4 - Native Riparian Tree Regeneration

ן Woi	B4. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from Worksheet 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.							
	Rating	Description						
K	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.						
	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.						
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.						
	1	Native poles, saplings, and/or seedlings absent (0% cover).						

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIA

Invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover				
Rating		Invasive Species Cover %		
<u>ğ</u>	4	0%		
~	3	>0% - <1%		
	2	≥1% - <10%		
(1	≥10		

Additional CTs and Biotic Metric Comments:

SA CODE: SF2MI[2]

Date: 7/16/24

SA Name: Two Mile Pond Reservoir Transect [2]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Bank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field indicators(check all existing conditions)
		X		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		X		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ŕ		There is leaf litter, thatch, or wrack in most pools.
indicators of		Ţ		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		X		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		X		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		Ø		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
·····				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avuision channels on the floodplain or adjacent valley floor.

Date: 7/16/24

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect ((2, 1)

A5 - Soil Surface Condition

Worksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, guilies, plant pedestals).
	X		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

> 10%

1		Table A5. Soil Surface Condition Rating
R	ating	Description
C.	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
c	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
X	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

SA Code SF			SA Cover	Worksheet				
	F2MI[2]	SA Name : Two N	Aile Pond Reservoir		Pr	oject : Ripari	an Asses	ement
ode Tso	sct[2]	AU Name : Trans	ect [Z]		w	OI : Two Mile	e Pond Re	eservoir
ounty Sar	inta Fe	HUC 12 Headw	aters Santa Fe River E	levation (ft) 729	99 (m) 2224,7	Ecor	egion 6.0 NWFM
A riparial decomm of water Driving Direc Driving t	an system t nissioned d r rights. ctions to Santa Fe	d Boundary (Rationale, c hat leads into a pond loc lue to safety concerns re from Albuquerque you	cated on the east side o garding the reservoir an head north on Old Pec	nd a water diver	sion to the	area was rec	ently shu	t down due to lack
<u></u>		you reach the reservoir Conservative and The S	·····	Data Sharing Restrictions	Results to only.	client (Fi	ish Obser Wetlan	
Surveyo	or Role		Survey	or Name				Surveyor Initials
Landsc	cape	Dustin Schwart:	Z					DS
Bioti	tic	Annie McCoy						AM
Abiot	otic	Dustin Schwart	Z					DS
Stress	sors	Dustin Schwart	Z					DS
Easting	g (m)	Northing (m)	Zone	Datum		Latitude (D	DD ft)	Longitude (DD fi
-105° 53' 24	5° 53' 24" W 35° 41' 23" N 13 NAD- 83 UTM 35.689722						-105.89	
Survey	Date	8/13/24	Start Time	9:00		End Tim	ne	15:00
SA Landsca	ape Contex	et (summarize the wetla and still w	nd and surrounding lan	dscape; include mon 50043	condition a , Apple	nd impacts)	vines	are the second
taki her	ing full re G	and still w adventuge. 'C round cover	et from the letus vine?" is very p	dscape; include mon soons appears is revalent.	, Apple • a	s and mgjowl	vines ty of	
taki her SA Biotic Cc	ing Ch re G ondition (1 3 Scer	and still w admittige. 'C round cover regetation patterns, con masquillos s	et from the letus vine?" is very p nposition and structure ear. medium	dscape; include mon soons appears is revalent. exotics and inva sized.	, Apple asives, distu Evide,	s and mgjor/i irbance evid	Vines 4 of lence, fire inter A.	and herbivory)
taki her SA Biotic Cc Ic set Jold fireh SA Abiotic C	ing full re G condition (1 3 Scer of Condition	and still w admittige. 'C rowd Cover regetation patterns, con masquillos s	et from the letus vine?" <u>is very p</u> nposition and structure sean. medium chast his <u>g</u> Apples s (e.g., dams, walls etc.);	dscape; include mon soons appears in revalent. exotics and inva sized. h in No heard flooding charac	Apple asives, distu Evide, the binds teristics an	s and mgjon/ urbance evid nce of Lennel. Vines devidence c	vines 4 of lence, fire ikter Also i tek	e and herbivory) nse flow , evidence Ingover Arecn
taki her SA Biotic Cc Ic set Jold fireh SA Abiotic C	ing Li re G ondition (1 3 Scer of Condition e and other Lan	and still w admittige. 'C rowd Cover regetation patterns, con masquittos s in Jabris Animals cation site impacts; explain the site impacts; explain the	et From the letus Vine?" is VCry f nposition and structure, ean. medium chast his g Apples s (e.g., dams, walls etc.); e hydrologic breaks or c	dscape; include mon soons appears is revalent. exotics and inva s, 'zed. h in No heard flooding charact ther factors that	Apple asives, distu Evide, the c binds teristics and define the	s and mgjon/ irbance evid ncc of Lannel. Vines devidence of SA limits)	vines ty of lence, fire inter Also state of overba	e and herbivory) nsc flow , evidence hs over freen nk flooding; soil
taki han SA Biotic Co SA Biotic Co Jesser Jold film SA Abiotic Co disturbance	ing La ing La re G ondition (1) 3 Scer of Condition and other Lan o/J	and still w admitage. 'C round Cover regetation patterns, con masquitos s in dabris Animals cation site impacts; explain the go tree / logs dead kinas 5,04 nte y (Overall site condition	et From the letus Vine?" is VCry f nposition and structure ean. medium chast his g Apples s (e.g., dams, walls etc.); e hydrologic breaks or o from Jabris seen in old pH 2.08 summary and commen	dscape; include mon soons appears is everalent. exotics and inva sized. h in No heard flooding charace ther factors that flows cr frees. 11.2°C	Apple asives, distu Evide, the binds teristics and define the in the 18 data is colle	s and mgjon/i irbance evid nce of hannel. Vines d evidence c SA limits) a chan 6 mS/cm ected.)	vines 4 of lence, fire inter Also of overba onel	e and herbivory) nse flow , evidence Ing over Arean nk flooding; soil whes eff
taki han SA Biotic Co SA Biotic Co Jesser Jold film SA Abiotic Co disturbance	ing La ing La re G ondition (1) 3 Scer of Condition and other Lan o/J	and still w admittige. 'C round Cover regetation patterns, con masquittos s in Jabris Animals cation site impacts; explain the go tree / logs Jacod sinas 5.04 nte	et From the letus Vine?" is VCry f nposition and structure ean. medium chast his g Apples s (e.g., dams, walls etc.); e hydrologic breaks or o from Jabris seen in old pH 2.08 summary and commen	dscape; include mon soons appears is everalent. exotics and inva sized. h in No heard flooding charace ther factors that flows cr frees. 11.2°C	Apple asives, distu Evide, the binds teristics and define the in the 18 data is colle	s and mgjon/i irbance evid nce of hannel. Vines d evidence c SA limits) a chan 6 mS/cm ected.)	vines 4 of lence, fire inter Also of overba onel	e and herbivory) nse flow , evidence Ing over Arean nk flooding; soil whes eff

SA CODE: SF2MI[2]

Date: 8/13/24

SA Name : Two Mile Pond Reservoir Transect [2]

Surveyor Initials : DS/AM

Landscape Context

.... - Buffer Integrity Index

· - .

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed,
or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season
and year of imagery).

Imager	у	Google Earth	KMZ. file	ile II				nage Date 6/23				
Allowe	<u> </u>	er/RCC land c	over elements			Exclud	ed nor	-buffer/RCC la	and co	ver elem	ents	
Buffer						Buffer	RCC					
X	X	Natural or ser	atural or semi-natural vegetation patches				X	1	mmercial/residential developments, parking lots, ms, bridges, revetments, and other structures			
	X	Smail irrigatio	irrigation ditches without levees					Lawns, parks,	awns, parks, golf courses, sports fields			
	<u> </u>	Old fields, un	s, unmaintained					Railroads				
		Open range l	and					Maintained le materials, sta			t piles, construction	
X	X	Foot trails, ho intensity)	orse trails, unpaved	bike trails	s (low						rse paddocks, feedlots	
X	x	Non-channel	open water					row crops, or	chard	s, and vin	· · · · · · · · · · · · · · · · · · ·	
	X	Non-functior naturally occ	ing abandoned ve urring levees	getated le	evees, or	X	X	graded roads	5	·	econd-order unpaved but	
		unpaved two	wo tracks roads			X	X	Open water k structure	bound	ed by a le	evee or other manmade	
		Other						Other				
	Worksheet 1b. Buffer Percent Sub-metric. Measure or estimate the percentage of SA perimeter composed of allowed buffer elements and enter into the Buffer Perce								Table	L1a. Buffer Percent		
	by below, Rate the sub-metric using Table L1a and enter the rati								R	ating	Buffer Percent	
		mary Worksh							C	4	100%	
		Buffer Percent (%)= 85%						R	3	≥80% - <100%		
1		D. ffer Milde	h Sub-metric. Mea	cura tha l	onath of a	ach bu	ffer line	in meters in		2	≥50% - <80%	
worksn the GiS	oront	he map. Avera	age the line lengths	and rate	using Tab	ile L1b. I	Enter ti	he rating on	1 <u>_</u>	1	<50%	
	ne GiS or on the map. Average the line lengths and rate using Tabl ne Buffer Integrity Summary Worksheet 1d.									e L1b. Buffer Width		
Line	Bu	ffer Width (m)	Buffer Width (ft)	Line	Buffer (m		Bu	uffer Width (ft)		ating	Average buffer width	
		64.26	538.91	E	161.9			531.26		4	≥190m	
A	ļ'								R	3	≥130 - <190m	
В	1	25.25	410.92	F	231.4	48		759.44		2	≥130 - <190m	
с	-	15.39	378.57	G	121.2	25		397.80		1	<65m	
D	· ·	111.07	364.40	н	155.	87	1	511.38				
	Ave	age	148.31 (m)		486.5	8	(ft)] Tal	ble L1c. S	Summary Rating for Buffer	
Works	heet 1	d. Buffer inte	grity Summary. E	nter the s	ub-metric	Rating	from	Tables L1a				
and L1	b abov	/e to calculate	the Buffer Integrity	/ Index Sc	ore using	the for	mula in	the box		ating	Score	
below.	Using	the Buffer Inte	egrity Index Score,	enter ratir	ng for Buff	fer Integ	grity in	Tabie L1c	\mathbf{C}	4	>3.5	
' 'on	the Si	A Summary W	orksheet.						R	3	>2.5 - ≤3.5	
Buffer	% Rat	ing + Bu	uffer Width Rating	/2 =	Buff	er Integ	irity In	dex Score		2	>1.5 - ≤2.5	
3		+	3	/2 =		3			<u> </u>	1	≤1.5	

sa code: SF2MI [오]

SA Name : Two Mile Pond Reservoir Transect [2]

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	o	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Page 5 of 17

Table L4. Surr	ounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
C 3	≥80 - <95
(X 2	≥40 - <80
<u> </u>	<40

Surveyor Initials :

Date : 8/13/24

CI Dopyon Nos. Species I No. Part records of the second structure. Received Sint State Received SintState <th>dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.</th> <th>that appears in the a</th> <th>issigned t</th> <th>to the same</th> <th></th> <th></th> <th>dir Chrobi</th> <th>OSITION OF A</th> <th>new CI</th> <th>is created f</th> <th>of the pr</th> <th>Strati im 3</th> <th></th> <th>T Score 4</th> <th>4</th> <th></th>	dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	that appears in the a	issigned t	to the same			dir Chrobi	OSITION OF A	new CI	is created f	of the pr	Strati im 3		T Score 4	4	
A 2.2 Image lease N ⁴ C ₁ (L) N		Species 1	E	becies 2	ш з	Species 3	E	ies 4	ш 7	Species 5		Species 6			SA5	Wt Score ⁶
8 1		Norther leaf Cottonad	Z		N	[Γ ~		Hars? trail	N N	Pearse -	2	4.03	1.26	4.00
C I																
D I																
E I						ĺ 							ļ			
F I																
G I					 											
H H	5									2						
1 1					ļ											
J I										:						
K Image: Constraint of the state of t								·								
L I	×															
M M																
N N C Y	W			:												
 O Final Weighted Score⁷ Final Weighted Score⁷ Final Weighted Score⁷ Final Weighted Score⁷ Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover. 4Raw Score is from Table B1a (Appendix B); 5%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; 6Wt. Score is the product of the Raw Score *% SA. 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Plant Community Composition on the SA Rank Summary Worksheet. 	2															
Final Weighted Score7 1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover. ⁴ Raw Score is from Table B1a (Appendix B); ⁵ %SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Plant Community Composition on the SA Rank Summary Worksheet.	0		} 													
 Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total stratum cover. 4Raw Score is from Table B1a (Appendix B); ⁵%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶Wt. Score is the product of the Raw Score * % SA; ⁷The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Plant Community Composition on the SA Rank Summary Worksheet. 		-									Fina	l Weighte	d Score			26%
stratum cover. 4Raw Score is from Table B1a (Appendix B); ⁵ %SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; 6Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	1. Trees and shrubs > 6 m (20 fee	t) and > 25% tot	tal stratur	n cover; 2.	frees ar	id shrubs ≤i	6m (20 fi	eet) and >2:	5% total	stratum co	ver; 3. H	erbaceous	(gramin	oids and	forbs)>1	0% totai
for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	stratum cover. ⁴ Raw Score is from equal 1; 6Wt. Score is the product	Table B1a (App of the Raw Scor	endix B); e * % SA;	5%SA is th ⁷ The Final	e perce Weight	ntage of th red Score is	e SA area the sum	t covered by of the Wt. 5	v the CT scores. R	and expres ate the CT	sed as a Final We	decimal nu ighted Scol	imber; tr re on Tal	he total a ble B1 ar	irea %5A Nd enter 1	must the Rating
	for Relative Native Plant Commun	ity Composition	i on the S	A Rank Sun	omary V	Vorksheet.										

۶.

Surveyor Initials : D

Date: 8/13/24

SA Name : Two Mile Pond Reservoir Tr $\operatorname{rot}[$

SA COD' SF2MI [2]

SF2MI [2] SA CODE :

SA Name :

Two Mile Pond Reservoir Transect [😕]

8/13/24 Date :

Surveyor Initials : DS/AM

B4 - Native Riparian Tree Regeneration

		ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Ra	ting	Description
ф.	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u> </u>	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIA

Invasive cover (%)

calculate

Tab	ole B5. Rating	gs for Invasive Exotic Plant Species Cover
F	Rating	Invasive Species Cover %
C	4 X	0%
	3	>0% - <1%
	2	≥1% - < 10%
C	1	≥10

Additional CTs and Biotic Metric Comments:

Lesser gold Ciach was hand and evidence of accords catery apples 3 arougallos were seen torby which is must error st proc

SA CODE: SF2MI[2]

Date: 8/13/24

SA Name : Two Mile Pond Reservoir Transect [Z]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		র্		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ŕ		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ŕ		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ŕ		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		X		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		ম্		Channel and point-bars consist of well-sorted bed material.
c		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		Ŕ		There are channel pools at meander bends and some deep pools within the reach.
		Ŕ		The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
		X		There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
		R		Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or failing into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 8/13/24

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect [2]

A5 - Soil Surface Condition

. Jorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	X		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
		· · · · · · · · · · · · · · · · · · ·	Estimate % soil disturbance by segment area

Average % Soil Disturbance:

25%

1		Table A5. Soil Surface Condition Rating
F	Rating	Description
c	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
7	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cover	r Worksheet			
A Code SF2MI [2] SA Name : Two A	file Pond Reservoir		Project : Rip	arian Asses	ement
Code Tsct [7/]	AU Name : Trans	ect [2]		WOI : Two N	Aile Pond R	eservoir
ounty Santa Fe	HUC 12 Headw	aters Santa Fe River	Elevation (ft) 729	9 (m) 2224.7	Ecor	egion 6.0 NWFM
A riparian system decommissioned of water rights. Driving Directions Driving to Santa F	nd Boundary (Rationale, e that leads into a pond lo due to safety concerns re e from Albuquerque you il you reach the reservoir	cated on the east side or garding the reservoir of head north on Old Pe	and a water divers	sion to the area was r	ecently shu	it down due to lack
	e Conservative and The S	····	t Data Sharing Restrictions	Results to client only.	Fish Obser Wetlar	
Surveyor Role		Surve	yor Name			Surveyor Initials
Landscape	Dustin Schwart	2				DS
Biotic	Annie McCoy			,,,,,		AM
Abiotic	Dustin Schwart	Z	··· ··· ···		_ •	DS
Stressors	Dustin Schwart	2		,		DS
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM 35.68972	2	-105.89
Survey Date	9/11/24	Start Time	9:00	End T	ime	15:00
12	All green	$f_{\rm const} = f_{\rm constant}$	Um for	on Ale do	10 - 17.	177 A.Y
	,					
5A Biotic Condition	(vegetation patterns, cor					
SA Biotic Condition	s 	April 21	· . · .	A start start	$(1,1)^{-1}$	· · · · ·
SA Biotic Condition	(vegetation patterns, cor	s (e.g., dams, walls etc.	.); flooding charac	teristics and evidenc	e of overba	an da La Roma I
SA Biotic Condition App SA Abiotic Conditio disturbance and othe Chonc	(vegetation patterns, cor // / / / / / / / / / / / / / / / / / /	21700, 21 is (e.g., dams, walls etc. e hydrologic breaks or 26 g pat Model da	.); flooding charac other factors that	teristics and evidenc define the SA limits	e of overba	nk flooding; soil
SA Biotic Condition	(vegetation patterns, cor (vegetation patterns, vegetation patterns, vegetation (vegetation patterns, vege	21/20, 21/ is {e.g., dams, walls etc. e hydrologic breaks or 26 g/a1 - 2660 12 - 2660 12 - 2660 26 g/a1 - 26600 26 g/a1 - 2660 26 g/a1 - 26600 26 g/a1 - 26600 26 g/a1 - 266000 26 000000000000000000000000	.]; flooding charac other factors that / / /	teristics and evidenc define the SA limits	e of overba	nk flooding; soil
SA Biotic Condition	(vegetation patterns, con $d_{1} = d_{1} + d_{2} + d$	steed, dams, walls etc. e hydrologic breaks or 26 g pat - Modi 11 f f summary and comme new grew	.); flooding charac other factors that ///////////////////////////////////	teristics and evidenc define the SA limits) data is collected.)	e of overba	nk flooding; soil
SA Biotic Condition	(vegetation patterns, cor (vegetation patterns, vegetation patterns, vegetation (vegetation patterns, vege	steed, dams, walls etc. e hydrologic breaks or 26 g pat - Modi 11 f f summary and comme new grew	.); flooding charac other factors that ///////////////////////////////////	teristics and evidenc define the SA limits) data is collected.)	e of overba	nk flooding; soil

SA CODE: SF2MI [3]

Date: 9/11/24

SA Name : Two Mile Pond Reservoir Transect [$\lfloor L \rfloor$]

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

3

3

÷

/2 ==

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Imagei	у 🗌	Google Earth	KMZ. file			Image	Date	6/23	3			
Allowe	d buff	er/RCC land o	cover elements			Exclud	led no	n-buffer/I	RCC la	and c	over elen	nents
Buffer	RCC					Buffer	RCC					
X	x	Natural or se	mi-natural vegetat	ion patc	hes	X						elopments, parking lots, and other structures
X	×	Small irrigati	on ditches without	t levees				Lawns, p	oarks,	golf	courses, s	sports fields
		Old fields, ur	maintained					Railroad				
		Open range	land					Maintair material				at piles, construction
X	X	Foot trails, he intensity)	orse trails, unpaved	d bike tra	ils (low			Intensiv	e live:	stock	areas, ho	orse paddocks, feedlots
×	X	Non-channe	l open water								re: maint ls, and vir	ained pastures, hay fields, neyards
X	×		ning abandoned ve urring levees	egetated	levees, or	×	X	graded r	roads			econd-order unpaved but
		unpaved two	o tracks roads			X	X	Open wa structure		ounc	led by a l	evee or other manmade
		Other	i					Other				
			cent Sub-metric. /	Vieasure	or estimate	e the per	rcentad	ge of the		_	Table	L1a. Buffer Percent
CA man			allowed buffor ala	monten	nd ontar in							
Box be	low. R	ate the sub-m	allowed buffer ele etric using Table L1			to the B	uffer Pe	ercent	:	F	lating	Buffer Percent
Box be	low. R		etric using Table L1 eet 1d.	la and er	nter the rat	to the B	uffer Pe	ercent	:	\cap	lating 4	Buffer Percent
Box be	low. R	ate the sub-m	etric using Table L1	la and er		to the B	uffer Pe	ercent	:	<u> </u>	<u> </u>	Buffer Percent
Box be Integrit	low. Ra ty Sum	ate the sub-m nmary Worksh	etric using Table L1 eet 1d. Buffer Percen	ta and er	nter the rat	to the Bi ing on ti	uffer Pe he Buff	ercent fer	rs in l	CRC	4	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS	low. Ri ty Sum eet 10 or on t	ate the sub-m nmary Worksh c. Buffer Widt the map. Aver	etric using Table L eet 1d. Buffer Percen h Sub-metric. Me age the line length	la and er it (%)= asure the	85% e length of	to the B ing on ti each bu	uffer Pe he Buff	ercent fer e in mete		<u> </u>	4	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS	low. Ri ty Sum eet 10 or on t er Inte	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summa	etric using Table L eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d.	la and er it (%)= asure the	85% 85% e length of te using Tai	to the Bi ing on ti each bu ble L1b.	uffer Pe he Buff ffer lin Enter t	ercent fer e in mete he rating	on	CRC	4 3 2 1	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS	low. Ri ty Sum eet 10 or on t er Inte	ate the sub-m mary Worksh c. Buffer Widt the map. Aver grity Summa iffer Width	etric using Table L eet 1d. Buffer Percen h Sub-metric. Me age the line length	la and er it (%)= asure the	85% 85% e length of te using Tai	to the B ing on ti each bu	uffer Pe he Buff ffer lin Enter t	ercent fer e in mete	on		4 3 2 1 Tab	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line	eet 10 or on ter Inte	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summa	etric using Table L eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	t (%)= asure the	85% 85% e length of te using Tai	to the Bi ing on the each bu ble L1b. Width n)	uffer Pe he Buff ffer lin Enter t	ercent fer e in mete he rating uffer Wid	on		4 3 2 1 Tabl	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width
Box be Integrit Worksh the GIS the Buff Line A	eet 1 or on t er Inte	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summa iffer Width (m) 164.26	etric using Table L eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	ta and er t (%)= asure the is and rat Line E	85% e length of te using Tai Buffer (r 161.	to the Bi ing on the each bu ble L1b. Width n) 93	uffer Pe he Buff ffer lin Enter t	ercent fer e in mete he rating uffer Wid (ft) 531.26	on		4 3 2 1 Tabl Nating 4	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line	low. Rity Sum eet 10 or on t er Inte Bu	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summar iffer Width (m) 164.26 125.25	etric using Table L eet 1d. Buffer Percen h Sub-metric. Mer age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	ta and er t (%)= asure the is and rat Line	85% e length of te using Tai Buffer (r 161. 231	to the Bi ing on the each bu ble L1b. Width n) 93 48	uffer Po he Buff	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44	on		4 3 2 1 Tabl Rating 4 3	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A	low. Rity Sum eet 10 or on t er Inte Bu	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summa iffer Width (m) 164.26	etric using Table L eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	ta and er t (%)= asure the is and rat Line E	85% e length of te using Tai Buffer (r 161.	to the Bi ing on the each bu ble L1b. Width n) 93 48	uffer Po he Buff	ercent fer e in mete he rating uffer Wid (ft) 531.26	on		4 3 2 1 Tabl Nating 4	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B	low. Ri ty Sum eet 10 or on t er Inte Bu	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summar iffer Width (m) 164.26	etric using Table L eet 1d. Buffer Percen h Sub-metric. Mer age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	ta and er it (%)= asure the is and rat Line E F	85% e length of te using Tai Buffer (r 161. 231	to the Bi ing on the each bu ble L1b. Width n) 93 48 25	uffer Pohe Buff	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44	on		4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C	low. Ri ty Sum eet 10 or on t er Inte Bu	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summar iffer Width (m) 164.26 125.25 115.39 111.07	etric using Table L eet 1d. Buffer Percen h Sub-metric. Mera age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	ta and er t (%)= asure the is and rat Line E F G H	85% e length of te using Tai Buffer (r 161. 231 121	to the Bi ing on the each bu ble L1b. Width n) 93 48 25 	uffer Pohe Buff	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44 397.80	on		4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D	low. Ri ty Sum eet 10 or on 1 er Inte Bu 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summar iffer Width (m) 64.26 125.25 115.39 111.07 rage	etric using Table L eet 1d. Buffer Percen h Sub-metric. Mera age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	ta and er t (%)= asure the is and rat Line F G H	85% e length of te using Tai Buffer (r 161. 231 121 155 486.5	to the Bi ing on the each bu ble L1b. Width n) 93 48 25 	uffer Pohe Buff	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44 397.80 511.38	on		4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D	low. Ri ty Sum eet 10 or on 1 er Inte Bu 1 1 1 1 4 Aver heet 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summar iffer Width (m) 164.26 125.25 115.39 111.07 rage	etric using Table L eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	ta and er t (%)= asure the is and rat Line E F G H Enter the	85% e length of te using Tai Buffer (r 161. 231 121 155 486.5	to the Bi ing on the each bu ble L1b. Width n) 93 .48 .25 .87 .58 c Rating:	uffer Pe he Buff ffer lin Enter t Be (ft) s from	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44 397.80 511.38 Tables L1a	on ith		4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below.	low. Ri ty Sum eet 10 or on t er Inte Bu 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summa- iffer Width (m) 164.26 125.25 115.39 111.07 rage id. Buffer Interve to calculate the Buffer Interve to calculate	etric using Table L eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	ta and er t (%)= asure the is and rat Line E F G H Enter the y Index S	85% e length of te using Tai Buffer (r 161. 231 121 155 486.5 sub-metrio 5core using	to the Bi ing on the each bu ble L1b. Width n) 93 48 25 .87 58 c Ratings g the form	offer Pe he Buff ffer lin- Enter t Br (ft) s from mula ir	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44 397.80 511.38 Tables L1a n the box	on ith a		4 3 2 1 Table tating 4 3 2 1 ble L1c. 5	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below.	low. Ri ty Sum eet 10 or on t er Inte Bu 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver- egrity Summar (ffer Width (m) 164.26 125.25 115.39 111.07 rage	etric using Table L eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	ta and er t (%)= asure the is and rat Line E F G H Enter the y Index S	85% e length of te using Tai Buffer (r 161. 231 121 155 486.5 sub-metrio 5core using	to the Bi ing on the each bu ble L1b. Width n) 93 48 25 .87 58 c Ratings g the form	offer Pe he Buff ffer lin- Enter t Br (ft) s from mula ir	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44 397.80 511.38 Tables L1a n the box	on ith a		4 3 2 1 Table tating 4 3 2 1 ble L1c. 5 tating 4 3	Buffer Percent 100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1 below. rl on	low. Ri ty Sum eet 10 or on t er Inte Bu 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	ate the sub-m mary Worksh c. Buffer Widt the map. Aver egrity Summa affer Width (m) 164.26 125.25 115.39 111.07 rage id. Buffer Inte ve to calculate the Buffer Inte A Summary W	etric using Table L eet 1d. Buffer Percen in Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	ta and er t (%)= asure the is and rat Line E F G H Sinter the y Index S enter rat	85% e length of te using Tai Buffer (r 161. 231 121 155 486. sub-metrin Score using ting for Bur	to the Bi ing on the each bu ble L1b. Width n) 93 48 25 .87 58 c Ratings g the form ffer Integ	offer Perfection ffer line Enter t Br (ft) (ft) s from inula in grity in	ercent fer e in mete he rating uffer Wid (ft) 531.26 759.44 397.80 511.38 Tables L1a n the box	on ith a		4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating 4 4	Buffer Percent 100% ≥80% - <100%

3

SF2MI[2] SA CODE :

Two Mile Pond Reservoir Transect [2] SA Name :

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area	Į	100	75

Table L4. Sur	rounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
C 3	≥80 - <95
Ø 2	≥40 - <80
C 1	<40

Surveyor Initials :

9/11/24 Date :

Page 5 of 17

B1 - Relativ	B1 - Relative Native Plant Community Composition	mmunity Con	position												
Worksheet 6.	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top	d Polygon Assign	Iments. Starting	with CT	A, enter the	number	of the first	polygon	from Worl	csheet 5.	Enter the s	species c	odes for	the two 1	do
dominant spe which it is mo	dominant species in each stratum that appears in the polygon. See footnotes for special instructions, if a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	nat appears in the lygon is either ass	Polygon. See foc igned to the same	otnotes t e CT if it	or special ir has the sarr	nstruction ne compo	ns. If a speci osition or a	ies appe new CT i	ars in more s created fi	than on or the po	e strata, as: lygon.	sign the :	species t	o the stra	atum in
	ę	Tall Woody Stratum ¹	tratum ¹		Short Woody Stratum 2	dy Stratu			Herbaceous/Sparse Stratum ³	s/Sparse	Stratum ³		CT Score ⁴	4	
CT Polygon Nos.	Nos.	Species 1 E	Species 2	шZ	Species 3	ыZ	Species 4	ωZ	Species 5	ш Z	Species 6	<u>ш 2</u>	Raw ⁴	% SA5	Wt Score ⁶
A 2		New services	1 Barly	N	Willes There	5	A. 50%		the office of the	\geq	Keebe	>	e 12	(29	8
8															
U			 												
									\$						
ш			\$												
<u></u> ш															
9															
т			<u> </u>	 											
_															
f															
×							5								
			\$		 										
W						}									
z															5
0				 											
										Final	Final Weighted Score ⁷	l Score ⁷			4.50
1. Trees and s	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total) and > 25% total :	stratum cover, 2. 1	Irees and	d shrubs ≤6	m (20 fe	et) and >25	% total s	tratum cov	'er; 3. He	rbaceous (graminoi	ids and fi	orbs)>10	% total
stratum cover equal 1; ⁶ Wt.	stratum cover. "Haw Score is from Lable 81a (Appendix 8); ² %SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table 81 and enter the Rating	lable BTa (Append) of the Raw Score * -	dix B); ² %SA is th _i % SA; ⁷ The Final	e percen Weighte	itage of the ed Score is t	SA area i the sum c	covered by of the Wt. So	the CT a cores. Ra	nd express te the CT F	ed as a d inal Wei <u>c</u>	ecimai nur Jhted Scon	nber; the e on Tabl	e total are le B1 and	ea %SA n I enter th	nust e Rating
for Relative N	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	y Composition on	n the SA Rank Sur	amary W	'orksheet.										,

S.

