### City of Santa Fe



Arroyo Improvement
Projects
General Obligation Bond
2013

#### **Benefits:**

- Improve water security for future development and economic growth.
- Reduced risk of loss of property and other damage from large floods.
- Improve watershed health
- Estimate direct construction jobs: 16.67 (annual, full-time equivalent).
- Bond funding will improve watershed health by correcting substandard drainage through a number of arroyos.
- This will allow more water to recharge our local aquifer and keep our water supply secure.
- Compliance with EPA Regulations

## More than 50 projects have been identified citywide.

Issues Include;

- Undersized and damaged culverts
- Sediment build-up
- Erosion
- Grade Control
- Protection of infrastructure
- Compliance with EPA Regulations

# Infrastructure drainage improvements are expected for these arroyos:

- Arroyo Cabra,
- Arroyo de la Piedra,
- Arroyo de los Chamisos,
- Arroyo de los Pinos,
- Arroyo en Medio,
- Arroyo Mascaras,
- Arroyo Mora,
- Arroyo Rosario,
- Arroyo Saiz,
- Canada Ancha Arroyo
- Santa Fe River

#### **Arroyo Classification System**

- Drainage Function
- Ecological Function
- Social Function

### Classification Rating for each of the Functions as follows;

- Classification as a low priority would have a rating of 0 to 8.
- Classification as a medium priority would have a rating of 9 to 16.
- Classification as a high priority would have a rating of 17 to 24.

#### **Drainage function**

- Will be weighted based on three categories
  - First is how well the stream segment functions to drain the watershed or properties.
  - Second is in regard to the size of the tributary basin that is drained by the stream segment.
  - Third is based on the type of waterway hydrology. An artificial waterway example is an acequia or a dam.

#### **Ecological function**

- Ecological function will also be weighted based on three categories
  - First is based on the level the channel is disassociated from the riparian zone (vegetated area along the river
  - Second is how well the stream segment functions for wildlife habitat
  - Third is if the stream segment has potential threatened or endangered species habitat (<u>Ecological Significant Waterways and</u> <u>Protected Species</u>, Marron & Associates, June 2009 for reference).

#### **Social Function**

- Social Function will be weighted based on two categories.
  - First is based on the type of recreational use.
     If the stream segment is used for dog walking or picnicking, it would be weighted accordingly.
  - Second is how the stream segment appears visually. If it is pristine without any human disturbance, it would be weighted accordingly. Examples of human disturbance include roads, fences, utility poles, man-made armoring or debris.

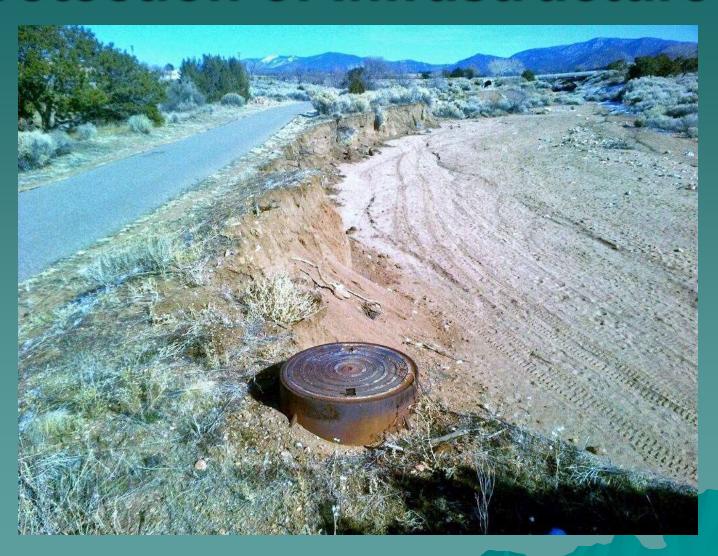
#### **Erosion**



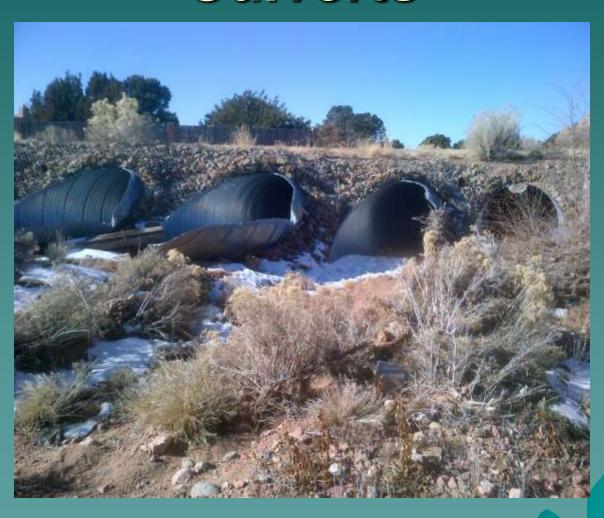
### Sediment Build-Up



#### **Protection of Infrastructure**



## Damaged or Undersized Culverts



# Arroyos provide sustenance and shelter for a variety of plants

- trees,
- brush
- flowers;
- straight-aways



## Arroyos are feeding grounds for a variety of animals

- coyotes,
- rabbits,
- birds,
- reptiles insects
- o etc.,



