

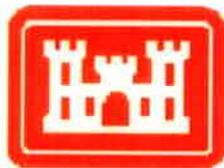
FINAL
ENVIRONMENTAL ASSESSMENT
and
FINDING OF NO SIGNIFICANT IMPACT

for the

CITY OF RIO RANCHO,
NEW MEXICO

SECTION 593 WATER RESOURCES DEVELOPMENT ACT
Rio Rancho Water Upgrade

June 2, 2006



**US Army Corps
of Engineers.
Albuquerque District**

Finding of No Significant Impact
Section 593 Water Resources Development Act
Rio Rancho Water Upgrade
Rio Rancho, New Mexico

The U.S. Army Corps of Engineers (Corps), Albuquerque District, in cooperation with and at the request of the City of Rio Rancho, New Mexico, is planning a project to install arsenic removal equipment at three existing Rio Rancho Water Supply Wells. The construction work would be conducted under Section 593 of the Water Resources Development Act of 1999 (Public Law 106-53; 33 U.S.C. 2201 *et seq.*), as amended. The Act authorizes the Corps to provide assistance for design and construction for water-related environmental infrastructure and resource protection and development projects in central New Mexico. The City of Rio Rancho is the local sponsor.

The proposed installation of the arsenic removal equipment at Wells 9, 12 and 13 is needed to comply with the Environmental Protection Agency's (USEPA) Arsenic Rule. The EPA adopted a new standard for arsenic in drinking water at 10 parts per billion (ppb), replacing the old standard of 50 ppb. The date by which systems should have been in compliance with the new 10 ppb standard was January 23, 2006.

The proposed project area is located in Sandoval County, about 20 miles northwest of downtown Albuquerque. The arsenic removal equipment would be installed within the existing fencing at Wells 12 and 13. The existing fenced boundary for Well 9 would need to be expanded to sufficiently house the additional equipment. Currently, the fenced boundary is 0.9 acre and would need to be expanded to one acre.

The potential effects of the proposed action are similar to the no-action alternative, with the caveat that the no-action alternative should be perceived as an environmentally unsound course of action with regard to improving the quality of Rio Rancho's drinking water. Also, the no-action alternative would not support the City of Rio Rancho's efforts to comply with the Arsenic Rule by the implementation date above.

The proposed work would not affect waters of the United States regulated by Section 404 of the Clean Water Act (CWA); therefore a Section 404 Department of the Army (DA) permit would not be needed for the project. The proposed installation of the arsenic removal equipment would occur outside the floodplain and would not significantly alter any natural feature or use of the area. Therefore, the planned action is consistent with Executive Order 11988 (Floodplain Management). The proposed work complies with Executive Order 11990 (Protection of Wetlands) as no wetlands are within the project area.

Cultural resources surveys of the three project areas were conducted by a Corps archaeologist on January 6 and 24, and on March 7, 2005. Prior to the field surveys, a search of the New Mexico Archaeological Records Management Section's database found that 59 archaeological sites have been previously recorded in the area. No State Register of Cultural Properties or National Register of Historic Places properties are known to occur in the immediate vicinity of the three project areas.

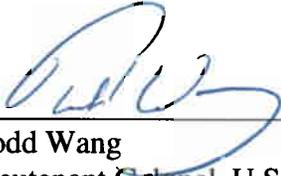
No cultural resources were found to occur within or adjacent to Compound No. 9. An archaeological site, LA121436, was found to be adjacent to but outside of the project area at Compound No. 13 and it would not be affected by the project. A portion of the archaeological site, LA80890, is located within the project area at Compound No. 12. The Corps recommended that testing be conducted to determine the nature and extent of the site within the Compound No. 12 project area. The testing included a total of 47 auger holes that were placed within and adjacent to the construction area. The holes were terminated at the top of the sterile caliche layer which varied from 20 to 130 centimeters below the surface. Seventeen stone flakes and modern debris were recovered from eight holes from just below the surface to just above the caliche layer. The project area is badly disturbed, and intact buried archaeological deposits are not present.