Surveyor Initials :

Date: 9/11/24

SA Name: Two Mile Pond Reservoir T* act [3]

SA COF SF2MI [\gtrsim]

Page 7 of 17

SA CODE: SF2MI [2]

SA Name : Two Mile Pond Reservoir Transect [$\frac{2}{2}$]

B4 - Native Riparian Tree Regeneration

B4. Native Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from Worksheet 5, rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.

Ra	ating	Description
C	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
$\overline{\mathbf{C}}$	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
9	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
Ć –	1 -	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIA

Invasive cover (%)

calculate

Tab	ole B	5. Rating	s for Invasive Exotic Plant Species Cover
F	latin	g	Invasive Species Cover %
$\hat{\mathbf{C}}$	4	X	0%
$\hat{}$	3		>0% - <1%
_	2		≥1% - <10%
(1		≥10

Additional CTs and Biotic Metric Comments:

Acres is proposing for winter

Date: 9/11/24

DS/AM

Surveyor Initials :

SA CODE: SF2MI[Z]

Date: 9/11/24

Surveyor Initials :

DS/AM

SA Name : Two Mile Pond Reservoir Transect [2]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		×		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		X		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		X		There is leaf litter, thatch, or wrack in most pools.
Indicators of				The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		₽ [́]		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		₩ A		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		X		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
, ;				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
		\bowtie		Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

SA Name : Two Mile Pond Reservoir Transect [-2]

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

Norksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
	Ŕ		Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other:
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

		Table A5. Soil Surface Condition Rating
R	ating	Description
C	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic, degradation to the soil surface is less than 1% of the SA.
R	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
ſ	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
ſ	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

SA Code SF2MI [²		SA Cove	Worksheet				
SA Code Srzwit	J SA Name : Two N	Aile Pond Reservoir		Pr	oject : Rip	arian Asses	sement
lode Tsct [3]	AU Name : Trans	sect [3]		w	01 : Two M	Aile Pond R	eservoir
County Santa Fe	HUC 12 Headw	vaters Santa Fe River	Elevation (ft) 729	99 (n	n) 2224.7	Eco	region 6.0 NWFM
A riparian systen decommissioned of water rights. Driving Directions Driving to Santa	and Boundary (Rationale, on that leads into a pond lood of the safety concerns response to the safety concerns response to the second structure sources the second structure sources to the second structure struc	cated on the east side e egarding the reservoir a head north on Old Pe	and a water diver:	sion to the	area was r	ecently shi	ut down due to lack
	ntil you reach the reservoir re Conservative and The S		Data Sharing Restrictions	Results to only.	client	Fish Obse Wetlar	- í
Surveyor Role		Surve	or Name			<i></i>	Surveyor Initials
Landscape	Dustin Schwart	z					DS
Biotic	Annie McCoy		<u> </u>				AM
Abiotic	Dustin Schwart	Z					DS
Stressors	Dustin Schwart	z					DS
Easting (m)	Northing (m)	Zone	Datum		Latitude	(DD ft)	Longitude (DD ft
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	тм	35.68972	2	-105.89
Survey Date	7/16/24	Start Time	9:00		End T	ime	15:00
SA Landscape Cont	ext (summarize the wetla Arca Fee/s	nd and surrounding la					ra
	Area Fools Trees in	nd and surrounding la very shoded Gull bloo	ndscape; include and A. m Helle	barme	A/14-1 057 Dee	Tvopi * Tvaci	······································
SA Biotic Condition Song Yei	Area Feels Trees in I (vegetation patterns, con Sparrow, Spar Jour breast/d sha Sinch, Rebjar	nd and surrounding la very shooled Cull Vilop mposition and structure of tablets show Hor se tai Red Breass	e, exotics and inve e, exotics and inve contractions in the first in the second investigation in second investigation in the second investigation in the second investigation in the second investigation in the second in the	barine barine asives, distu kipita, t, hatch	Alun 097 Dee Irbance ev Tesse Wa; E	tropi v traci vidence, fir sold boxes s.l.s. b	e and herbivory) Grach, point ency: hrad
SA Biotic Condition Song Yei SA Abiotic Conditic	Area Feels Trees in (vegetation patterns, con	nd and surrounding la very shoded full blood position and structure of database show Hor se data Red Breass is (e.g., dams, walls etc.	e, exotics and inva e, exotics and inva in Land in Nat	barine barine asives, distu kipto, l, hatch teristics and	Alun 09 Dee Irbance ev le see Las, 8	Tropi Traci vidence, fin , sold bever , lo. b e of overba	e and herbivory) Grachy Proved an out herbid
SA Biotic Condition Song Yei SA Abiotic Conditic	Area Feels Trees in I (vegetation patterns, con 5 Sparnow, Spot low breasting the Ginch, Rehin, on (hydrológical alteration er site impacts; explain the 18,5 North	nd and surrounding la very shoded full blood nposition and structure Werse tai Red Breass is (e.g., dams, walls etc. e hydrologic breaks or 15.99 10	ndscape; include and Helle m Helle e, exotics and inve a, J. C. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M.	barine barine asives, distu kipto, l, teristics and define the	Irbance ev Iesse Losse SA limits)	tropi vidence, fir sold bever 5.1.5. 1 e of overba	e and herbivory) Grachy Proved an out herbid
SA Biotic Condition Song Yei SA Abiotic Conditic	Area Feels Trees in I (vegetation patterns, con 5 Sparnow, Spot low breasting the Ginch, Rehin, on (hydrológical alteration er site impacts; explain the 18,5 North	nd and surrounding la very should full blood nposition and structure I data should Horse tai Red Breass is (e.g., dams, walls etc. e hydrologic breaks or	ndscape; include and Helle m Helle e, exotics and inve a, J. C. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M. M. (J. M.	barine barine asives, distu kipto, l, teristics and define the	Irbance ev Iesse Losse SA limits)	tropi vidence, fir sold bever 5.1.5. 1 e of overba	e and herbivory) Grach, poor except hrad
SA Biotic Condition Song Ye I SA Abiotic Conditic disturbance and oth	Area Feels Trees In Trees In (vegetation patterns, con Sparnow, Sparnow, nd and surrounding la very shoded full blood nposition and structure Worse tai Red Breass is (e.g., dams, walls etc. e hydrologic breaks or ISA sub Summary and comme	ndscape; include and Helle whether Helle e, exotics and inve a, exotics and inve a, exotics and inve a, exotics and inve b, flooding charac other factors that the decomposition the field	barine barine asives, distu- kipte, 1, teristics and define the constant of the define the constant of the data is colle	Alun 09 Dee Irbance ev lesse More (SA limits) Sa 25 In 1 Sa 25 In 1 Sa 25 In 1 Sa 25 In 1 Sa 25 In 1	tropi v traci vidence, fir sold bever sold so	e and herbivory) Grach, point ency: hrad	
SA Biotic Condition Song Yel SA Abiotic Condition disturbance and oth	Area Feels Trees In Trees In (vegetation patterns, con Sparnow, Sparnow, nd and surrounding lat VCTY Shaded Coll Ulop mposition and structure In Induce Inter Hor se Inter Red Breast is (e.g., dams, walls etc. e hydrologic breaks or ISP 50 Etc., da	ndscape; include and Helle whether Helle e, exotics and inve a, exotics and inve a, exotics and inve a, exotics and inve b, flooding charac other factors that the decomposition the field	barine barine asives, distu- kipte, 1, teristics and define the constant of the define the constant of the data is colle	Alun 09 Dee Irbance ev lesse More (SA limits) Sa 25 In 1 Sa 25 In 1 Sa 25 In 1 Sa 25 In 1 Sa 25 In 1	tropi v traci vidence, fir sold bever sold so	e and herbivory) Giach, Peorler og hiroo	

SA CODE : SF2Mi [3]

7/16/24 Date :

SA Name :	Two Mile Pond Reservoir Transect (31
JA Rumes	TWO IVARE FOLID Reservoir Transect [~ 1

Surveyor Initials : DS/AM

Landscape Context

Buffer Integrity Index

5

or are e	neet 1a. I xcluded a ir of imag	and consider	CC Checklist. Che ed non-buffer ele	eck off land ments that o	cover e disrupt	ecosyst	s withi em co	n the bui nnectivit	ffer ar y. Ind	ea or icate	RCC corri the imag	dors that are either allowed, ery type and date (season
Imagery	/ Go	ogle Earth Ki	MZ. file			lmage	Date	6/2	3			
Allowed	1 buffer/F	CC land cov	er elements			Exclude	ed nor	-buffer/l	RCC la	nd c	over elem	ents
Buffer I	RCC					Buffer	RCC					
X	x Na	turai or semi	-natural vegetatio	on natches			X					elopments, parking lots,
												and other structures
X	<u>,</u>		ditches without I	evees		╞╝				golf	courses, s	ports fields
		d fields, unm	aintained					Railroad				<u> </u>
		en range lar	nd					Maintaii materia				t piles, construction
		ot trails, hors ensity)	e trails, unpaved	bike trails (k	w			Intensiv	e live:	stock	areas, ho	rse paddocks, feedlots
×	X No	n-channel o	pen water								ire: mainta is, and vin	ained pastures, hay fields, eyards
X		n-functionin turally occur	g abandoned veg ring levees	jetated leve	es, or	X	X	graded	roads			econd-order unpaved but
<u>ات</u> (🛄 un	paved two ti	racks roads			×	X	Open w structur		ounc	led by a le	evee or other manmade
		her	<u></u>	······				Other			-	
Workst	neet 1b. l	Buffer Perce	nt Sub-metric. M	easure or es	timate	the per	centag	e of the		Г	Table	L1a. Buffer Percent
SA perii	meter col	nposed of al	lowed buffer elen ric using Table L1a	nents and er	nter int	o the Bi	iffer Pe	rcent			Rating	Buffer Percent
		ry Workshee			ine ruoi	ng on n	e ban	:		F	4	100%
	<u> </u>		Buffer Percent	(%)= 8	5%					R	3	≥80% - <100%
		CC	Sub-metric. Mea		th of a	ach bul	for line	in moto		r	2	≥50% - <80%
Workshi the GIS (eet 1c. B	man Averag	e the line lengths	and rate us	ing Tab	each bui le L1b. f	Enter t	ne rating	on	0	1	<50%
			Worksheet 1d.			-						e L1b. Buffer Width
Line	Buffe	r Width	Buffer Width	Line E	Buffer 1		Bu	iffer Wio	lth			· · · · · · · · · · · · · · · · · · ·
		m)	(ft)		(m	<u> </u>	-	(ft)		1.	Rating	Average buffer width
Α	164.	26	538.91	E	161.9			531.26		<u></u>	4	≥190m
В	125	25	410.92	F	231.4	48		759.44		R	3	≥130 - <190m ≥65 - <130m
c	115	.39	378.57	G	121.2	25		397.80		с С	2	<65m
 D		07	364.40	н	155.8	87		511.38		Ľ	. <u> </u>	
			148.31 (m)		486.5	8	 (ft)			Та	ble L1c. S	iummary Rating for Buffer
	Averag					·						Integrity
Works	ieet 1d.	Buffer Integ	rity Summary, Er	nter the sub-	metric Susina	Ratings	from nula in	fables L1 the box	a	F	lating	Score
and L1b above to calculate the Buffer Integrity Index Score using below. Using the Buffer Integrity Index Score, enter rating for Bul					for Buff	fer Integ	rity in	Table L1	c	\cap	4	>3.5
		ummary Wor		-	_					2	3	>2.5 - ≤3.5
Buffer	% Rating	t + Buff	er Width Rating	/2 ≕	Buffe	er Integ	rity in	dex Sco	re	$\overline{\mathbf{C}}$	2	>1.5 - ≤2.5
3		·	3	/2 ≃	+-	3				<u>ſ</u>	1	≤1.5
1 3		+	د ا	/∠∺		د						

SA CODE: SF2MI[3]

SA Name :

5°2(V))[*]

Date: 7/16/24

DS/AM

Two Mile Pond Reservoir Transect [β]

Surveyor Initials :

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

1	able 14.	Surrounding Land Use Rating
F	lating	LUI Score
Ĉ	4	≥95 - 100
$\overline{\mathbf{C}}$	3	≥80 - <95
R	2	≥40 - <80
\cap	1	<40

dom Whic	inan hiti	s mc	ecies in e	tach stratu dant. Each	the the	dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one stratum species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon. Tail Woody Stratum ¹ [Tail Woody Stratum ³ [CT Score ⁴]	preases in the polygon is either assigned to Tail Woody Stratum ¹	gon. See for I to the sam n 1	otnotes f e CT if it	or special instructions. If has the same compositic Short Woody Stratum ²	nstructic ne comp dy Strati	ons. If a spec sosition or a um ²	ties appe	ars in more is created fi Herbaceou	than or the purchase or the purchase	ars in more than one strata, as: is created for the polygon. Herbaceous/Sparse Stratum ³	sign the s	species to t CT Score 4	o the str	atum in
<u></u> <u> </u> <u> </u>	Poly	/gor	Polygon Nos.			Species 1	<u></u>	Species 2	ш 2	Species 3	<u> </u>	cies 4	<u>ш 2</u>	Species 5	ш Z	Species 6	<u>ш 2</u>	Raw4	SA5	Wt Score ⁶
۲					<u> </u>	La travera		21. 16	2	Cen un t	2	Main	ш	Name's an Care is a care				V) A)	R	5
<u>م</u>					[1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	N	S. Mar	2			6.44.5	2	San San San San San San San San San San	ي وي المراجع . ي م وي الم			65	jî,	8
U																				
ш			, 	· · · · · · · · · · · · · · · · · · ·			 		 				 							
<u>u.</u>		<u> </u>																		
U		 						 	ļ		¢ 				1			•		
л		ļ				 					 									
-	ļ	Ļ							<u> </u>											
<u> </u>		[
×	ļ	ļ					 													
ц.																				
٤		 	 																	
z			·				ļ		 				 		ļ					
0		 					} 	 		\$ } }	·	 	 							
	ļ	ł													Fini	Final Weighted Score ⁷	1 Score7			
1.	rees	and	i shrubs c	> 6 m (20 1	feet) ;	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	otal stratu	im cover; 2.	Trees an	id shrubs ≤€	5m (20 f	eet) and >2:	5% total	stratum co	ver; 3. H	erbaceous (gramino	ids and	forbs)>1	3% total
stra	tan i	COV	er. 4Raw	Score is tra	om Te	stratum cover. 4Raw Score is from Table B1a (Appendix B); 2%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must	pendix B)	; 2%SA is tr 7TL2 Eign	le percei	ntage of the	e SA arec	e covered by	/ the CT	and expres	sed as a	decimal nut	mber; the	e total al '- Pi an	rea %SA	must
for <u>j</u>	ai i. ?elati	ive	t. Score IS Native Pj:	s the prouv ant Comm	uct or vunity	equal 1, Wtt. Score is the product of the Raw Score 1% SM; 7.1 he Final Weighted Score is the sum of the Wtt. Scores. Rate the C.1 Final Weighted Score on Table 81 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	n on the	 The Fils SA Rank Sur 	т weigh. И Малу М	ied score is forksheet.	the sum	i of the wr. :	ocores. n	ate the CLI	-Inal we	igntea scur	e on Tau	le pi an	ם פחופר ו	ле кашъу
														•						

۶

Surveyor Initials : 🛛 🗍

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Tr $-\infty$ t [\mathbb{C}^{-1}]

SA COP' SF2MIL 3]

Page 7 of 17

SA CODE: SF2MI[3]

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Transect [³]

Surveyor Initials : DS/AM

 \mathcal{O}

B^A - Native Riparian Tree Regeneration

		Description
E	lating	Description
¢	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
\overline{c}	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

Al/A

Invasive cover (%)

calculate

Table B5. Ratin	gs for Invasive Exotic Plant Species Cover
Rating	Invasive Species Cover %
X 4	0%
3	>0% - <1%
2	≥1% - <10%
<u>C 1</u>	≥10

Additional CTs and Biotic Metric Comments:

SA CODE: SF2MI [³]

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		ď		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
				Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		đ		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 7/16/24

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect [3]

A5 - Soil Surface Condition

Worksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, guillies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

0

1	Table A5. Soil Surface Condition Rating						
Rating	Description						
R 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.						
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.						
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.						
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.						

NMRAM Montane Riverine Wetlands Version 2.5

			SA Cove	r Worksheet			·	
A Code	SF2MI (🎽)	SA Name : Two N	iile Pond Reservoir			Project : Ripa	arian Asses	ement
ođe	Tsct [3]	AU Name : Trans	ect []			WOI : Two M	lile Pond R	eservoir
ounty	Santa Fe	HUC 12 Headw	aters Santa Fe River	Elevation (ft) 729	99	(m) 2224.7	Ecor	egion 6.0 NWFM
A ripa decor of wat Driving Di Drivirg	arian system ti mmissioned d ter rights. irections ng to Santa Fe	d Boundary (Rationale, c hat leads into a pond loc lue to safety concerns re from Albuquerque you you reach the reservoir	ated on the east side garding the reservoir head north on Old Pe	and a water diver	sion to t	he area was re	ecently shu	it down due to lack
)wnershi	p The Nature	Conservative and The S	anta Fe National Fore	t Data Sharing Restrictions	Results only.	s to client	Fish Obser Wetlar	
Surve	yor Role		Surve	yor Name				Surveyor Initials
Lan	dscape	Dustin Schwart:	2					DS
8	liotic	Annie McCoy						AM
At	biotic	Dustin Schwart	Ζ					DS
Str	essors	Dustin Schwart	Z					DS
East	ing (m)	Northing (m)	Zone	Datum		Latitude	(DD ft)	Longitude (DD ft
-105° 53	3' 24" W	35° 41' 23" N	13	NAD- 83 U	ITM	35.689722		-105.89
Surv	ey Date	8/13/24	Start Time	9:00		End T	ime	15:00
SA Land	scape Contex Land Iraf	t (summarize the wetla appoints w Mulch Wf	nd and surrounding la	indscape; include hmid, grou	condition nd i	in and impact is cover (anop	ts) red ih	dead over shading
SA Bioti	Land leaf c Condition (Cogror bloom	appenvis w Mulch Wr vegetation patterns, cor s Huwk, Fen 1. Y Oclocks	nd and surrounding la ct, Nory H it Fungus c nposition and structu ce post Lieuro Broad tall	indscape; include hmid, grow andtr mu re, exotics and inv l. Mulle in Humming bil	nd Ich asives, c J, k	is cover (anop listurbance ev illow an See , No	vidence, firm nd troes Nosqu	e and herbivory) in full iby
SA Bioti SA Abiot disturbai	Land leaf c Condition (Cogror, bloom tic Condition nce and other	appenvis w Mulch Wr vegetation patterns, cor s Huwk, Fen y Oclocks (hydrological alteration site impacts; explain th 7,94 n Fu Coopers Han	nd and surrounding la ct, Nory H it Fungus c inposition and structu ce post Lieure Broad tall s (e.g., dams, walls etc e hydrologic breaks of 2 16, 3 u S/cm it was vory summary and comme	indscape; include hmie, grow andtr mu re, exotics and inv l. Mulle in Humming bil Humming	rd Ich asives, c J, f cteristics t define f data is	is cover (anop) listurbance ev illow and dee, No sand evidence the SA limits) H 7.17 collected.)	vidence, fir vidence, fir nd trag Nosqu e of overba	e and herbivory) in full ibs
SA Bioti SA Abiot disturbai	Land leaf c Condition (Cogror, bloom tic Condition nce and other	appenvis w Mulch Wr vegetation patterns, cor s Huwk, Fen y Uclocks (hydrological alteration site impacts; explain th 7.94 n tu Coopers Han	nd and surrounding la ct, Nory H it Fungus c inposition and structur ce post Lizure Broad tall s (e.g., dams, walls etc e hydrologic breaks of 216, 3 u Sten K was vory summary and commu- pre paring to	indscape; include linic, grow andtr mu re, exotics and inv l. Mulle in Hummity bil il; flooding charac rother factors tha 13.9°(Nocal ents after the field r full a	nd Ich asives, c J, f teristics t define f data is nd	is cover (anop) listurbance ev (llow and dee No dee No	vidence, fir vidence, fir nd trag nd trag nd trag nd trag e of overba	e and herbivory)

SA CODE: SF2MI [\$]

Date: 8/13/24

SA Name :	Two Mile Pond Reservoir Transect [2]
-----------	------------------------------------	---	---

Surveyor Initials : DS/AM

Landscape Context

B	- Buffer Integrity Index										
or are e	exclud									ridors that are either allowed, gery type and date (season	
lmager	у 🗌	Google Earth	KMZ. file			Image	Date	6/23			
Allowe	d buff	er/RCC land c	over elements					n-buffer/RCC	land cover eler	nents	
Buffer	RCC				· .	Buffer	RCC	Į			
×	X	Natural or se	mi-natural vegetat	ion patc	hes	\boxtimes	X	1		velopments, parking lots, and other structures	
X	X	Small irrigation	on ditches without	levees				Lawns, park	s, golf courses,	sports fields	
		Old fields, un	maintained					Railroads			
		Open range land							levees, sedime taging areas	nt piles, construction	
X	1 1 1	Foot trails, horse trails, unpaved bike trails (low intensity)						Intensive liv	vestock areas, h	orse paddocks, feedlots	
X	X	Non-channel open water							agriculture: maintained pastures, hay fields, s, orchards, and vineyards		
×	X	Non-functioning abandoned vegetated levees, or naturally occurring levees				×	X	Paved road graded road	s or developed second-order unpaved but Is		
		unpaved two tracks roads				×	X	Open water structure	bounded by a	levee or other manmade	
		Other						Other			
			cent Sub-metric. I allowed buffer ele						Tabl	e L1a. Buffer Percent	
			etric using Table L1						Rating	Buffer Percent	
Integrit	y Sum	Immary Worksheet 1d.						100%			
			Buffer Percen	t (%)=	85%				Q 3	≥80% - <100%	
Vorksh	eet 1z	Buffer Widt	h Sub-metric. Me	asure the	length of e	ach but	ffer line	in meters ir	<u>ה 2</u>	≥50% - <80%	
			age the line length							<50%	
he Buffe	er Inte	grity Summar	y Worksheet 1d.							le L1b. Buffer Width	
Line	Bu	ffer Width	Buffer Width	Line	Buffer V		B	iffer Width		· · · · · · · · · · · · · · · · · · ·	
		(m)	(ft)		(m			(ft)	Rating	Average buffer width	
Α	1	64.26	538.91	E	161.9	3	ł	531.26	C 4	≥190m	

(m)	(ft)		(m)	(11)
164.26	538.91	E	161.93	531.26
125.25	410.92	F	231,48	759.44
115.39	378.57	G	121.25	397.80
111.07	364.40	н	155.87	511.38
Average	148.31 (m)		486.58	(ft)
	164.26 125.25 115.39 111.07	164.26 538.91 125.25 410.92 115.39 378.57 111.07 364.40	164.26 538.91 E 125.25 410.92 F 115.39 378.57 G 111.07 364.40 H	164.26 538.91 E 161.93 125.25 410.92 F 231.48 115.39 378.57 G 121.25 111.07 364.40 H 155.87

Table L1b. Buffer Width					
Rating Average buffer width					
C	4	≥190m			
(X	3	≥130 - <190m			
0	2	≥65 - <130m			
C	1	<65m			

Table	Table L1c. Summary Rating for Buffer Integrity					
Rat	ing	Score				
<u> </u>		>3.5				
R 3	3	>2.5 - ≤3.5				
C 2	2	>1.5 - ≤2.5				
C 1		≤1.5				

Worksheet 1d. Buffer Integrity Summary. Enter the sub-metric Ratings from Tables L1a and L1b above to calculate the Buffer Integrity Index Score using the formula in the box below. Using the Buffer Integrity Index Score, enter rating for Buffer Integrity in Table L1c 1 on the SA Summary Worksheet.

