

**FINAL  
ENVIRONMENTAL INFORMATION DOCUMENT**

**Aztec Sewer Outfall Line  
for  
The City of Aztec, New Mexico**



**Prepared for:**

**The New Mexico Environment Department  
Construction Programs Bureau**



**On behalf of:**

**The City of Aztec**



**January 2013**

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# ENVIRONMENTAL INFORMATION DOCUMENT FOR CITY OF AZTEC AZTEC SEWER OUTFALL LINE

## 1. INTRODUCTION

### 1.1 The Proposal

The City of Aztec (City) proposes to install a 24" sewer line primarily along an existing sewer line easement in San Juan County in northwest New Mexico (Figure 1). The proposed sewer line, the Aztec Sewer Outfall Line, would replace the existing outfall line from Aztec Blvd. west to South Oliver Dr. The proposed alignment along the existing easement roughly follows the Elledge Mill Ditch north of the Animas River (Figure 2). The western end of the line would terminate at the Aztec Wastewater Treatment Plant off of South Oliver Dr. The legal description of the proposed project's location is as follows:

South ½ of Section 8 and Northwest ¼ of the Southwest ¼ of Section 9  
Township 30N, Range 11W, New Mexico Principal Meridian (NMPM)  
San Juan County, New Mexico

The proposed project is depicted on the Flora Vista, NM 7.5' U.S. Geological Survey (USGS) quadrangle map (Figure 2). Project plan drawings are provided as Appendix A. The project area elevation ranges from 5,580 feet (ft) above mean sea level (msl) to 5,600 ft above msl. The GPS coordinates at the termini of the proposed sewer line are:

Eastern Terminus	Western Terminus
Latitude: 36.8264° N	Latitude: 36.8196° N
Longitude: 108.0032° W	Longitude: 108.0217° W
Datum: NAD 83	Datum: NAD 83

This action is being proposed on municipal (City and County) and privately owned lands and the portion at Aztec Blvd. (NM 516) would be within New Mexico Department of Transportation (NMDOT) right-of-way (ROW).

This report addresses the Environmental Information Document (EID) portion of the scope of work pursuant to the New Mexico Environment Department - Construction Programs Bureau (NMED-CPB) State Environmental Review Process document dated 1/2/08. The EID is prepared in part to comply with the requirements of the National Environmental Policy Act (NEPA). To fulfill the requirements of NEPA, NMED-CPB is required to prepare a written assessment that describes the affected environment and environmental consequences of a proposed project; reasonable or practicable alternatives to the proposed project; and any mitigation measures necessary to avoid or minimize adverse environmental effects.

## 1.2 Purpose and Need

The purpose for the proposed action is to replace an existing line that is nearing the end of its useful lifespan. The current sewer outfall line serves as the main collector for 100% of the City of Aztec's wastewater stream. The need for the action has arisen as the existing line has deteriorated and clogged with sand.

The existing 15" clay tile sewer line was installed in the 1950's and has the following full flowing capacities:

**Table 1: Existing Sewer Outfall Line Capacities and Flow Rates**

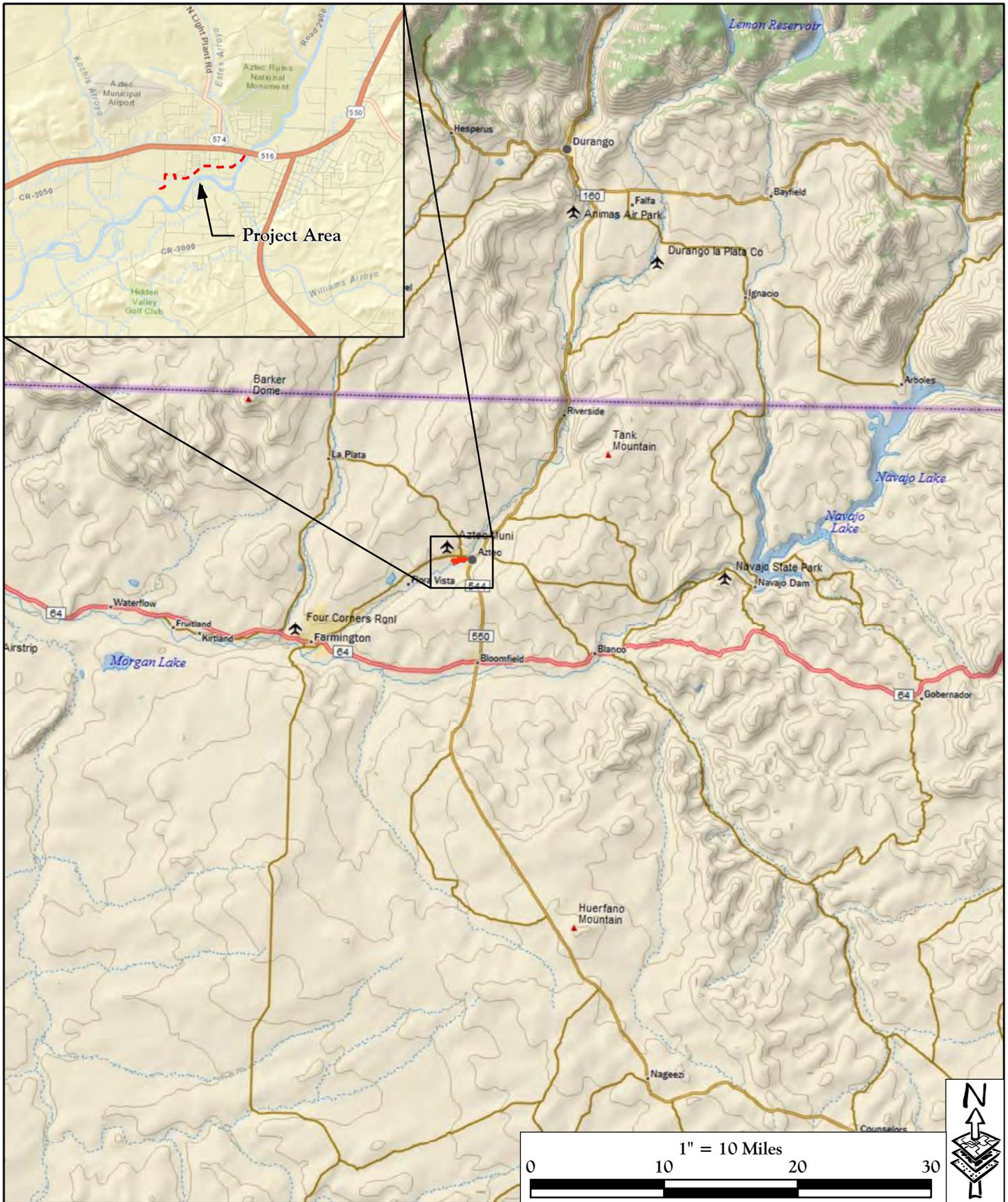
MH#	STA.	LENGTH	INVERT	SLOPE	CAPACITY (cfs)	CAPACITY (GPM)	CAPACITY (MGD)
1	2+82.93		5581.14				
		326.47		0.4686%	6.06	2,719.73	3.92
2	6+09.4		5582.67				
		379.46		0.1400%	3.31	1,485.53	2.14
3	9+88.86		5583.03				
		379.47		0.1400%	3.31	1,485.53	2.14
4	13+68.33		5583.77				
		631.75		0.0900%	2.66	1,193.81	1.72
5	20+00.08		5584.3				
		497.8		0.1100%	2.94	1,319.47	1.90
6	32+29.03		5584.83				
		489.09		0.1400%	3.31	1,485.53	2.14
7	37+14.12		5584.76				
		156.16		0.8300%	8.06	3,617.33	5.21
8	38+70.28		5586.05				
		311.88		0.8200%	8.05	3,612.84	5.20
9	41+82.16		5586.31				
		537.97		0.0670%	2.29	1,027.75	1.48
10	47+20.00		5586.67				
		423.85		0.2600%	4.51	2,024.09	2.91
11	51+87.43		5587.77				
		76.18		0.4000%	0.00	0.00	0.00
12	52+63.62		5587.74				
		387.92		0.1100%	2.94	1,319.47	1.90
13	56+51.53		5588.17				
		364.73		0.6000%	6.86	3,078.77	4.43
14	60+16.26		5588.39				
		255.4		0.6300%	7.03	3,155.06	4.54
15	62+71.58		5588.55				
		317.01		0.4500%	5.94	2,665.87	3.84
16	65+88.67		5589.98				
		334.6		0.3400%	5.16	2,315.81	3.33

17	69+23.27		5591.11				
		303.98		0.2300%	4.25	1,907.40	2.75
18	71+58.97		5591.82				
		219.35		0.1000%	2.80	1,256.64	1.81
19	73+58.32		5592.05				

The City's wastewater treatment plant has a design and permitted capacity of 1.2 million gallons per day which is roughly 1.86 cfs. A peak factor of 3.0 was selected for the project due to the type of facilities contributing to the system and the nature of the flow characteristics. A straight grade from the beginning of the project to the point of connection to the existing system plus providing a 0.1 foot manhole drop yields an overall interceptor slope of 0.001244 ft/ft. The smallest interceptor capable of meeting the project's design flow rates at this slope is a 24 inch diameter pipe which matches the largest capacity of a single segment of the existing line. Below is a summary of the 24 inch interceptor depths and fluid velocities with the varying flow rates.

