

EXHIBIT 1

NORTHWEST WELL AND CITY WELL FIELD
GROUNDWATER MONITORING AND REPORTING PLAN

1. The Northwest Well and City Well Field Groundwater Monitoring and Reporting Plan (“Plan”) is the result of a Settlement Agreement and an Unopposed Joint Motion to Dismiss Protest and Remand to Water Rights Division in the above referenced application. As set forth therein, the parties to this Groundwater Monitoring and Reporting Plan include the City of Santa Fe (“City”), OSE-Water Rights Division (“WRD”), and Protestant, which below are collectively referred to as the “Parties”.
2. The purpose of the Plan is to collect data to evaluate possible water-level declines in the area of the Northwest Well and the City Well Field. The data may also be used to help improve the simulation of groundwater flow and pumping in the area, and to simulate groundwater pumping in the area to evaluate the causes of possible future water-level declines. These data, analyses and/or the monitoring reports can be used at any time to initiate a consultation with the City of Santa Fe in accordance with the Settlement Conditions of Approval.
3. The Parties have identified the following wells as candidates for inclusion in the Plan. See Figure No. 1 and Table 1, attached, for location and well completion details. There are three sets of wells to be monitored: Group A, Group B, and Group C.
 - a. Group A: Monitor wells surrounding the Northwest Well
 - i. RG-61371 (Location with respect to NW Well: North, near)
 - ii. RG-74921 (Location with respect to NW Well: North, intermediate)
 - iii. RG-78218 (Location with respect to NW Well: North, distant)
 - iv. RG-62069 (Location with respect to NW Well: West)
 - v. RG-49683 (Location with respect to NW Well: East)
 - vi. Ortiz -1 (Location with respect to NW Well: South)
 - b. Group B: City of Santa Fe Municipal Wells
 - i. Hickox No. 2 (inactive)
 - ii. Ferguson (active)
 - iii. New Alto (active)
 - iv. Torreon (active)
 - v. Agua Fria (active)
 - vi. Santa Fe Well (active)
 - vii. Osage Well (active)
 - viii. St. Michael’s well (active)
 - c. Group C: Possible Monitor wells near the City Well Field:

- i. Alto St: MW-9 (shallow, TD=160 ft)
 - ii. Alto St: MW-5 (middle, TD=235 ft)
 - iii. Alto St: MW-3 (deep, TD=415 ft)
 - iv. CSF-1 (TD=284 ft)
 - v. CSF-2 (A, 534-554 ft) (B, 648-658 ft)
- 4. Monitoring of wells in Groups A, B, and C listed above will occur according to the following provisions.
 - a. Group A Wells
 - i. Group A Wells identified for potential inclusion in the Plan will become part of the Plan, provided that: a) the well owner executes an agreement with the City that will allow the City, at its cost, to install a sounding tube and pressure transducer in his/her well and allow reasonable access by a City employee to download data from the transducer; b) the well owner further agrees to public use of the transducer data; and c) the well owner will be requested, but not required, to allow the City to install a flow meter in his/her well, such meter to be installed at the City's expense if one does not already exist, and to allow public use of the data from the flow meter if one exists or is installed. The sounding tubes, transducers, and flow meters will be selected and installed to a good professional standard and maintained in good working order by the City to ensure a high professional quality for the water level and well flow data.
 - ii. If an acceptable agreement cannot be reached between the City and a well owner, or if the Parties determine that a provisionally selected well is not suitable for monitoring for any reason, the Protestant will identify to the WRD and City an alternative well in the same general location, and will consider that well as provisionally accepted if no timely objection to the well is received. If timely objection is made (within 30 days), the Parties will consider alternative wells until agreement is reached.
 - iii. Once a well is adopted into the program, and until the monitoring program is modified or terminated, the well shall remain in use for monitoring so long as access is allowed and there are no technical issues with data collection. In the event a well is no longer suitable for inclusion in the program, the City will notify the WRD and Protestant, and the Protestant will identify an alternative well in the same general location, and will consider the alternative well as provisionally accepted if no timely objection to the well is received. If timely objection is made (within 30 days), the Parties will consider alternative wells until agreement is reached.
 - iv. The City will install sounding tubes and pressure transducers in the six wells that are selected in accordance with the principles above. Transducers will initially be programmed to record water elevations at hourly intervals. After

review of the data following the first year, the frequency may be temporarily increased to better define water-level responses to pumping. Data will be periodically downloaded by the City (at a frequency consistent with hand measurements – see below), and uploaded to a dedicated portal accessible to the public on the City’s website each 6 months beginning no later than three months after the first transducer is installed. Until such time as all transducers are installed, the City will provide the WRD and Protestant with a brief monthly report summarizing progress in installation of transducers. The transducer measurements shall be corroborated by and calibrated to hand measurements on a schedule consistent with manufacturer recommendations and with the protocols set forth in the reports: Groundwater Technical Procedures of the U. S. Geological Survey, compiled by William L. Cunningham and Charles W. Schalk (2011), and Use of Submersible Pressure Transducers in Water-Resource Investigations by Freeman et al. (2004).