The Corps is of the opinion that there would be No Historic Properties Affected for the work to be conducted at Compounds No. 9, 12 and 13. None of the other archaeological sites in the vicinity would be affected by the proposed project. The New Mexico State Historic Preservation Officer agreed with the Corps' determination of no adverse effect.

Only short-term negligible adverse impacts to land use, aesthetics, soils, air, noise, vegetation, and wildlife, would occur during construction. No impacts would occur to land use (long-term), climate, soils (long-term), air (long-term), wetlands or other waters of the U.S., special status species, floodplains, socioeconomics, environmental justice or cultural resources. Minor beneficial impacts would occur to human health and safety. The proposed project would not result in any moderate or significant, short-term, long-term, or cumulative adverse effects.

The planned action has been fully coordinated with federal, state, tribal, and local agencies with jurisdiction over the biological, ecological, cultural, and hydrological resources of the project area. Based upon these factors and others discussed in detail in the Environmental Assessment, the planned action would not have a significant effect on the human environment. Therefore, an Environment Impact Statement will not be prepared for the proposed installation of the arsenic removal equipment.

6/8/06
Date



Todd Wang
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TABLE OF CONTENTS

	<u>Page</u>
1.0 INTRODUCTION	1
1.1 Background and Location	1
1.2 Purpose and Need	1
1.3 Regulatory Compliance	1
2.0 PROPOSED ACTION AND ALTERNATIVE	4
2.1 Proposed Action	4
2.2 The No-Action Alternative	9
3.0 EXISTING ENVIRONMENT AND FORESEEABLE AFFECTS	10
3.1 Physical Resources	10
3.1.1 Physiography, Geology, and Soils	10
3.1.2 Climate	11
3.1.3 Water Resources	12
3.1.4 Floodplains and Wetlands	12
3.1.5 Air Quality, Noise, and Aesthetics	13
3.2 Biological Resources	14
3.2.1 Vegetation Communities	14
3.2.2 Wildlife	14
3.2.3 Special Status Species	14
3.3 Cultural Resources	18
3.4 Human Health and Safety	19
3.5 Land Use and Socioeconomic Considerations	20
3.6 Environmental Justice	20
3.7 Cumulative Impacts	20
4.0 CONCLUSION AND SUMMARY	21
5.0 PREPARATION, CONSULTATION AND COORDINATION	21
5.1 Preparation	21
5.2 General Consultation and Coordination	22
6.0 REFERENCES CITED	23

TABLE OF CONTENTS (Cont.)

	<u>Page</u>
LIST OF FIGURES	
Figure 1. Proposed Project Location for the Rio Rancho Water Upgrade in Rio Rancho, Sandoval County, New Mexico.	2
Figure 2. Overview of Proposed Well Locations for the Installment Of Arsenic Removal Equipment in Rio Rancho, Sandoval County, New Mexico.	3
Figure 3. Section 593 Project Location of Water Well #9 Compound.	5
Figure 4. Section 593 Project Location of Water Well #12 Compound.	6
Figure 5. Section 593 Project Location of Water Well #13 Compound.	7
SITE VISIT PHOTOS	
• 1). Water Supply Well 9	8
• 2). Water Supply Well 12	8
• 3). Water Supply Well 13	9
LIST OF TABLES	
Table 1 Federal and State of New Mexico's Special Status Species with Potential to Occur in Proposed Project Site.	15
APPENDICES	
Appendix A Cultural Resources Consultation Letter	
Appendix B Draft EA Letter/Public Review Comments and Corps' Responses	
Appendix C Notice of Draft EA Availability	

1.0 INTRODUCTION

1.1 Background and Location

The United States Army Corps of Engineers (Corps), Albuquerque District, in cooperation with and at the request of the City of Rio Rancho, Sandoval County, New Mexico is planning a project to install arsenic removal equipment at three existing Rio Rancho Water Supply Wells in Rio Rancho, New Mexico (see Figure 1 for project location). The arsenic removal equipment for Wells 12 and 13 would be constructed within the existing fencing for the well. The existing fenced boundary for Well 9 would have to be expanded in order to house any additional equipment (see Figure 2 for well site location and Figures 3 through 5 for individual well locations). The proposed construction period would be approximately nine months and would be expected to start in June 2006.