**Table 2: Proposed Sewer Outfall Line Designed Depths and Flow Rates**

Pipe Size (in)	Pipe Slope (%)	Flow (cfs)	Peak Factor (-)	Flow (gpd)	Pipe Depth (ft)	Velocity (fps)
24	0.1244	5.57	3.0	3,600,000	10.4	3.4
24	0.1244	1.86	1.0	1,200,000	0.57	2.5
24	0.1244	0.93	0.5	600,000	0.4	2.04



**PROJECT LOCATION:**

Township 30 North, Range 11 West,  
Sections 8, 9, and 17,  
NMPM, San Juan County, New Mexico.

**Western Terminus:**

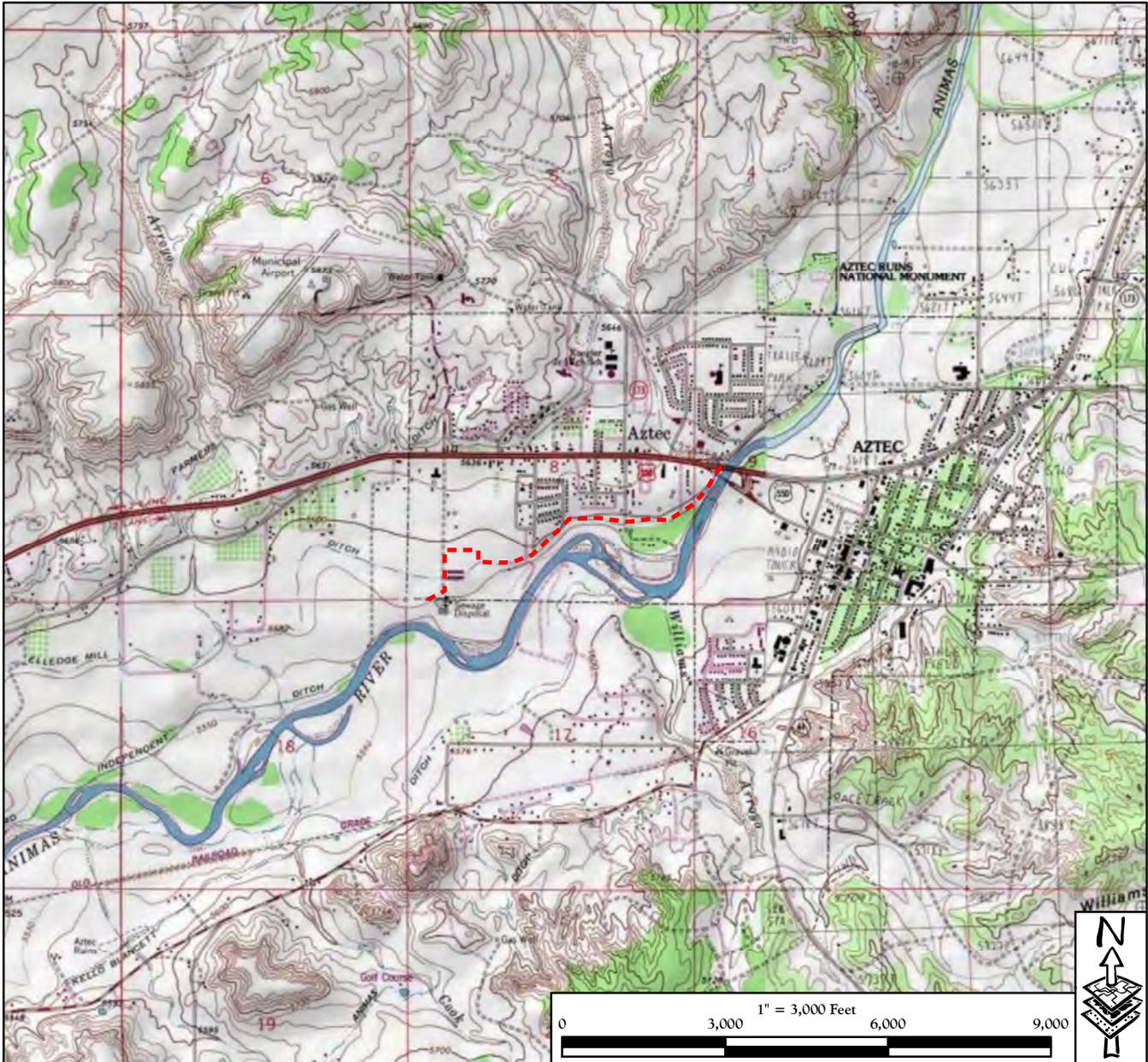
Lat: 36° 49' 10.2" N Long: 108° 01' 18.3" W

**Eastern Terminus:**

Lat: 36° 49' 34.9" N Long: 108° 00' 12.0" W

**Legend**

--- Proposed Sewer Line



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PROJECT LOCATION MAP  
AZTEC SEWER OUTFALL LINE  
ENVIRONMENTAL ASSESSMENT

**FIGURE 2**

Source: Aztec & Flora Vista, New Mexico  
7.5' USGS Quadrangles  
Copyright: © 2010 National Geographic Society

## 2. ALTERNATIVES INCLUDING THE PROPOSED ACTION

### 2.1 Alternative A - No Action

Under this alternative, the proposed Aztec Sewer Outfall Line would not be constructed. The existing sewer line would operate at its current limitations; capacity within 100% of the City's sewer system would remain at the 1950's design values. The risk of a failure of the aged sewer line would remain at its current level. The no action alternative would not address the looming threat to the public's health and safety, or the financial security of the City, posed by the aging outfall line. The renovated Aztec Wastewater Treatment Plant would not operate to meet the need for which it was constructed. No mitigation measures would be required for the no action alternative.

### 2.2 Alternative B - Proposed Action

The proposed action would require the placement of a new sewer line primarily within the existing easement of an existing sewer line. Approximately 7,188 feet of sewer line would be installed (Figure 3). The proposed sewer line would leave the existing easement for approximately 1,596 feet at the western end of the proposed alignment in order to avoid buildings that overlie the existing easement. Construction of the proposed pipeline would require clearing of a right-of-way and developing temporary use areas (as needed), trenching and boring, laying of pipeline, testing, and backfilling the pipeline. Portions of the line would be bored underground where needed in order to minimize effects to ditches, adjacent structures, existing utilities, steep embankments, and other surface resources. Based on a preliminary analysis by the project engineer, it is anticipated that approximately 60% of the proposed alignment would be bored underground and would not result in new surface disturbance. This estimate may vary based upon site conditions, construction limitations, or other unforeseeable circumstances. The existing sewer line would be left in place. The City plans to develop a 60-foot wide easement. Total surface area for the proposed easement would be approximately 8.52 acres.

Refer to the plan drawings, on file with the City of Aztec Public Works Department or online at <http://www.aztecnm.gov/publicworks/departement.htm>, for a more detailed description of the pipeline route and specific design features associated with the proposed action. Sheet U1 of the plans is provided in Appendix A.