Buffer % Rati	r % Rating + Buffer Width Rating /2 =		/ 2 ≃	Buffer Integrity Index Score	
3	-+		3	/2 =	3

SF2ML[3] SA CODE :

8/13/24 Date :

Two Mile Pond Reservoir Transect [\mathcal{S}] SA Name :

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table 14 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, Irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surrounding Land Use Rating					
Rating	LUI Score				
C 4	≥95 - 100				
C 3	≥80 - <95				
Ø 2	≥40 - <80				
C 1	<40				

DS/AM Surveyor Initials :

D - Relative Native Flant Community Composition Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT fit has the same commosition or a new CT is created for the polygon.	und Poly that ap	vor view vor vgon Assig ppears in th	mpusit juments le polygo	Lion Starting v on. See fool	vith CT A inotes fo	, enter the r special in	number Istruction	of the first ns. If a spec	: polygor cies appe	h from Worl ars in more is created f	sheet 5. than on or the pr	Enter the s e strata, as: wron	pecies co ign the s	odes for 1 pecies to	the two for the strain of the	top atum in	
		Tall Woody Stratum ¹	Stratum	1		Short Woody Stratum ²	dy Stratu	m ²		Herbaceot	is/Sparse	Herbaceous/Sparse Stratum ³		CT Score 4	4		
CT Polygon Nos.		Species 1	<u>ы</u> 2	Species 2	шZ	Species 3	шZ	Species 4	щZ	Species 5	ы Z	Species 6	ы К	Raw4	% SA5	Wt Score ⁶	·
V	7	Le theread	N	will'r	Ŵ	ente Aque	\sim	Curad	~	M. C. C.	¥.,	1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	4	10 - 10 10 - 10 10 - 10	20	1.75	
8	<u> </u>	Le Herward	\mathbf{i}	witter	2	South South				1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1	14		5.5	1995 1997 1997 1997	20	63.5	
			}						 								
																	.
																	<u> </u>
5																	
																	<u> </u>
																	г —
																	<u> </u>
ž																	
																*	<u> </u>
0																	
-											Fina	Final Weighted Score ⁷	l Score ⁷			3, 25	<u> </u>
1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Tre	et) and	> 25% tota	l stratum	1 cover; 2. T	rees and	i shrubs ≤6	m (20 fe	et) and >2	5% total	stratum co	ver; 3. He	es and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	graminoi	ids and f	orbs)>1(% total	
stratum cover. *Raw Score is from Table BTa (Appendix B); 2%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must lequal 1; 6Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score and enter the Rating	m Table :t of the	B1a (Appe Raw Score	* % SA;	⁷ The Final	e percen Weighte	tage of the d Score is f	SA area the sum (covered by of the Wt. 3	y the CT Scores. R	and expres ate the CT I	sed as a (⁻ inal Wei	decimal nui ghted Scor	nber; the e on Tabl	e total ar le B1 and	ea %SA i I enter tl	must he Rating	
for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	inity Coi	nposition (on the S/	A Rank Sum	imary W	orksheet.	r •				:						

Page 7 of 17

Date: 8/13/24 Surveyor Initials: [M

SA Name: Two Mile Pond Reservoir Tr[3]

SA COL⁻ SF2MI [J]

SA CODE: SF2MI [31

Date : 8/13/24

Two Mile Pond Reservoir Transect [β] SA Name :

Surveyor Initials : DS/AM

0

B4 - Native Riparian Tree Regeneration

	ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
¢ 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u> </u>	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIA

Invasive cover (%)

calculate

Table B5. Ratin	gs for Invasive Exotic Plant Species Cover
Rating	Invasive Species Cover %
X 4	0%
<u> </u>	>0% - <1%
2	≥1% - <10%
C 1	≥10

Additional CTs and Biotic Metric Comments:

Fungues is thriving in the environment with the recent humidity,

SA CODE: SF2MI [3]

Date: 8/13/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ď		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Í		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ŋ		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
				Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		ď		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 8/13/24

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect [3]

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, guilies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
	······································		Estimate % soil disturbance by segment area

Average % Soil Disturbance:

0

1		Table A5. Soil Surface Condition Rating
R	ating	Description
¢	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cover	Worksheet			
A Code SF2MI (3] SA Name : Two N	Aile Pond Reservoir		Project : Ripa	irian Assese	ement
Lode Tsct [3]	AU Name : Trans	iect [रे]		WOI : Two M	ile Pond Re	servoir
County Santa Fe			Elevation (ft) 7299	(m) 2224.7	Ecore	egion 6.0 NWFM
A riparian system decommissioned of water rights. Driving Directions Driving to Santa F	nd Boundary (Rationale, o that leads into a pond lo due to safety concerns re e from Albuquerque you il you reach the reservoir	cated on the east side o egarding the reservoir a 	nd a water diversion t	o the area was re	ecently shu	t down due to lack
wnership The Nature	e Conservative and The S	anta Fe National Forest	Data Sharing Resu Restrictions only		Fish Obser Wetlan	
Surveyor Role		Survey	or Name			Surveyor Initial
Landscape	Dustin Schwart	z	, , , , , , , , , , , , , , , , ,			DS
Biotic	Annie McCoy					AM
Abiotic	Dustin Schwart	tz				DS
Stressors	Dustin Schwart	tz				DS
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD f
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTM	35.689722	2	-105.89
Survey Date	9/11/24	Start Time	9:00	End Ti	ime	15:00
5A Landscape Conte	ext (summarize the wetla	nd and surrounding lar	scription	ition and impact	ts)	
SA Landscape Conte א ניץ א	High formst i 10 11	ind and surrounding lar	ndscape; include cond	ition and impact advice and half	:s) :// //////////////////////////////////	an y a 12 M an anta
SA Landscape Conte A cyd Glo	ext (summarize the wetla High formst i The The Gellen jack	ind and surrounding lar	ndscape; include cond	ition and impact	ts)	алу с 13 9 1. так
N (7) ⁴ (45)	High formst i 10 11	ind and surrounding lar	ndscape; include cond 197 - 34 marks of 77 - veges	alland and h l s, disturbance ev	vidence, fire	
A C/A CAS SA Biotic Condition	High formst i define formst i action patterns, con	and and surrounding lar	ndscape; include cond	a dava and h d s, disturbance ev M	vidence, fire	e and herbivory)
A cyd As SA Biotic Condition C u fu hors	High format (when formation (wegetation patterns, con or mail, various	mposition and structure	ndscape; include cond by ghore by The vegation e, exotics and invasive small yellow	s, disturbance ev moths. W	vidence, fire	e and herbivory)
Λ (γ) 49 SA Biotic Condition (11 / 1 hors Nuj	High format i high format i (vegetation patterns, con omit, e tail, Various t hatch ano	mposition and structure pollihators, 2:	e, exotics and invasive	s, disturbance ev mothy. w bid	vidence, fire ullein hite cre	e and herbivory)
A cyd As SA Biotic Condition (u fu hors Nu; SA Abiotic Conditio	High format i define the format i and formation patterns, con and, Various thatch ano n (hydrological alteration	mposition and structure pollinators, 2 A narrow to	adscape; include cond y ghore of The veget e, exotics and invasive a mall yellow a 1 humming 1; flooding characteris	s, disturbance ev moths with bird	vidence, fire ullcin Lite cre	e and herbivory)
A cyd As SA Biotic Condition (u fu hors Nu; SA Abiotic Conditio	High formst i define for (vegetation patterns, con omit, e tail, Various t hatch ano	mposition and structure pollinators, 2 a your of the hydrologic breaks or	a, exotics and invasive a, exotics and invasive a, exotics and invasive a, exotics and invasive b, exotics and invasive a, exotics and invasive b, exotics and e	s, disturbance ev mothy wi bi-d tics and evidence ne the SA limits)	vidence, fire ullcin Lite cre e of overba	e and herbivory) ested
Λ cyd Go SA Biotic Condition (u tu hors Nu) SA Abiotic Conditio disturbance and othe	High format i define format i (vegetation patterns, con a mail, various t hatch a no n (hydrological alteration er site impacts; explain the Water is se p)1 7.33 1	mposition and structure pollinators, 2 a narrow f. a narrow f. hs (e.g., dams, walls etc. he hydrologic breaks or a ping over	e, exotics and invasive a mall yellow a j humming be aver dam 1.8	s, disturbance ev mothy wi bi-d tics and evidence ne the SA limits) more and	vidence, fire ullein hite cro e of overba more	e and herbivory) ested ink flooding; soil each time,
A cyd As SA Biotic Condition (u. tu hors Nu) SA Abiotic Conditio disturbance and othe	High format i (vegetation patterns, con- and, Various t hatch ano n (hydrological alteration ersite impacts; explain the Water is so p)1 7.33 1 ary (Overall site condition	mposition and structure pollinators, 2 A norrow the ns (e.g., dams, walls etc. the hydrologic breaks or a ping over hydrologic breaks or a ping over	and scape; include cond y ghow of The regard e, exotics and invasive a mall yellow a 1 humming l; flooding characteris other factors that defi becaver dam 1.8 nts after the field data	s, disturbance ev mothy. wh bird tics and evidence ne the SA limits) more and is collected.)	vidence, fire ullein hite cro e of overba more	e and herbivory) ested ink flooding; soil each time,
A CY AS SA Biotic Condition (10 F1 hors NH) SA Abiotic Conditio disturbance and othe	High format i define format i (vegetation patterns, con- a not, various t hatch a no n (hydrological alteration ersite impacts; explain the Water is so p)1 7.33 i ary (Overall site condition A ten i	mposition and structure pollinators, 2 A norrow f. A n	a, exotics and invasive a, exotics and invasive a, exotics and invasive a mall yellow a 1 humming braver dam 1.8 nts after the field data 10 16r a	s, disturbance ev mothy with bird tics and evidence ne the SA limits) more and is collected.) yellow for	vidence, fire ullein hite cro e of overba more	e and herbivory) ested ink flooding; soil each time,
Λ cyd Go SA Biotic Condition (u. p. kors Nu) SA Abiotic Conditio disturbance and othe	High format i define format i (vegetation patterns, con- a not, various t hatch a no n (hydrological alteration ersite impacts; explain the Water is so p)1 7.33 i ary (Overall site condition A ten i	mposition and structure pollinators, 2 A norrow the ns (e.g., dams, walls etc. the hydrologic breaks or a ping over hydrologic breaks or a ping over	a, exotics and invasive a, exotics and invasive a, exotics and invasive a mall yellow a 1 humming braver dam 1.8 nts after the field data 10 16r a	s, disturbance ev mothy with bird tics and evidence ne the SA limits) more and is collected.) yellow for	vidence, fire ullein hite cro e of overba more	e and herbivory) ested ink flooding; soil each time,

SA CODE: SF2MI(3)

Date: 9/11/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DS/AM

Landscape Context

. - Buffer Integrity Index

3

3

÷

/2 =

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Imagei	у	Google Earth	KMZ. file			Image	Date	6/2	3			
Allowe	d buff	er/RCC land c	over elements			Exclud	led nor	n-buffer/	RCC la	and c	over elen	nents
Buffer	RCC					Buffer	RCC					
X	x	Natural or se	mi-natural vegetat	ion patc	hes	X	X	j -				elopments, parking lots, and other structures
X	X	Small irrigati	on ditches without	levees				Lawns, j	parks,	golf	courses, s	ports fields
	Π	Old fields, un	maintained					Railroad	ls			
		Open range l	and					Maintai materia				t piles, construction
Ń	X	Foot trails, he intensity)	orse trails, unpavec	l bike tra	ils (low			Intensiv	e live:	stock	areas, ho	orse paddocks, feedlots
X	X	Non-channel	open water						-		ire: maint is, and vir	ained pastures, hay fields, neyards
X	x	Non-functior naturally occ	ning abandoned ve urring levees	getated	levees, or	X	X	Paved ro graded		or de	veloped s	econd-order unpaved but
		unpaved two	tracks roads			X	x	Open w structur		ound	ded by a l	evee or other manmade
		Other						Other		-		
			cent Sub-metric. N								Table	e L1a. Buffer Percent
						~ *h ~ Di	• Hény Dr	are and				
Box be	low. Ra	ate the sub-m	allowed buffer ele etric using Table L1							1.	lating	Buffer Percent
Box be	low. Ra		etric using Table L1 eet 1d.	a and er	nter the rati					C	4	100%
Box be	low. Ra	ate the sub-m	etric using Table L1	a and er						1.	4 3	100% ≥80% - <100%
Box be Integrit Worksh	low. Ra :y Sum eet 1c	ate the sub-manary Worksho 	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea	a and er t (%)=	85% e length of e	ng on ti each bu	he Buff	er e in mete			4 3 2	100% ≥80% - <100% ≥50% - <80%
Box be Integrit Worksh the GIS	low. Ra :y Sum : eet 1c or on t	ate the sub-mo mary Worksh c. Buffer Widt the map. Avera	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length	a and er t (%)=	85% e length of e	ng on ti each bu	he Buff	er e in mete		C	4 3	100% ≥80% - <100%
Box be Integrit Worksh the GIS	low. Ra y Sum eet 1c or on t er Inte	ate the sub-manary Worksho c. Buffer Widt the map. Avera egrity Summar	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d.	a and er t (%)=	85% e length of e e using Tab	ng on ti each bu le L1b. I	ffer line Enter ti	e in mete	on		4 3 2 1	100% ≥80% - <100% ≥50% - <80%
Box be Integrit Worksh the GIS	low. Ra y Sum eet 1c or on t er Inte	ate the sub-mo mary Worksh c. Buffer Widt the map. Avera	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length	a and er t (%)=	85% e length of e	ng on tì each bu le L1b. I Width	ffer line Enter ti	er e in mete	on		4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50%
Box be Integrit Worksh the GIS the Buff	eet 1c or on t Bu	ate the sub-ma mary Workshi c. Buffer Widt the map. Avera grity Summar iffer Width	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width	t (%)=	85% elength of e using Tab	ng on ti each bu le L1b. I Width	ffer line Enter ti Bu	e In mete he rating uffer Wic	on		4 3 2 1 Tabl	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width
Box be Integrit Worksh the GIS the Buff Line A	eet 1 c or on t er Inte	ate the sub-minimary Workshi c. Buffer Widt the map. Avera grity Summar iffer Width (m) 64.26	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91	t (%)= sure the s and rat	e length of e se using Tab Buffer f (m	ng on t) each bu le L1b. Width i) i3	ffer line Enter ti	e in mete he rating uffer Wic (ft)	on		4 3 2 1 Tabl	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width
Box be Integrit Worksh the GIS the Buff Line A B	eet 1c or on t er Inte Bu 1	ate the sub-manary Workshi c. Buffer Widt the map. Avera egrity Summar iffer Width (m) 64.26	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92	t (%)= asure the s and rat Line E F	e length of e e using Tab Buffer 1 (m 161.9 231.4	ng on t) each bu le L1b. Width i) i3 i8	ffer line Enter ti	e in mete he rating uffer Wic (ft) 531.26 759.44	on		4 3 2 1 Tabl Rating 4	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m
Box be Integrit Worksh the GIS the Buff Line A	eet 1c or on t er Inte Bu 1	ate the sub-minimary Workshi c. Buffer Widt the map. Avera grity Summar iffer Width (m) 64.26	etric using Table L1 Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	a and er t (%)= asure the s and rat Line E	e length of e e using Tab Buffer 1 (m 161.9 231.4 121.2	ng on t) each bu le L1b. I Width 1) 13 18 25	ffer line Enter ti	e in mete he rating uffer Wic (ft) 531.26	on		4 3 2 1 Tabl Rating 4 3	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
Box be Integrit Worksh the GIS the Buff Line A B	eet 1c or on t er Inte Bu 1 1	ate the sub-manary Workshi c. Buffer Widt the map. Avera egrity Summar iffer Width (m) 64.26	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92	t (%)= asure the s and rat Line E F	e length of e e using Tab Buffer 1 (m 161.9 231.4	ng on t) each bu le L1b. I Width 1) 13 18 25	ffer line Enter ti Bu	e in mete he rating uffer Wic (ft) 531.26 759.44	on		4 3 2 1 Tabl Rating 4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m
Box be Integrit Worksh the GIS the Buff Line A B C	eet 1c or on t er Inte Bu 1 1	ate the sub-minimary Workshi c. Buffer Widt the map. Avera grity Summar iffer Width (m) 64.26 125.25 115.39 111.07	etric using Table L1 Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	t (%)= asure the s and rat Line E F G	e length of e e using Tab Buffer 1 (m 161.9 231.4 121.2	ng on t) each bu le L1b. Width e) e3 48 25 37	ffer line Enter ti Bu	e In mete he rating uffer Wic (ft) 531.26 759.44 397.80	on		4 3 2 1 Tabl Rating 4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer
Box be Integrit Worksh the GIS the Buff Line A B C D	eet 1c or on t er Inte Bu 1 1 1 1 Aver	ate the sub-minimary Workshi c. Buffer Widt the map. Avera egrity Summar iffer Width (m) 64.26 125.25 115.39 111.07 rage	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	t (%)= asure the s and rat Line E F G H	Buffer b Buffer b Buffer b (m 161.9 231.4 121.2 155.8 486.55	ng on t) each bu le L1b. Width i) i3 i8 25 37 8	ffer line Enter ti Bu (ft)	e In mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38	on		4 3 2 1 Tabl Rating 4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m
Box be Integrit Worksh the GIS the Buff Line A B C D	eet 1c or on t er Inte Bu 1 1 1 Aver heet 1	ate the sub-minimary Workshi c. Buffer Widt the map. Avera egrity Summar iffer Width (m) 64.26 125.25 115.39 111.07 rage	etric using Table L1 Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. E	t (%)= asure the s and rat Line E F G H	Buffer I 85% e length of e e using Tab Buffer I (m 161.9 231.4 121.2 155.8 486.55 sub-metric	ng on t each bu le L1b. Width 13 13 13 13 13 13 13 13 13 13 13 13 13	ffer line Enter ti Bu (ft)	e In mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1	on Ith		4 3 2 1 Tabl Rating 4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer
Box be Integrit Worksh the GIS the Buff Line A B C D Works and L1	eet 1c or on t er Inte Bu 1 1 1 Aver heet 1 b abov	ate the sub-minimary Workshi c. Buffer Widt the map. Avera grity Summar iffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inte /e to calculate	etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	t (%)= asure the s and rat Line E F G H nter the y Index S	Buffer the rational second sec	ng on the seach but the L1b. I width the L1b. I width the search but the search b	ffer line Enter the Bu (ft) 5 from 1 mula in	e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1 h the box	on Ith		4 3 2 1 Table Rating 4 3 2 1 ble L1c. S	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer Integrity
Box be Integrit Worksh the GIS the Buff Line A B C D Worksi and L11 below.	eet 1 coron ter Inter Bu 1 1 Aver heet 1 5 abov Using	ate the sub-minimary Workshi c. Buffer Widt the map. Avera grity Summar iffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inte /e to calculate	etric using Table L1 Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	t (%)= asure the s and rat Line E F G H nter the y Index S	Buffer the rational second sec	ng on the seach but the L1b. I width the L1b. I width the search but the search b	ffer line Enter the Bu (ft) 5 from 1 mula in	e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1 h the box	on Ith		4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating	100% ≥80% - <100%
Box be Integrit Worksh the GIS the Buff Line A B C D Worksi and L11 below. 1 on	eet 1 coron ter Inter Bu 1 1 Aver heet 1 b abov Using the S/	ate the sub-minimary Workshi c. Buffer Widt the map. Avera egrity Summar iffer Width (m) 64.26 125.25 115.39 111.07 rage d. Buffer Inte ve to calculate the Buffer Inte A Summary We	etric using Table L1 Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	t (%)= asure the s and rat Line E F G H nter the y Index S enter rat	Buffer the rational second sec	ng on the seach but the L1b. It width the L1b. It width the search but the search	ffer line Enter ti Bu (ft) s from 1 nula in prity in	e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1 h the box	on Ith a		4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating 4	100% ≥80% - <100%

3

SF2MI[3] SA CODE :

9/11/24 Date :

Two Mile Pond Reservoir Transect [[3]] SA Name :

Surveyor Initials :

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel (that goes under paved roads)), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, Iand managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Ta	able L4.	Surrounding Land Use Rating
Ra	ating	LUI Score
C	4	≥95 - 100
C	3	≥80 - <95
R	2	≥40 - <80
C	1	<40

DS/AM

No No	· Kel	ative set 6. (e Nati CT Pla	IVE Pla nt Spei	cies al	omn of bo	B 1 - Kelative Native Plant Community Composition Worksheet 6. CT Plant Species and Polygon Assignments. Sta	omposi signmen	b 1 - Kelative Native Plant Community Composition Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top	with CT /	A, enter the	e number	r of the first	: polygon	from Worl	sheet 5.	Enter the	species c	todes for	the two	top	
do V hi	ninan ch it i	nt spec is more	ties in - e abur	each str idant. E	atum ach p	that a olygo	ppears in n is either	the polyc assigned	dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	stnotes fi e CT if it l	or special ir has the san	nstructio ne comp	ns. If a spec osition or a	ties appe	ars in more s created fi	than on or the po	e strata, a: Iygon.	ssign the	species t	to the str	atum in	
							Tall Woody Stratum ¹	ly Stratur	n ¹		Short Woody Stratum 2	ody Stratu	1m 2		Herbaceous/Sparse Stratum ³	s/Sparse	Stratum ³		CT Score 4	4		<u> </u>
t	Poŀ	Polygon Nos.	Vos.				Species 1	<u>w 2</u>	Species 2	шZ	Species 3	ωZ	Species 4	w z	Species 5	ш 2	Species 6	<u> </u>	Raw ⁴	% SA5	Wt Score ⁶	· · · · ·
A							the thread	~	42 J 24	2	w. HAN	\geq			~	11		*****	15 15	ß	8	
ස					 		6 through		Logic Care	N	1997 - 19	N		ļ		\geq	1. S. S. S. S. S. S. S. S. S. S. S. S. S.			Ç,		
U					 						:											· · · · · ·
0	 		┣		 													 				
щ	 																					1
<u> </u>	ļ																	 				
0	ļ							 	5				2									—
_ II																						
						ļ		 														
· ~																						T
×	_					ļ		} 										 				1
										[3						 					· / · · · · · –
×	 					ļ		 										 				7
z																						1
0																					\$	<u> </u>
																Final	Final Weighted Score ⁷	d Score ⁷			3.75	1
	rees	and sł	hrubs :	> 6 m (2	0 fee	t) and	l > 25% tot	tal stratur	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	lrees and	l shrubs ≲6	im (20 fe	et) and >2:	5% total :	tratum cov	rer; 3. He	rbaceous	(gramino	ids and t	forbs)>1()% total	T
edr	itum Iai 1;	cover. 6Wt. S	. TKaw Core is	score I: s the pro	s from oduct	n labl∢ of th∈	e B1a (App e Raw Scor	endix B); e * % SA;	stratum cover. "Haw score is from Table BTa (Appendix B); "%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Ra	e percen Weighte	tage of the id Score is f	: SA area the sum i	bercentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must 'eighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	/ the CT a cores. Ra	nd express te the CT F	ed as a d inal Weic	ecimal nu phted Scol	mber; th re on Tab	e total ar de B1 ano	rea %SA d enter tl	nust De Ratino	
ور	Relat	ive Na	itive Pi	ant Cor	นภามน	ity Co	mposition	on the S	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	mary W	orksheet.					•					ı	
											Page .	Page 7 of 17										1

Surveyor Initials : M

Date: 9/11/24

SA Name: Two Mile Pond Reservoir T- act [3]

SF2MI [3]

SA CO⁷

SA CODE: SF2MI[3]

SA Name : Two Mile Pond Reservoir Transect [3]

Date: 9/11/24

Surveyor Initials : DS/AM

Ø

B4 - Native Riparian Tree Regeneration

		ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
R	ating	Description
R	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
$\overline{\cap}$	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u> </u>	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

N/A

Invasive cover (%)

calculate

Tab	le B5. Ratin	gs for Invasive Exotic Plant Species Cover
R	ating	Invasive Species Cover %
¢.	4	0%
\sim	3	>0% - <1%
	2	≥1% - <10%
\overline{C}	1	≥10

Additional CTs and Biotic Metric Comments:

Lots of pollinators in the area and land is shifting who a fall presimment. BIT spinuls are listed on ester page.

SA CODE: SF2MI[3]

Date: 9/11/24

SA Name : Two Mile Pond Reservoir Transect [3]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
				The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI[3]

Date: 9/11/24

Surveyor Initials : DS/AM

SA Name :	Two Mile Pond Reservoir Transect (31
	•	•

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	Ø		Active erosion features due to anthropogenic disturbance (eg. rills, guilies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
		·	Estimate % soil disturbance by segment area

Average % Soil Disturbance:

C	כ	

		Table A5. Soil Surface Condition Rating
Rati	ing	Description
≪ 4	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C 3	}	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C 2	!	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C 1		Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

SA Code SF2MI [リ		SA Cover	Worksheet			
] SA Name : Two N	Aile Pond Reservoir		Project : Rip	arian Asses	ement
lode Tsct [\mathcal{Y}]	AU Name : Trans	sect [² /]	····	WOI : Two I	Mile Pond R	eservoir
County Santa Fe	HUC 12 Headw	aters Santa Fe River	Elevation (ft) 7299	(m) 2224.7	Eco	region 6.0 NWFM
A riparian system decommissioned of water rights. Driving Directions Driving to Santa	and Boundary (Rationale, on that leads into a pond loo in that leads into a pond loo i due to safety concerns re Fe from Albuquerque you	cated on the east side o garding the reservoir a head north on Old Pec	nd a water diversio	on to the area was	recently shu	ut down due to lack
	itil you reach the reservoir 		[Results to client only.	Fish Obse Wetlar	
Surveyor Role		Survey	or Name	· · · · · · · · · · · · · · · · · · ·		Surveyor Initials
Landscape	Dustin Schwart:	Ζ				DS
Biotic	Annie McCoy	<u> </u>				AM
Abiotic	Dustin Schwart	Ζ.				DS
Stressors	Dustin Schwart	z				DS
Easting (m)	Northing (m)	Zone	Datum	Latitude	e (DD ft)	Longitude (DD ft
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTI	M 35.68972	22	-105.89
Survey Date	7/16/24	Start Time	9:00	End 1	Fime	15:00
5A Landscape Cont	ext (summarize the wetlan Area is th Area is th	nd and surrounding lan				why promilies t
SA Biotic Condition Tansj Aldi	Area in the the Port a (vegetation patterns, con y Mustard U er tree lots	nd and surrounding lan a full arguinate f nposition and structure notef green s of blue	exotics and invas	hor Surve Th on perce ives, disturbance e I whay beloci	vidence, fin	e and herbivory) Mulle in
SA Biotic Condition Ta A sy A I d I Frog SA Abiotic Conditio	Area in the Poord the Poord i (vegetation patterns, con y Mastard U er tree lots noises, blac on (hydrological alteration	nd and surrounding lan a full a full a full a full position and structure position and structure	stem Sal	for Survey The on perce ives, disturbance e I what diart I bush / a pristics and evidence	vidence, fin k 2, m i 23 k 2 m i 23	e and herbivory) Mulle in Ants
SA Biotic Condition Tans Ald Frog SA Abiotic Conditio disturbance and oth	Area is in the Post revegetation patterns, con y Mustard U er tree lots noises, blue	nd and surrounding lan a Full under a Full under a full nposition and structure whole full green s a full blue <u>Jragon f</u> s (e.g., dams, walls etc.) e hydrologic breaks or o MJJC. Jah	stem Sal	for Survey In on perce Ives, disturbance e I why killer I why killer I why killer I why killer istics and evidence lefine the SA limits	vidence, fir k (m i St	e and herbivory) Mulle in Auts ink flooding; soil
SA Biotic Condition Tan sy Ald Frog SA Abiotic Conditio disturbance and oth 90 %	Area is in the Post in (vegetation patterns, con y Mastard U er tree lots noises, blue pround corre downer, find. ary (Overall site condition	nd and surrounding lan a F_{a}/f a F_{a}/f a F_{a}/f position and structure related green g a F_{b}/hc drsgon F_{b}/hc drsgon F_{b}/hc s (e.g., dams, walls etc.) e hydrologic breaks or of a $f/f/f$ f/f/f/f s (e.g., dams, walls etc.) e hydrologic breaks or of a $f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/$	ster the field da	for Survey In on perce ives, disturbance e ives,	vidence, fir Vidence, fir (CC), M (CM) (SC) SC) SC)	e and herbivory) Mulle in Au 13 ink flooding; soil
SA Biotic Condition Tan sy Ald Frog SA Abiotic Conditio disturbance and oth 90 %	Area is in the Post is (vegetation patterns, con y Mustard U er tree lots noises, blue pround corre dowhee, Find. ary (Overall site condition Area is	nd and surrounding lan a Full a Full a Full a full a full a full a full b fue fue fue fue fue fue fue fue	stem sal she have stem sal flooding characte other factors that do and the pro-	for Survey In on perce ives, disturbance e ives,	vidence, fir Vidence, fir (CC), M (CM) (SC) SC) SC)	e and herbivory) Mulle in An 13 Ink flooding; soil
SA Biotic Condition Tan sy Ald Frog SA Abiotic Conditio disturbance and oth 90 %	Area is in the Post is (vegetation patterns, con y Mustard U er tree lots noises, blue pround corre dowhee, Find. ary (Overall site condition Area is	nd and surrounding lan a F_{a}/f a F_{a}/f a F_{a}/f position and structure related green g a F_{b}/hc drsgon F_{b}/hc drsgon F_{b}/hc s (e.g., dams, walls etc.) e hydrologic breaks or of a $f/f/f$ f/f/f/f s (e.g., dams, walls etc.) e hydrologic breaks or of a $f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/f/$	stem sal she have stem sal flooding characte other factors that do and the pro-	for Survey In on perce ives, disturbance e ives,	vidence, fir Vidence, fir (CC), M (CM) (SC) SC) SC)	e and herbivory) Mulle in Auts ink flooding; soil

SA CODE : SF2MI (47)

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Transect [$\frac{2f}{f}$]

Surveyor Initials : DS/AM

Landscape Context

🖬 - Buffer Integrity Index

÷.