The rehabilitation work would be conducted under Section 593 of the Water Resources Act of 1999 (Public Law 106-53; 33 U.S.C. 2201 *et seq.*) as amended. The Act authorizes the Corps to provide assistance in the form of design and construction for water-related environmental infrastructure, resource protection, and development projects in Central New Mexico, which is defined within the Act as the counties of Bernalillo, Sandoval and Valencia. Provisions under the Act require that the project be publicly owned to receive Federal assistance. As such, the non-Federal project sponsor is the City of Rio Rancho, New Mexico. The Act further requires that a cooperative agreement be established between the Federal and non-Federal interests. The Federal share of project costs under each cooperative agreement is 75 percent of the total project costs.

1.2 Purpose and Need

The City of Rio Rancho operates approximately 20 groundwater wells that serve a population of approximately 55,000. Thirteen of the City's wells exceed the arsenic maximum contaminant level (MCL) of 10 parts per billion (ppb). Additionally, the City's population is expected to double over the next decade and additional groundwater resources need to be developed. Drinking water supplies that are impacted by the new arsenic MCL of ten ppb had to comply with U.S. Environmental Protection Agency's (USEPA) Arsenic Rule by January 23, 2006, unless a state-approved extension of two years or more is obtained. New Mexico State Department of Environment's Drinking Water Bureau (DWB) was planning to extend the arsenic compliance period based on an "Equivalent Health Risk" analysis. Following the findings of the analysis, a number of water systems below a groundwater arsenic level of 35 ppb received an extension to comply with the arsenic MCL prior to January 23, 2006. However, the wells included in this proposed project, Wells 9, 12 and 13, have had three separate sampling events where the arsenic level has been above 35 ppb. Therefore, these wells should have been in compliance with the new 10 ppb standard prior to January 23, 2006.

1.3 Regulatory Compliance

This Environmental Assessment was prepared by the Corps in compliance with all applicable Federal Statutes, Regulations, and Executive Orders, including the following:



Figure 1. Proposed Project Location for the Rio Rancho Water Upgrade in Rio Rancho, Sandoval County, New Mexico.