### 2.3 Alternatives Considered but not Analyzed in Detail

Alternatives to the proposed action are developed to explore different ways to accomplish the purpose and need while responding to potential issues related to the proposed action. Alternatives to the proposed action were considered. As originally proposed, the route of the sewer line was planned to follow the existing easement for the entire length. Since the installation of the original sewer line, buildings at 600 S Oliver Dr. (A-1 Mini Storage in Aztec) have been constructed over the portion of the easement that crosses this parcel. The City determined that it would be easier and safer to realign 800 feet of the line so that it would bypass the 600 S Oliver Dr. parcel. The route as now proposed in Alternative B goes north of the 600 S Oliver Dr. parcel through a parcel purchased by the City to Western Avenue, west down Western

Avenue, then south on S Oliver Dr. to rejoin the existing easement. The original route following the existing easement is included in Figure 3 below.

The City also considered a number of alternative routes for the outfall line replacement outside of the existing sewer easement. One alternative would be to re-route the line from the Chaco St./Aztec Blvd. intersection west along Aztec Blvd. to S. Oliver Dr., and then south to the existing Wastewater Treatment Plant. This alternative would require multiple lift stations in order to elevate sewage entering the system at the eastern terminus to the elevation of Aztec Blvd. and to elevate sewage from the neighborhoods south of Aztec Blvd. north, and uphill, to the alternate route. This alternative would require substantial costs and surface disturbance. Each lift station would add an estimated 30% to the initial cost of the action as currently proposed. On top of these additional costs, an unspecified additional long-term cost would include the regular maintenance and operation of these lift stations. Lift stations in the neighborhoods south of Aztec Blvd. would also need a pressurized line to be installed connecting the lift station to the outfall line at Aztec Blvd. This would result in a significant increase in surface disturbance and costs over the proposed action.

Alternate routes that would fall in between the existing easement and Aztec Blvd. would be difficult to construct as there are no existing rights-of-way or streets that transect the neighborhoods in an east-west orientation. Developing an alignment through these neighborhoods would likely be costly and controversial, and may require condemning private property.

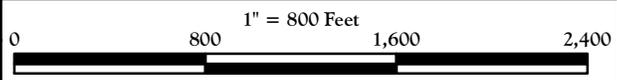
The City also explored the option of developing a new alignment along City owned property south of the Elledge Mill Ditch through the City's Riverside Park. This alternative alignment would re-align the easternmost portion of the proposed route from the Chaco St./Aztec Blvd. intersection west to Lightplant Rd. and the entrance to Riverside Park. This alignment would avoid steep hillsides on private property along this portion of the existing easement. Since the installation of the original outfall line, private property owners have backfilled over the existing sewer line easement, burying the line up to 17 feet below the grade of the backfill. Realigning this section would avoid construction complexities in this section, and would simplify future maintenance of the line. However, this route would align the outfall line to a low topographical position within the Animas River floodplain. The low topographical position would reduce the slope of this section below 0.00084 and flow velocity would be below the minimum scour velocity of 2 feet per second. Construction of this portion of the line would be cost prohibitive as it would require the installation of a lift station to maintain a sufficient flow velocity and grade. In addition, the lift station and all manhole covers would need to be elevated above the flood hazard zone in order to reduce the risk of contaminating floodwater with raw sewage and to maintain proper functioning of the system. This alternate route would also complicate maintenance if work was required during river flood stages.

Lastly, the City considered the use of Cast in Place Pipe (CIPP) in order to shore-up the existing outfall line, thereby reducing the risk that the line will fail. This technology involves coating the inside of the existing pipe with a substance that hardens in place to form a structurally sound pipe within the existing pipe. This alternative would not meet the stated purpose and need of improving the flow of the existing pipe. This alternative would nominally reduce the already restrictive flow and poor grade of the exiting line, rather than improve it.



**Legend**

- - - Proposed Sewer Line
- - - Abandoned Sewer Segment
- Proposed Manholes



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**AERIAL SITE MAP**  
**AZTEC SEWER OUTFALL LINE**  
**ENVIRONMENTAL ASSESSMENT**

**FIGURE 3**  
 Source: Aerial Photo Taken in 2011 Provided by National Agriculture Imagery Program (USDA).

### **3. AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES**

This section describes the environment that would be affected by implementation of the proposed action and the effects of the proposed action on those resources. Aspects of the affected environment described in this section focus on the relevant major resources or issues. Only those resources of the environment that have the potential to be affected by the proposed action are described; coastal resources and wilderness areas, for example, will not be discussed as they do not occur in or near the project area. Field resource investigations of the proposed sewer line were conducted on December 10 and 11 of 2009, and again on August 29, 2012 by specialists from SME Environmental, Inc.

#### **3.1 Environmental Setting**

The proposed action is located within the San Juan Basin of northwestern New Mexico. The proposed alignment follows the edge of a terrace above the north bank of the Animas River in the City of Aztec. The alignment would begin near the intersection of W. Chaco St. and NM Highway 516 where the roads cross the Animas River and would terminate at the Aztec Wastewater Treatment Plant at the southern end of S. Oliver Dr. The topography of the project area is that of an alluvial valley terrace. The slopes within the project area are generally low (3-8%) as the project follows an existing easement; however the project does traverse the steep (up to 70% slope) sides of the valley terrace in many places. Expanding on the existing easement in these areas would result in larger cuts and fill material in order to create a level working surface for construction and installation of the line. However, some of the steeper slopes would be avoided by boring the proposed line underground.

Aztec, New Mexico was originally settled by Puebloan Indians in the 13th century. The ruined village they left behind on the banks of the Animas River is an outlier of the Chacoan civilization that once extended from northern Mexico into southern Utah. Today Aztec is a town of nearly 7,000 people with an historic town center. It is the seat of San Juan County government and home to the Aztec Ruins National Monument.

The climate of the Aztec area is somewhat dry and mild with an average annual rainfall of 10 inches and an average annual snowfall of 15 inches. January temperatures average 28 degrees Fahrenheit, July averages 74 degrees Fahrenheit, and the overall annual average temperature is 51 degrees (WRCC 2009).

According to U.S. Census Bureau data (<http://factfinder.census.gov>), the population of San Juan County was 113,801 in 2000 and was estimated at 130,044 in 2010, a 14% increase. The population of the city of Aztec rose from 6,378 in 2000 to 6,778 in 2010, an increase of 6%.

#### **3.2 Land Use**

##### **3.2.1 General Land Use**

Approximately half of the proposed easement, primarily the mid-section, passes through or is immediately adjacent to residential areas. Typical lot sizes average about 0.2 acres. One large lot zoned as Mobile Home District is undeveloped as are two adjoining Multiple Family Dwelling lots. The east end of the easement primarily crosses commercial lots, but lies close to,

and crosses into, a large agricultural lot that has been developed as an Aztec City Park know as Riverside Park. The western end of the easement primarily crosses commercial and municipal maintenance lots.

**Table 3: City of Aztec Zoning Districts within the Proposed Project Area**

Zoning District	Brief Description	No. of Units Crossed by Easement	Percent of Project Area
C-2 General Commercial and Wholesale	Permits the uses specified under the C-1 District [mixed use neighborhood and “daily needs” commercial district - central business district], plus commercial activities of both retail and wholesale nature, designed to serve the community or tourists. This district includes those uses normally adjacent to a central business district, and of a magnitude not normally compatible with residential areas. Some minor industrial usage not associated with objectionable noise and activities are permitted.	6	24%
Unclassified	Utility and road rights-of-way, no zoning designated	N/A	22%
PUD Planned Unit Development	This district provides suitable sites for uses, which are special because of infrequent occurrence, effect on surrounding property, safety hazard, or other reasons. A pre-requisite for a land tract to be considered under such land use district is that the parcel of land includes at least three (3) acres in area for commercial, residential, and public land uses or ten (10) acres for manufacturing and agriculture uses.	7	17%
MH Mobile Home District	Permits one mobile home and normal residential accessory uses, but not another dwelling in each lot, or lot of record provided setback requirements could be met.	1	12%
A-1 Agricultural or Rural	Permits uses customarily conducted in an agricultural or rural area and is further controlled in that one family or multiple-family dwellings are permitted only on large lots thereby maintaining a low density of population.	2	8%
R-1 Single Family Dwelling	Permits single-family residential development, certain structures and land uses required to serve governmental, educational, non-commercial recreation, public utility installations, and other compatible public needs.	6	7%
R-2 Multiple Family Dwelling	Permits all uses permitted in the R-1 district, multi-family dwellings, apartments, condominiums, and town houses.	2	6%
O-1 Office and Institutional	Permits R-1 and R-2 uses plus offices, hotels, institutional, and service uses that are compatible with high-density residential areas.	1	3%