3

3

ł

/2 =

	exclude	d and consid									idors that are either allowed, ery type and date (season
lmager	y 🔽	Google Earth	KMZ. file			Image	Date	6/23			
Allowe	d buffe	r/RCC land c	over elements			Excluc	led nor	n-buffer/RCC I	land c	over elem	ents
Buffer	RCC					Buffer	RCC				
X		Natural or se	mi-natural vegetat	ion patcl	hes		×				elopments, parking lots, and other structures
		Small irrigatio	on ditches without	levees				Lawns, parks	, golf	courses, s	ports fields
		Old fields, un	maintained					Railroads			
		Open range l	land					Maintained I materials, sta			t piles, construction
	1 Y I I	Foot trails, he intensity)	orse trails, unpavec	l bike tra	ils (low			Intensive live	estock	areas, ho	rse paddocks, feedlots
X	X	Non-channel	l open water					row crops, oi	rcharc	ls, and vin	
X	1		ning abandoned ve urring levees	getated	levees, or	X	X	graded road:	S	·	econd-order unpaved but
		unpaved two	o tracks roads			X	X	Open water l structure	bound	led by a le	evee or other manmade
		Other			· · · ·			Other	_		
Works	ieet 1b	, Buffer Per	and Cult matrie A						[]		
										Table	L1a. Buffer Percent
SA peri Box bel	meter c ow. Rat	composed of the sub-me	allowed buffer ele etric using Table L1	ments an	nd enter inte	o the Bi	uffer Pe	ercent	F	Table lating	L1a. Buffer Percent Buffer Percent
SA peri Box bel	meter c ow. Rat	omposed of	allowed buffer ele etric using Table L1 eet 1d.	ments an a and en	nd enter inte ter the ratio	o the Bi	uffer Pe	ercent	C	Rating 4	Buffer Percent
SA peri Box bel	meter c ow. Rat	composed of the sub-me	allowed buffer ele etric using Table L1	ments an a and en	nd enter inte	o the Bi	uffer Pe	ercent		Rating 4 3	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh	meter c ow. Rat y Sumn eet 1c.	e the sub-me nary Worksh Buffer Widt	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea	ments an a and en t (%)=	nd enter inter ater the ratio 85% length of e	o the Bing on the	uffer Pe ne Buff ffer line	ercent er In meters in		Rating 4 3 2	Buffer Percent 100% ≥80% - <100% ≥50% - <80%
SA peri Box bel Integrit Worksh the GIS o	meter c ow. Rat y Sumn eet 1c. or on th	composed of the sub-me nary Workshe Buffer Widt the map. Avera	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length	ments an a and en t (%)=	nd enter inter ater the ratio 85% length of e	o the Bing on the	uffer Pe ne Buff ffer line	ercent er In meters in		Rating 4 3	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh the GIS o the Buff	meter o ow. Rat y Sumn eet 1c. or on th er Integ	omposed of the sub-me mary Workshing Buffer Widt the map. Avera grity Summar	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea	ments an a and en t (%)= asure the s and rate	nd enter inter ater the ratio 85% length of e	o the Bi ng on tl ach bu le L1b.	uffer Pe ne Buffe ffer line Enter th	ercent er In meters in		Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100% ≥50% - <80%
SA peri Box bel Integrit Worksh the GIS o	meter o ow. Rat y Sumn eet 1c. or on th er Integ	composed of the sub-me nary Workshe Buffer Widt the map. Avera	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d.	ments an a and en t (%)=	nd enter inte ater the ratio 85% length of e e using Tab	o the Bi ng on tl each bu le L1b. Width	uffer Pe ne Buffe ffer line Enter th	ercent er in meters in he rating on		Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50%
SA peri Box bel Integrit Worksh the GIS o the Buff	meter c ow. Rat y Summ eet 1c. or on th er Integ Buff	omposed of the sub-me nary Workshe Buffer Widt the map. Avera rity Summar fer Width	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	ments an a and en t (%)= asure the s and rate	nd enter inte ater the ratio 85% length of e e using Tab Buffer t	o the Bi ng on the ach bu le L1b. Width	uffer Pe ne Buff ffer line Enter ti	ercent er In meters in he rating on		Rating 4 3 2 1 Tabl	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width
SA peri Box bel Integrit Worksh the GIS of the Buffe Line	eet 1c. br on the Buff	Buffer Widt er Worksho Buffer Widt er map. Avera rity Summar fer Width (m)	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length ty Worksheet 1d. Buffer Width (ft)	ments an a and en t (%)= asure the s and rate Line	nd enter inte ater the rational 85% length of e e using Tab Buffer M (m	o the Bing on the Bing on the Bing on the Bing on the Bing of the	uffer Pene Buffer ffer line Enter th	ercent er In meters in he rating on Iffer Width (ft)		Rating 4 3 2 1 Table Rating 4 3	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
SA peri Box bel Integrit Worksh the GIS of the Buffe Line A B	meter o ow. Rat y Sumn eet 1c. or on th er Integ Buff 16	Buffer Widt Be map. Avera rity Summar fer Width (m) 4.26	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92	ments and a and en t (%)= asure the s and rate Line E F	nd enter inte ater the ratio 85% length of e e using Tab Buffer to (m 161.9 231.4	o the Bing on the Bing on the Bing on the Bing on the Bing of the	Iffer Pene Buffer ffer line Enter the Bu	ercent er e in meters in he rating on offer Width (ft) 531.26		Rating 4 3 2 1 Table tating 4 3 2	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh the GIS o the Buffo Line A B C	meter of ow. Rat y Sumn eet 1c. or on th er Integ Buff 16 12	Buffer Widt Be map. Avera rity Summar fer Width (m) 4.26 5.25	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	ments and a and en t (%)= asure the s and rate Line E F G	nd enter inter ater the ratio 85% length of e e using Tab Buffer M (m 161.9 231.4 121.2	o the Bing on the Bing on the Bing on the Bing on the Bing on the Bing of the	ffer line Enter th	ercent er e In meters in he rating on erating on erating on erating on ffer Width (ft) 531.26 759.44 397.80		Rating 4 3 2 1 Table Rating 4 3	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
SA peri Box bel Integrit Worksh the GIS of the Buffe Line A B	eet 1c. or on the standard sta	Buffer Widt e map. Avera rity Summar fer Width (m) 4.26 5.25 5.39	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40	ments and a and en t (%)= asure the s and rate Line E F	nd enter intenter the ratio 85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8	o the Bing on the Bing on the Bing on the Bing on the Bing of the	ffer line Enter the Bu	ercent er e In meters in he rating on offer Width (ft) 531.26 759.44		Table 4 3 2 1 Table tating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh the GIS of the Buffo Line A B C D	meter of ow. Rat y Summ eet 1c. or on th er Integ Buff 16 12 11 11 11	Buffer Widt e map. Avera rity Summar fer Width (m) 4.26 5.25 15.39 1.07 ge	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	ments and a and en t (%)= asure the s and rate Line E F G H	e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58	o the Bing on the Bing on the Bing on the Bing on the Bing on the Bing of the	ffer line Enter the Buffer Enter the Bu (ft)	ercent er e In meters in ne rating on iffer Width (ft) 531.26 759.44 397.80 511.38		Table 4 3 2 1 Table tating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh the GIS of the Buffo Line A B C D	eet 1c. or on the Integ Buff 16 12 11 Avera	Buffer Widt Be map. Avera rity Summar fer Width (m) 4.26 5.25 15.39 1.07 ge	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	ments and a and en t (%)= asure the s and rate Line E F G H	d enter inter ater the ratio 85% length of e e using Tab Buffer N (m 161.9 231.4 121.2 155.8 486.58 sub-metric	o the Bing on the Bing on the Bing on the Bing on the Bing of the	Iffer Pene Buffer Inter Inter Enter the Bu (ft) From 1	ercent er e in meters in he rating on offer Width (ft) 531.26 759.44 397.80 511.38 511.38		Table 4 3 2 1 Table tating 4 3 2 1	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh the GIS of the Buffe Line A B C D Worksl and L11 below.	eet 1c. or on the Integ Buff 16 12 11 Avera Deet 1d Dabove Using th	Buffer Width er many Workshe Buffer Width er map. Avera rity Summar fer Width (m) 4.26 15.25 15.39 1.07 ge buffer Inte to calculate he Buffer Inte	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length (y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score,	ments and a and en t (%)= asure the s and rate Line E F G H H	d enter inter ster the ratio 85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58 sub-metric core using t	o the Bing on the Bing on the Bing on the Bing on the Bing on the Bing of the	affer Pene Buffer ffer line Enter the Bu (ft) ofrom 1 nula in	ercent er e in meters in he rating on offer Width (ft) 531.26 759.44 397.80 311.38 ables L1a the box		Rating 4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating 4	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh the GIS of the Buffe Line A B C D Worksl and L11 below.	eet 1c. or on the Integ Buff 16 12 11 Avera Deet 1d Dabove Using th	Buffer Width er many Worksho Buffer Width er map. Avera rity Summar fer Width (m) 4.26 15.25 15.39 1.07 ge to calculate	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length (y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score,	ments and a and en t (%)= asure the s and rate Line E F G H H	d enter inter ster the ratio 85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58 sub-metric core using t	o the Bing on the Bing on the Bing on the Bing on the Bing on the Bing of the	affer Pene Buffer ffer line Enter the Bu (ft) ofrom 1 nula in	ercent er e in meters in he rating on offer Width (ft) 531.26 759.44 397.80 311.38 ables L1a the box		Rating 4 3 2 1 Table tating 4 3 2 1 ble L1c. S rating 4 3	Buffer Percent 100% ≥80% - <100%
SA peri Box bel Integrit Worksh the GIS of the Buff Line A B C D Worksi and L11 below.	eet 1c. or on the Integ Buff 16 12 11 Avera eet 1d o above Using the SA	Buffer Width er many Workshe Buffer Width er map. Avera rity Summar fer Width (m) 4.26 15.25 15.39 1.07 ge to calculate he Buffer Inte Summary Wo	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea age the line length (y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score,	ments and a and en t (%)= asure the s and rate Line E F G H H nter the y Index S enter rat	e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58 sub-metric core using for Buffer	o the Bing on the Bing on the Bing on the Bing on the Bing on the Bing of the	Iffer Pene Buffer Inter the Enter th	ercent er e in meters in he rating on offer Width (ft) 531.26 759.44 397.80 311.38 ables L1a the box		Rating 4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating 4	Buffer Percent 100% ≥80% - <100%

3

SA CODE: SF2MI [4]

SA Name :

Two Mile Pond Reservoir Transect [\checkmark]

Date: 7/16/24

DS/AM

Surveyor Initials :

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	Ó
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0,5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	<u> </u>	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4. Surrounding Land Use Rating					
Rating	LUI Score				
C 4	≥95 - 100				
C 3	≥80 - <95				
x 2	≥40 - <80				
<u>C</u> 1	<40				

zhid	Relat ksheet inant sj h it is n	ive Na 6. CT PI pecies in tore abu	tive Plan ant Specie each stratu ndant. Each	t Comi is and Po um that h polygo	31 - Relative Native Plant Community Composition Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the nolvoon.	impositi gnments. he polygo ssigned to	ion Starting v n. See foo o the same	with CT / thotes fo	A, enter the Dr special ir Das the sam	r numbe Instructio	r of the firs ns. If a spec osition of a	t polygo cies appe	ith CT A, enter the number of the first polygon from Worksheet 5. Enter I notes for special instructions. If a species appears in more than one strat CT if it has the same composition or a new CT is created for the polynom	sheet 5. than on	Enter the sp e strata, assi Nonon	ecies codes gn the speci	for the t les to the	wo top stratum in
					Tali Woody Stratum ¹	' Stratum		ļ	Short Woody Stratum ²	dy Strat	um 2		Herbaceous/Sparse Stratum	s/Sparse	Stratum ³	U S C	CT Score ⁴	
Ы	Polygo	Palygan Nos.			Species 1	м шZ	Species 2	ພ z	Species 3	шZ	Species 4	<u>ш z</u>	Species 5	ш Z	Species 6 E		4 % SA5	5 Wt Score6
<	\sim						Ger Eler	N	Sa Warr		C. 4. 2	~	Vorger		84.5 ton	Q.P.	0	
8	Ч								W. S.		C= + 14 - 2	\geq	6.44		Lung rift	5'5	\sim	
U																		}
ш						8												
ц.									2								+	
0								 	5						 	<u> </u>		
エ						\$						 				-		
-						3						 						
-																		
×		 															 	
ى												_						
X																		
z				c			5											
0																		
														Final	Final Weighted Score ⁷	core7	+	0 3
⊢ †	rees and	d shrubs 25 402	> 6 m (20 1	feet) and	• Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	l stratum (List av ⁵ 5	cover; 2. Ti	rees and	l shrubs ≤6i	m (20 fe	et) and >2!	5% total	stratum cov	er; 3. Hei	rbaceous (gr	aminoids ar	nd forbs)	>10% total
a na	um cov ∍l 1; 6W olative	t. Score l betwo D	v acore is its is the produ	om rabi uct of the	sulaturin cover. Traw Score is from Lable 51a (Appendix B); 7%SA is the equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; 7The Final V for Polative Matice Ploat Community Commission 25 the School Science	* % SA; 7	%SA is the The Final \ Double final	percent Veighte	age of the d Score is t	SA area he sum (covered by of the Wt. S	r the CT a	and express ate the CT Fi	ed as a d nal Weig	percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must Veighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Ra	oer; the tota on Table B1	l area % and ent	subutin cover. Thaw score is from Table 514 (Appendix B); 2%5A is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; 7The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Polative Mistice Plots Community Commun
					A relative reary a light composition on the 2A rank composition of the 2A rank committely worksheet.				DINSIDEEL. Dage 7 of 17	1 of 17								

Page 7 of 17

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Trzenact [$[\downarrow]$]

SA COD" SF2MI [🧳]

۶.

SA CODE: SF2MI[4]

Date: 7/16/24

SA Name: Two Mile Pond Reservoir Transect [4]

Surveyor Initials : DS/AM

д

B4 - Native Riparian Tree Regeneration

Rating	Description
¢ × 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
C 3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
$\overline{\mathbf{C}}$ 1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the 5A and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIA

Invasive cover (%)

calculate

Tat	ole B5. Rating	s for Invasive Exotic Plant Species Cover
F	Rating	Invasive Species Cover %
C	4	0%
\sim	3 X	>0% - <1%
	2	≥?% - <10%
	1	≥10

Additional CTs and Biotic Metric Comments:

Area has a lot of new life that is listed on the cover page.

SA CODE: SF2MI [4]

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Transect [$\mathcal{4}$]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
2		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
				There are channel pools at meander bends and some deep pools within the reach.
· · · · · · · · · · · · · · · · · · ·				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI[4]

Date: 7/16/24

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect [\mathcal{Y}]

A5 - Soil Surface Condition

Worksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	Ø		Active erosion features due to anthropogenic disturbance (eg. rills, guilies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

0

	Table A5. Soil Surface Condition Rating								
Rating	Description								
K 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.								
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.								
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.								
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.								

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cover 1	Norksheet			
SA Code SF2MI [4] SA Name : Two M	Aile Pond Reservoir	· · · · · · · · · · · · · · · · · · ·	Project : Rip	arian Asse	sement
ode Tsct [4]	AU Name : Trans	sect [🦞]		WOI : Two #	viile Pond R	Reservoir
County Santa Fe	HUC 12 Headw	vaters Santa Fe River El	levation (ft) 7299	(m) 2224.7	Eco	region 6.0 NWFM
	hat leads into a pond lo	comments) cated on the east side of egarding the reservoir ar				
	e from Albuquerque you you reach the reservoir	i head north on Old Pecc located to the North.	os Trail. Then head e	east on Camino D	el Monte S	ol and right on
Ownership The Nature	Conservative and The S	anta Fe National Forest		sults to client ily.	Fish Obse Wetla	
Surveyor Role		Surveyo	or Name			Surveyor Initials
Landscape	Dustin Schwart	Z				DS
Biotic	Annie McCoy					AM
Abiotic	Dustin Schwart	.2				DS
Stressors	Dustin Schwar	tz			•	DS
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft)
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 UTM	35.68972	2	-105.89
Survey Date	8/13/24	Start Time	9:00	End 1	lime	15:00
	L	SA Desc	ription			• • • • • • • • • • • • • • • • • • • •
SA Landscape Contex	ct (summarize the wetla	nd and surrounding land	dscape; include con	dition and impac	ts)	
Land	Still wet for	on Monsoon	Sonson Sey	appears	to be	
Mor	e wet than	on Monsoon surrounding o	area less	plant	diversit	ty l
than	, other t	ran sects				
······································		nposition and structure,	exotics and invasiv	es, disturbance e	vidence, fir	e and herbivory)
Gur	n weld, Etc /	Tullein gumm	ead, saltbas	h a chim	15a, 51	he stem
R y æ	, Ants, Pir	e Siskin, A.	merican Ca	on Drag	nfly	
		is off wh			/	
SA Abiotic Condition	(hydrological alteration	s (e.g., dams, walls etc.); e hydrologic breaks or o	flooding characteri	stics and evidenc fine the SA limits)	e of overba	ank flooding; soil
	Ant hill gots	larger every tim	ie, soup h	as moss	and app	Dears
m	ore wet thum	surroundly en	viven nont 3.5	ST 35ntn	407m7	im 17.6° pH6.8
Assessment Summar		summary and comment				
	Lots OF	pland lifé	and gro.	und cover	taki	(r)
f	over,		r			-
Provisional Field Score $3, 4$ Ran	k A- Surveyor(s)	DS/AM Final 3 Score	1 Rank A	Initials	3	Date 8/13/24
		Page 1	of 17			

ς.

SA CODE: SF2MI [4]

Date: 8/13/24

SA Name : Two Mile Pond Reservoir Transect [\mathcal{Y}]

Surveyor Initials : DS/AM

Landscape Context

		ntegrity l								· · · · · ·		
Worksh	ieet 1a	. Buffer and	RCC Checklist. Ch	eck off lan	d cover e	lement	s withi	n the buffe	r area o Indicato	r RCC corr	idors that are either allowed,	
or are e: and yea			ered non-buffer ele	ments the	it disrupt	ecosyst	em co	nnecuvity.	muicate	e ule imag	ery type and date (season	
Imagery		loogle Earth	KMZ. file	<u>. </u>		Image	Date	ate 6/23			, <u></u>	
Allowed	<u> </u>	/RCC land c	over elements	<u> </u>		Exclud	ed non	-buffer/RC	C land (over elem	nents	
Buffer						Buffer	RCC					
X		latural or se	mi-natural vegetati	on patche	s	X	X				elopments, parking lots, and other structures	
		mall irrigatio	on ditches without	levees				Lawns, par	ks, golf	courses, s	ports fields	
,					· _			Railroads				
)pen range l	and		_			Maintaine materials,			it piles, construction	
X	1 1 1 1	oot trails, ho ntensity)	orse trails, unpaved	bike trails	(low			Intensive I	ivestoc	k areas, ho	orse paddocks, feedlots	
X			open water					Intensive a row crops,			ained pastures, hay fields, neyards	
×			ning abandoned ver urring levees	getated le	vees, or	X	×	Paved road graded road		eveloped s	econd-order unpaved but	
		inpaved two	tracks roads			X	X	Open wate structure	er boun	ded by a l	evee or other manmade	
							Other					
Worksheet 1b. Buffer Percent Sub-metric. Measure or estimat					estimate	the ner	centac	e of the		Tabl	e L1a. Buffer Percent	
SA perimeter composed of allowed buffer elements and enter in Box below. Rate the sub-metric using Table L1a and enter the rat					enter int	o the Bi	iffer P€	ercent		Rating	Buffer Percent	
	egrity Summary Worksheet 1d.				5			L C	4	100%		
	Buffer Percent (%)= 85%							R	3	≥80% - <100%		
	The second state of the second state of the second state of			ach hu	forling	a in meters		2	≥50% - <80%			
Norksheet 1c. Buffer Width Sub-metric. Measure the length of the GIS or on the map. Average the line lengths and rate using Tab					le L1b. l	Enter t	he rating of	n"	1	<50%		
he Buffe	er Integ	rity Summa	ry Worksheet 1d.		2			-		Tob	le L1b. Buffer Width	
Line	Buf	ier Width		Line	Buffer		Bu	affer Width			····	
ritte		(m)	(ft)			(m)		(ft)	1Ľ	Rating	Average buffer width	
Α	16	4.26	538.91	E	161.93			531.26		4	≥190m	
в	12	5.25	410.92	F	231.48			759.44		3	≥130 - <190m	
<u>с</u>		5.39	378.57	G	121.25		1-	397.80			≥65 - <130m <65m	
					155.			C	1	<03(1)		
D	1	1.07	364,40	н					ablaite (Summary Pating for Buffer		
Average 148.31 (m) 486.5							Integrity					
Works	neet 10	i. Buffer inte	egrity Summary. E the Buffer Integrity	nter the su Lindex Sci	ib-metric	Ratings the form	s from nula ir	Tables LTa		Rating	Score	
below	Usina t	he Buffer Int	egrity Index Score,	enter ratir	ig for Buf	fer Integ	grity in	Table L1c	1	4	>3.5	
1 I on	the SA	Summary W	orksheet.		-	-			2	3	>2.5 - ≤3.5	
Buffer	% Rati	na 4 Ri	uffer Width Rating	/2=	Buff	er integ	rity In	dex Score	10	2	>1.5 - ≤2.5	
Pariet	/0 11 0 41								- r	1	≤1.5	
3		+	3	/2 =		3						

SA CODE: SF2MI[9]

Date: 8/13/24

DS/AM

SA Name : Two Mile Pond Reservoir Transect [4]

Surveyor Initials :

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel (that goes under paved roads)), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
\griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score⇔ Coefficient * % LUZ Area		100	75

Table L4. Surrounding Land Use Rating Rating LUI Score (4 ≥95 - 100 (3 ≥80 - <95</td> (2 ≥40 - <80</td>

1

<40

Worl	csheet	t 6. CT Pla necies in	int Specie each stratu	im tha	Polygor Manpear	Assign	ments. St Polvaon.	tarting w See footr	ith CT A Notes fo	, enter the r special ir	number nstructio	r of the firs ns. If a spe	st polyge sries app	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in	rksheet 5 e than o	6. Enter the ne strata, a	species ssian th	codes fo	or the two s to the st	o top tratum in	—
whic	hit is r	nore abut	ndant. Eacl	h poly	gon is ei	ther assig	gned to th	ne same (CT if it h	as the sam	ne comp	osition or	a new C	which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	for the p	olygon.					
					Tall V	Tall Woody Stratum ¹	ratum ¹			Short Woody Stratum ²	dy Strati	um 2		Herbaceo	us/Spars	Herbaceous/Sparse Stratum ³	3	CT Score ⁴	sre 4		
<u></u> ნ	Polyg	Polygon Nos.			Species 1	ies 1 E N	Spe	Species 2	<u>,</u> л Т	Species 3	ωZ	Species 4	ωZ	Species 5	<u>ш 2</u>	Species 6	шZ	Raw4	% SA ⁵	Wt Score ⁶	ę
۲	5						ш́б С	10	2	5.44.2	4	(A. 1. 1)	2	1	~			с. 	2		[
ക	3-	 				i				ine Para	2	Zz + 42. 5	2	1. A. M. C.	· «.»». «	Cover?	2		e e		<u> </u>
U				<u> </u>		} 															Γ
٥		╞				· ·															
ш					 							 									
ш.					<u> </u>																1
U					 			•					1								
т			 		<u> </u>		 														1
													 								Γ
,					[<u>.</u>						 			 					-
×	 	 	 																		
												 =				 					
Σ										•							 				<u> </u>
z					:															 	
0							 									 					
						_	-							-	Fin	Final Weighted Score ⁷	ed Score	e7		6.2	L.
-	ees ar	nd shrubs	> 6 m (20	feet) a	and > 25	% total s	tratum co	over; 2. Tr	ees and	i shrubs ≤6	6m (20 fe	eet) and >	25% tota	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover, 2. Trees and shrubs < 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	over; 3. H	lerbaceou	s (gramit	noids an	d forbs)>	10% total	
stra equ	um cc il 1; 6v	ver. 4Raw Vt. Score i	v Score is the is the prod	rom Ta luct of	able 81a the Raw	(Append Score * 9	% SA; 7TH % SA; 7TH	SA is the he Final V	percent Veighte	age of the d Score is	e SA area the sum	covered to of the Wt.	oy the C Scores.	stratum cover. ⁴ Raw Score is from Table B1a (Appendix B); ⁻ %5A is the percentage of the 5A area covered by the CT and expressed as a decimal number; the total area %5A must equal 1; ⁶ Wt. Score is the product of the Raw Score * % 5A; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	ssed as a Final We	decimal n sighted Sci	umber; I ore on Ti	the total able B1 a	area %5/ ind enter	A must the Ratin	ð
10 1	Glatty	e Native F	tor kelative Native Plant Lommunity Composition on the SA Kank Summary Worksneet. Page	Sinur			the 5A K		mary wo	orksneet. Page	reet. Page 7 of 17										

ž Surveyor Initials : F

Date: 8/13/24

SA COF - SF2MI[4/]

SA Name: Two Mile Pond Reservoir Tr __ect [🤸]

SA CODE: SF2MI [4]

Date: 8/13/24

SA Name : Two Mile Pond Reservoir Transect [4°]

Surveyor Initials : DS/AM

21

B4 - Native Riparian Tree Regeneration

. Worl		ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
R	ating	Description
à	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
$\overline{\mathbf{C}}$	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C.	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u> </u>	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIA

Invasive cover (%)

calculate

Table B5. Rating	is for Invasive Exotic Plant Species Cover
Rating	Invasive Species Cover %
C 4	0%
<u>∽ 3 X</u>	>0% - <1%
2	≥1% - <10%
C 1	≥10

Additional CTs and Biotic Metric Comments:

Area is supporting a large variety of Listic life, can be seen on cover page,

SACODE: SF2MI [4]

SA Name : Two Mile Pond Reservoir Transect [4]

Date: 8/13/24

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ď		There is leaf litter, thatch, or wrack in most pools.
Indicators of				The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
, ,				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		ď		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
-				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
3				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
· · · · · · · · · · · · · · · · · · ·				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avuision channels on the floodplain or adjacent valley floor.

Ð

Surveyor Initials :

DS/AM

SA Name : Two Mile Pond Reservoir Transect [\mathcal{Y}]

A5 - Soil Surface Condition

Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating						
Rating	Description						
X 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.						
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.						
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.						
(1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.						

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cove	r Worksheet			· · · · · · · · · · · · · · · · · · ·		
SA Code SF2MI [Y	ement							
Tode Tsct [4] AU Name : Transect [4] WOI : Two Mile Pond R						eservoir		
County Santa Fe	HUC 12 Headw	vaters Santa Fe River	Elevation (ft) 729	9 (m) 2224.7	Ecor	region 6.0 NWFM		
A riparian system t decommissioned o of water rights. Driving Directions Driving to Santa F	nd Boundary (Rationale, that leads into a pond lo due to safety concerns re e from Albuquerque you I you reach the reservoir	cated on the east side egarding the reservoir head north on Old Pe	and a water divers	ion to the area was re	ecently shu	it down due to lack		
Ownership The Nature	e Conservative and The S	Santa Fe National Fore	st Data Sharing Restrictions	Results to client only.	Fish Obser Wetlar			
Surveyor Role		Surve	yor Name		·	Surveyor Initials		
Landscape	Dustin Schwart	Z	,			DS		
Biotic	Annie McCoy					AM		
Ablotic	Dustin Schwart	tz				DS		
Stressors	Dustin Schwart	tz				DS		
Easting (m)	Northing (m)	Zone	Datum	Latitude	(DD ft)	Longitude (DD ft)		
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM 35.68972	2	-105.89		
Survey Date	9/11/24	Start Time	9:00	End T	ime	15:00		
ſJ.	ants look like and stocks b	ut no live	planta yet					
Aller is golden y	(vegetation patterns, con turning yellow, avrow Solt b. American Raver C	cover is th rush and chim	ick not a isa every w	lot of bloom	s keside	'S		
SA Abiotic Condition disturbance and othe	n (hydrological alteration r site impacts; explain th	ns (e.g., dams, walls etc e hydrologic breaks o	c.]; flooding charact r other factors that	define the SA limits)				
Seep that	appears to Flows over h 5 Water Qualit	be active illside + moss	at some po	pint based on	Smooth			
Assessment Summa	ry (Overall site condition	n summary and comm	ents after the field	data is collected.)				
Ju	Area is		of bloc	um and g	Sartie	r /		
ንሮ	1							

SA CODE: SF2MI [4]