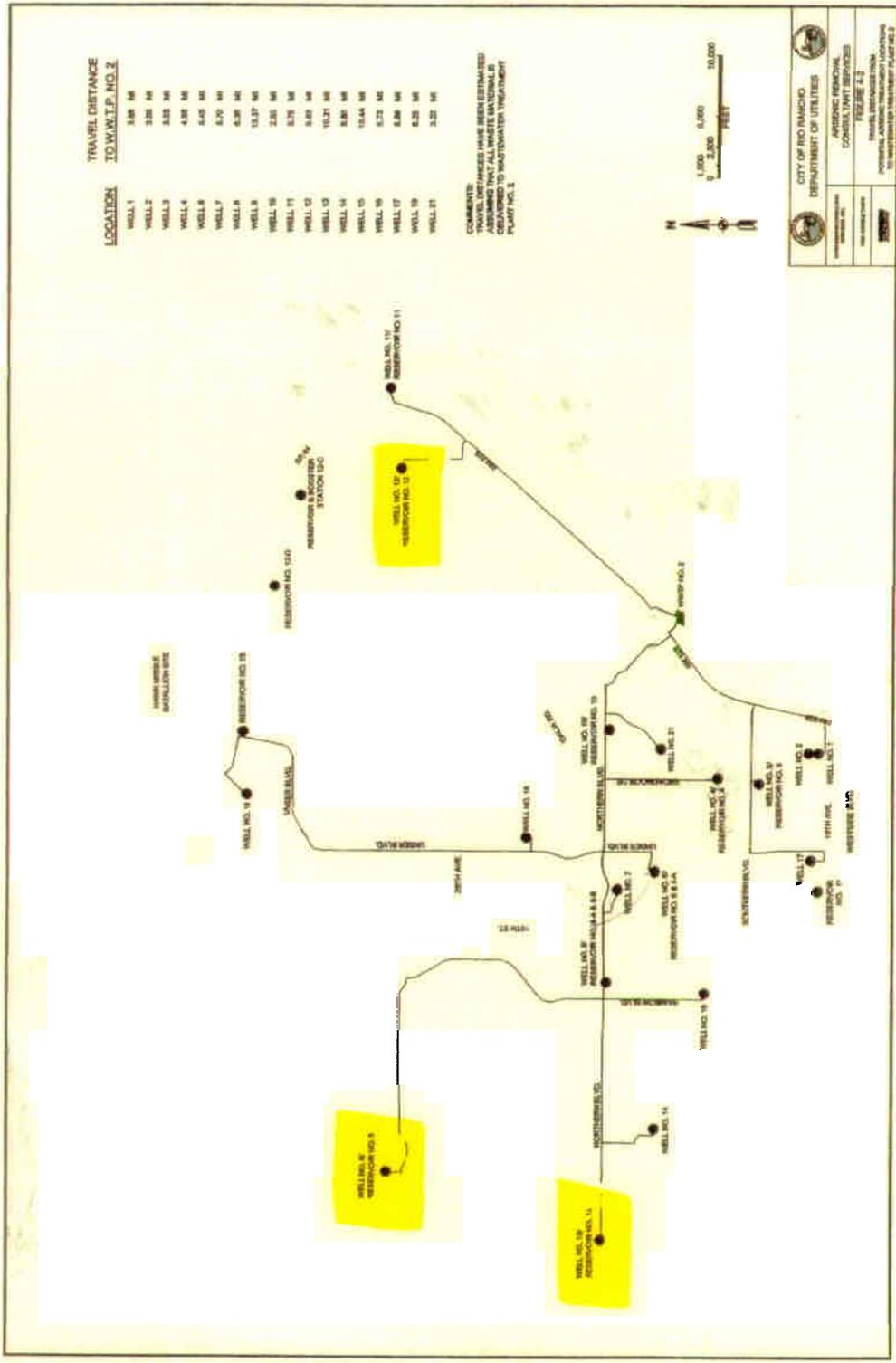


Figure 2. Overview of Proposed Well Locations for the Installment of Arsenic Removal Equipment in Rio Rancho, Sandoval County, New Mexico

- Archaeological Resources Protection Act of 1979 (16 U.S.C 470)
- Clean Water Act of 1972 and Amendments of 1977(CWA)
- Clean Air Act of 1972, as amended (42 U.S.C. 7401 *et seq.*)
- Endangered Species Act of 1973, (ESA) as amended (16 U.S.C. 1531 *et seq.*)
- Executive Order 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low Income Populations, 1994
- Fish and Wildlife Coordination Act of 1958, as amended (16 U.S.C. 661 *et seq.*)
- Floodplain Management (Executive Order 11988)
- National Environmental Policy Act of 1969, as amended (42 U.S.C 4321 *et seq.*)
- Regulations for Implementing the Procedural Provisions of NEPA (40 CFR 1500 *et seq.*)
- National Historic Preservation Act of 1966, as amended (16 U.S.C. 470 *et seq.*)
- Native American Graves Protection and Repatriation Act of 1990 (25 U.S.C. 3001 *et seq.*)
- Protection and Enhancement of the Cultural Environment (Executive Order 11593)
- Protection of Wetlands (Executive Order 11990)
- Procedures for Implementing NEPA (33 CFR 230; ER 200-2-2)
- U.S. Army Corps of Engineers' Procedures for Implementing NEPA (33 CFR 230)
- Farmland Protection Policy Act of 1981, as amended (7 U.S.C. 4201 *et seq.*)

This Environmental Assessment also reflects compliance with all applicable State of New Mexico and local regulations, statutes, policies, and standards for conserving the environment such as water and air quality, endangered plants and animals, and cultural resources.