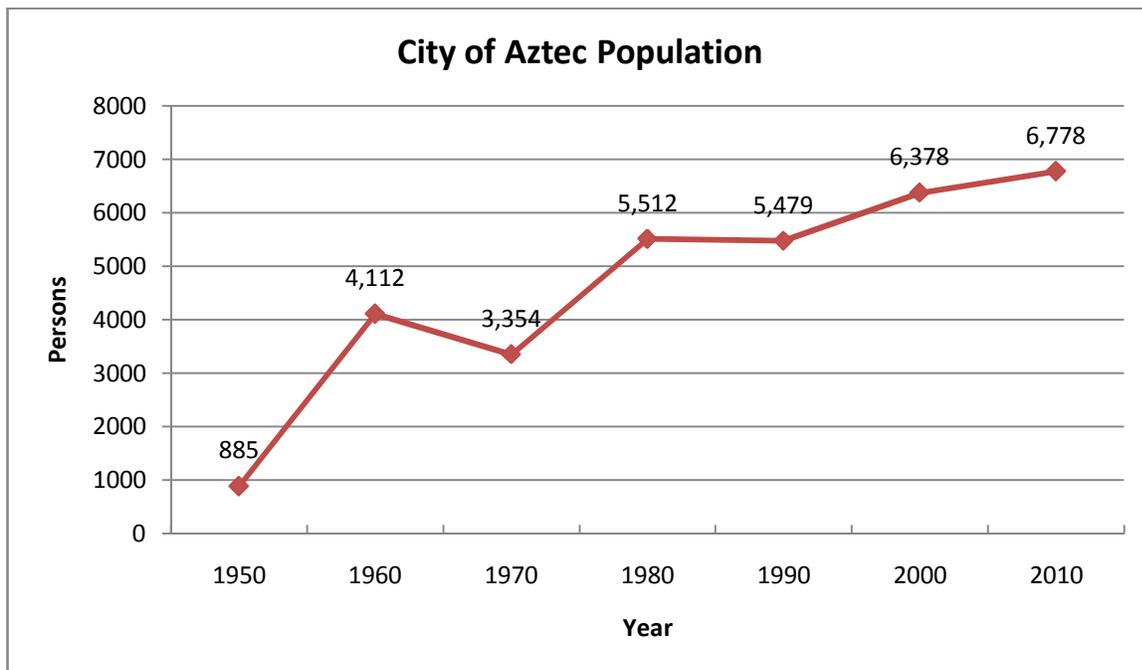
Aztec City Code, Chapter 26

No homes or businesses would be directly affected by the proposed action. The proposed sewer line would follow an existing easement and would avoid any residential or commercial structures. One mobile home near the mid-section of the alignment is directly over or very near to the existing outfall line. The portion of the proposed line in the vicinity of the mobile home will be bored underground. The boring will follow very close to, if not precisely along the

existing alignment. Depending on the technology used, there may be a slight (around one inch) void between the new line and the bore diameter. This would have no significant effect on the structural integrity of the mobile home foundation and would not result in settling. No residents would be displaced as a result of the proposed action. The character of existing residential areas would remain essentially unchanged.

### 3.2.2 Growth and Population Trends

According to U.S. Census Bureau data (<http://factfinder.census.gov>), the population of Aztec in 2010 was 6,778 persons, a 6% increase from the 2000 Census. If the population of Aztec maintained that rate of growth, the current population of Aztec may be around 6,863 persons. Figure 1 below charts Census Bureau population data from the year 1950, the first year that data was provided for the City, to 2010, the last census year. The dramatic fluctuations in population are likely a result of oil and gas exploration and production booms, and subsequent busts, which began in the mid 1950's, roughly the same time at which the existing City sewer outfall line was installed.



**Figure 4: Population of the City of Aztec from the years 1950 to 2010 (U.S. Census Bureau data).**

The proposed project is expected to accommodate anticipated residential growth within the northern portion of the City since the wastewater collection system capacity would be increased. Not installing the line may slow growth within the City.

### 3.2.3 Important Farmland

All of the soil units within the project area are classified by the United States Department of Agriculture, Natural Resource Conservation Service (NRCS) as potential farmlands of statewide importance (USDA 2007b). These lands must have a dependable supply of irrigation water to meet crop needs, and are limited to farmlands currently in production. The proposed action is

located in an urban/developed area; no farmlands would be crossed by the proposed sewer line easement (J.X. Montoya - NRCS, personal communication 2012). As such, the proposed action would have no effect on important farmlands.

### 3.2.4 Soils

The NRCS (formerly the Soil Conservation Service) has surveyed the soils in the proposed project area. Complete soil information is available online at the NRCS's Web Soil Survey website (USDA 2007b). Soils of the proposed action are described by the NRCS as follows:

**Table 4: Soil Units that Occur in the Proposed Project Area**

Soil Unit	Brief Description	Hydric Soils	Percent of Project Area
Fruitland loam, 5-8% slopes	A well drained soil found on alluvial fans and stream terraces at elevations ranging from 4,800 ft to 6,000 ft that was formed from slope alluvium derived from sandstone and shale with a moderate available water capacity and composed of loam and fine sandy loam.	Does not meet hydric criteria.	55%
Turley clay loam, 1-3% slopes	A well drained soil found on alluvial fans at elevations ranging from 4,800 ft to 6,000 ft formed from fan alluvium derived from sandstone and shale with a high available water capacity composed of clay loam.	Does not meet hydric criteria.	26%
Fruitland sandy loam, 2-5% slopes	A well drained soil found on alluvial fans and stream terraces at elevations ranging from 4,800 ft to 6,400 ft that was formed from alluvium derived from sandstone and shale with a moderate available water capacity and composed of sandy loam.	Does not meet hydric criteria.	13%
Stumble loamy sand, 0-3% slopes	A somewhat excessively drained to well drained soil found on dunes and alluvial fans at elevations ranging from 4,800 ft to 6,400 ft formed from eolian deposits derived from sandstone and fan alluvium derived from sandstone and shale with a low to moderate available water capacity and composed of loamy sand, gravelly loamy sand, loam and fine sandy loam.	Does not meet hydric criteria.	3%
Walrees loam	A somewhat poorly drained soil found on floodplains at elevations ranging from 6,400 ft to 7,200 ft on 0-2% slopes formed from mixed alluvium with a moderate available water capacity formed from stratified gravelly sand.	Does not meet hydric criteria.	2%
Werlog loam	A somewhat poorly drained soil found on floodplains at elevations ranging from 6,400 ft to 7,200 ft on 0-1% slopes formed from mixed alluvium with a high available water capacity and composed of loam, stratified fine sandy loam to clay loam and stratified sand to cobbly sand.	Does not meet hydric criteria.	1%

USDA 2007b

The proposed action would result in up to 8.52 acres of soil disturbance. Soils that would be disturbed would be structurally mixed, displaced and exposed to the elements of wind and water erosion. In some areas, these soils would also be compacted. Once disturbed, these soils can be subject to increased erosion, dependent upon storm events of water and/or wind. Disturbed areas, especially cut and fill slopes, would be susceptible to wind and water erosion until reseeded had been established (one to two growing seasons). The amount of soils that would be

lost to erosion is unknown, however it is assumed that effects to soils would be low based on short slope lengths (project traverses the grade) and mitigating measures. Effects would primarily be short-term until re-vegetation is established within reclamation areas.

### **3.2.1 Formally Classified Lands**

No formally classified lands such as national parks, landmarks, historic sites, wilderness areas, wildlife refuges, wild and scenic rivers, grasslands, state parks, and Native American owned lands occur within the project area. No such lands would be affected by the proposed action.

### **3.3 Floodplains**

A review of Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps indicates the proposed action is not located within any 100-year floodplains (FEMA 2009). However, the east end of the proposed easement appears to come very close to the Animas River floodplain where the easement passes under the W. Chaco St. and NM 516 bridges. The FEMA maps show that the Elledge Mill Ditch is out of the floodplain; the proposed easement is uphill of the ditch and therefore is likely out of the floodplain. The proposed action would not noticeably alter the topography of the project area, introduce aboveground structures beyond manholes, or otherwise affect the Animas River floodplain.