b. Group B wells

- i. These wells are currently automated with pressure transducers and SCADA. The City will take quarterly manual water-level measurements to ensure data from pressure transducers is accurate. Data shall be collected according to professional standards.

c. Group C wells

- i. Proposed wells Alto St: MW-9, Alto St: MW-5, and Alto St: MW-3 are suitable for access and available for data collection. Within the first three months, the City will evaluate CSF-1 and CSF-2 and determine if they are available for data collection. Group C wells will be monitored manually on a semi-annual basis. The City will make those measurements in the winter and summer if possible. Data shall be collected according to professional standards.

5. Beginning two years after the initiation of data collection, but no later than March 2019, the City shall prepare the first monitoring report and upload it to a dedicated portal on the City’s website. The second monitoring report and subsequent monitoring reports will be due every three years after the first monitoring report.

6. The monitoring report shall be completed to a good professional standard and shall include the following.

- a. Data tables and hydrographs which present the new monitoring data from Group A, B, and C wells along with historical data for those wells, if any. The tables and hydrographs should also include monthly pumping data for the City of Santa Fe Wells within the City (Alto, Hickox, Torreon, Ferguson, Santa Fe, Agua Fria, Northwest, Osage, St. Michaels

and any additional City wells that are drilled in the future). For the purposes of the Plan, the City has no obligation to directly collect any data other than just described.

- b. Data tables and hydrographs based on water-level data of good quality that are published in and reasonably available from a recognized monitoring database, and which are for wells within 3 miles of the Alto, Hickox, Torreón, Ferguson, Santa Fe, Agua Fria, and Northwest Wells. Data sources may include but are not limited to the NM Bureau of Geology's Espanola Basin monitoring database, the USGS's Ground Water Site Inventory (GWSI) database (including the Archery Range shallow, middle, and deep piezometers, the Santa Fe 1 shallow, middle, and deep piezometers, and any data collected and approved that has not yet been entered in the GWSI database), the City of Santa Fe landfill water-level datasets and any good quality data provided by the WRD or otherwise collected by the City.
 - c. Maps showing the then-current potentiometric surface within three (3) miles of the Alto, Hickox, Torreón, Ferguson, Santa Fe, Agua Fria, and Northwest Wells and the change in that surface relative to a baseline map that represents conditions in the timeframe around January, 2014. By June 30, 2017, a draft of the initial baseline map will be provided to the WRD and Protestant, and any comments received will be reflected in a revised map, or addressed in the monitoring report. Given the uncertainty in water-level contouring in this area, these comments should not preclude future reinterpretation of the water-level surface by any of the Parties, for the January 2014 period, and/or for subsequent periods.
 - d. A narrative discussion of the information presented in items a, b, and c, above, with specific consideration of any identified water-level declines that may relate to changes in pumping described in the Settlement. If graphical and spatial analysis of water-level trends is not conclusive, a more detailed analysis may need to be performed to assess whether the pumping allowed in the Settlement by the Northwest Well or the City Wells is causing the water-level declines. OSE's current groundwater model for administration in the area (potentially recalibrated based on data collected from the Plan), or any other model determined to be suitable by the OSE, may be used to identify the source or sources of the observed water-level declines and this analysis should be included in the discussion.
 - e. Documentation of the City's compliance with its permit conditions for the Northwest Well, including any consultation or compliance action initiated by the OSE.
7. The dedicated portal on the City's website should contain the following:
- a. Hyperlinks to USGS webpages covering the Archery Range shallow (USGS ID 354321105573703), middle (USGS ID 354321105573702), and deep (USGS ID 354321105573701) piezometers