2.0 PROPOSED ACTIONS AND ALTERNATIVES

All Federal agencies that assist or take part in projects that utilize funding are mandated by the National Environmental Policy Act (NEPA) to evaluate alternative courses of action. Typically, alternatives are a set of different locations that satisfy certain defined project criterion. However, alternatives can also include design considerations and/or attributes that may mitigate or reduce impacts generated by a given action. In general the NEPA process can provide decision makers with an evaluation of the present and future conditions with regard to the implementation and timing of an action at a given site. Finally, a particular design chosen from alternatives evaluated can then be implemented in the best interest of the public and environment.

2.1 Proposed Action

The proposed action involves installation of arsenic removal equipment at three existing well sites, 9, 12 and 13 (see photos 1-3). Various arsenic removal technologies were studied for this proposed project. They include adsorption media (alumina, iron, or other metallic sorbents), ion exchange, coagulation followed by filtration, and coagulation with microfiltration. Based on a review of the water quality parameters, it appears that adsorption using granular iron media with or without pH adjustment, coagulation followed by conventional filtration or membrane filtration, or ion exchange are the most applicable technologies for the arsenic impacted wells. Waste media or waste brines generated during the removal of Arsenic

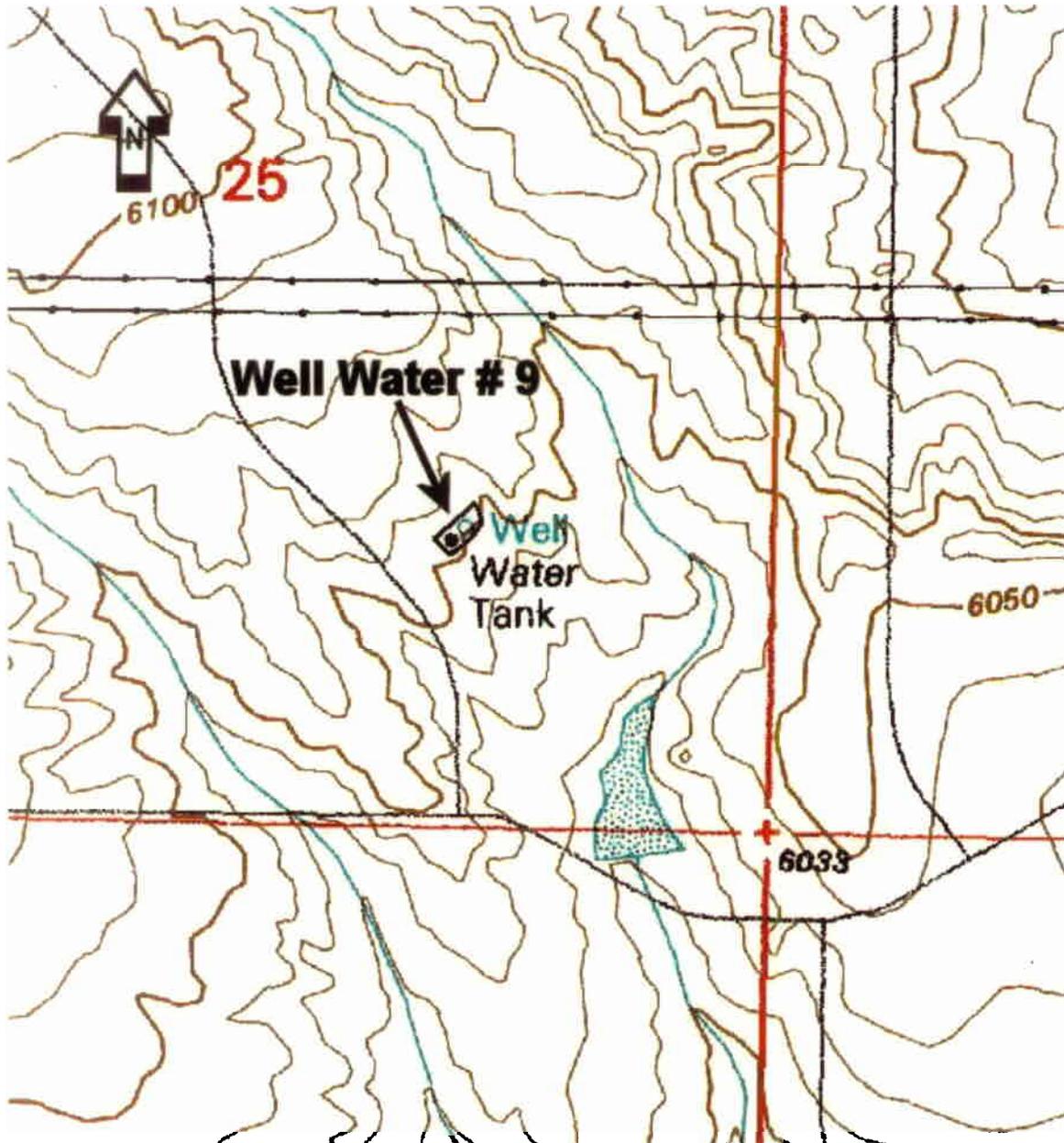


Figure 3: Section 593 Project Location of Water Well #9 Compound. Projection Location falls with the City of Rio Rancho, Sandoval County, New Mexico. Adapted from USGS 7.5' Quadrangle Map: Arroyo De Las Calabacillas, NM (35106-C7, 1990, NAD27, UTM Zone 13).