### **3.4 Wetlands**

SME staff delineated 1.01 acres of wetland and stream features within the utility easement boundary, which includes 0.24 acre of wet meadow/marsh wetland area (PEM), 0.28 acre of mixed willow/marsh area (PSS/PEM), and 0.49 acre of intermittent riverine streambed (RSB4). All 0.49 acre of RSB4 and 0.21 acre of the PEM (total of 0.70 acre) are associated directly with the Elledge Mill Ditch. All 1.01 acres have been determined to be jurisdictional in nature, including the ditch and abutting wetland edges. SME has made this determination based on the presence of an intermittent hydrologic surface connection to the Animas River, which is a Traditionally Navigable Waterway (TNW). Wetlands communities within the easement are characterized by the dominant presence of coyote willow (*Salix exigua*), common reed (*Phragmites australis*), cattail (*Typha latifolia*), wire rush (*Juncus arcticus*), and unidentified thin-leaf sedge (*Carex* sp.; no flowers located) growing along the ditch edges. Also, a large (apx. 13 ac.) willow/cottonwood wetland complex exists abutting the south side of the easement just to the west of the Riverside Park.

The proposed project was coordinated with the United States Army Corps of Engineers (USACE) concerning the protection of jurisdictional wetlands and Waters of the United States (WOUS). Since these protected resources are known to occur in the project area, the project will require the issuance of a Section 404 permit prior to construction. The funding recipient must abide by all conditions of the permit to insure that wetlands and WOUS in the area will not be adversely impacted by construction of the project. Additionally, the applicant has consulted with the New Mexico Environment Department, Surface Water Quality Bureau (SWQB) to acquire Section 401 Water Quality Certification. The issuance of the Section 404 permit is contingent upon acquisition of Water Quality Certification.

### **3.5 Water Resources**

#### **3.5.1 Surface Water**

Limited surficial and groundwater resources are available in northwest New Mexico due to the arid climate. Irrigation water for agriculture comes from the diversion of perennial streams and rivers. Outside of the river corridors, dry farming is nearly nonexistent.

The dominant surface water resource in the analysis area is the Animas River. The proposed sewer line approaches to within 100 feet of the north bank of the river. In addition, the proposed action roughly parallels the Elledge Mill Ditch, a seasonally operated irrigation ditch fed by the Animas River. Surface run-off in the project area would drain west primarily into the Elledge Mille Ditch, except at road crossings where run-off would follow roadside ditches towards the Animas River. The proposed easement would cross the irrigation ditch at S. Oliver Dr. at the western end of the proposed sewer line. This portion of the line would be bored under the ditch to avoid effects to the ditch. No other well defined surface water resources were identified within the project area.

A USACE CWA Section 404 Permit for the discharge of dredge and fill materials in waters of the United States will be required. As the Elledge Mill Ditch displays a significant nexus with the Animas River, it would be considered a water of the U.S. Construction activities are planned to avoid any activities within the banks of the ditch, and the one crossing of the ditch at Oliver Drive would be bored under the ditch. However, the City plans to acquire Section 404 authorization for any unavoidable activities that may occur within the banks of the ditch. In addition, the City must abide by all conditions issued with the Section 401 Water Quality Certification to insure that water quality in the area will not be adversely impacted by construction of the project. The City is currently working with USACE and SWQB to acquire authorization for the proposed action.

The U.S. Environmental Protection Agency (USEPA) requires National Pollutant Discharge Elimination System (NPDES) permit coverage for stormwater discharges from construction projects that will result in the disturbance of one or more acres of total land area. A Stormwater Pollution Prevention Plan (SWPPP) would be required under 40 CFR §122 as construction activities would result in a total land disturbance greater than 1 acre.

The disruption of project area soils and the increase of barren surface would result in augmented surface flows with associated increased sedimentation and total dissolved solids (TDS). Sedimentation, resulting from both wind and water erosion, could be realized down gradient of the proposed action. The quality and quantity of this surface sedimentation would be dependent upon wind and water events in relation to soil disturbance and the timing and success of reclamation and erosion control configurations.

Short term effects to the surface water quality and quantity are assumed to be low to moderate under the proposed action with mitigating measures. The linear area of disturbance associated with the proposed action is oriented along the gradient, thereby reducing the slope length of exposed soils, and therefore erosion potential.

### 3.5.2 Ground Water

Ground water supplies in northwest New Mexico are deep and limited. Most water supplies in the basin are obtained from valley fill deposits of Quaternary age along rivers, and some of the shallower Cretaceous sandstones bodies. The major ground water aquifer beneath the proposed project area is the Uinta-Animas aquifer. Formations within this aquifer are largely untested, although known to yield numerous stockponds and springs in the basin.

The continued aging of the existing sewer line represents the potential for accidental leakage of raw sewage to ground water aquifers, such as the local Uinta-Animas Aquifer, and shallow groundwater resources along the Animas River. The latent hazard of a sewer line failure would be reduced through the construction of the proposed sewer line. With mitigation, short and long term effects to ground water would be low for the proposed action.

### 3.6 Air Quality

Section 109 of the Clean Air Act (CAA) (42 U.S.C. 1857-18571, as amended by Public Law 91-604), requires that national primary and secondary ambient air quality standards be established. In New Mexico, the EPA has identified seven Air Quality Control Regions (AQCRs) and has approved, with some exceptions, New Mexico's plan for the attainment and maintenance of the national ambient air quality standards (NAAQS) in these interstate and intrastate regions. The State of New Mexico has also promulgated some ambient air quality standards that are more stringent than the NAAQS.

The City of Aztec is considered to be in attainment for all New Mexico and National Ambient Air Quality Standards. Activities associated with the proposed action have the potential for a temporary increase in dust and emissions from construction equipment. However, these increases are expected to be minimal due to the relatively short duration of the project (6 months) and since only typical construction equipment would be used. The project activities will meet local regulations regarding noise and dust control. No significant emissions are expected as part of project activities or during operation of the sewer line.

### 3.7 Biological Resources

#### 3.7.1 Vegetation

The project area is located at the transition of the Animas River floodway and an abandoned floodway terrace. The floodway contains areas of native riparian communities characterized by the dominant presence of Fremont cottonwood (*Populus fremontii*), but the terrace slope, on which the study area is located, generally contains a transitional upland community characterized by the dominant presence of three leaf sumac (*Rhus trilobata*), Chinese elm (*Ulmus pumila*) Wood's rose (*Rosa woodsii*) and smooth brome (*Bromus inermis*). Two wetland areas also cross the study area. The eastern wetland area is a willow (*Salix*)/reed (*Phragmites*) dominated wetland community and a western wetland area is a cattail (*Typha*) dominated wetland community that also supports various wetland grasses and rushes including Torrey's rush (*Juncus torreyi*) and scratch grass (*Mulhenbergia asperifolia*). The vegetation located within the easement is largely disturbed due to disturbance related to the original construction and ongoing maintenance activities on the existing sewer line, ditch and overhead utility lines. Effects to vegetation would be low due to this existing disturbance and the linear nature of the disturbance.

Four State of New Mexico listed noxious weed species were observed within the project area. One Class A species, Canada thistle (*Cirsium arvense*); one Class B species, Russian knapweed (*Acroptilon repens*); and two Class C species, cheatgrass (*Bromus tectorum*) and Russian olive (*Elaeagnus angustifolia*) were observed.

### 3.7.1 Wildlife

Evidence of habitat utilization by wildlife in the analysis area was revealed through tracks, droppings, vocalizations, and visual identification of individuals. Tracks and scat of striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), gray fox (*Urocyon cinereoargenteus*), and mule deer (*Odocoileus hemionus*) were observed along a trail following the south side of the Elledge Mill Ditch. A large number of deer (up to one dozen) and prairie dog burrows were observed in the study area. One bald eagle (*Haliaeetus leucocephalus*) was observed perched in a large cottonwood overarching the Animas River approximately 900 east of the project site, while a second bald eagle was observed flying west along the river corridor. A female northern harrier (*Circus cyaneus*) was observed flying low over meadow areas in the Animas River floodplain. Numerous Canada geese (*Branta canadensis*) were observed along the banks of the Animas River. A medium sized stick nest was observed in the top of a large cottonwood tree within 100 feet of the proposed alignment. The nest may be that of a red-tailed hawk (*Buteo jamaicensis*) or raven (*Corvus corax*). A complete list of wildlife inferred and observed during the on-site field survey is included in Attachment B of the Biological Assessment (Appendix C).