- b. Hyperlinks to USGS webpages covering the Santa Fe 1 shallow (USGS ID 353945105574503), middle (USGS ID 353945105574502), and deep (USGS ID 353945105574501) piezometers
 - c. Map showing the location of the City's wells, the Plan monitoring wells, the USGS Archery Range and Santa Fe 1 piezometers
 - d. Downloadable Excel files containing tables and hydrographs of monitoring data and pumping data described in 6.a. and 4.a.iv.
 - e. Plan reports
8. At any time the City or the OSE may propose a change to this Plan. If the City or the OSE proposes any changes to the Plan, it will provide advance notice to and consultation with the other Parties, and any such changes must be approved by the State Engineer. Consultation will include a good faith effort to schedule a joint meeting among the City, WRD, and Protestant.
9. During its review of the Plan report, the OSE may comment on, request clarification of, or further investigate the City's report findings within 90 days of receiving the report.
10. If there is a concern regarding water-level declines in the area of the Plan, the OSE may initiate consultation with the City at any time.
11. The City may in the future present evidence as to why it no longer has to conduct monitoring and reporting as described in this Plan to the OSE and Protestant. Both the OSE and Protestant will review the information and decide if they agree that monitoring and reporting are no longer necessary to understanding the effects of the pumping described in the Settlement.
12. Notice shall be provided as soon as possible and in no event less than 30 days before any change. Notice shall be given in writing at the following addresses, unless and until notice of change of address is provided in writing:

City of Santa Fe:
City Attorney's Office
City of Santa Fe
P.O. Box 909
Santa Fe, NM 87504

OSE-Water Rights Division
P.O. Box 25102
Santa Fe, NM 87504-5102

Protestant:
Tano Road Association
P.O. Box 31967
Santa Fe, NM 87594-1967

Table 1. Proposed North West Well Area Monitoring Wells

Monitor Well Group	well	NMOSE ID	owner	NMBGMR ID	USGS ID	year drilled	TD, ft	screen interval, ft	casing diameter, in.	lat, WGS84	long, WGS84	X, UTM83, m	Y, UTM83, m
B	Hickox No. 2	RG-1114	City of Santa Fe	EB-123		1999	860	400 to 840	8.625	35 40 53.31	105 56 53.50	414198	3949035
B	Ferguson	RG-1116	City of Santa Fe			1970	750	175 to 746	14	35 41 15.98	105 57 27.60	413347	3949741
B	New Alto	RG-1113	City of Santa Fe	EB-276		1969	725	226 to 720	12.75	35 41 08.17	105 57 40.72	413015	3949504
B	Torreón	RG-1115	City of Santa Fe			1997	1230	365 to 1230	16	35 41 05.59	105 58 02.7	412462	3949430
B	Agua Fria	RG-1118	City of Santa Fe			1951	740	201 to 740	16	35 40 41.45	105 58 15.85	412124	3948689
B	Santa Fe	RG-1117	City of Santa Fe			1951	725	200 to 723	18 to 421; 10.75 to 723	35 40 33.17	105 57 46.55	412858	3948427
B	Osage	RG-304-S	City of Santa Fe			1971	770	210 to 760	16	35 40 21.43	105 58 47.42	411324	3948080
B	St. Michael's	RG-304	City of Santa Fe			1983	795	380 to 780	16	35 39 32.82	105 57 56.30	412595	3946570
C	Alto St. MW-9	-	NMED			1995	160	100 to 160	4	35 41 08.8	105 57 40.3	413026	3949523
C	Alto St. MW-5	-	NMED			1995	235	195 to 235	4	35 41 06.8	105 57 53.6	412691	3949465
C	Alto St. MW-3	-	NMED	EB-279		1995	415	395 to 415	4	35 41 08.8	105 57 40.2	413029	3949523
C	CSF-1	-	City of Santa Fe			1997	284	259 to 284	4	35 40 42.43	105 57 33.59	413187	3948709
C	CSF-2 (A)	-	City of Santa Fe			1997	554	534 to 554	2	35 40 37.13	105 58 02.17	412467	3948553
C	CSF-2 (B)	-	City of Santa Fe			1997	668	648 to 658	2	36 40 37.13	106 58 02.17	412467	3948553
A	RG-78218	RG-78218	Private owner	EB-275		2003	1000	720 to 740; 780 to 800; 840 to 860; 900 to 920; 960 to 980	6.625	35 45 11.82	105 58 35.34	411717	3957024
A	RG-62069	RG-62069	Private owner	EB-108		1995	940	680 to 700; 820 to 840; 860 to 880; 900 to 920	4.5	35 44 01.16	105 59 26.52	410410	3954860
A	RG-61371	RG-61371	Private owner			1995	710	590 to 610; 630 to 650; 670 to 690	4.5	35 43 29.1	105 58 10.1	412320	3953853
A	RG-74921	RG-74921	Private owner	EB-274		2002	800	700 to 800	6.625	35 44 02.89	105 58 06.36	412424	3954893
A	RG-49683	RG-49683	Private owner	EB-080		1988	600	400 to 600	6.625	35 43 49.52	105 56 06.5	415431	3954452
A	Ortiz 1 (Ortiz Park Landfill MW-1)	-	City of Santa Fe	EB-475		2004	460	350 to 460	4	35 41 34.97	105 58 01.01	412514	3950334