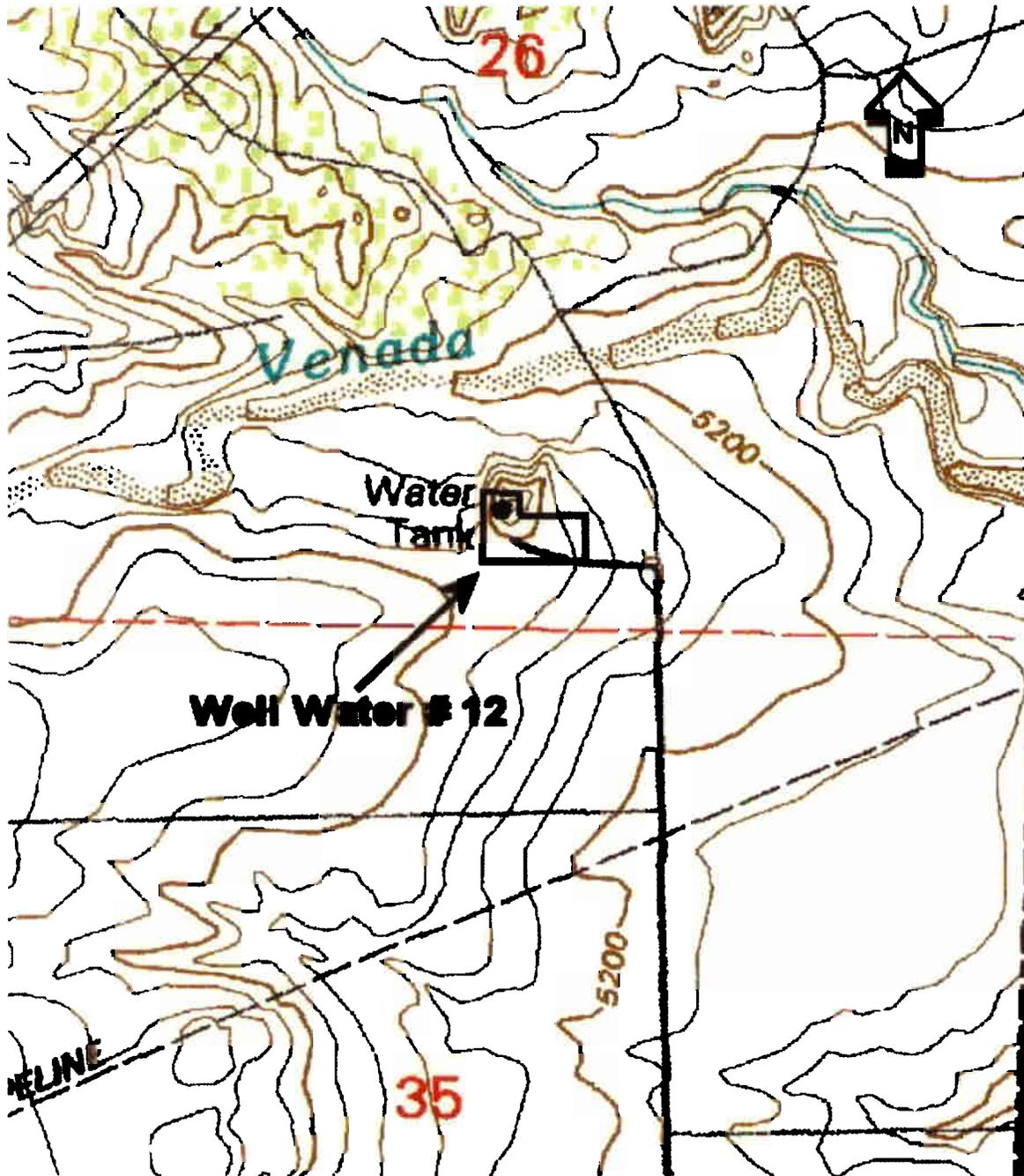


Figure 4. Section 593 Project Location of Water Well #12 Compound. Projection Location falls with the City of Rio Rancho, Sandoval County, New Mexico. Adapted from USGS 7.5' Quadrangle Map: Bernalillo, NM (35106-C5, 1990, NAD27, UTM Zone