Effects on wildlife can result from direct habitat loss, noise, increased human activity, and habitat fragmentation. Some wildlife species react positively to certain construction activities, some negatively, and some show no reaction at all. Species would continue to inhabit the area or conversely move out of the area, and the populations may increase or decrease depending on the available adjacent forage and habitat present.

The project area would be re-vegetated during reclamation, but the species composition and percent cover may be different than the original vegetation. Since the vegetation removed would not necessarily be replaced with the same species, and in the same percentage, an alteration in habitat utilization could occur. Some burrowing animals may be killed or displaced, and their burrows destroyed during construction activities.

Moderate to high levels of noise would be generated in the immediate vicinity of construction activities. These effects would be temporary, lasting only the duration of construction activities. Displacement of animal species away from the ROW could occur.

Habitat fragmentation associated with the proposed action would be limited as the proposed sewer line follows an existing corridor along a developed residential/commercial area. As such, the habitat removed as a result of the proposed action is already fragmented. The proposed action would not significantly add to the existing habitat fragmentation. With implementation of proposed mitigation measures, wildlife effects are anticipated to be moderate in the short term and low in the long term for the proposed action.

### 3.7.1 Threatened & Endangered Species

According to the USFWS, there are 12 federally threatened, endangered, proposed, or candidate species with the potential for occurrence in San Juan County, New Mexico. One (1) of the 12

species, the southwestern willow flycatcher (*Empidonax traillii extimus*), has limited potential to occur in the proposed action area based upon evaluations of the species habitat requirements and field surveys. A determination of “may affect, not likely to adversely affect” the southwestern willow flycatcher was made based on the low level of effects and the low probability of southwestern willow flycatcher to occur in the action area. This determination was reached after informal consultation with the USFWS.

Of the nine (9) State of New Mexico threatened or endangered species with potential to occur in San Juan County, New Mexico, three (3) have the potential to occur in the project area: American peregrine falcon (*Falco peregrinus anatum*), bald eagle (*Haliaeetus leucocephalus*), and Spotted bat (*Euderma maculatum*). The proposed action would not directly affect habitat for state listed species: however, the proposed action would result in visual and auditory disturbances during construction. Effects to state listed species would be low and would not require additional mitigation measures beyond those described for wildlife and vegetation. See Appendix C, the Biological Assessment, for a more detailed analysis of effects to threatened and endangered species.

### **3.8 Archeological, Cultural, and Historic Resources**

The proposed action is located within the archaeologically rich San Juan Basin of northwestern New Mexico. In general, the prehistory of the San Juan Basin can be divided into five major periods: Paleoindian (ca. 10000 B.C. to 5500 B.C.), Archaic (ca. 5500 B.C. to A.D. 400), Anasazi Basketmaker II-III (A.D. 1 to 700), Anasazi Pueblo I-IV (A.D. 700 to 1540), and the historic (A.D. 1540 to present), which includes Native American as well as later Hispanic and Euro-American cultural components. Detailed descriptions of these various periods and select phases are provided in the Bureau of Land Management Farmington Field Office Farmington Proposed Resource Management Plan/Final Environmental Impact Statement (BLM 2003).

The proposed action is located in the Animas watershed. According to data provided by the Museum of New Mexico Archaeological Records Management System (ARMS) on October 20, 2009, there are 1,203 sites within the watershed with at least 1,312 temporal/cultural components on record. The following percentages were calculated using Table 2-2 from the 2002 BLM-FFO Cultural Resources Technical Report, which obtained data from ARMS in 2001. Anasazi cultural components are most represented (55%) followed by Navajo (18%), historic Hispanic or Euro-American (7%), and Archaic (5%). The remaining 15% are of unknown age or cultural affiliation. Most of those are likely Native American (Anasazi and Navajo).

A Class III cultural resource inventory has been completed for the proposed project. The inventory was conducted by El Morro CRM under the provision and standards of 4.10.15 New Mexico Administrative Code: Cultural Resources, Cultural Properties and Historic Preservation, Standards for Survey and Inventory. Standards included a records search and a pedestrian survey of the project area and cultural buffer zone on either side of the ROW.

The inventory of the proposed Aztec Sewer Outfall Line Project yielded a total of two previously recorded sites, LA 68214 and LA 122905. Site LA 68214, an in-use segment of the Elledge Mill Ditch, was recommended to be eligible to the National Register of Historic Places (NRHP) under Criteria A and C. The State Historic Preservation Office (SHPO) determined that site LA

122905, the Chaco Street Bridge, was eligible for listing in the NRHP under Criteria A and C. A single previously recorded site, LA 15235, was not relocated in the current survey area. Site LA 15235 was originally recorded as a Pueblo III period roomblock. It is unknown if potential subsurface archaeological deposits retain integrity and NRHP eligibility remains undetermined.

The proposed undertaking crosses NMDOT right of way at a point where New Mexico Highway (NM) 516 crosses the Animas River. NM 516 is carried over the river by NMDOT bridges 6219 (southbound lanes) and 6220 (northbound lanes). These bridges were constructed in 1960 and are potentially eligible for NRHP and State Register of Cultural Properties (SRCP) listing; however, the NMDOT Environmental Design Division did not require an evaluation of eligibility during the project archaeological investigation. The proposed undertaking should have no adverse effect on NMDOT bridges. All construction activities will take place under the NMDOT bridges and at a sufficient distance from its surface features, piers, and footings to eliminate the risk of any direct effects. The portion of the outfall line constructed in the proximity of the NMDOT bridges will be bored underground and placed in a steel carrier pipe to ensure that there would be no indirect effects to the foundational support of the bridges.

The proposed undertaking should have no adverse effect on historic properties with recommended protection measures. SHPO concurs that qualified archaeological construction monitors should be onsite during construction activities within 100 feet of any previously recorded sites.

### **3.8.1 American Indian Religious Concerns**

Traditional Cultural Properties (TCPs) is a term that has emerged in historic preservation management and the consideration of Native American religious concerns. TCPs are places that have cultural values that transcend, for instance, the values of scientific importance that are normally ascribed to cultural resources such as archaeological sites. The National Park Service has defined TCPs as follows:

A Traditional cultural property...can be defined generally as one [a property] that is eligible for the National Register because of its association with cultural practices or beliefs of a living community that (a) are rooted in that community's history, and (b) are important in maintaining the continuing cultural identity of the community (National Register Bulletin 38).

Native American cultural associations are the "communities" most likely to identify TCPs, although TCPs are not restricted to this group. Some TCPs are well known, while others may only be known to a small group of traditional practitioners with the specific site known or vague.

There are several pieces of legislation or Executive Order that can be linked to an evaluation of Native American religious concerns. These govern access and use of sacred sites, possession of sacred items, protection and treatment of human remains, and the protection of archaeological resources ascribed with religious or historic importance. These include the following:

- The American Indian Religious Freedom Act of 1978 (AIRFA; 42 USC 1996, P.L. 95-431 Stat. 469).

- Executive Order 13007 (24 May 1996).
- The Native American Graves Protection and Repatriation Act of 1990 (NAGPRA; 25 USC 3001, P.L. 101-601).
- The Archaeological Resources Protection Act of 1979 (ARPA; 16 USC 470, Public Law 96-95).

The proposed action is located in the northeastern portion of ‘Dinetah’, within the Animas River riparian corridor and the Greater Animas River Watershed. ‘Dinetah’ is the traditional homeland of, and is religiously significant, to the Navajo People.

For the proposed action, identification of TCPs were limited to reviewing existing published and unpublished literature, and the selective cultural inventory report conducted for the Proposed Action. Aztec Ruins has been identified as a Navajo affiliated TCP and retains significance for modern Pueblo groups. Aztec Ruins (Kin niteel or Wide House) is a place sacred to the Navajo, with numerous chantway and rite associations (Van Valkenburgh 1974:141). The proposed action is not thought physically threaten the integrity of any TCPs, prevent access to sacred sites, prevent the possession of sacred objects, or interfere or otherwise hinder the performance of traditional ceremonies and rituals.