SA Name : Two Mile Pond Reservoir Transect [

Date: 9/11/24

Surveyor Initials : DS/AM

Landscape Context

, - Buffer Integrity Index

3

3

÷

/**2** =

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Imagery	,	Google Earth KMZ. file					Date	6/2	3				
Allowed buffer/RCC land cover elements					Excluded non-buffer/RCC land cover elements								
Buffer F	RCC						RCC						
X	[X]	Natural or semi-natural vegetation patches					X					elopments, parking lots, and other structures	
		Cur all instanti		loungs		+			dams, bridges, revetments, and other structures Lawns, parks, golf courses, sports fields				
			on ditches without	levees _	<u> </u>	누片	┝╠╡	Railroad					
		Old fields, un				$+$ \square	$ \square$		Maintained levees, sediment piles, construction				
		Open range l	and						materials, staging areas				
	X	Foot trails, he intensity)	orse trails, unpaved	bike tra	ils (low			Intensiv	e live:	vestock areas, horse paddocks, feedlots			
	x	Non-channel	open water					row crog	ps, or	charc	ls, and vir		
X	X	Non-functior naturally occ	ning abandoned ve urring levees	getated	levees, or	×	X	graded	roads			econd-order unpaved but	
		unpaved two	wed two tracks roads					Open was structur		bounded by a levee or other manmade			
, 1	\Box	Other	Other Other										
Worksheet 1b. Buffer Percent Sub-metric. Measure or estimate						the pe	rcentac	e of the	1	<u> </u>	Table	e L1a. Buffer Percent	
l									1			erite porter cercent	
Box bel	ow. Ra	composed of ate the sub-m	allowed buffer ele etric using Table L1	ments ar	nd enter int	o the B	uffer Pe	ercent			Rating	Buffer Percent	
Box bel	ow. Ra	composed of	allowed buffer ele etric using Table L1	ments ar	nd enter int iter the rati	o the B	uffer Pe	ercent				ş	
Box bel	ow. Ra	composed of ate the sub-m	allowed buffer ele etric using Table L1	ments ar a and en	nd enter int	o the B	uffer Pe	ercent			Rating	Buffer Percent	
Box belo Integrity	ow. Ra y Sum	composed of ate the sub-m mary Worksh	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen	ments ar a and en t (%)=	nd enter int iter the rati 85%	o the B ng on t	uffer Pe he Buff	ercent fer		<u> て ま に</u>	Rating 4	Buffer Percent	
Box belo Integrity Worksho	ow. Ra y Sum	composed of ate the sub-m mary Worksh	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen h Sub-metric. Mea	ments ar a and en t (%)=	ed enter int iter the rati 85% length of e	o the B ng on t each bu	uffer Pe he Buff	ercent fer e in mete	ers in	2	Rating 4 3	Buffer Percent 100% ≥80% - <100%	
Box belo Integrity Worksho the GIS o	ow. Ra y Sum eet 1c or on t er Inte	composed of ate the sub-m mary Worksh c. Buffer Widt the map. Aver grity Summar	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d.	ments ar a and en t (%)=	ed enter int ter the rati 85% length of e e using Tab	each bu	uffer Pe he Buff ffer line Enter t	ercent fer e in mete he rating	ers in I on	<u> て ま に</u>	Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
Box belo Integrity Worksho the GIS o	ow. Ra y Sum eet 1c or on t er Inte	composed of ate the sub-marry Worksh c. Buffer Widt the map. Aver- grity Summar iffer Width	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	ments ar a and en t (%)=	ed enter int iter the rati 85% length of e	o the B ng on t each bu ble L1b. Width	uffer Pe he Buff ffer line Enter t	ercent fer e in mete	ers in I on		Rating 4 3 2 1 Tabl	Buffer Percent 100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width	
Box belo Integrit Worksho the GIS of the Buffe Line	ow. Ra y Sum eet 1c or on t er Inte Bu	composed of ate the sub-m mary Worksh c. Buffer Widt the map. Aver grity Summar	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d.	ments ar a and en t (%)= asure the s and rat	ed enter int iter the rati 85% length of e using Tab Buffer	to the B ng on t each bu ble L1b. Width	uffer Pe he Buff ffer line Enter t	ercent fer e in mete he rating uffer Wic	ers in I on		Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
Box belo Integrit Worksho the GIS of the Buffe Line A	ow. Ra y Sum eet 1c or on t er Inte Bu 1	composed of ate the sub-many Worksh c. Buffer Widt the map. Aver- egrity Summar offer Width (m) 164.26	allowed buffer ele etric using Table L1 Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	ments ar a and en t (%)= asure the s and rat Line E	ed enter int iter the rati 85% length of e e using Tab Buffer (n 161.9	each bu ng on t each bu ble L1b. Width h)	uffer Pe he Buff Iffer line Enter t	ercent fer e in mete he rating uffer Wic (ft) 531.26	ers in I on		Rating 4 3 2 1 Tabl Rating	Buffer Percent 100% ≥80% - <100%	
Box belo Integrit Worksho the GIS of the Buffe Line	ow. Ra y Sum eet 1c or on t er Inte Bu 1 1	composed of ate the sub-mary Worksh c. Buffer Widt the map. Averagity Summar (ffer Width (m) 64.26	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	ments ar a and en t (%)= asure the s and rat Line	ed enter int iter the rati 85% length of e using Tab Buffer (n 161.9 231.4	to the B ng on t each bu ble L1b. Width 1) 93	uffer Pe he Buff ffer line Enter t	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44	ers in I on		Rating 4 3 2 1 Tabl Rating 4	Buffer Percent 100% ≥80% - <100%	
Box belo Integrit Worksho the GIS of the Buffe Line A	ow. Ra y Sum eet 1c or on t er Inte Bu 1 1	composed of ate the sub-many Worksh c. Buffer Widt the map. Aver- egrity Summar offer Width (m) 164.26	allowed buffer ele etric using Table L1 Buffer Percen h Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	ments ar a and en t (%)= asure the s and rat Line E	ed enter int iter the rati 85% length of e e using Tab Buffer (n 161.9 231.4 121.1	each bu each bu le L1b. Width 1) 93 48	uffer Pe he Buff ffer line Enter t	ercent fer e in mete he rating uffer Wic (ft) 531.26	ers in I on		Rating 4 3 2 1 Tabl Rating 4 3	Buffer Percent 100% ≥80% - <100%	
Box beld Integrit Worksho the GIS of the Buffe Line A B	ow. Ra y Sum eet 1c or on t er Inte Bu 1 1	composed of ate the sub-mary Worksh c. Buffer Widt the map. Averagity Summar (ffer Width (m) 64.26	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	ments ar a and en t (%)= asure the s and rat Line E F	ed enter int iter the rati 85% length of e using Tab Buffer (n 161.9 231.4	each bu each bu le L1b. Width 1) 93 48	uffer Pe he Buff Iffer line Enter t	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44	ers in I on		Rating 4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
Box beld Integrit Worksho the GIS of the Buffe Line A B C	ow. Ray Sum eet 1c or on t er Inte Bu 1 1 1	composed of ate the sub-many Workshing c. Buffer Widt the map. Averagity Summar ffer Width (m) 64.26 125.25 115.39 111.07	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	ments ar a and en t (%)= asure the s and rat Line E F G	ed enter int iter the rati 85% length of e e using Tab Buffer (n 161.9 231.4 121.1	each buole L1b. Width 1) 93 48 25 87	uffer Pe he Buff Iffer line Enter t	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38	ers in I on		Rating 4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
Box belo Integrit Worksho the GIS of the Buffe Line A B C D	ow. Ra y Sum eet 1c or on t er Inte Bu 1 1 1 1 4 Ver	composed of ate the sub-minimary Workshing c. Buffer Widt the map. Averagity Summar iffer Width (m) 164.26 125.25 115.39 111.07 rage	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	ments ar a and er t (%)= asure the s and rat Line E F G H	ed enter int iter the rati 85% length of e e using Tab Buffer (n 161.9 231.4 121.1 155. 486.5	to the B ng on t each bu le L1b. Width 1) 93 48 25 87 8	uffer Pe he Buff Iffer line Enter t Bi (ft)	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38	ith		Rating 4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
Box beld Integrit Worksho the GIS of the Buffe Line A B C D	eet 1c eet 1c or on t Bu 1 1 1 Aver	composed of ate the sub-minimary Workshing c. Buffer Widt the map. Averagity Summar ffer Width (m) 64.26 125.25 115.39 111.07 rage	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	ments ar a and er t (%)= asure the s and rat Line E F G H H	ed enter int iter the rati 85% length of e e using Tab Buffer (n 161.9 231.4 121.1 155.4 486.5 sub-metric	each buo each buo le L1b. Width h) 93 48 25 87 8 8	uffer Pe he Buff Iffer line Enter t Bi (ft) s from	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1	a a straight		Rating 4 3 2 1 Tabl Rating 4 3 2 1	Buffer Percent 100% ≥80% - <100%	
Box beld Integritt Worksho the GIS of the Buffe Line A B C D	eet 1c eet 1c er Inte Bu 1 1 1 Aver neet 1 o abov	composed of ate the sub-minimary Workshing c. Buffer Width the map. Averagity Summar (ffer Width (m) 64.26 125.25 115.39 111.07 rage	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	ments ar a and er t (%)= asure the s and rat Line E F G H nter the y Index S	ed enter int iter the rati 85% length of e e using Tab Buffer (n 161.9 231.4 121.1 155.4 486.5 sub-metric core using	each buole L1b. Width 1) 93 48 25 87 8 8 25 87	uffer Pe he Buff Iffer line Enter t Bu (ft) s from mula ir	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1 n the box	ars in on		Rating 4 3 2 1 Tabl Rating 4 3 2 1 ble L1c. S	Buffer Percent 100% ≥80% - <100%	
Box beld Integrity Worksho the GIS of the Buffe Line A B C D Worksh and L1b below. 0	ow. Ray Sum eet 1 cor on t er Inte Bu 1 1 1 Aver Jeet 1 0 abov Jsing	composed of ate the sub-minimary Workshing c. Buffer Width the map. Averagity Summar (ffer Width (m) 64.26 125.25 115.39 111.07 rage	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	ments ar a and er t (%)= asure the s and rat Line E F G H nter the y Index S	ed enter int iter the rati 85% length of e e using Tab Buffer (n 161.9 231.4 121.1 155.4 486.5 sub-metric core using	each buole L1b. Width 1) 93 48 25 87 8 8 25 87	uffer Pe he Buff Iffer line Enter t Bu (ft) s from mula ir	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1 n the box	ars in on		Rating 4 3 2 1 Tabl Rating 4 3 2 1 ble L1c. S Rating	Buffer Percent 100% ≥80% - <100%	
Box beld Integrity Worksho the GIS of the Buffe Line A B C D Worksh and L1b below. 0	ow. Ray Sum eet 1 cor on ter Inter Bu 1 1 1 Aver Jeet 1 0 abov Jsing the S/	composed of ate the sub-minimary Workshi c. Buffer Width the map. Averagity Summar affer Width (m) 164.26 125.25 115.39 111.07 rage d. Buffer Internet ve to calculate the Buffer Internet A Summary W	allowed buffer ele etric using Table L1 eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	ments ar a and er t (%)= asure the s and rat Line E F G H nter the y Index S enter rat	ed enter int ter the rati 85% length of e e using Tab Buffer (n 161.9 231.4 121 155. 486.5 sub-metric core using ing for Buf	each buole L1b. Width 1) 93 48 25 87 8 8 5 87 8 8 5 87 8 8 7 8 8	uffer Pe he Buff Iffer line Enter t Bu (ft) s from mula ir grity in	ercent fer e in mete he rating uffer Wic (ft) 531.26 759.44 397.80 511.38 Tables L1 n the box	a c		Rating 4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating 4	Buffer Percent 100% ≥80% - <100%	

3

SA CODE: SF2MI[1]

Date: 9/11/24

Surveyor Initials :

DS/AM

SA Name : Two Mile Pond Reservoir Transect [$\frac{U}{J}$]

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel (that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0,9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

T	Table L4. Surrounding Land Use Rating					
F	lating	LUI Score				
ſ	4	≥95 - 100				
C	3	≥80 - <95				
R	2	≥40 - <80				
$(\cap$	1	<40				

Surveyor Initials : [M

Date: 9/11/24

SA Name : Two Mile Pond Reservoir Tr \Rightarrow ct [$\frac{4}{7}$]

sa cor SF2MI [Ý]

SF2MI[4] SA CODE :

Two Mile Pond Reservoir Transect [4^{\prime}] SA Name:

B4 - Native Riparian Tree Regeneration

	ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
C_4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
Q 3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u> </u>	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

N/A

Invasive cover (%)

calculate

Table B5. Ratings for Invasive Exotic Plant Species Cover				
Ra	ating	Invasive Species Cover %		
$\overline{\mathbf{C}}$	4	0%		
\sim	3 2	>0% - <1%		
	2	≥1% - <10%		
\cap	1	≥10		

Additional CTs and Biotic Metric Comments:

Area is proparing for Fall. Mustard Never returned

Date : 9/11/24

Surveyor Initials : DS/AM

SA CODE: SF2MI[4]

		:1	
SA Name :	Two Mile Pond Reservoir Transect [7]

Date: 9/11/24

Surveyor initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ŋ		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		Ø		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
ľ				There are avuision channels on the floodplain or adjacent valley floor.

Ο

SA Name :	Two Mile Pond Reservoir Transect (4]
on manne i	Two wile Fond Reservoir manseet [1	1

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

Worksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soll disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	ď		Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing,hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
· · · · · · · · · · · ·			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

1		Table A5. Soil Surface Condition Rating
R	ating	Description
Q	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
c	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

CA Carda CCOMILE		SA Cove	r Worksheet					
SA Code SF2MI [🗲] SA Name : Two N	Aile Pond Reservoir		Project : F	Riparian Asse	sement		
lode Tsct [5]	AU Name : Trans	sect [5]		WOI : Tw	o Mile Pond I	Reservoir		
County Santa Fe	HUC 12 Headw	vaters Santa Fe River	Elevation (ft) 729)9 (m) 2224	.7 Ecc	pregion 6.0 NWFM		
A riparian system decommissioned of water rights. Driving Directions Driving to Santa	and Boundary (Rationale, on that leads into a pond loo I due to safety concerns re Fe from Albuquerque you til you reach the reservoir	cated on the east side egarding the reservoir head north on Old Pe	and a water divers	sion to the area wa	s recently sh	ut down due to lack		
	re Conservative and The S		st Data Sharing Restrictions	Results to client only.	Fish Obse Wetla			
Surveyor Role		Surve	yor Name			Surveyor Initials		
Landscape	Dustin Schwart	Ζ.				DS		
Biotic	Annie McCoy					AM		
Abiotic	Dustin Schwart	2				DS		
Stressors	Dustin Schwart	tz				DS		
Easting (m)	Northing (m)	Zone	Datum	Latitu	de (DD ft)	Longitude (DD ft		
-105° 53' 24" W 35° 41' 23" N 13 NAD- 83 UTM 35.689722 -105.89								
Survey Date	7/16/24	Start Time	9:00	En	i Time	15:00		
•	ext (summarize the wetla willing an	nd and surrounding la		condition and imp	acts)			
		nd and surrounding la	ndscape; include (condition and imp	acts)			
Dr/ SA Biotic Condition	willing an	nd and surrounding ia way Even u mposition and structur	ndscape; include of the second s	condition and imp	acts) Sectral evidence, fil	re and herbivory)		
Dry SA Biotic Condition Chickory	willing an (vegetation patterns, cor ref Hawks beard	nd and surrounding la ra Even u mposition and structur	ndscape; include of the second s	condition and imp	acts)	re and herbivory)		
Dry SA Biotic Condition Chickory	willing an (vegetation patterns, cor ref Hawks beard	nd and surrounding la ra Even u mposition and structur	ndscape; include of the second s	condition and imp	acts)	re and herbivory)		
Dig SA Biotic Condition Chickord Blue Co	willing an (vegetation patterns, cor ref Hawks beam Oragon fly, smost Moximum 1	nd and surrounding la re Even u mposition and structur J Some J white mod Aster	indscape; include of the second secon	condition and imp Asy A serve asives, disturbance asives, disturbance Asy Ale	acts) evidence, fin ck b, r	re and herbivory) in ts		
Dry SA Biotic Condition Chicker Blue Co SA Abiotic Conditio disturbance and other	wilting an (vegetation patterns, cor ref Hawks beam dragon fly, <u>smos/Meximan</u> in (hydrological alteration er site impacts; explain the	nd and surrounding la ca. Even u nposition and structur Some d white mot Aster is (e.g., dams, walls etc e hydrologic breaks or	ndscape; include Albox Sources re, exotics and inva- Y 9 + 5 3 24 A3 X CO I; flooding charac other factors that	condition and imp A.S.A	acts)	re and herbivory) an ts of ank flooding; soil		
Dry SA Biotic Condition Chicker Blue Co SA Abiotic Conditio disturbance and other	wilting an (vegetation patterns, cor ref Hawks beard dragon fly, <u>smos/Meximan</u> in (hydrological alteration er site impacts; explain the Avea Cacls	nd and surrounding la ra Even u mposition and structur Some d white mot Aster as (e.g., dams, walls etc e hydrologic breaks or a nd Secury	indscape; include of the second secon	condition and imp A.S.A. A.A. asives, disturbance asives, disturbance L. J. L. L. Marca A	acts)	re and herbivory) an ts d ank flooding; soil		
Dry SA Biotic Condition Chicker Blue Co SA Abiotic Condition disturbance and other	wilting an (vegetation patterns, cor ref Hawks beam dragon Hy, smos/Maying in (hydrological alteration er site impacts; explain the Avea Cocls Not a	nd and surrounding la re Even u mposition and structur Some d where mode and second late s	indscape; include of the second secon	condition and imp A.S.A. A.S.A. asives, disturbance asives, disturbance L.A. teristics and evide define the SA limit L. How A.S. C.	acts)	re and herbivory) an ts d ank flooding; soil		
Dry SA Biotic Condition Chicker Blue Co SA Abiotic Condition disturbance and other	wilting an (vegetation patterns, cor ref Hawks Geard dragon Gy, <u>smos/Moyinam</u> in (hydrological alteration er site impacts; explain the Avec Cocls Not a ary (Overall site condition	nd and surrounding la ce. Even u mposition and structur Some d white mot Aster and Second lat of summary and comme	indscape; include of the second secon	condition and imp Ary A area asives, disturbance define the SA limit L, 'llow S & area (C data is collected.)	acts)	re and herbivory) an ts of ank flooding; soil		
Dry SA Biotic Condition Chicker Blue Co SA Abiotic Condition disturbance and other	wilting an (vegetation patterns, cor ref Hawks beard dragon fly, <u>smos/Meximan</u> in (hydrological alteration ersite impacts; explain the Avea feels Not a ary (Overall site condition Avea is	nd and surrounding la ra Even u mposition and structur Some d white mod Aster and Second lat at summary and comme Vary ba	indscape; include of the second secon	condition and imp Ary A area asives, disturbance define the SA limit L, 'llow S & area (C data is collected.)	acts)	re and herbivory) an ts d ank flooding; soil		
Dry SA Biotic Condition Chicker Blue Co SA Abiotic Condition disturbance and other	wilting an (vegetation patterns, cor ref Hawks Geard dragon Gy, <u>smos/Moyinam</u> in (hydrological alteration er site impacts; explain the Avec Cocls Not a ary (Overall site condition	nd and surrounding la ra Even u mposition and structur Some d white mod Aster and Second lat at summary and comme Vary ba	indscape; include of the second secon	condition and imp Ary A area asives, disturbance define the SA limit L, 'llow S & area (C data is collected.)	acts)	re and herbivory) an ts d ank flooding; soil		

7/16/24 Date :

SA Name: Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

Landscape Context

🖃 - Buffer Integrity Index

٦,

or are e		d and consid									idors that are either allowed, ery type and date (season
Imager	y C	ioogle Earth	KMZ. file			Image	Date	6/23		·	
Allowed buffer/RCC land cover elements				Exclud	ed non	-buffer/RCC	land co	over elen	ients		
Buffer	RCC					Buffer	RCC				
X	X P	Natural or se	mi-natural vegeta	tion patche	s	N	Ń				elopments, parking lots, and other structures
X		mall irrigati	on ditches withou	t levees				Lawns, parks			
			maintained					Railroads	, <u>gon</u> (
									evees.	sedimen	t piles, construction
)pen range	nge land					materiais, st			
	1 4 1 1	oot trails, h ntensity)	orse trails, unpaved	d bike trails	(low			Intensive live	estock	areas, ho	rse paddocks, feedlots
×	N N	ion-channe	l open water					Intensive ag row crops, o			ained pastures, hay fields, eyards
X			ning abandoned ve surring levees	egetated le	vees, or	X		graded road	s	·	econd-order unpaved but
		inpaved two	o tracks roads			×	X	Open water structure	bound	ed by a l	evee or other manmade
)ther						Other	1.00		
			cent Sub-metric.						[Table	L1a. Buffer Percent
			allowed buffer ele etric using Table L					R	ating	Buffer Percent	
integrit	y Summ	hary Worksh	eet 1d.	r				C	4	100%	
			Buffer Percen	Buffer Percent (%)= 85%					R	3	≥80% - <100%
Worksheet 1c. Buffer Width Sub-metric. Measure the length of e			ach bul	fer line	in meters in	٦C	2	≥50% - <80%			
the GIS or on the map. Average the line lengths and rate using Tabl the Buffer Integrity Summary Worksheet 1d.				TCL SHEC			1	<50%			
		rity Summai	ry Worksheet 1d.							•	
Line		er Width	Buffer Width		BufferV		Inter th	e rating on			e L1b. Buffer Width
	Duin	er Width (m)	Buffer Width (ft)	Line	Buffer V (m)	Vidth	Inter th				
Α				Line E		Vidth)	inter th	e rating on ffer Width		Tabl	e L1b. Buffer Width
A B	164	(m)	(ft)		(m)	Vidth) 3	Enter th	e rating on ffer Width (ft)	Ra C (%	Tabl ating 4 3	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
B	164 12	(m) 4.26 5.25	(ft) 538.91 410.92	E	(m) 161.93 231.4	Vidth) 3 8	Enter th	ffer Width (ft) 531.26	Ra C & C	Tabl ating 4 3 2	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m
B C	164 125	(m) 4.26 5.25 5.39	(ft) 538.91 410.92 378.57	E F G	(m) 161.93 231.4 121.2	Vidth) 3 8 5	Enter th Bu	e rating on ffer Width (ft) 531.26 759.44 97.80	Ra C (%	Tabl ating 4 3	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
B	164 12: 11: 11	(m) 4.26 5.25 5.39 1.07	(ft) 538.91 410.92 378.57 364.40	E	(m) 161.9 231.4 121.2 155.8	Vidth) 3 8 5 7	Enter the	e rating on ffer Width (ft) 531.26 759.44	Ri C & C C	Tabl ating 4 3 2 1	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m
B C D	164 12: 11: 11 Averag	(m) 4.26 5.25 5.39 1.07 ge	(ft) 538.91 410.92 378.57 364.40 148.31 (m)	E F G H	(m) 161.93 231.4 121.2 155.8 486.58	Vidth) 3 8 5 7	Enter th Bu 7 3 5 (ft)	e rating on ffer Width (ft) 531.26 759.44 97.80 11.38	Ri C & C C	Tabl ating 4 3 2 1	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m
B C D Worksł	164 129 111 11 Averag	(m) 4.26 5.25 5.39 1.07 ge Buffer Inte	(ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. E	E F G H	(m) 161.93 231.4 121.2 155.8 486.58 b-metric l	Vidth) 3 8 5 7 Ratings	Enter the Bu 7 3 5 (ft)	e rating on ffer Width (ft) 531.26 259.44 97.80 11.38 ables L1a	Ra C C C Tab	Tabl ating 4 3 2 1	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m ummary Rating for Buffer
B C D Worksi and L18 below.	164 129 111 111 Average Deet 1d. D above Using th	(m) 4.26 5.25 5.39 1.07 ge Buffer Inte to calculate e Buffer Inte	(ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	E F G H nter the su y Index Sco	(m) 161,9: 231,4 121,2 155,8 486,58 b-metric f bre using t	Vidth) 3 8 5 7 Ratings he forn	Enter the Bu 7 3 5 (ft) from Ta hula in f	e rating on ffer Width (ft) 531.26 59.44 97.80 11.38 ables L1a the box	Ra C C C Tab	Table432111<	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m ummary Rating for Buffer Integrity Score >3.5
B C D Worksi and L18 below.	164 129 111 111 Average Deet 1d. D above Using th	(m) 4.26 5.25 5.39 1.07 ge Buffer Inte to calculate	(ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	E F G H nter the su y Index Sco	(m) 161,9: 231,4 121,2 155,8 486,58 b-metric f bre using t	Vidth) 3 8 5 7 Ratings he forn	Enter the Bu 7 3 5 (ft) from Ta hula in f	e rating on ffer Width (ft) 531.26 59.44 97.80 11.38 ables L1a the box	Ra C C Tab Ra C C C	Table4321de L1c. Sectionatting43	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m ummary Rating for Buffer Integrity Score >3.5 >2.5 - ≤3.5
B C D Worksi and L18 below.	164 129 111 11 Average Deet 1d. D above Using the the SA S	(m) 4.26 5.25 5.39 1.07 ge Buffer Inte to calculate te Buffer Inte summary We	(ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	E F G H inter the su y Index Sco enter ratin	(m) 161.9: 231.4 121.2 155.8 486.58 486.58 b-metric f ore using t g for Buffe	Vidth) 3 8 5 7 Ratings he forn er Integ	Enter the Bu From Table from Table from Table frity in T	e rating on ffer Width (ft) 531.26 59.44 97.80 11.38 ables L1a the box	Ra C C C Tab	Table432111<	e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m ummary Rating for Buffer Integrity Score >3.5

SA CODE: SF

SF2MI[5]

Date: 7/16/24

Surveyor Initials :

DS/AM

SA Name : Two Mile Pond Reservoir Transect [5]

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
.griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassiand (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4	Surrounding Land Use Rating
Rating	LUI Score
<u>(</u> 4	≥95 - 100
C 3	≥80 - <95
(x 2	≥40 - <80
C 1	<40

-

, io militaria	kshee kshee inant hitis	specie more	es in	ant Sp each s	ecies stratur Fach	and I n tha	Polyg t appe	Worksheet 6. CT Plant Species and Polygon Assignments. Starting w dominant species in each stratum that appears in the polygon. See foot which it is more abundant Each polycon is either assigned to the comp	gnmer be poly	nts. Sta rgon. S don. S	ee foot	ith CT / notes fo	V, enter th or special	he numb instruct	er of the ions. If a s	first pol species (ygon fr	in more	sheet 5 than or	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either sections of the control of the first polygon from Worksheet 5. Enter the species to the stratum in which it is more abundant. Each polygon is either sections of the control of the species of the stratum in the polygon.	e species assign th	s codes fo	or the two to the st	top ratum in
						King	Tail	Tail Woody Stratum ¹	Stratu				Short Woody Stratum 2	ody Stra	Short Woody Stratum ² Herbaceous/Sparse Stratu	oranev	H	reated 1 rbaceou	or the p s/Spars	Is created for the polygon. Herbaceous/Sparse Stratum ³	m	CT Score 4	re 4	
E	Polyc	Polygon Nos.	05.				Spe	Species 1	<u>ш 2</u>	Species 2	}		Species 3	шZ	Species 4	5 4 m Z	Sp	Species 5	<u>u</u> 2	Species 6	<u>u</u> 2	Raw ⁴	% SA5	Wt Score ⁶
۲	5						 						W.W.	1	C. +			20 Ser.	L L	المان المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية ا مناطقة المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية المانية ا	1.	80		*1
8																			ŧ			•		
U	 							ł												_				
		 					-																	
ш			:																		<u> </u>			
<u> </u>		 															 				 			
U						<u> </u>				 		t												
(エ)																							 	
—													\$											
~																¦								
×	:				1	·····	 								 									
L.			 			 	<u> </u>								 	<u> </u>								
Ξ						<u> </u>					 					<u> </u>				5	_			
z																<u> </u>								
0											<u>}</u>				 									
																	-		Fina	Final Weighted Score ⁷	ed Score			
F	ees ai	nd shr	:sqn	>6m	(20 fe	et) ar 	7d > 2:	5% tota	l stratu 	m cove	er; 2. Tre	ees and	shrubs ≤	6m (20	feet) and	>25% t(otal stra	tum co/	er; 3. He	Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤6m (20 feet) and >25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	(gramin	ioids and	forbs)>1	0% total
or B Squi	um c. II 1; 6v elative	Ver Vt. Sci e Natř	ore is ve Pl	s the p ant Co	is itor iroduc immur	n lac :t of ti nitv C	he Bav be Rav Tompo	ы a unit cover. Traw Score is from Table BTa (Appendix B); 2%SA is the equal 1; бWt. Score is the product of the Raw Score * % SA; 7The Final V for Relative Native Plant Community Composition on the SA Bank Summ	* % SA	; ⁷ The ; ⁷ The	Final W K Summ	bercent (eighte: Nary Wc	et a turn cover. Thaw score is from Table BTA (Appendix B); 2%5A is the percentage of th equal 1; 6Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is for Relative Native Plant Community Composition on the SA Bank summary Workshear	ie SA are s the sum	a covered 1 of the W	d by the /t. Score	CT and s. Rate 1	express the CT Fi	ed as a c nal Wei	percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must Veighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Ra way Workshaet	umber; t ore on Ta	he total a ble B1 ar	rea %SA id enter t	ered in tover. Traw score is from Table 618 (Appendix B); 2%5A is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table 81 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Worksheet
Ì							-						Page	Page 7 of 17										

Surveyor Initials: D' M

Date: 7/16/24

SA Name : Two Mile Pond Reservoir Transet [5]

sa codr SF2MIL 🕤]

Date: 7/16/24

SA Name: Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

B4 - Native Riparian Tree Regeneration

Rating	Description
C 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
C 3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C 2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u> </u>	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

N/A

Invasive cover (%) / >

calculate

Tal	ole B5. Ratin	gs for Invasive Exotic Plant Species Cover
F	Rating	Invasive Species Cover %
C	4	0%
~~	3	>0% - <1%
	2 X	≥1% - <10%
$\widehat{}$	1	≥10

Additional CTs and Biotic Metric Comments:

little to no growth but what does appear is small and hard to identify,

Date: 7/16/24

SA Name :	Two Mile Pond Reservoir Transect [5)]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ď		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		đ		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
				Channel and point-bars consist of well-sorted bed material.
		۶.		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		ď		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
2				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date: 7/16/24

Surveyor Initials : DS/AM

SA Name : Two Mile Pond Reservoir Transect (5)

A5 - Soil Surface Condition

Worksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	Ø		Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

0____

1		Table A5. Soil Surface Condition Rating							
Rating		Description							
R,	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.							
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.							
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.							
C	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.							