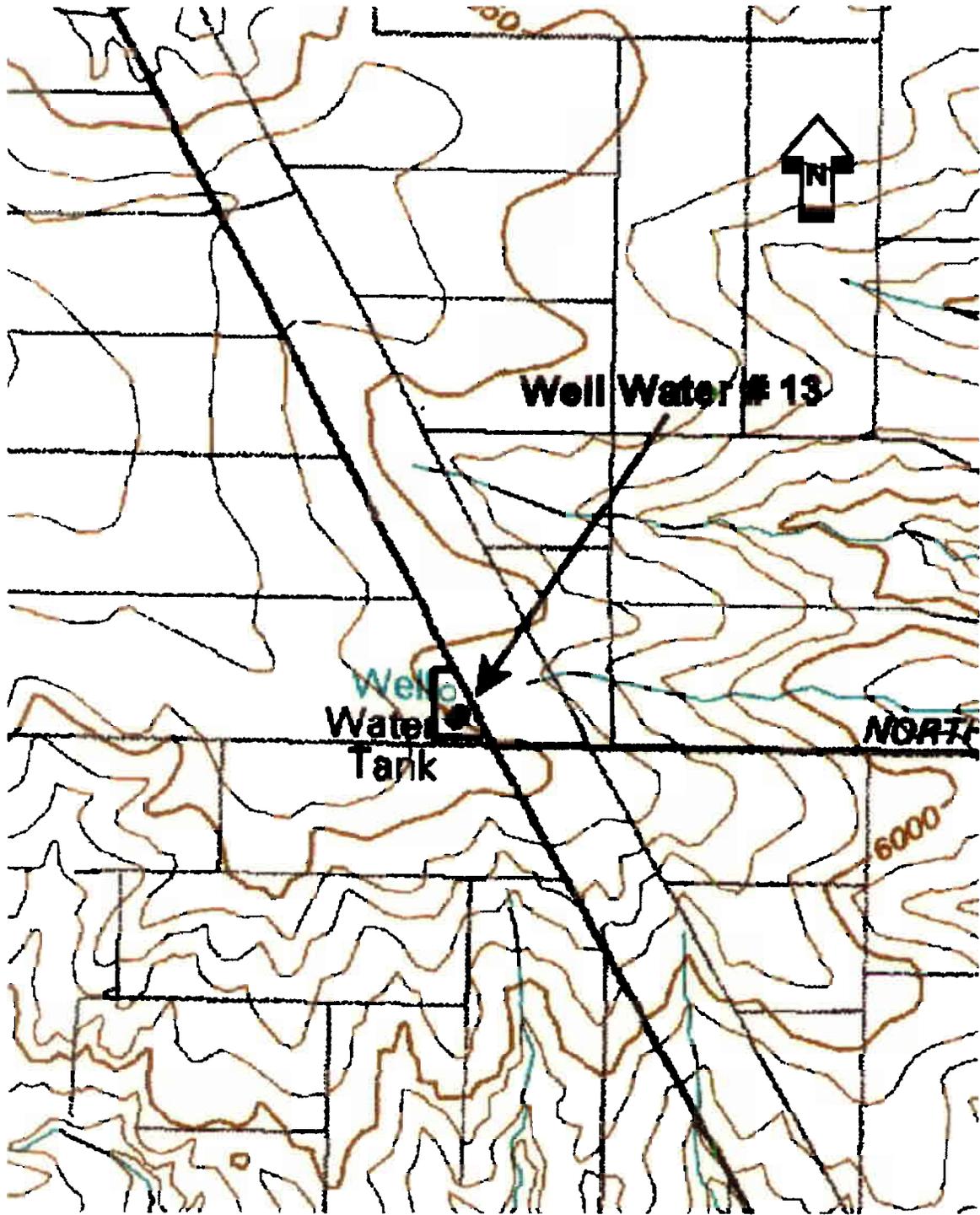