### **3.9 Socioeconomics / Environmental Justice**

#### **3.9.1 Socioeconomic Issues**

No costs to specific individual users would be associated with the proposed action such as connection fees. The cost of the proposed action would be remunerated with municipal, State, and/or Federal funds. The proposed project is not anticipated to have a disproportionate effect upon low income families.

#### **3.9.2 Environmental Justice**

The vast majority (over 70%) of residents within 4 miles of the project area are adults, whites, and homeowners, with a household income of over \$25,000. The 2012 US Health and Human Services poverty guideline is \$23,050 for a household of four. See Appendix E for more information regarding the demographic make-up of the project area. The proposed action will serve all populations equally and will be constructed in a manner to ensure that no persons or populations will be discriminated against or denied the benefits of the project because of their race, color, income level, or national origin. There will be no adverse impacts that are considered disproportionate to any particular population(s) based on ethnicity or income. The installation of the proposed sewer line could have a positive long term effect upon populations in the project area as the proposed sewer line replacement would reduce the risk of line failure and contamination of the project area, and would serve to maintain the current standard of living.

### **3.10 Other Resources**

#### **3.10.1 Public Health and Safety**

Installation of the proposed sewer line would reduce the risk of line failure associated with the existing line. Line failure could pose a potential health risk to the local community. Appropriate

measures would be taken to ensure risks of injury to the public are controlled during line construction such as barricading trenches, erecting warning signs, and utilizing applicable traffic control measures.

### **3.10.2 Transportation**

Operation of the proposed sewer line is not anticipated to have a detrimental effect upon the local transportation network. Any driveway cuts would be returned to their original condition or better at or before completion of the project. The proposed action would have no impact on the structure or integrity of the NM 516 bridges (NMDOT bridges 6219 and 6220) or their footings (see Section 3.8 above).

Some minor disruption of traffic would occur on local side streets during construction activities of the sewer line. The proposed easement does not cross any arterial roadways. The easement does cross three roads (S. Oliver Dr., Western Ave., and Light Plant Rd.), two of which are dead ends that terminate shortly after the crossings. Use of the three roads appeared to be very light during the field survey of the project area. However, traffic flow will be redirected as necessary during construction activities according to the Manual of Uniform Traffic Devices and applicable traffic control plans developed for the project. The changes in traffic patterns will be temporary, and the construction activities will be conducted in a phased approach.

### **3.10.3 Visual Impacts**

Visual resources and viewsheds for the project area include mainly residential and commercial developments to the north. To the south, views are dominated by the relatively natural setting of the Animas River corridor and associated floodplains populated by cottonwood stands, fallow fields, and Riverside Park. The existing easement is partly overgrown, but a sizeable portion of the line does cross bare ground or pavement. Installation of the new line would likely not be noticeable to the casual observer upon reclamation of the surface. During construction, construction equipment and materials may be temporarily visible to nearby residents and visitors to Riverside Park where construction takes place adjacent to residences and the park respectively. Effects are anticipated to be minor due to the level of existing disturbance and activity adjacent to and within the easement.

### **3.10.1 Noise**

Existing noise levels within the project area were observed to be relatively low during the field survey, and were limited mainly to traffic and pet noise. During construction, there will be a slight increase in noise pollution from construction equipment. Noise is unavoidable but temporary and is not expected to cause an unacceptable level of impact. Efforts will be utilized to minimize noise impacts. Due to the proximity of residences, construction activities should not take place outside of regular weekday business hours.

## **3.11 Cumulative Impacts**

The construction and operation of the proposed sewer line not anticipated to commit irreversible or irretrievable resources.

The proposed sewer line would serve to transport collected wastewater to the renovated Aztec Wastewater Treatment Plant located at the western end of the proposed line. The treatment plant was recently renovated in order to meet the anticipated future demand increases on the City's wastewater system and to modernize the facility. In order to better serve the treatment facility, the proposed line would increase capacity over the existing line. The proposed line would not in itself increase wastewater volumes or add service beyond what already exists. However, the line would allow for future expansion of the City's wastewater collection system.

Additional cumulative impacts from the proposed action are likely to be low as the proposed line would follow an existing easement. Once constructed, the presence of the line and the effect of the line in the surrounding area would be minimal to imperceptible.

## 4. SUMMARY OF MITIGATING MEASURES

### 4.1 Physical Resource Measures

Best Management Practices (BMPs) described in the SWPPP and stipulations associated with the Clean Water Act Section 401 certification and Section 404 permit would effectively mitigate potential effects to soils and water resources. BMPs typically include measures to slow run-off and reduce erosion thereby reducing effects to soils and surface waters. Good housekeeping BMPs will reduce the risk of spilling potential ground water and surface water contaminants. Stipulations associated with 401/404 compliance would mitigate or offset effects to wetlands and surface water resources within the project area. Re-vegetation of the easement will reduce soil loss by reducing erosion.

Some dust will be generated during construction. Mitigation measures will include requirements to reduce dust as needed during construction by watering down or covering disturbed areas.

The portion of the proposed outfall line located under the NMDOT bridges 6219 and 6220 will be bored underground and placed in a steel carrier pipe to avoid disturbing the foundational support for the bridges. Any driveway cuts would be returned to their original condition or better at or before completion of the project. Traffic control devices will be employed as needed during construction activities.

Efforts will be utilized to minimize noise impacts. Due to the proximity of residences, construction activities should not take place outside of regular weekday business hours.

### 4.2 Biological Resource Measures

Re-vegetation of the easement will reduce direct effects to vegetation by replacing removed vegetation and will reduce indirect effects to wildlife by replacing forage and cover. Following completion of construction activities, disturbed areas will be reseeded with native vegetation to minimize erosion.

To minimize trapping of wildlife during trenching operations, trenching and backfilling piping will be conducted concurrently. A minimal amount of trenching will be kept open overnight, and escape ramps will be provided for wildlife. Escape ramps should be constructed at least every 300 feet and could consist of lateral trenches or planks not to exceed 45 degrees in pitch. Trenches should be inspected for wildlife prior to backfilling.

If construction activities are to begin during the migratory bird nesting season (April 15 - August 15), a preconstruction survey for active nests should be conducted.

In order to reduce the potential for spreading noxious weeds to the project area, noxious weeds should be sprayed with herbicide prior to start of construction activities, as required. No other mitigation measures are required for noxious weeds.

#### **4.3 Threatened and Endangered Species Measures**

All construction activities will occur outside of the migratory bird nesting season (April 15 – August 15). If construction is to occur during this period, a biological monitor will be on site to ensure no active nests are removed. The removal of vegetation will be avoided where possible.

#### **4.4 Socioeconomic / Environmental Justice Measures**

By maintaining the existing wastewater collection system, the proposed action will likely have a positive effect on socioeconomic conditions in the area. Provision of basic utilities, such as wastewater collection, will maintain the standard of living in the area.

The proposed project will indirectly benefit minority and low-income populations in Aztec by continuing to provide an effective wastewater collection system to the entire community.

#### **4.5 Archeological, Cultural and Historic Resources Measures**

A qualified archaeological construction monitor will be onsite during construction activities within 100 feet of all previously recorded sites in or adjacent to the project area as indicated in the archaeological report and monitoring report.

In order to provide for protection of possible cultural resource materials during construction activities, the construction contract documents should include the following or similar language:

“In the event of a discovery [“discovery” means any previously unidentified or incorrectly identified cultural resources, including but not limited to, archaeological deposits, human remains, or locations reportedly associated with Native American religious/ traditional beliefs or practices], the Contractor must immediately cease all operations in the immediate vicinity of the discovery and notify the Engineer. The Contractor should be aware of his/her responsibilities under the National Historic Preservation Act of 1966 and the Archeological Resources Protection Act of 1979.”

Upon notification of a discovery by the Contractor, the Engineer must immediately notify the New Mexico State Historic Preservation Office (NMSHPO), as well as other Native American groups that have requested notification (the Comanche Tribe, for example).

The portion of the proposed outfall line located under the NMDOT bridges 6219 and 6220 will be bored underground and placed in a steel carrier pipe to avoid disturbing the foundational support for the bridges.