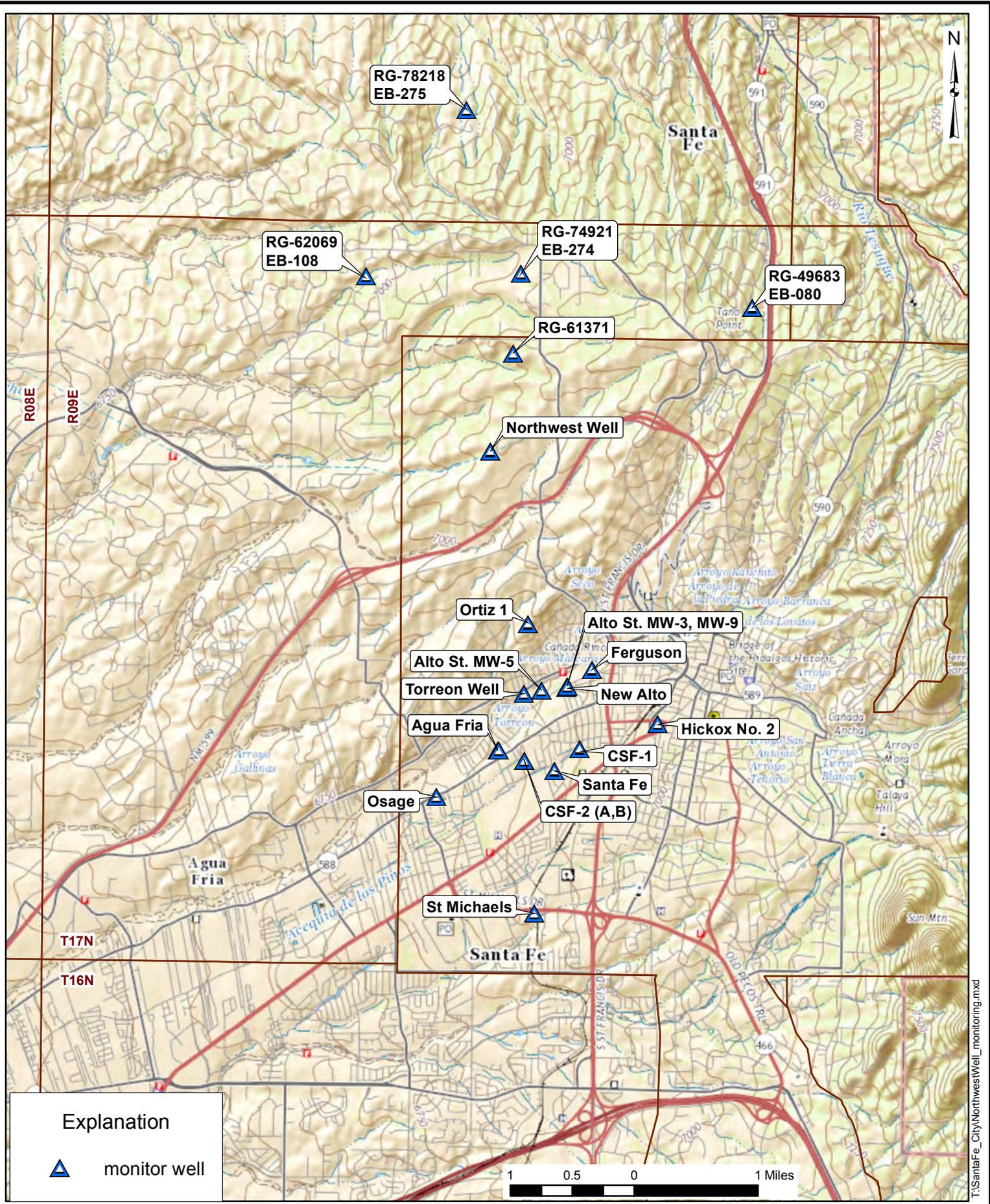


Figure 1. Map showing locations of City of Santa Fe monitoring wells Santa Fe County, New Mexico.