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cove	r Worksheet							
SA Code SF2MI [5] SA Name : Two N	lile Pond Reservoir		Project : R	iparian Asse	sement				
Code Tsct [5]	AU Name : Trans	ect {]		WOI : Two	Mile Pond F	leservoir				
County Santa Fe	HUC 12 Headw	aters Santa Fe River	Elevation (ft) 729	9 (m) 2224.	7 Eco	region 6.0 NWFM				
A riparian system decommissioned of water rights. Driving Directions Driving to Santa F	nd Boundary (Rationale, c that leads into a pond loc due to safety concerns re fe from Albuquerque you il you reach the reservoir	ated on the east side garding the reservoir head north on Old Pe	and a water divers	ion to the area wa	s recently sh	ut down due to lack				
Ownership The Nature	e Conservative and The S	anta Fe National Fores	t Data Sharing Restrictions	Results to client only.	Fish Obse Wetla					
Surveyor Role		Surve	yor Name			Surveyor Initials				
Landscape	Dustin Schwart:	2		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		DS				
Biotic	Annie McCoy			<u> </u>		AM				
Abiotic	Dustin Schwart	Z				DS				
Stressors Dustin Schwartz DS										
Easting (m) Northing (m) Zone Datum Latitude (DD ft) Longitude (DD ft)										
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM 35.6897	722	-105.89				
Survey Date	8/13/24	Start Time	9:00	Enc	Time	15:00				
SA Biotic Condition M, /Km No b, in SA Abiotic Conditio	still not Willows and (vegetation patterns, cor eed! Cosmos (inds heard <u>high end</u> n (hydrological alteration	nposition and structur check with Very quie of transc is le.g., dams, walls etc	re, exotics and invi last time t, Some ct); flooding charac	asives, disturbance) Sand mat Chickovee :teristics and eviden	evidence, fi t b/ne and c	re and herbivory) _ stem. : lover				
r	er site impacts; explain th land is recovered From ary (Overall site condition Arca is Like	summary and commons	and dy.	Some willo overed in data is collected.)	old deo	ver- nd plautz				
rovisional ield Score 3,04 Ra	nk 👂 Surveyor(s)	DS/AM Final Score	3,04 Rank	B Initials J) 5	Date 8/13/24				

SA CODE: SF2MI (5)

Date: 8/13/24

SA Name :	Two Mile Pond Reservoir Transect [ς	1
	two where one reservor mansecci	. د.	J

Surveyor Initials : DS/AM

Landscape Context

🔬 - Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Imagery Google Earth KMZ. file Image Date 6/23											
Imagei	гу	Google Earth	KMZ. file			Image	Date	6/23			
Allowe	d buffe	er/RCC_land_c	over elements					-buffer/RCC	land c	over elen	nents
Buffer	RCC					Buffer	RCC				
\mathbf{X}	X	Natural or se	mi-natural vegetat	ion patcl	hes	\boxtimes	X	2			elopments, parking lots, and other structures
X	X	Small irrigation	on ditches without	levees				Lawns, park	s, golf	courses, s	ports fields
Old fields, unmaintained							Railroads				
	Open range land						Maintained materials, st		•	t piles, construction	
	X	Foot trails, he intensity)	orse trails, unpaved	bike tra	ils (low			Intensive liv	estoci	careas, ho	orse paddocks, feedlots
X	X	Non-channel	l open water	_				Intensive ag row crops, c			ained pastures, hay fields, neyards
X	- Iv I I	Non-functior naturally occ	ning abandoned ve urring levees	getated	levees, o	r 🗵	X	graded road	İs		econd-order unpaved but
		unpaved two	tracks roads			X	X	Open water structure	bound	ded by a l	evee or other manmade
וםו		Other	······································					Other			
Works	heet 1	b. Buffer Per	cent Sub-metric. M	/ieasure	or estima	te the per	centag	e of the		Table	L1a. Buffer Percent
SA per	imeter	composed of	allowed buffer ele	ments ar	nd enter i	nto the Bu	iffer Pe	rcent			t <u></u>
			etric using Table L1 eet 1d	a and er	ster the ra	ating on th	e Buff	er	<u> </u>	Rating	Buffer Percent
Integrity Summary Worksheet 1d. Buffer Percent (%)= 85%							R R	43	100% ≥80% - <100%		
L						<u></u>				2	≥50% - <80%
Worksheet 1c. Buffer Width Sub-metric. Measure the length of the GIS or on the map. Average the line lengths and rate using Tab				feach buf	fer line	e in meters in		1	<50%		
			age the line length ry Worksheet 1d.	s and rat	e using 1	adie LTD. t	nter ti	ie rating on			
		ifer Width	Buffer Width		Buffe	er Width	Bu	ffer Width	-1	Tabl	e L1b. Buffer Width
Line		(m)	(ft)	Line		(m)		(ft)	1	Rating	Average buffer width
A	1	64.26	538.91	E	161	1.93		531.26	IC.	4	≥190m
В	1	25.25	410.92	F	23	1.48		759.44		3	≥130 - <190m
C		15.39	378.57	G	12	1.25		397.80		2	≥65 - <130m
			364.40		155.87		511.38			1	<65m
D						┤┌┯┈	Table L1c. Summary Rating for Buffer				
•····	Aver	age	148.31 (m)		486	.58	³ (ft)				Integrity
			egrity Summary. E							Rating	Score
			the Buffer Integrit egrity Index Score,						Г. С	4	>3.5
		Summary W		enteria	ung ior bi	uner integ	my in		R	3	>2.5 - ≤3.5
					<u> </u>					2	
1			11. 140 a.t. mt.			Buffer Integrity Index Score			$\overline{\Gamma}$	4	>1.5 - ≤2.5
Buffer	% Rati	ing + Bu	uffer Width Rating	/2	= Bu	ffer Integ	rity In	dex Score	$\frac{c}{c}$	1	≤1.5

SF2MI[5] SA CODE :

8/13/24 Date :

Surveyor Initials :

Two Mile Pond Reservoir Transect [5] SA Name :

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0,5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
.griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other failow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0,3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0. 9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Table L4.	Surrounding Land Use Rating
Rating	LUI Score
C 4	≥95 - 100
C 3	≥80 - <95
R 2	≥40 - <80
<u>(</u> 1	<40

Page 5 of 17

DS/AM

B1 - Re Worksh	lative eet 6. C	B1 - Relative Native Plant Community Composition Worksheet 6. CT Plant Species and Polygon Assignments. Sta	lant C ecies a	nd Pol	Innity Co Iygon Ass	ignmen ignmen	B1 - Relative Native Plant Community Composition Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top forminant species in each stratime that answers in the onlygon form that answers in the onlygon form.	with CT	A, enter the	e number	r of the firs	t polygor	from Wor	ksheet 5.	Enter the	species c	odes for	the two t	do
which it	is more	abundant.	Each p	olygor	his either	assigned	which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	e CT if it	has the san	ne comp	osition or a		is created 1	or the po	e suara, as		species	ח ונוב אוני	
					Tall Woody Stratum ¹	ly Stratur	ا د ا		Short Woody Stratum ²	ody Stratu	um 2		Herbaceous/Sparse Stratum ³	us/Sparse	Stratum ³		CT Score ⁴	4	
۹ ۲	Polygon Nos.	s.			Species 1	<u>u 2</u>	Species 2	шZ	Species 3	ωZ	Species 4	ы N	Species 5	<u>u 2</u>	Species 6	шZ	Raw4	% SA5	Wt Score ⁶
A									Wilser	Ń	$\mathcal{L}_{2q}^{\{\eta_{i}\}}$	R	M. 116 N	i ⊥_1	and the second	<i>.</i> ,	2.2	8	(٧١
8										:									
U						 						 							
۵																			
ш ш												 							
ц.,						} {					 								
U U							 								*				
r						 				 				}					
] [
			<u> </u>			 													
×						ļ				 									
¥					:													 	
z								; ; [s I	}			
0														; - 					
														Final	Final Weighted Score ⁷	1 Score ⁷			
1. Tree	ind shi	ubs > 6 m	(20 fee	et) and	> 25% tot	al stratur	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs) > 10% total	Trees an	d shrubs ≤6	5m (20 fe	set) and >2	5% total	stratum co	ver; 3. He	rbaceous (gramino	ids and fi	orbs)>10	% total
stratur equal 1	6Wt. Sci	'Raw Score ore is the p	e is from product	of the	e B1a (App - Raw Scon	endix B); e * % SA:	stratum cover. "Haw Score is from Table B1a (Appendix B); "%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1: 6Wt. Score is the product of the Raw Score * % SA: "The Final Weinhted Score is the sum of the Wt. Scores Rate the CT Final Weinhted Score * % SA: "The Final Weinhted Score is the sum of the Wt. Score is the product of the Raw Score * % SA: "The Final Weinhted Score is the sum of the Wt. Scores Rate the CT Final Weinhted Score * % SA: "The Final Weinhted Score is the sum of the Wt. Scores Rate the CT Final Weinhted Score * % SA: "The Final Weinhted Score is the sum of the Wt. Scores Rate the CT Final Weinhted Score * % SA: "The Final Weinhted Score is the sum of the Wt. Scores Rate the CT Final Weinhted Score * % SA: "The Final Weinhted Score" is the sum of the Wt. Scores Rate the CT Final Weinhted Score * % SA: "The Final Weinhted Score * % SA: "The Final Weinhted Score * % SA: "The Final Weinhted Score * % SA: "The Final Weinhted Score * % SA: "The Final Weinhted Score * % SA: "The Final Weinhted Score * % SA: "The Final Weinhted Score	ie percer I Weighte	itage of the ed Score is t	e SA area the sum	covered by of the Wt 4	/ the CT a	and expres	sed as a d inal Weid	lecimal nui shted Scor	mber; the A on Tah	e total ard de R1 and	ea %SA n I enter th	hust A Bating
for Rela	tive Nati	ve Plant C	отт	lity Co	mposition	on the S	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.	nmary W	orksheet.										5

Page 7 of 17

Surveyor Initials : F M

Date: 8/13/24

SA Name: Two Mile Pond Reservoir Tr act [\sum]

SA COL SF2MIL

SA Name: Two Mile Pond Reservoir Transect [5]

Surveyor initials : DS/AM

D

B4 - Native Riparian Tree Regeneration

i Wori		ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
R	ating	Description
C	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few.
- ر	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
8	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

N/A-

Invasive cover (%)

calculate

Tab	ole B5. Ratin	gs for Invasive Exotic Plant Species Cover
F	Rating	Invasive Species Cover %
C	4	0%
	3 X	>0% - <1%
	2	≥1% - <10%
C	1	≥10

Additional CTs and Biotic Metric Comments:

Area is in a decline some plants Never recovered from winter

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
Indicators of Channel Equilibrium		ď		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
				There is leaf litter, thatch, or wrack in most pools.
Indicators of			<u> </u>	The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		Ø		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
Degradation				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

Date : 8/13/24

Date: 8/13/24

Surveyor Initials : DS/AM

SA Name: Two Mile Pond Reservoir Transect [S]
SA Name: Two Mile Pond Reservoir Transect [5	

A5 - Soil Surface Condition

.Vorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or lowdensity wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	Ø		Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other:
	·····		Estimate % soil disturbance by segment area
	1		Average % Soil Disturbance: ()

	Table A5. Soil Surface Condition Rating
Rating	Description
<u></u>	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cover	Worksheet						
A Code SF2MI [5] SA Name : Two N	iile Pond Reservoir		Pro	ject : Ripa	rian Asses	ement		
Code Tsct [5] AU Name : Transect [5] WOI : Two Mile Pond Reservoir									
County Santa Fe HUC 12 Headwaters Santa Fe River Elevation (ft) 7299 (m) 2224.7 Ecoregion 6.0 NWFM									
A riparian system decommissioned of water rights. riving Directions Driving to Santa	nd Boundary (Rationale, e that leads into a pond loo due to safety concerns re Fe from Albuquerque you til you reach the reservoir	ated on the east side o garding the reservoir a head north on Old Peo	nd a water divers	ion to the a	rea was re	cently shu	t down due to lack		
Ownership The Nature Conservative and The Santa Fe National Forest Data Sharing Results to client Restrictions Fish Observed in Wetland?									
Surveyor Role	· · · · · · · · · · · · · · · · · · ·	Survey	or Name		A		Surveyor Initial		
Landscape Dustin Schwartz DS									
Biotic Annie McCoy AM									
Abiotic	Dustin Schwart	Z			·	·	DS		
Stressors	Dustin Schwar	Z					DS		
Easting (m)	Northing (m)	Zone	Datum		Latitude	(DD ft)	Longitude (DD f		
-105° 53' 24" W	35° 41' 23" №	13	NAD- 83 U	ТМ	35.689722	2	-105.89		
Survey Date	9/11/24	Start Time	9:00		End Ti	me	15:00		
ar Pa	grass is mat Aren is ve	ny rocky w	ith little	soil			/		
SA Biotic Condition (vegetation patterns, composition and structure, exotics and invasives, disturbance evidence, fire and herbivory) Chiko rea, Mini Cosino, None of the large plants look like they are doing well cosmos is blooming parselone, Sandmat, possible thistk									
SA Abiotic Condition (hydrological alterations (e.g., dams, walls etc.]; flooding characteristics and evidence of overbank flooding; soil disturbance and other site impacts; explain the hydrologic breaks or other factors that define the SA limits) DID Willows and matted grass cover highly eraded rocky									
disturbance and oth		d matted g	rasy cover	r hists	1 8100	100 10	cky		
disturbance and oth Div	Willows an	d matted g birds heard							
disturbance and oth b/i k. /	Willows an Uside No k ary (Overall site condition	irds heard	Water nts after the field	Pohring data is colle	,'n to ected.)	outi	et pipe!		
disturbance and oth b/i k, /	Willows an Uside No k	irds heard summary and comme lly Joing yearn i	Water nts after the field Given 1 a Jac	Pouring data is colle bloop.	into	outi I ha	et pipe ! 1.91%		

Date: 9/11/24

SA Name :	Two Mile Pond Reservoir Transect [ς	1
avenue.	TWO MILE CONTRACTAGE AND TRADECCE.	. J	1

Surveyor Initials : DS/AM

Landscape Context

- Buffer Integrity Index

7

3

3

+

/2 =

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Imagery	y 🗌	Google Earth	KMZ. file			Image	Image Date 6/23						
Allowed	 d buffe	er/RCC land co	over elements			Exclud	xcluded non-buffer/RCC land cover elements						
Buffer I	RCC					Buffer	RCC		<u> </u>				
X	x	Natural or ser	mi-natural vegetati	on patch	nes	X	×	dams, br	Commercial/residential developments, parking lots, dams, bridges, revetments, and other structures				
	X	Small irrigatio	on ditches without	levees				Lawns, p	arks,	golf	courses, s	ports fields	
		Old fields, un	maintained					Railroad	_				
		Open range l	and					Maintair material				t piles, construction	
X	X	Foot trails, ho intensity)	orse trails, unpaved	bike trai	ils (low							rse paddocks, feedlots	
X	×	Non-channel	open water					row crop	os, orc	hard	ls, and vin		
×	x	Non-function naturally occu	ning abandoned ve urring levees	getated	levees, or	X	X	graded r	roads		-	econd-order unpaved but	
		unpaved two	tracks roads			×	×	Open wa structure		ounc	ded by a le	evee or other manmade	
		Other						Other					
Worksi	1eet 1	b. Buffer Perc	cent Sub-metric. N	/ieasure o	or estimat	e the per	centag	e of the			Table	L1a. Buffer Percent	
SA peri Box bei	meter ow.R:	 composed of ate the sub-me 	allowed buffer eler etric using Table L1	ments ar a and en	nd enter ir hter the rai	ito the Bi ting on th	hier Pe he Buff	ercent		F	Rating	Buffer Percent	
		nmary Workshi								5	4	100%	
			Buffer Percent	t (%)=	85%					R	3	≥80% - <100%	
Workeh	eet 1.		h Sub-metric. Mea	isure the	lenath of	each bu	ffer line	e in mete	rs in	<u> </u>	2	≥50% - <80%	
the GIS or on the map. Average the line lengths and rate using Tab				ble L1b.	Enter t	he rating	on	C	1	<50%			
	er Inte	egrity Summar	ry Worksheet 1d.							[Tabl	e L1b. Buffer Width	
Line	Bu	(m)	Buffer Width (ft)	Line		r Width m)	B	uffer Wid (ft)	11N	F	Rating	Average buffer width	
A	1	164.26	538.91	E	161	.93	531.26		_	C	4	≥190m	
B	<u> </u>	125.25	410.92	F	231	.48	_	759.44		8	3	≥130 - <190m	
	 	115.39	378.57	G	121	.25		397.80	.97.80 C 2 ≥65 - <130m		<u></u>		
c					<u> </u>	155.87				<u>٢</u>	I	<65m	
D		111.07	364.40									Summary Rating for Buffer	
	Ave		148.31 (m)		486.		(ft)	· · · · · · · · · · · · · · · · · · ·		1 19	1916 E I C. 3	Integrity	
Works	heet 1	ld. Buffer Inte	e <mark>grity Summary.</mark> E the Buffer Integrit	inter the	sub-metr	ic Rating:	s from ' nula in	Tables L1.	a	F	Rating	Score	
below.	u ado\ Usina	the Buffer Inte	egrity Index Score,	enter rat	ting for Bu	iffer Integ	grity in	Table L10	:	C	4	>3.5	
		A Summary W			-	•				R	3	>2.5 - ≤3.5	
Buffer % Rating + Buffer Width Rating /2 = Buffe								C	2	>1.5 - ≤2.5			

3

SF2MI[5] SA CODE :

9/11/24 Date :

SA Name: Two Mile Pond Reservoir Transect [5]
---	---	---

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	o
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Tab	le L4. Surr	ounding Land Use Rating
Rati	ng	LUI Score
C 4		≥95 - 100
C 3		≥80 - <95
(2		≥40 - <80
C 1		<40

DS/AM Surveyor Initials :

<u></u> .	Rel	ative	e Nat	ive P	lant C	iomi.	B1 - Relative Native Plant Community Composition	Compo	sition	·			:		:							
Voi dom whic	kshe inan h it i	t spec s mor	CT PI: cies in e abur	ant Sp each s ndant.	ecies a tratum Each p	ithat ; olygo	olygon A appears ir on is eithe	ssignme A the pol r assigne	Worksheet 6. CT Plant Species and Polygon Assignments. Starting w dominant species in each stratum that appears in the polygon. See foot which it is more abundant. Each polygon is either assigned to the same	ng with C footnote: ame CT if	T A, enter s for specia it has the	the nun al instru same co	nber of ctions. mposi	f the first If a speci tion or a	polygor es appe new CT	ith CT A, enter the number of the first polygon from Worksheet 5. Enter thouses for special instructions. If a species appears in more than one strate CT if it has the same composition or a new CT is created for the polygon.	ksheet 5 e than or for the p	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	species (ssign the	codes for e species	r the two to the str	top atum in
				ļ		·	Tall Woo	Tall Woody Straturn ¹	um ¹		Short W	Short Woody Stratum 2	tratum	2		Herbaceo	is/Spars	Herbaceous/Sparse Straturn 3		CT Score ⁴	e 4	
5	Poly	Polygon Nos.	Nos.				Species 1	л И П И	Species 2	<u>ч</u> 2	Species 3	ш Z с	ds_	Species 4	шZ	Species 5	ш Z	Species 6	<u> </u>	Raw4	SA5	Wt Score6
<											U. llew	[Ceth. 1	Ń	N. S.		مردی میں در این را مردی میں در این را	1	8	e) Q	·~ ``
ŝ										-		[<u> </u>			
υ								 				 										
Δ			 			 																
ш] : 											<u> </u>		
(L					 	[<u> </u>	 						 			
υ								<u> </u>														
포								} 		3								}				
-																						
						ļ		 					 									
×			į	 												\$						
L						<u> </u>		 	 				 									
Σ						ļ																
z										} 												
0																						
													-				Fina	Final Weighted Score ⁷	d Score ⁷			
- 1 -	ees :	and sh	arubs :	> 6 m (20 fee	t) and	> 25% tc	otal strat	um cover;	2. Trees a	nd shrubs	≤6m (2(0 feet)	and >25 ⁽	% total s	stratum co	/er; 3. He	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	(graminc	pids and 1	forbs)>10)% total
strat equ: for R	um c il 1; 6 elativ	iover. Wt. S /e Nat	⁴ Raw core i: tive Pl	Score s the p ant Co	is from roduct mmun	n Table of the lity Co	e B1a (Ap) e Raw Sco impositio	pendix B re * % S/ n on the	stratum cover. "Raw Score is from Table B1a (Appendix B); ">%SA is the percentage of th equal 1; 6Wt. Score is the product of the Raw Score * % SA; "The Final Weighted Score i for Relative Native Plant Community Composition on the SA Rank Summary Worksheet	the perce nal Weigh	entage of t ited Score Morksheet	the SA a is the su t	rea cov um of t	/ered by 1 he Wt. Sc	the CT a ores. Ra	nd express te the CT F	ed as a c inal Wei	stratum cover. "Raw Score is from Table B1a (Appendix B); "%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating for Relative Native Plant Community Composition on the SA Rank Summary Worksheet	mber; th e on Tab	ie total ar ole B1 an	rea %SA r d enter t [‡]	nust 1e Rating
ļ											Pag	Page 7 of 17	2									

Surveyor Initials : F M

Date: 9/11/24

SA Name: Two Mile Pond Reservoir Training 1

sa cor sf2MI(🕤)

Date: 9/11/24

DS/AM

Surveyor Initials :

SA Name : Two Mile Pond Reservoir Transect [5]

B4 - Native Riparian Tree Regeneration

R	ating	Description
C	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
\overline{c}	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
C	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u>a</u>	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

NIR

Invasive cover (%)

ラロ

calculate

Tat	ole B5. Rating	gs for Invasive Exotic Plant Species Cover
F	Rating	Invasive Species Cover %
C	4	0%
	3 х	>0% - <1%
	2	≥1% - <10%
C	1	≥10

Additional CTs and Biotic Metric Comments:

Avea about to go into fall with last blooms on cosmos and chimisa,

Date: 9/11/24

SA Name : Two Mile Pond Reservoir Transect [5]

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		ď		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		Ø		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
5				There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ŋ		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparlan area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		Ľ		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

 \bigcirc

SA	Name :	Two Mile Pond Reservoir Transect [5)

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

Norksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
	Í		Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

·		Table A5. Soil Surface Condition Rating
Ratir	ng	Description
94		Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.
C 3		Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are iminimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.
C 2		Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.
C 1		Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cove	r Worksheet			
SA Code SF2MI[6] SA Name : Two I	Aile Pond Reservoir		Project : R	iparian Asse	sement
Code Tsct [6]	AU Name : Tran	sect [6]		WOI : Two	Mile Pond F	Reservoir
County Santa Fe	HUC 12 Heady	vaters Santa Fe River	Elevation (ft) 729	99 (m) 2224.	7 Eco	pregion 6.0 NWFM
A riparian system decommissioned of water rights. Driving Directions Driving to Santa I	nd Boundary (Rationale, that leads into a pond lo due to safety concerns re Fe from Albuquerque you	cated on the east side egarding the reservoir u head north on Old Pe	and a water diver	sion to the area wa	s recently sh	ut down due to lack
	il you reach the reservoir Conservative and The S		st Data Sharing Restrictions	Results to client only.	Fish Obse Wetla	
Surveyor Role		Surve	yor Name		•	Surveyor Initials
Landscape	Dustin Schwart	2				DS
Biotic	Annie McCoy					AM
Abiotic	Dustin Schwar	tz				DS
Stressors	Dustin Schwar	tz				DS
Easting (m)	Northing (m)	Zone	Datum	Latituc	le (DD ft)	Longitude (DD ft)
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM 35.6897	22	-105.89
Survey Date	7/16/24	Start Time	9:00	End	Time	15:00
Land a to	almost onti almost onti malille bake		wed in the every la	growth. p sild tom tills		even b. bactlos, ants
	(vegetation patterns, co				evidence, fi:	re and herbivory)
Chickeree	, globenallow an d score gr in ^{Signifi} n (hydrological alteration	2 Mattein are	Vicemin 6	at tails	almost	comptail,
SA Abiotic Conditio	n (hydrological alteration er site impacts; explain th	ns (e.g., dams, walls etc	.]; flooding charac	teristics and evider define the SA limit	nce of overba	ank flooding; soil 56
	almest					
	27.5 nti	306 mS	17.10 p	# 16.4	<u>``</u>	
Assessment Summa	ry (Overall site condition					
	Area is in lots of Cla at 255 percent	full bloor a and fa at specie	were with	noote and a locij	l hard r vari	weing with
Provisional 3,11 Ra Field Score 3,11 Ra	nk <u>B</u> Surveyor(s)			A Initials 🏳	¢	Date 7/16/24

Page 1 of 17

Date: 7/16/24

SA Name :	Two Mile Pond Reservoir Transect [6]
		0	

Surveyor Initials : DS/AM

Landscape Context

💷 🖓 - Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

Image	y i	Google Earth	n KMZ. file		Image Date		6/23				
Allowe	d buffe	er/RCC land o	cover elements	<u> </u>	<u> </u>	Exclud	led nor	n-buffer/RCC	land o	cover eler	nents
Buffer	RCC					Buffer	RCC				· · · · · · · · · · · ·
X	X	Natural or se	emi-natural vegeta	tion patch	nes	X	×	Commercial/residential developments, parking lots, dams, bridges, revetments, and other structures			
X	X	Small irrigati	ion ditches withou	t levees				Lawns, park	s, golf	courses,	sports fields
		Old fields, ur	nmaintained					Railroads			
		Open range	land					Maintained materials, st			nt piles, construction
X		Foot trails, he intensity)	orse trails, unpaved	d bike trai	ils (low			Intensive live	estoci	k areas, ho	orse paddocks, feedlots
X	X	Non-channel	l open water					Intensive ag row crops, o			ained pastures, hay fields, neyards
X	1.41		ning abandoned ve curring levees	egetated	levees, or	×	×	Paved roads graded road		veloped s	econd-order unpaved but
		unpaved two	o tracks roads			X	X	Open water structure	boun	ded by a l	evee or other manmade
		Other						Other			
Works	heet 1k	o. Buffer Per	cent Sub-metric.	Measure c	or estimate	the per	centag	e of the		Table	e L1a. Buffer Percent
		composed of te the sub-m	f allowed buffer ele					ercent			r · · · · · · · · · · · · · · · · · · ·
			ethe using Table c	la and en	ter the rati:	ng on th	ne Buffe	er		Rating	Buffer Percent
integrit	y Sum:	nary Worksh		la and en	ter the ratio	ng on th	ne Buffe	er		Rating 4	Buffer Percent
integrit	y Sum:			<u> </u>	ter the ration 85%	ng on th	ne Buffe	er	h	-	
	-	nary Worksh	eet 1d. Buffer Percen	t (%)=	85%				180	4	100%
Worksh the GIS (eet 1c. or on th	nary Worksh Buffer Widt 1e map. Avera	Buffer Percent Buffer Percent Th Sub-metric. Mea age the line length	t (%)= asure the	85% length of e	ach bul	ffer line	in meters in	180	4 3	100% ≥80% - <100%
Worksh the GIS (eet 1c. or on th	nary Worksh Buffer Widt 1e map. Avera	eet 1d. Buffer Percen	t (%)= asure the	85% length of e using Tab	ach bul le L1b. f	ffer line Enter th	in meters in he rating on		4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50%
Worksh the GIS of the Buffo	eet 1c. or on the	nary Worksh Buffer Widt ne map. Avera grity Summar fer Width	Buffer Percent Buffer Percent Bub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	t (%)= asure the	85% length of e e using Tab Buffer \	ach bul le L1b. f	ffer line Enter th	in meters in ne rating on Iffer Width		4 3 2 1 Tab	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width
Worksh the GIS of the Buffi Line	eet 1c. or on ther integ Buf	mary Worksh Buffer Widt ne map. Avera grity Summar fer Width (m)	Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft)	it (%)= asure the s and rate	85% length of e e using Tab Buffer \ (m	ach bul le L1b. f Nidth)	ffer line Enter th	e in meters in ne rating on Iffer Width (ft)		4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50%
Worksh the GIS of the Buffo	eet 1c. or on ther integ Buf	nary Worksh Buffer Widt ne map. Avera grity Summar fer Width	Buffer Percent Buffer Percent Bub-metric. Mea age the line length ry Worksheet 1d. Buffer Width	asure the as and rate	85% length of e e using Tab Buffer \	ach bul le L1b. f Nidth)	ffer line Enter th	in meters in ne rating on Iffer Width		4 3 2 1 Tabl Rating 4	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m
Worksh the GIS of the Buffi Line	eet 1c. or on ther Integ Buf	mary Worksh Buffer Widt ne map. Avera grity Summar fer Width (m)	Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft)	it (%)= asure the s and rate	85% length of e e using Tab Buffer \ (m	ach bul le £1b. f Nidth) 3	ffer line Enter th	e in meters in ne rating on Iffer Width (ft)		4 3 2 1 Tabl Rating 4 3	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
Worksh the GIS of the Buffo Line A	eet 1c. or on ther Integ Buf 16	mary Worksh Buffer Widt ne map. Avera grity Summar fer Width (m) 54.26	eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91	t (%)= asure the is and rate Line E	85% length of e e using Tab Buffer V (m 161.9	ach bul le L1b. f Width) 3 8	ffer line Enter th Bu	e in meters in he rating on Iffer Width (ft) 531.26		4 3 2 1 Tabl Rating 4	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m
Worksh the GIS of the Buffi Line A B	eet 1c. or on ther integ Buf 16	mary Worksh Buffer Widt ne map. Avera grity Summar fer Width (m) 54.26 25.25	eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92	t (%)= asure the is and rate Line E F	85% length of e e using Tab Buffer V (m 161.9 231.4	ach but le £1b. f Vidth) 3 8 5	ffer line Enter th Bu	e in meters in ne rating on Iffer Width (ft) 531.26 759.44		4 3 2 1 Tabl Rating 4 3	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m
Worksh the GIS < the Buffi Line A B C	eet 1c. or on ther integ Buf 16 12	mary Worksh Buffer Widt ne map. Avera grity Summar fer Width (m) 54.26 25.25 15.39	eet 1d. Buffer Percen th Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40	t (%)= asure the as and rate Line E F G H	85% length of e e using Tab Buffer V (m 161.9 231.4 121.2	ach bul le L1b. f Nidth) 3 8 5 7	ffer line Enter th Bu	e in meters in ne rating on affer Width (ft) 531.26 759.44 397.80		4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m
Worksh the GIS of the Buffi Line A B C D	eet 1c. or on ther integ Buf 16 12 1 1 Avera	mary Worksh Buffer Widt ne map. Avera grity Summar fer Width (m) 54.26 25.25 15.39 11.07 age	eet 1d. Buffer Percen ith Sub-metric. Meta age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	t (%)= asure the is and rate Line E F G H	85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58	ach bul le L1b. f Vidth) 3 8 5 7	ffer line Enter th Bu 5 (ft)	e in meters in ne rating on Iffer Width (ft) 531.26 759.44 397.80 511.38		4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100% ≥50% - <80% <50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m
Worksh the GIS of the Buffe Line A B C D	eet 1c. or on the Integ Buf 12 11 Avera	mary Worksh Buffer Widt ne map. Avera grity Summar fer Width (m) 54.26 25.25 15.39 11.07 age	eet 1d. Buffer Percen ith Sub-metric. Mea age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E	t (%)= asure the is and rate Line E F G H	85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58	ach bul le L1b. f Vidth) 3 8 5 7 8 7 8 8	ffer line Enter th Bu S (ft) From T	a in meters in be rating on Iffer Width (ft) 531.26 759.44 397.80 511.38 Tables L1a		4 3 2 1 Tab Rating 4 3 2 1	100% ≥80% - <100%
Worksh the GIS of the Buffe Line A B C D Worksh and L1b	eet 1c. or on the Integ Id Id Id Id Id Id Id Id Id Id Id Id Id	mary Workshine map. Averagrity Summar fer Width (m) 54.26 25.25 15.39 11.07 age to calculate	eet 1d. Buffer Percen ith Sub-metric. Meta age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m)	t (%)= asure the is and rate Line E F G H nter the s y Index So	85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58 sub-metric core using t	ach bul le L1b. f Vidth) 3 8 5 7 7 Ratings the form	ffer line Enter th Bu S (ft) From T nula in	a in meters in the rating on Iffer Width (ft) 531.26 759.44 397.80 511.38 ables L1a the box		4 3 2 1 Table Rating 4 3 2 1 ble L1c. S	100% ≥80% - <100%
Worksh the GIS of the Buffo Line A B C D Workst and L1b below. I	eet 1c. or on the Integration Buf 12 12 11 Avera Neet 1c Dabove Using t	mary Workshine map. Averagrity Summar fer Width (m) 54.26 25.25 15.39 11.07 age to calculate	eet 1d. Buffer Percen age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	t (%)= asure the is and rate Line E F G H nter the s y Index So	85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58 sub-metric core using t	ach bul le L1b. f Vidth) 3 8 5 7 7 Ratings the form	ffer line Enter th Bu S (ft) From T nula in	a in meters in the rating on Iffer Width (ft) 531.26 759.44 397.80 511.38 ables L1a the box		4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating	100% ≥80% - <100%
Worksh the GIS of the Buffo Line A B C D Workst and L1b below. I	eet 1c. or on the Integration Buf 16 12 11 11 Avera Neet 1c Dabove Using t the SA	mary Workshi Buffer Width he map. Avera grity Summar fer Width (m) 54.26 25.25 15.39 11.07 15.39 11.07 15.39 11.07 15.39 11.07 15.39 11.07 15.39	eet 1d. Buffer Percen age the line length ry Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrit egrity Index Score,	t (%)= asure the s and rate Line E F G H nter the s y Index So enter rati	85% length of e e using Tab Buffer V (m 161.9 231.4 121.2 155.8 486.58 sub-metric core using t ng for Buffe	ach bul le L1b. f Vidth) 3 8 5 7 8 7 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 8 7 8	ffer line Enter th Bu S (ft) From T nula in rity in T	a in meters in the rating on Iffer Width (ft) 531.26 759.44 397.80 511.38 ables L1a the box		4 3 2 1 Table Rating 4 3 2 1 ble L1c. S Rating 4 4	100% ≥80% - <100%