#### **4.6 Environmentally Sensitive Areas**

Best Management Practices (BMPs) described in the SWPPP and stipulations associated with the 401/404 compliance would effectively avoid, minimize, or mitigate potential effects to wetlands or WOUS. BMPs would reduce contamination of wetlands and WOUS as described above in section 4.1.

#### **4.7 Cumulative Impact Measures**

No measures are necessary at this time to mitigate cumulative effects of the proposed action.

## 5. CONSULTATION, COORDINATION, AND PUBLIC INVOLVEMENT

### 5.1 Agencies Consulted

- New Mexico Office of Cultural Affairs, State Historic Preservation Office
- Pueblo of Acoma
- Hopi Tribal Council
- Pueblo of Laguna
- Kiowa Tribe of Oklahoma
- Navajo Nation
- Ohkay Owingeh
- Pueblo of Zia
- Pueblo of Tesuque
- Ute Mountain Ute Tribe
- Southern Ute Indian Tribe
- U.S. Department of Interior - National Park Service, Intermountain Region
- U.S. Department of Interior - Fish and Wildlife Service, New Mexico Ecological Services Field Office
- New Mexico Department of Game and Fish, Conservation Services Division
- New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division
- U.S. Army Corps of Engineers - Albuquerque District, Regulatory Branch
- U.S. Department of Agriculture - Natural Resources Conservation Service, New Mexico State Office
- New Mexico Environment Department, Environmental Impact Review Coordinator
- New Mexico Environment Department, Surface Water Quality Bureau
- New Mexico Environment Department, Air Quality Bureau
- New Mexico Department of Transportation
- Federal Emergency Management Agency, Region VI
- City of Aztec Flood Plain Administrator
- Elledge Mill Ditch
- San Juan Water Commission
- Center for Biological Diversity
- Forest Guardians
- San Juan Citizens Alliance

See Appendix F for an example of the letter submitted to agencies soliciting comments as well as copies of the response letters received.

## 5.2 Public Involvement

In addition to the scoping letters mailed to the agencies and interest groups listed above in Section 5.1, the public was also invited to comment on the proposed action during an open Public Hearing. The notice of the hearing was published in the local newspaper of record, posted at public points within the City of Aztec regularly used to post public notices, and a copy of the notice was mailed to all private landowners within the immediate project area. The public hearing was held on January 3, 2013 at 6:00 PM in the Aztec City Hall Commission Meeting Room. See Appendix G for a copy of the public notice, hearing minutes, and the mailing list used.

## 5.3 Responsiveness Summary

See the blow table for a summary of the public comments received during the public hearing and a response to those comments.

**Table 5: Responsiveness Summary**

<b>IN THE MATTER OF THE PUBLIC HEARING REGARDING:</b>		
Replacement of the City of Aztec's Sewer Outfall Line from Aztec Blvd. west to the City's Waste Water Treatment Plant.		
<b>Summary of Public Comments:</b>		
Private land owners along the existing easement were concerned that the replacement of the existing line within the existing easement would inhibit their use of their private property or would result in the loss of their private property to the City.		
<b>Specific Public Comment</b>	<b>Agency Response</b>	<b>Modifications in response to public comment</b>
1) Land owner was concerned that they would lose their property.	Mike Huber, City Public Works Director (City), explained that there is an existing easement through their property and that replacement of the line would follow this existing easement. They would still retain their existing property, but the City maintains the right to access their easement which may mean that structures built over the easement could be removed by the City with no obligation to replace any such structure.	Comment is beyond the scope of the proposed action.
2) Why can't the City route the line through City property (Riverside Park)?	The City explored this option and determined it would be cost prohibitive. The City has an existing easement through the landowner's property and has the right to utilize the easement to replace the outfall line.	This alternative is discussed in Section 2.3 above.

<p>3) The City will comply with the desires of State and Federal agencies; they should comply with the desires of the people to the same degree.</p>	<p>The City ensured the public that they would do all they could to meet the needs of the landowners, and Mike Huber encouraged the attendants to call him at any time if they wanted to discuss the project more, and that he was available to make site visits to their property if they wished.</p>	<p>The City has expressed their commitment to address the public's concern and has engaged the public through the public hearing process.</p>
<p>4) What would stop the City from coming in and saying "we want to put an arterial road over the line to ease traffic on Aztec Blvd. because we have an easement"?</p>	<p>The City's easement already exists, the construction of the replacement line would not change that. More importantly, the City's easement is a utility easement for the sole purpose of a utility line. The easement does not grant the City the right to develop a road along the easement for a purpose other than accessing the easement.</p>	<p>Comment is beyond the scope of the proposed action.</p>
<p>5) There is a mobile home over or very close to the existing outfall line. What are you going to do about that?</p>	<p>The City and the contract engineer feel that the proposed line could be safely bored under the home without resulting in settling or other detrimental structural effects.</p>	<p>The amount of proposed line to be bored has been revised in the Section 2.2.</p>
<p>6) Will boring under the mobile home lead to settlement?</p>	<p>The City and the contract engineer feel that the proposed line could be safely bored under the home without resulting in settling or other detrimental structural effects.</p>	<p>The issue of the proximity of this home to the proposed line is discussed in Section 3.2.1.</p>
<p>7) Landowner of mobile home park commented that they have filled in the southern portion of the property to create a turn-around area for trucks delivering or removing mobile units, burying the existing outfall line approximately 17 feet deep. Replaced fill upon completion of line replacement must be sturdy enough to support an 80,000 pound trailer.</p>	<p>If the line were to be open cut in this area, the disturbance would be temporary, and the backfill would be required to be compacted to 95% of the original fill. However, the City plans to bore this section of line. The existing manhole that sits 17 feet above the exiting line is unsafe for worker entry. The existing manhole will be moved east to a spot where the line is not buried so deep. This will limit future maintenance activities on this property, in addition to creating a safer entry point for maintenance.</p>	<p>The amount of proposed line to be bored has been revised in the Section 2.2.</p>

<p>8) What about the future maintenance of this section buried 17 feet deep? How will it affect the trailer park?</p>	<p>The City's right to access their easement for maintenance would not change with this action. The proposed action would improve maintenance access to this portion of the line by relocating the existing 17-foot deep manhole to a shallower area off the trailer park property. If this section of line needed replacement in the future, the section would either be bored, with little to no effect to the trailer park, or open cut. If open cut, there would be a temporary loss of a turn-around area for trailer hauling trucks until the line is backfilled and compacted to 95% compaction of the original fill. The replacement of the existing line would reduce the likelihood that a catastrophic failure of the line along this reach could result in lengthy repairs that may be avoided by the proposed action.</p>	<p>Comment is beyond the scope of the proposed action. The City holds an existing easement that allows access to the alignment for maintenance regardless of the proposed action.</p>
<p>9) A hand-dug well is located within 4 feet of the line in the vicinity of manhole 21. The well is not being used, but the commenter would like to keep that well.</p>	<p>The City made note of the location of the well and will try to avoid the well.</p>	<p>The Contractor will be required to attempt to locate the hand-dug well in the field. Once located, the well location would be fenced for the duration of construction.</p>
<p>10) What will the City do about restoring the construction areas, the City has not lived up to its obligation to clean up after repairs in the past?</p>	<p>Mr. Huber assured the public that he operates in a different fashion than his predecessors. The contractor will be bound to clean up after itself, the City will ensure that the site is restored, any post construction monitoring conducted (wetlands), and that citizens are satisfied.</p>	<p>Site restoration is discussed in Chapter 4 Mitigation.</p>
<p>11) What will the City do about driveways torn up during construction?</p>	<p>Damage to driveways will be repaired as part of the construction contract.</p>	<p>Site restoration is discussed in Chapter 4 Mitigation.</p>

## 6. REFERENCES

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## **APPENDIX A**

### **Plan Drawings**

(Sheet U1 – see project file for full plan set)

## **APPENDIX B**

### **Project Area Images**

(See Attachment C of the Biological Assessment)

**APPENDIX C**  
**Biological Assessment**

**APPENDIX D**  
**Archaeological Survey Report**

## **APPENDIX E**

### **Demographic Data Summary – Environmental Justice**

## **APPENDIX F**

### **Consultation and Coordination Documentation**

## **APPENDIX G**

### **Public Involvement Documentation**