SA CODE :

SF2MI[6]

7/16/24 Date:

Surveyor Initials :

Two Mile Pond Reservoir Transect [6] SA Name :

L4 - Surrounding Land Use

Vorksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) [surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score≔ Coefficient * % LUZ Area		100	75

T	able L4.	Surrounding Land Use Rating
R	ating	LUI Score
\cap	4	≥95 - 100
$\overline{\mathbf{C}}$	3	≥80 - <95
R	2	≥40 - <80
Ĉ	1	<40

DS/AM

B1 - R	elat	ive N	lativı	e Plar	ŭ	ມເມດ	81 - Relative Native Plant Community Composition	odmo	sition												
Work: domin which	iheet ant s it is n	t 6. CT pecie: nore a	Plant s in ear	: Speci ch stra ant. Ea	tum t ch pc	id Po that a lygou	lygon As ppears in h is either	signme the poly assigne	nts. Starf ygon. See d to the	cing with C e footnote: same CT if	TA, enter th s for special it has the se	ne numb instructi ime com	er of the fir ons. If a spi position or	st polygo ecies app a new C	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	ksheet 5 than on or the pc	Enter the s le strata, as blygon.	pecies of sign the	odes for species	the two to the str	top atum in
							Tall Woody Stratum ¹	dy Strati	[m		Short Woody Stratum 2	ody Stra	tum 2		Herbaceou	is/Sparse	Herbaceous/Sparse Stratum ³		CT Score 4	4	
ь С	olyg(Polygon Nos.	\$				Species 1	wΖ	Species 2	152 E N	Species 3	шZ	Species 4	<u>щ Z</u>	Species 5	ш Z	Species 6	щΖ	Raw4	% SA5	Wt Score ⁶
A									 		willow		Ch.n. Sy	N	Cherry.	Z	Bluester	\sim	<u>ه.</u>	N 13	
8										 			at a	2	de est	3	12.22.21	2	5	8 8	
υ											 				*						
	 	 			┣—										 						
ш					 				 				{ 								
<u></u> и.													 	 							
U																: 					
Ξ											, , ,				8						
-		:			_							 				}					
¥				ļ						 	4 4 4 4	 									
		 			<u> </u>																
Σ										 									1		
z	• • • • • •									 				 				 			
0	[i	 			 							
																Fina	Final Weighted Score ⁷	i Score ⁷			
1. Tre	es an	id shri) < sdi	5 m (20) feet	t) and	> 25% to	tal strat		r; 2. Trees a	s sdunds bri	s6m (20	feet) and >	25% tota	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs < 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	ver; 3. He	erbaceous (gramino	ids and	forbs)>1(9% total
stratu Jequal	0 € 1;€ 0	ver. 4I /t. Sco	Raw Sc The is the	tore is Ne prou	from duct _e	Tablı of the	e B1a (App e Raw Sco	oendix B re * % Sı); 7%SA A; 7The f	is the perci inal Weigh	entage of th ited Score i	ie SA are s the sun	a covered l n of the Wt	by the CT . Scores. F	stratum cover. ⁴ Raw Score is from Table B1a (Appendix B); 2%SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table B1 and enter the Rating	inal Wei	decimal nur ahted Scor	mber; th: e on Tab	e total ai le B1 an	rea %SA i d enter tl	must De Rating
for Re	lative	Pativ	re Plan	t Com	unu	S Ţ	mpositio	n on the	SA Rank	Summary	for Relative Native Plant Community Composition on the SA Rank Summary Worksheet.		-								1

Page 7 of 17

Date: 7/16/24 Surveyor Initials: [

۶

sa cop مع المع المع المع sezmi (ح ا

SA Name : Two Mile Pond Reservoir Tr $\operatorname{act} [\ { i \in I }]$

SA CODE: SF2MI [-6]

Date: 7/16/24

SA Name: Two Mile Pond Reservoir Transect [6]

Surveyor Initials : DS/AM

B4 - Native Riparian Tree Regeneration

Worl	ksheet 5	rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
R	ating	Description
X	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1%-5% cover, size classes few.
\sim	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

N/A

Invasive cover (%) >1 >

calculate

Tat	ole B5. Ra	tings for Invasive Exotic Plant Species Cover
F	lating	Invasive Species Cover %
C	4	0%
	3	>0% - <1%
1	2	≥1% - <10%
$\overline{\mathbf{C}}$	1 χ	≥10

١

Additional CTs and Biotic Metric Comments:

This area is supporting many listic life. Most species are listed or the cover page

SA CODE: SF2MI[(]

Date: 7/16/24

SA Name :	Two Mile Pond Reservoir Transect [61
SA Rame .	two mile i ond neservoir transcer [01

Surveyor Initials : DS/AM

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		đ		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		ď		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		D		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
		Ø		The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		ď		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
			, 🗋	There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the flood plain or adjacent valley floor.

Date: 7/16/24

SA Name :	Two Mile Pond Reservoir Transect [6	1
	in a mer and reserved manager (0	,

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

. **Jorksheet 14. Soll Surface Condition.** Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)	
	-0		Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).	
			Multiple livestock and other (fishing, hiking) trails,	
			Vehicle tracks including off-road and construction, etc.	
			Impervious compacted surfaces or pavement	
			Grading or plowing	
			Fill	
			Gravel pits	
			Anthropogenic levees and berms	
			Irrigation-driven salinity and mineral crusts	
			Fire pits	
			Other:	
			Estimate % soil disturbance by segment area	

Average % Soil Disturbance:

	Table A5. Soil Surface Condition Rating					
Rating	Description					
8 4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.					
C 3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.					
C 2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.					
C 1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill, gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.					

NMRAM Montane Riverine Wetlands Version 2.5

		SA Cove	r Worksheet			
iA Code SF2MI [6] SA Name : Two N	sesement				
lode Tsct [6]	AU Name : Trans	d Reservoir				
County Santa Fe	HUC 12 Headw	coregion 6.0 NWFM				
A riparian system 1 decommissioned o of water rights. Driving Directions Driving to Santa F	nd Boundary (Rationale, o that leads into a pond lo due to safety concerns re e from Albuquerque you { you reach the reservoir	ated on the east side garding the reservoir head north on Old Pe	and a water divers	ion to the are	a was recently	shut down due to lack
· · · · · · · · · · · · · · · · · · ·	Conservative and The S		t Data Sharing Restrictions	Results to cli only.		oserved in tland?
Surveyor Role		Surve	yor Name			Surveyor Initials
Landscape	Dustin Schwart	2	·· ·· ··			DS
Biotic	Annie McCoy	·				AM
Abiotic	Dustin Schwart	Z.				DS
Stressors	Dustin Schwart	Z	,		· · · · · · · · ·	DS
Easting (m)	Northing (m)	Northing (m) Zone		Li	atitude (DD ft)	Longitude (DD ft
-105° 53' 24" W	35° 41' 23" N	13	NAD- 83 U	TM 35	5.689722	-105.89
Survey Date	8/13/24	Start Time	9:00		End Time	15:00
SA Biotic Condition A w ble (Ants) X Abiotic Condition	hay had net and ing. A maran (vegetation patterns, cor haranth is baned, Muggle w hro is coverin thydrological alteration r site impacts; explain th turb 1.76 ntw	nposition and structur 3 roming every ort is cov <u>9 ground and</u> s {e.g., dams, walls etc e hydrologic breaks or	1 and t. e, exotics and invi- y where, the ering pond <u>persolving</u> .]; flooding charact other factors that	a king o asives, disturb ore hound Villa covering iteristics and e idefine the S/	ver evidence, sprars ? s full ground evidence of ove a limits)	rea fire and herbivory) to have already green (Dragonn fizards + flies see
Assessment Summa	ry (Overall site condition	•	ents after the field VCCCH	data is collect	ted.) 150011 S.	Aro.
Provisional Field Score 3,18 Rar	nk B Surveyor(s)	DS/AM Final Score	3,18 Rank	₿ Initials	PS	Date 8/13/24

Page 1 of 17

SA Name : Two Mile Pond Reservoir Transect [6]

Date: 8/13/24

Surveyor Initials : DS/AM

Landscape Context

... - Buffer Integrity Index

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

						-		· ·· ···				
Image	ery Google Earth KMZ. file				Image	Date	6/23					
Allowe						Exclud	ed nor	-buffer/RCC I	and c	over elen	ents	
Buffer	RCC						RCC					
X	X	Natural or semi-natural vegetation patches					X	Commercial/residential developments, parking lots, dams, bridges, revetments, and other structures				
X	[X]	Small irrigati	on ditches without	levees				Lawns, parks	Lawns, parks, golf courses, sports fields			
		Old fields, un	maintained					Railroads				
		Open range l	and					Maintained levees, sediment piles, construction materials, staging areas				
X	X	Foot trails, he intensity)	orse trails, unpaved	l bike trails (I	ow			Intensive live	estock	areas, ho	orse paddocks, feedlots	
X	X	Non-channel	open water					Intensive agr row crops, or			ained pastures, hay fields, neyards	
X	X	Non-functior naturally occ	iing abandoned ve urring levees	getated leve	es, or	X	×	Paved roads graded road:		veloped s	econd-order unpaved but	
		unpaved two	tracks roads			×	X	Open water l structure	n water bounded by a levee or other manmade sture			
וםו		Other						Other				
Works	heet 1	b. Buffer Per	ent Sub-metric. N	Aeasure or e	stimate	the per	centao	e of the		Table	L1a. Buffer Percent	
SA peri	meter	composed of	allowed buffer ele	ments and e	nter inte	o the Bu	iffer Pe	rcent	-		·······	
		ate the sub-management Imary Workshi	etric using Table L1	a and enter	the ratir	ng on th	ie Butfi	er		Rating	Buffer Percent	
	y sun		Buffer Percen	t (%)= 8	35%				2	43	100% ≥80% - <100%	
	·									2	≥50% - <80%	
			Worksheet 1c. Buffer Width Sub-metric. Measure the length of e the GIS or on the map. Average the line lengths and rate using Tab							~		
		110 111373 01/01	عمم فلمم كالمم امس معك	e and make						1	<50%	
Line				s and rate us					Ċ	1	<50%	
	Bu		age the line length y Worksheet 1d. Buffer Width			le L1b. I	inter ti			1		
Line		grity Summar ffer Width (m)	y Worksheet 1d.		ing Tabl Buffer V (m	le L1b. I Ni dth)	Bu	ne rating on Iffer Width (ft)		1	<50%	
A		grity Summai ffer Width	y Worksheet 1d. Buffer Width		ing Tabl	le L1b. I Ni dth)	Bu	ne rating on Iffer Width		1 Tabl	<50% e L1b. Buffer Width Average buffer width ≥190m	
	1	grity Summar ffer Width (m)	y Worksheet 1d. Buffer Width (ft)	Line	ing Tabl Buffer V (m	le L1b. I Ni dth) 3	Bu	ne rating on Iffer Width (ft)		1 Tabl Rating 4 3	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m	
A B	1	grity Summar ffer Width (m) 64.26	y Worksheet 1d. Buffer Width (ft) 538.91	Line E	Buffer V (m 161.9	le L1b. I Width) 3	Bu	ne rating on iffer Width (ft) 531.26		1 Tabl Rating 4 3 2	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m	
A B C	1	grity Summar ffer Width (m) 64.26 25.25 15.39	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	Line E F G	ing Tabl Buffer V (m 161.9 231.4 121.2	le L1b. I Nidth) 3 8	Bu	ne rating on (ffer Width (ft) 531.26 759.44 397.80		1 Tabl Rating 4 3	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m	
A B	1	grity Summar ffer Width (m) 64.26 25.25 15.39 11.07	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40	Line E F	ing Tabl Buffer V (m 161.9 231.4 121.2 155.8	le L1b. I Nidth) 3 8 5 7	Bu	ne rating on (ffer Width (ft) 531.26 759.44		1 Tabl Rating 4 3 2 1	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m	
A B C	1	grity Summar ffer Width (m) 64.26 25.25 15.39 11.07	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57	Line E F G	ing Tabl Buffer V (m 161.9 231.4 121.2	le L1b. I Nidth) 3 8 5 7	Bu	ne rating on (ffer Width (ft) 531.26 759.44 397.80		1 Tabl Rating 4 3 2 1	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m	
A B C D	1 1 1 1 Aver	grity Summar ffer Width (m) 64.26 25.25 15.39 11.07 age d. Buffer Inte	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) grity Summary. E	Line E F G H nter the sub	Buffer V (m 161.9 231.4 121.2 155.8 486.58 -metric	le L1b. I Nidth) 3 8 5 5 7 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8	Bu Bu (ft)	ne rating on iffer Width (ft) 531.26 759.44 397.80 511.38 Tables L1a		1 Tabl Rating 4 3 2 1	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m	
A B C D Works and L1	1 1 1 Aver heet 1 b abov	rgrity Summar ffer Width (m) 64.26 25.25 15.39 11.07 age d. Buffer Inter re to calculate	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity	Line E F G H nter the sub	Buffer V (m 161.9 231.4 121.2 155.8 486.58 -metric e using 1	le L1b. I Nidth) 3 8 5 5 7 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8	Bu Bu (ft) from T nula in	e rating on ffer Width (ft) 531.26 759.44 397.80 511.38 ables L1a the box		1 Tabl Rating 4 3 2 1 1 ble L1c. S	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer Integrity	
A B C D Works and L1 below.	1 1 1 Aver heet 1 b abov Using	rgrity Summar ffer Width (m) 64.26 25.25 15.39 11.07 age d. Buffer Inter re to calculate	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score,	Line E F G H nter the sub	Buffer V (m 161.9 231.4 121.2 155.8 486.58 -metric e using 1	le L1b. I Nidth) 3 8 5 5 7 8 8 8 7 8 8 8 8 8 8 8 8 8 8 8 8	Bu Bu (ft) from T nula in	e rating on ffer Width (ft) 531.26 759.44 397.80 511.38 ables L1a the box		1 Tabl Rating 4 3 2 1 ble L1c. S Rating	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer Integrity Score	
A B C D Works and L1 below. 1 on	1 1 1 Aver heet 1 b abov Using the S/	grity Summar ffer Width (m) 64.26 25.25 15.39 11.07 age d. Buffer Inter re to calculate the Buffer Inter A Summary W	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score, orksheet.	Line E F G H nter the sub y Index Score enter rating	Buffer V (m 161.9 231.4 121.2 155.8 486.58 -metric e using 1 for Buffi	le L1b. I Nidth) 3 8 8 5 5 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 7 8 8 7 8 8 7 8 8 7 8 7 8 8 7 8 7 8 7 8 7 8 8 7 8 8 7 8 7 8 8 7 8 7 8 8 7 8 8 8 7 8 8 8 8 7 8	Bu Bu (ft) from T nula in rity in	ables L1a the box Table L1c		1 Tabl Rating 4 3 2 1 ble L1c. S Rating 4	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer Integrity Score >3.5	
A B C D Works and L1 below.	1 1 1 Aver heet 1 b abov Using the S/ % Rat	grity Summar ffer Width (m) 64.26 25.25 15.39 11.07 age d. Buffer Inter re to calculate the Buffer Inter A Summary W	y Worksheet 1d. Buffer Width (ft) 538.91 410.92 378.57 364.40 148.31 (m) egrity Summary. E the Buffer Integrity egrity Index Score,	Line E F G H nter the sub y Index Score enter rating	Buffer V (m 161.9 231.4 121.2 155.8 486.58 -metric e using 1 for Buffi	le L1b. I Nidth) 3 8 8 5 5 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 8 7 8 7 8 8 7 8 8 7 8 8 7 8 7 8 8 7 8 7 8 7 8 7 8 8 7 8 8 7 8 7 8 8 7 8 7 8 8 7 8 8 8 7 8 8 8 8 7 8	Bu Bu (ft) from T nula in rity in	e rating on ffer Width (ft) 531.26 759.44 397.80 511.38 ables L1a the box		1 Tabl Rating 4 3 2 1 ble L1c. S Rating 4 3	<50% e L1b. Buffer Width Average buffer width ≥190m ≥130 - <190m ≥65 - <130m <65m Summary Rating for Buffer Integrity Score >3.5 >2.5 - ≤3.5	

SA CODE :

SF2MI[6]

8/13/24 Date :

Surveyor Initials :

Two Mile Pond Reservoir Transect [6] SA Name:

L4 - Surrounding Land Use

Norksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) surrounding the SA. Calculate the Land Use Index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or solls	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel [that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
griculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Т	Table L4. Surrounding Land Use Rating					
Ŕ	ating	LUI Score				
Ċ	4	≥95 - 100				
C	3	≥80 - <95				
8	2	≥40 - <80				
C	1	<40				

DS/AM

Page 7 of 17

SA CODE: SF2MI[6]

SA Name: Two Mile Pond Reservoir Transect [🧹]

Date: 8/13/24

Surveyor Initials : DS/AM

B4 - Native Riparian Tree Regeneration

i Worl	B4. N ksheet 5	ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
R	ating	Description
Ŕ	4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
<u> </u>	3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
с С	2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
	1	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

 N_{li}

Invasive co	over (%)	70	calculate
		/	
er			

Tab	Table B5. Ratings for Invasive Exotic Plant Species Cover						
F	Rating	Invasive Species Cover %					
C	4	0%					
	3	>0% - <1%					
•	2	≥1% - <10%					
8	1	, ≥10					

Additional CTs and Biotic Metric Comments:

A list of all the biotic life can be san in the cover page

SF2MI[6] SA CODE :

Date :

Two Mile Pond Reservoir Transect [\oint] SA Name :

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		Ø		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
		ď		Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
\$ \$		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium		Ø		There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		ď		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
}				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

8/13/24

DS/AM Surveyor Initials :

Date: 8/13/24

SA Name :	Two Mile Pond Reservoir Transect [1	1
	two title i otto iteserron isanseet	0	

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

Jorksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or lowdensity wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			Fill
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other:
			Estimate % soil disturbance by segment area
, , <u> </u>	l	L	Average % Soll Disturbance:

	Table A5. Soil Surface Condition Rating					
Rating		Description				
ø.	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.				
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.				
C	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.				
ſ	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.				

NMRAM Montane Riverine Wetlands Version 2.5

			SA Cove	r Worksheet				
SA Code	SF2MI[6]	SA Name : Two M	Aile Pond Reservoir		Project : Ripa	irian Asses	ement	
Code	Tsct [6]	AU Name : Trans	sect [(,]		WOI : Two M	lile Pond R	eservoir	
County Santa Fe HUC 12 Headwaters Santa Fe River Elevation (ft) 7299 (m) 2224.7 Ecoregion 6.0 NWFM								
A ripa decor of wat Driving Di Drivir	rian system t nmissioned d ter rights. rections ig to Santa Fe	lue to safety concerns re	cated on the east side e egarding the reservoir a head north on Old Pe	of Santa Fe bordering th and a water diversion to cos Trail. Then head east	the area was re	ecently shu	ut down due to lack	
		Conservative and The S		t Data Sharing Result Restrictions only.	ts to client	Fish Obse Wetlar		
Surve	yor Role		Surve	yor Name			Surveyor Initials	
Land	İscape	Dustin Schwart	Z				DS	
Biotic Annie McCoy AM								
Ablotic Dustin Schwartz DS								
Stressors Dustin Schwartz DS								
Easti	Easting (m) Northing (m) Zone Datum Latitude (DD ft) Longitude (DD ft							
-105° 53'	' 24" W	W 35° 41' 23" N 13 NAD- 83 UTM 35.689722 -105.89						
Survey Date 9/11/24 Start Time 9:00 End Time 15:00								
·			SA De	scription	_ 1			
SA Lands	cane Conte	ct (summarize the wetia	nd and surrounding la	ndscape; include conditi	on and impact	s)		
		and dry	ring land	getting	ready	for		
SA Biotic	Condition (vegetation patterns, cor	mposition and structure	e, exotics and invasives,	disturbance ev	idence, fir	e and herbivory)	
h	ild Sunfi	lover, Puiple Aste	r, chimisa, gle	bemallow, chicken	y All in	6/001	m, A	
Se	ora bir	d call can be	e heard in	the cat tails,	Palmer	Amaron	nthis	
L.	Mullein, 9	ground cherries .	also prominent	Many pollinators	(gnats bea	tles, 6	ees ja grea)	
SA Abiot	ic Condition	(hydrological alteration	is (e.g., dams, walls etc.]; flooding characteristic	s and evidence	e of overba	ink flooding; soil	
<u>disturban</u>	Last	year dead 1 overed in Mug	Mustard Still Wort	other factors that define in area but	ground ST		nist and	
		pH 6,85	12.5°C 4394	S/cm 22 ntu	1.99 m	rs/L DO		
Assessme		·		nts after the field data is	· · · · · · · · · · · · · · · · · · ·			
	,			ng and he	and the second s	a de a por		
		before + 1	$\sim 1^{\circ}$					

SA CODE: SF2MI(6)

SA Name : Two Mile Pond Reservoir Transect [6]

Date: 9/11/24

Surveyor Initials : DS/AM

Landscape Context

Worksheet 1a. Buffer and RCC Checklist. Check off land cover elements within the buffer area or RCC corridors that are either allowed, or are excluded and considered non-buffer elements that disrupt ecosystem connectivity. Indicate the imagery type and date (season and year of imagery).

lmager	ry 📑	Google Earth	n KMZ. file			Image	Date	6/23			
Allowed buffer/RCC land cover elements					Exclud	led nor	n-buffer/RCC	land o	cover elen	nents	
Buffer	RCC					Buffer	RCC				
X	X	Natural or se	emi-natural vegetat	ion patcl	hes	N	×	1			relopments, parking lots, and other structures
X	X	Small irrigati	ion ditches without	levees				Lawns, park	s, golf	courses, s	sports fields
		Old fields, ur	nmaintained					Railroads			
		Open range	land					Maintained materials, sl			t piles, construction
	[Y]	Foot trails, h intensity)	orse trails, unpaved	l bike tra	ils (low			Intensive liv	restoc	k areas, ho	orse paddocks, feedlots
X	X	Non-channel open water						Intensive ag row crops, c			ained pastures, hay fields, neyards
X	1	Non-functioning abandoned vegetated levees, or naturally occurring levees				X	X	graded road	ls		econd-order unpaved but
<u>ר</u> ו		unpaved two	o tracks roads			X	X	Open water structure	boun	ded by a l	evee or other manmade
╷᠋		Other						Other			
Works	heet 11	o. Buffer Per	cent Sub-metric.	Aeasure	or estimate	the per	centag	e of the		Table	e L1a. Buffer Percent
SA peri	meter	composed of	f allowed buffer ele	ments ar	nd enter int	o the Bu	uffer Pe	rcent			Buffer Percent
		te the sub-m mary Worksh	etric using Table L1 Beet 1d	la and en	nter the rati	ng on ti	ne Butte	er		Rating	
Buffer Percent (%)= 85%									4 3	<u>100%</u> ≥80% - <100%	
Worksheet 1c. Buffer Width Sub-metric. Measure the length of e							<u> </u>	_	2	≥50% - <80%	
									<u>ור</u>	1	<50%
the GIS or on the map. Average the line lengths and rate using Tabl the Buffer Integrity Summary Worksheet 1d.							c racing on				
Line Buffer Width Buffer Width Line Buffer V					Bu	iffer Width	ᆌ	Tabl	le L1b. Buffer Width		
		(m)	(ft)	LIIT	(m	-	(ft)		-11 1	Rating	Average buffer width
Α	16	54.26	538.91	E	161.9	93		531.26	\Box	4	≥190m
B	12	25.25	410.92	F	231.4	48		759.44	8	3	≥130 - <190m
c	1	15.39	378.57	G	121.2	25				2	≥65 - <130m
	ļ				-					1	<65m
<u> </u>							Summary Rating for Buffer				
Average 148.31 (m) 486.58					8	(ft)		۱ I	Die FiC 3	Integrity	
Worksl	heet 10	l. Buffer Inte	egrity Summary. E	nter the	sub-metric	Ratings	from T	ables Līa		Dating	Score
Worksheet 1d. Buffer Integrity Summary. Enter the sub-metric l and L1b above to calculate the Buffer Integrity Index Score using t									Rating	Score	
below. Using the Buffer Integrity Index Score, enter rating for Buffe							et. 1. 1 . 1 .				
below.	Using t	he Buffer int	egrity Index Score,			fer Integ	rity in `	Table L1c		4	>3.5
below. 1 on	Using t the SA	he Buffer Int Summary W	egrity Index Score, /orksheet.	enter rat	ing for Buff		-		R	3	>2.5 - ≤3.5
below.	Using t the SA	he Buffer Int Summary W	egrity Index Score,	enter rat	ing for Buff		-	Table L1c dex Score			

SF2MI[6] SA CODE :

Date :

Surveyor Initials :

Two Mile Pond Reservoir Transect [6] SA Name :

L4 - Surrounding Land Use

Worksheet 4. Surrounding Land Use. Enter the percent area occupied by a given Land Use Element in the Land Use Zone (LUZ) (surrounding the SA. Calculate the Land Use index (LUI) Score by element as the product of the element coefficient times the percent of the LUZ Area occupied. (The %LUZ Area must total 100%.) Sum the LUI scores for each element to create the final LUI Score. Rate using Table L4 and enter the rating in the SA Rank Summary Worksheet.

Land Use Element	Coef	% LUZ Area	LUI Score
Paved roads, parking lots, domestic or commercially developed buildings, mining (gravel pit, quarry, open pit, strip mining), railroads	0	0	0
Unpaved roads (e.g., driveway, tractor trail, unpaved parking lots), paddock, dirt lot	0.1	0	0
Dredging, borrow pits, abandoned mines, water-filled artificial impoundments (ponds and reservoirs)	0.1	0	0
Filling or dumping of sediment or soils	0.1	0	0
Intense recreation (all-terrain vehicle use, camping, popular fishing spot, etc.)	0.3	0	0
Rip-rapped channel (highly modified channel with severely limited vegetation zone that is altered by human activities but not a completely concrete channel (that goes under paved roads]), junkyards, trash dumps, disturbed ground (not including roads)	0.3	0	0
Ski area	0.4	0	0
Dam sites and flood-disturbed shorelines around water storage reservoirs	0.5	0	0
Abandoned artificial impoundments (ponds and reservoirs) and associated disturbed flood zones	0.5	10	5
Artificial/Constructed wetlands, irrigation ditches	0.7	20	14
Developed/Managed trail system (high use trail)	0.8	5	4
Agriculture - active tilled crop production	0.2	0	0
Agriculture - permanent crop (vineyards, orchards, nurseries, berry production)	0.3	0	0
Manicured lawns, sport fields, and golf courses; urban manicured parks	0.3	0	0
Old fields and other disturbed fallow lands dominated by ruderal and/or exotic species (e.g., kochia, Russian thistle, mustards, annual vegetation)	0.5	0	0
Mature old fields and other fallow lands with natural composition, introduced hay field and pastures (e.g., perennial vegetation cover)	0.7	0	0
Restoration areas in process to natural conditions (re-conversion in process)	0.8	65	52
Haying of native grassland (e.g., no tillage, haying and baling only)	0.9	0	0
Heavy logging or tree removal with >50% of large trees (e.g., >30 cm diameter at breast height) removed, woodland/shrub vegetation conversion (chaining, cabling, rotochopping)	0.3	0	0
Commercial tree plantation, Christmas tree farms	0.6	0	0
Selective logging or tree removal with <50% of large trees (e.g., >30 cm diameter at breast height) removed	0.8	0	0
Mature restoration areas returned to natural conditions (re-converted)	0.9	0	0
Natural area, land managed for native vegetation - No agriculture, logging, development	1	0	0
LUI Score= Coefficient * % LUZ Area		100	75

Т	able L4. Suri	rounding Land Use Rating			
R	Ating LUI Score 4 ≥95 - 100				
$\hat{}$	4	≥95 - 100			
Ĉ	3	≥80 - <95			
(X	2	≥40 - <80			
Ĉ	1	<40			

9/11/24

DS/AM

	SA COF		sf2Mi1&]		SAL	SA Name :		Two Mile Pond Reservoir Tr		ैत [🔨]		Date:	9/11/24	Sun	Surveyor Initials :	tials :	¥ i	
ž	Relativ	ve Nat	31 - Relative Native Plant Community Composition	mmo	unity Con	nposit	ion						:					
don whi	rksheet (ninant sp ch it is m	6. CT PI ecies in ore abu	ant Species a each stratum ndant. Each p	ind Pol I that al Iolygon	lygon Assig ppears in the tis either ass	nments e polygc signed tu	Starting with on. See footno o the same CT	Worksheet 6. CT Plant Species and Polygon Assignments. Starting with CT A, enter the number of the first polygon from Worksheet 5. Enter the species codes for the two top dominant species in each stratum that appears in the polygon. See footnotes for special instructions. If a species appears in more than one strata, assign the species to the stratum in which it is more abundant. Each polygon is either assigned to the same CT if it has the same composition or a new CT is created for the polygon.	e numbe Instructio ne comp	r of the first ons. If a spec osition or a	polygor ies appe new CT	r from Worl Ars in more is created fo	sheet 5. than on or the po	Enter the s e strata, as: lygon.	pecies co	odes for t	the two o the str	top atum in
					Tall Woody Stratum ¹	Stratum	1	Short Woody Stratum 2	ody Strat	um 2		Herbaceous/Sparse Stratum ³	s/Sparse	Stratum ³		CT Score 4	4	,
Ъ	Polygon Nos.	n Nos.			Species 1 E		Species 2 E	Species 3	<u> </u>	Species 4	<u>ш Z</u>	Species 5	шz	Species 6	ш Z	Raw ⁴	% SA5	Wt Score ⁶
A								N. Y.S.	2	6 4 Q		9 10 to	Ň	Cares ?	1/1/	5	60	
8		·		· · · ·						(4)4 (U	2.	he her	W	2 (e 531	1	2	Ş	
U							, ,	 									1	
Δ								 								1		
ш					3		 											
μ.							 											
U													5					
Ŧ				1 <u></u>														
-																		
-						+												
$ $ \times																		
							\$							\$				
Σ									 									
z																		
0									 									
													Final	Final Weighted Score ⁷	Score ⁷			7
	rees and	shrubs	> 6 m (20 fee	et) and	> 25% total	stratum	cover; 2. Tree	1. Trees and shrubs > 6 m (20 feet) and > 25% total stratum cover; 2. Trees and shrubs ≤ 6m (20 feet) and > 25% total stratum cover; 3. Herbaceous (graminoids and forbs)>10% total	5m (20 ft	set) and >25	% total	stratum cov	er; 3. He	tbaceous (graminoi	ds and fo	orbs)>10	% total
stra equ	tum cove lal 1; 6Wt Bolotica	er, ⁴ Raw . Score i	Score is from s the product s the product	n Table : of the	B1a (Appen Raw Score *	dix B); ¹ % SA; 7	%SA is the pe 7The Final Wei	stratum cover. 4Raw Score is from Table 81a (Appendix B): ⁵ %SA is the percentage of the SA area covered by the CT and expressed as a decimal number; the total area %SA must equal 1; ⁶ Wt. Score is the product of the Raw Score * % SA; ⁷ The Final Weighted Score is the sum of the Wt. Scores. Rate the CT Final Weighted Score on Table 81 and enter the Rating	e SA area the sum	covered by of the Wt. S	' the CT a cores. Ra	and express ite the CT F	ed as a d inal Wei <u>c</u>	ecimal nur hted Score	nber; the e on Table	total are e B1 and	еа %SA г l enter tł	nust ie Rating
<u></u>					mposition or	Ac ant r	Kank Summa	tion held the inditive many worksheet.	heet. Dado 7 of 17									

Page 7 of 17

SA CODE: SF2MI [6]

Date: 9/11/24

Surveyor Initials : DS/AM

2.10

SA Name : Two Mile Pond Reservoir Transect [🂪]

B4 - Native Riparian Tree Regeneration

	ative Riparian Tree Regeneration rating. Using the polygon percent cover of native tree seedlings, saplings and poles from , rate the SA based on polygon percent cover and patch density. Enter the rating on the SA Rank Summary Worksheet.
Rating	Description
C 4	Native poles, sapling, and seedlings trees well represented, obvious regeneration, many patches or polygons with >5% cover, typically multiple size (age) classes.
× 3	Native poles, saplings and/or seedlings common, scattered patches or polygons with 1% -5% cover, size classes few.
2	Native poles, saplings and/or seedlings present but uncommon, restricted to one or two patches or polygons with typically <1% cover, little size class differentiation.
<u> </u>	Native poles, saplings, and/or seedlings absent (0% cover).

B5 - Invasive Exotic Plant Species Cover

Worksheet 9. Based on Worksheets 5 and 6, calculate or estimate the percentage cover of Invasive exotic species for the SA and enter below. Rate using Table B5 and enter the rating on the SA Rank Summary Worksheet.

Rating Method

PAR R.

Invasive cover (%)

calcuiate

Tab	Table B5. Ratings for Invasive Exotic Plant Species Cover							
R	ating	Invasive Species Cover %						
C	4	0%						
<u></u>	3	>0% - <1%						
	2	≥1% - <10%						
\overline{C}	1 X	≥10						

Additional CTs and Biotic Metric Comments:

A list of biotic factors have be seen on cours page,

SA CODE: SF2MI [6]

Date: 9/11/24

Surveyor Initials :

DS/AM

SA Name: Two Mile Pond Reservoir Transect [6]

A3- Channel Equilibrium

Worksheet 12. Channel Equilibrium Checklist. Check all field indicators that apply to the upper, middle and lower segment of the SA observed at the channel edge of the traverse. Rate using the Table A3 descriptions and based on a preponderance of evidence from this checklist. Enter the rating on the SA Rank Summary Worksheet.

Condition	Upper Segment	Middle Segment	Lower Segment	Field Indicators(check all existing conditions)
		ď		The channel has a well-defined bankfull contour that clearly demarcates the point of incipient flooding where moderate frequent flow events spread flow across the floodplain.
				Perennial riparian vegetation is abundant and well established along the bankfull contour, but not below it.
		Ø		There is leaf litter, thatch, or wrack in most pools.
Indicators of		Ø		The channel contains embedded woody debris of the size and amount consistent with what is naturally available in the riparian area.
Channel Equilibrium				There is little or no active undercutting or burial of riparian vegetation.
				There are no bars that are densely vegetated with perennial vegetation (neither mid-channel bars or point bars).
		Ø		Channel and point-bars consist of well-sorted bed material.
				The channel bed is not planar and without an abundance of fine materials filling the interstitial spaces between larger stream substrate.
		ď		There are channel pools at meander bends and some deep pools within the reach.
				The channel is characterized by deeply undercut banks with exposed living roots of trees or shrubs.
				There are abundant bank slides or slumps, or the lower banks are uniformly scoured and not vegetated.
				Bank vegetation is declining in stature or vigor, or many riparian trees and shrubs along the banks are leaning or falling into the channel.
Indicators of Active Degradation				Channel bed is scoured to large cobbles or boulders and entrained bank material is filling the cobble interstices and pools.
				There are active headcuts within the channel.
				An obvious historical floodplain has recently been abandoned, as indicated by the age structure of its riparian vegetation.
				There is abundant fresh splays of coarse sediment covering the floodplain above the natural point bar elevation.
				There are partially buried living tree trunks or shrubs along the banks.
Indicators of Active Aggradation				The channel bed is planar overall. The stream lacks well-defined channel pools at meander bends, or pools are filled with sediment.
				There are partially buried or sediment-choked culverts.
				There are avulsion channels on the floodplain or adjacent valley floor.

SA CODE: SF2MI [6]

Date: 9/11/24

		1	
SA Name :	Two Mile Pond Reservoir Transect [(\mathcal{D}))

Surveyor Initials : DS/AM

A5 - Soil Surface Condition

Norksheet 14. Soil Surface Condition. Check all that apply in the upper, middle and lower SA segments during the field reconnaissance. The absence of these indicators would signify that disturbances are naturally occurring (e.g., flood deposition or low-density wildlife trails). Estimate the percent soil disturbance by segment area and referring to the SA abiotic map. Rate using Table A5 and enter on the SA Rank Summary Worksheet.

Upper Segment	Middle Segment	Lower Segment	Field Indicators (Check all existing conditions)
			Active erosion features due to anthropogenic disturbance (eg. rills, gullies, plant pedestals).
			Multiple livestock and other (fishing, hiking) trails,
			Vehicle tracks including off-road and construction, etc.
			Impervious compacted surfaces or pavement
			Grading or plowing
			FIL
			Gravel pits
			Anthropogenic levees and berms
			Irrigation-driven salinity and mineral crusts
			Fire pits
			Other
······			Estimate % soil disturbance by segment area

Average % Soil Disturbance:

D

[Table A5. Soil Surface Condition Rating								
R	lating	Description							
R	4	Bare soil areas due to anthropogenic disturbance absent or very limited. No human-caused impervious surfaces or gravel pits are found within the SA. Total disturbance, including erosion, impervious surfaces, fill, or other anthropogenic degradation to the soil surface is less than 1% of the SA.							
C	3	Some amount of bare soil from human causes is present but the extent is limited. Area of impervious surfaces are minimal in extent. Total disturbance, including erosion, impervious surfaces, fill, gravel pits, vehicle tracks or other anthropogenic degradation to the soil surface is between 1% and 5% of the sampling area.							
c	2	Bare soils from human causes are common. These may include dense livestock trails, vehicle tracks, trails, construction staging areas, mechanical rutting, or irrigation-driven salinity. Soil disturbance, while apparent, is limited to specific areas and not found across the majority of the SA. Total disturbance, including erosion, impervious surfaces, fill, gravel mining, or other anthropogenic degradation to the soil surface is greater than 5% or less than 10% of the SA.							
c	1	Bare soil areas degrade portions of the site because of altered hydrology or other long-lasting impacts. Deep ruts from off-road vehicles or machinery are present. Livestock disturbance or trails are widespread and several inches deep. Water is channeled into rills or ponded. Additional human-caused impervious surfaces or soil compaction are present. Total disturbance, including erosion, impervious surfaces, fill,gravel mining or other anthropogenic degradation to the soil surface is equal to or greater than 10% of the SA.							

Appendix E.

Field Photos



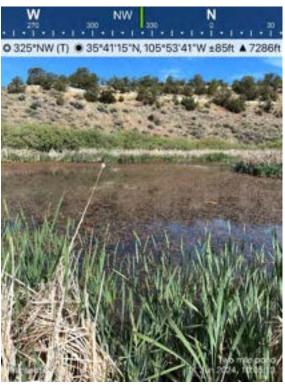
March 7th 2024 Transect 6



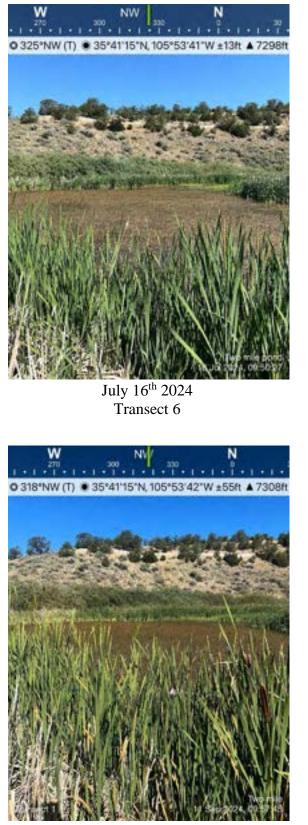
April 9th 2024 Transect 6



May 15th 2024 Transect 6



June 11th 2024 Transect 6



September 11th 2024 Transect 6



August 13th 2024 Transect 6



October 9th 2024 Transect 6

JSAI



May 15th 2024 Transect 5



April 9th 2024 Transect 5



June 11th 2024 Transect 5



September 11th 2024 Transect 5



April 9th 2024 Transect 5



October 9th 2024 Transect 5



May 15th 2024 Transect 4



April 9th 2024 Transect 4



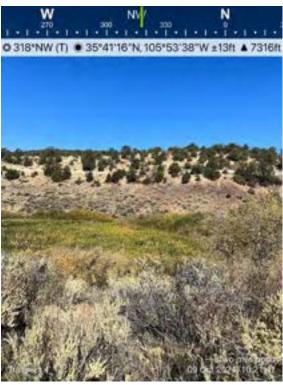
June 11th 2024 Transect 4



September 11th 2024 Transect 4



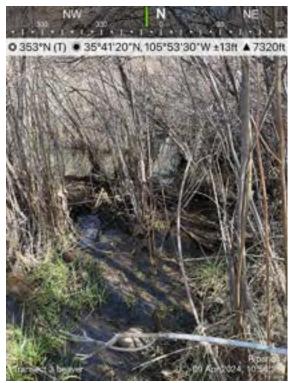
August 13th 2024 Transect 4



October 9th 2024 Transect 4



March 7th 2024 Transect 3



April 9th 2024 Transect 3



May 15th 2024 Transect 3



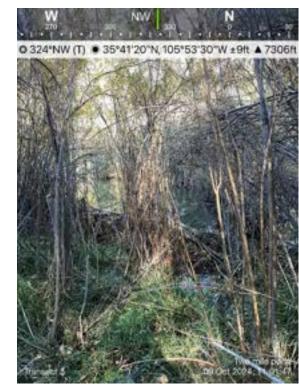
June 11th 2024 Transect 3



September 11th 2024 Transect 3



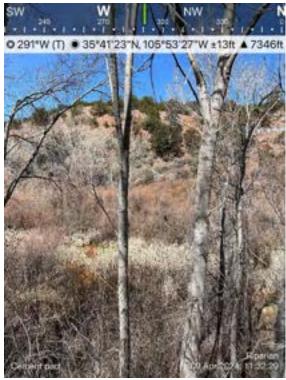
August 13th 2024 Transect 3



October 9th 2024 Transect 3



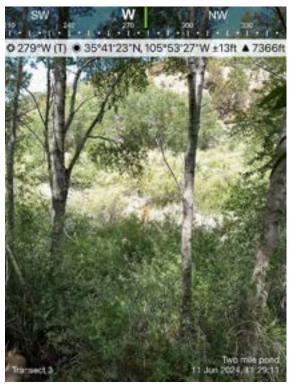
March 7th 2024 View from top of dam.



April 9th 2024 View from top of dam.



May 15th 2024 View from top of dam.



June 11th 2024 View from top of dam.



September 11th 2024 View from top of dam.



August 13th 2024 View from top of dam.



October 9th 2024 View from top of dam.



March 7th 2024 Transect 1



June 11th 2024 Transect 1



May 15th 2024 Transect 6



May 15th 2024 Transect 2.5

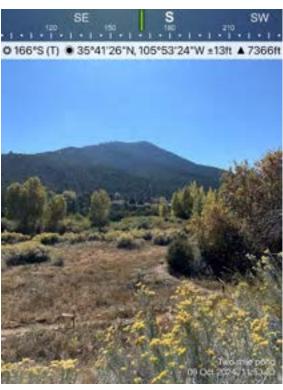
JSAI



September 11th 2024 Transect 1



June 11th 2024 Transect 1



October 9th 2024 Transect 1



Large Box Elder bug.



Goldfish in pond.



Spotted Towhee



Mule Deer



August 13th 2024 Blooming



September 11th 2024 Garter Snake



September 11th 2024 Racoon Track

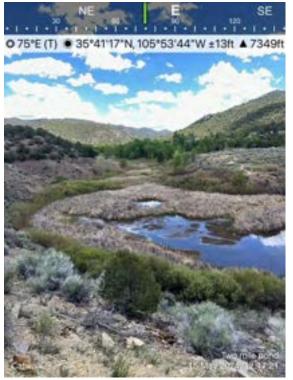


October 9th 2024 Hedgehog Cactus





April 9th 2024 Two Mile Pond



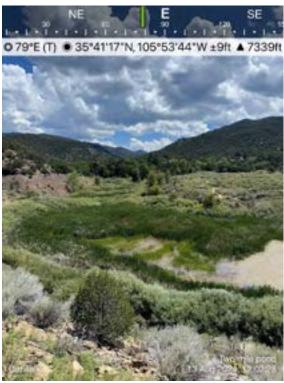
May 15th 2024 Two Mile Pond



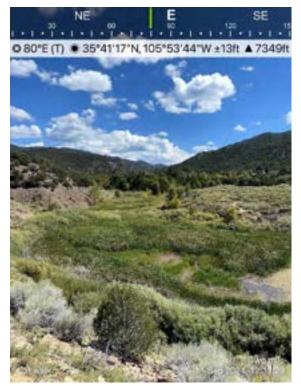
June 11th 2024 Two Mile Pond



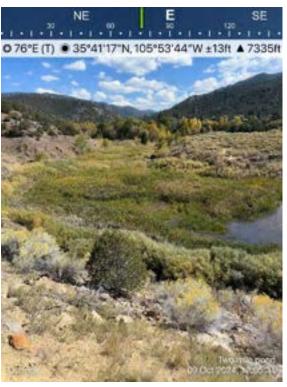
July 16th 2024 Two Mile Pond



August 13th 2024 Two Mile Pond



September 11th 2024 Two Mile Pond



October 9th 2024 Two Mile Pond

Appendix F.

Santa Fe, New Mexico, Mosquito Study Two-Mile Pond



City of Santa Fe, New Mexico Integrated Pest Management



Two Mile Pond Mosquito Survey

City of Santa Fe employees with assistance from New Mexico Department of Health (DOH) conducted presence sampling for adult mosquitos at Two Mile Pond (TMP). Trapping was conducted according to DOH protocols, including a standard sampling array using gravid traps and light traps specifically designed for capturing mosquitos. Weather conditions were ideal, and trapping proved successful.

In total, sixty-six mosquitos were captured with seven species representing the four genera identified (Table 1). All species identified are common throughout NM and would be expected in an environment such as Two Mile Pond. All species captured are considered nuisance species except C. tarsalis, a common vector for West Nile Virus (WNV) in New Mexico.

Santa Fe has a low number of WNV cases and very little mosquito sampling has been conducted previously. As such, historical data may be hard to come by. With the data from this recent sampling, we are unable to draw any conclusions as to how changes in TMP flows have impacted the mosquito populations in the area. However, this testing does confirm the presence of mosquitos at the time of sampling. To further examine the status of the mosquito population at TMP a long-term study would need to be developed and implemented.

		Percent of	
		total	
Species	Count	sample	WNV vector
Aedes increpitus	1	1.52%	
Aedes trivittatus	11	16.67%	
Anopheles			
freeborni	6	9.09%	
Culex tarsalis	18	27.27%	yes
Culiseta incidens	4	6.06%	
Culiseta increpitus	1	1.52%	
Culiseta inornata	25	37.88%	

Table 1: Sample results from June 18th, 2024 field collection

Appendix G.

Soil moisture maps

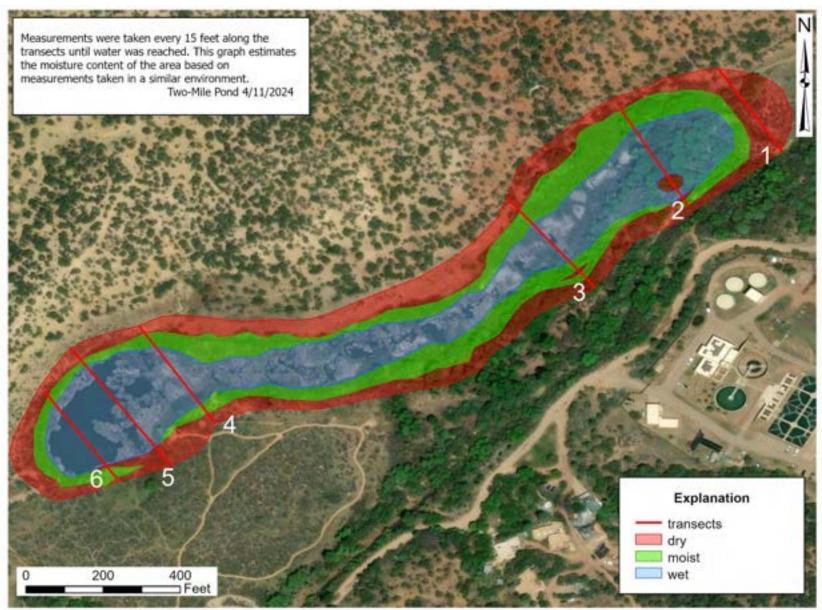


Figure G1. Moisture map April 11, 2024.

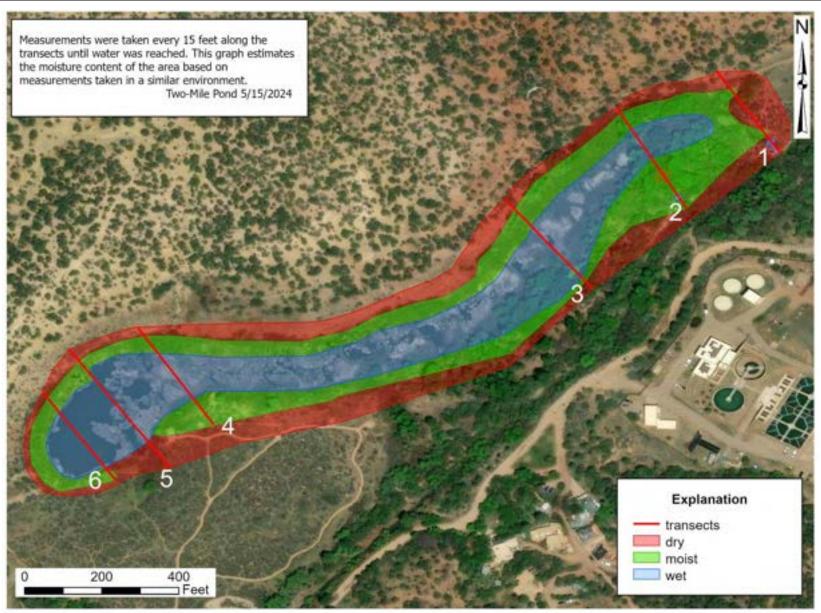


Figure G2. Moisture map May 15, 2024.

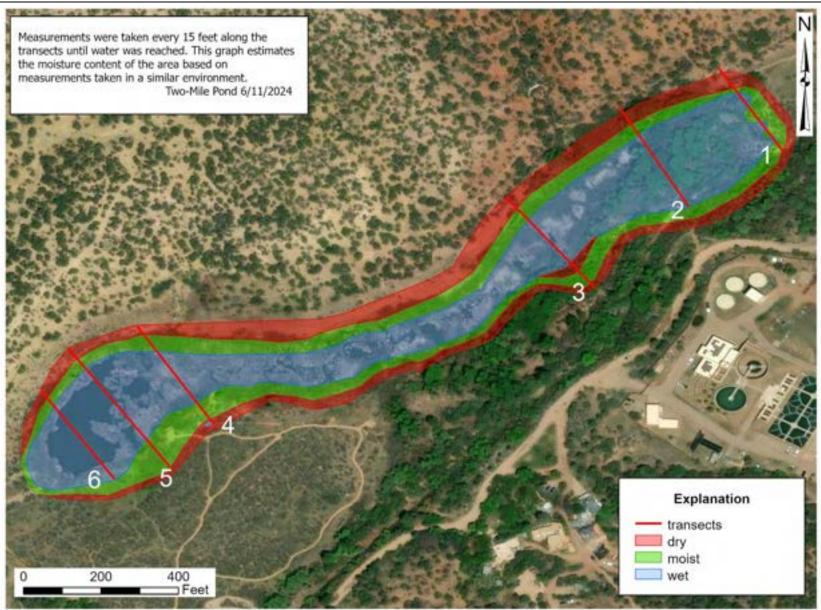


Figure G3. Moisture map June 11, 2024.

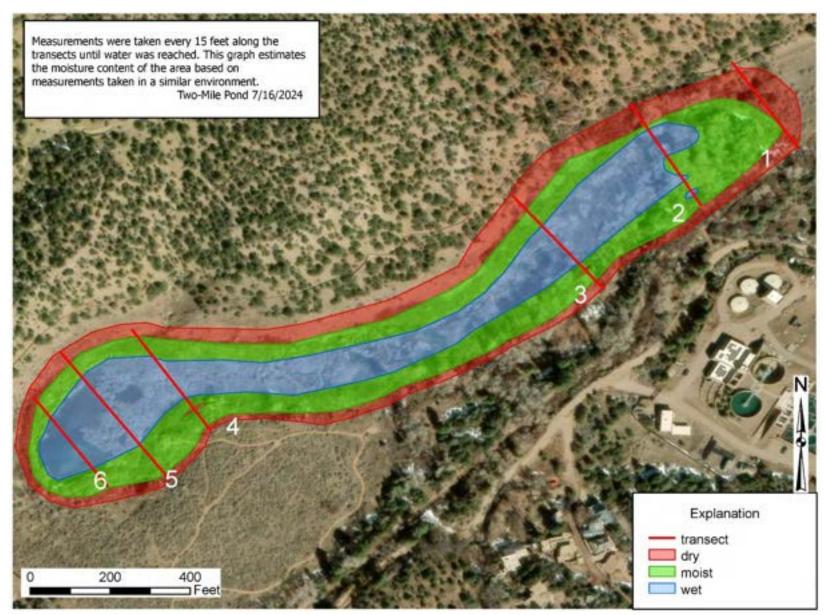


Figure G4. Moisture map July 16, 2024.

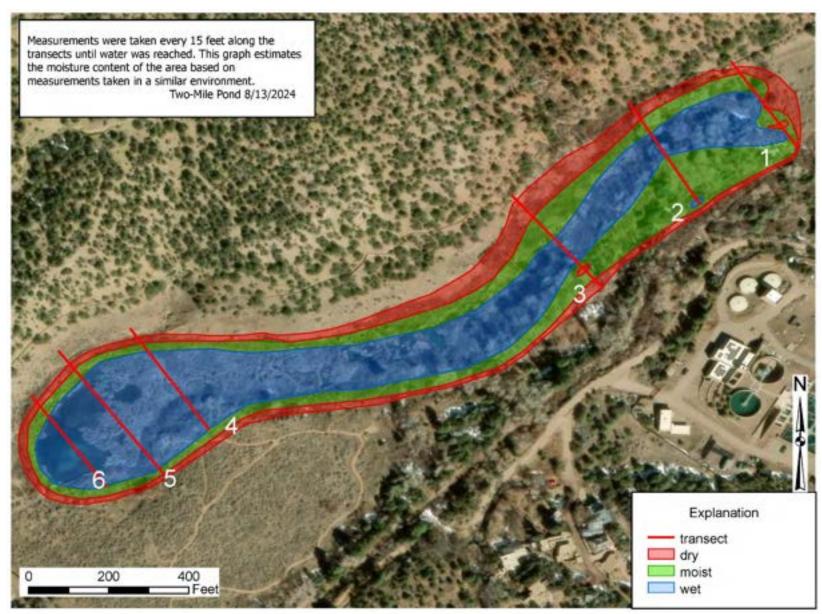


Figure G5. Moisture map August 13, 2024.

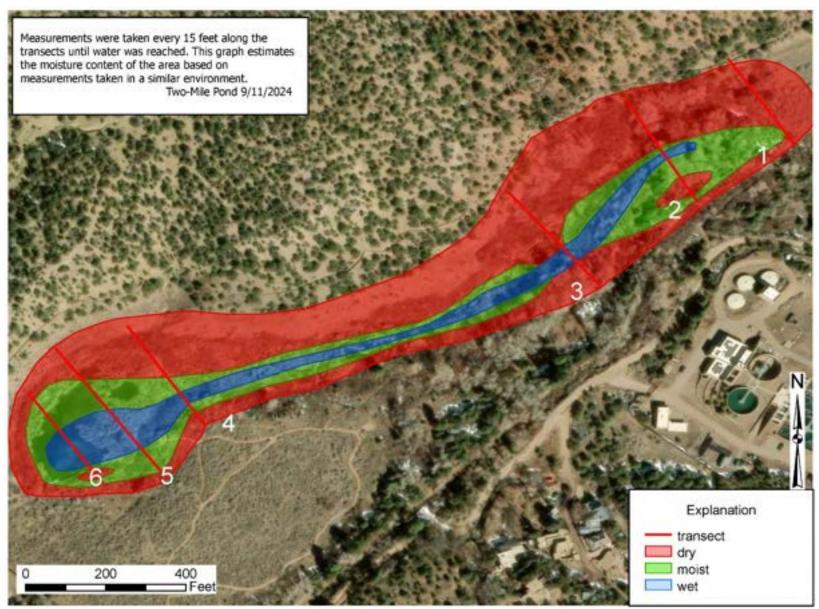


Figure G6. Moisture map September 11, 2024.

JSAI