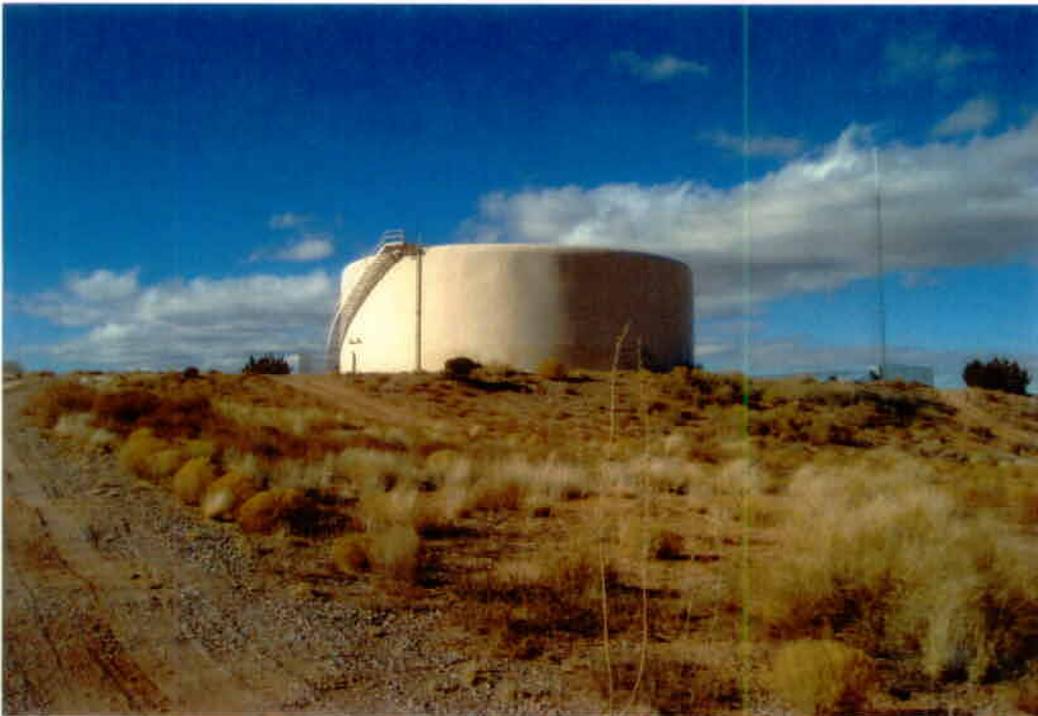
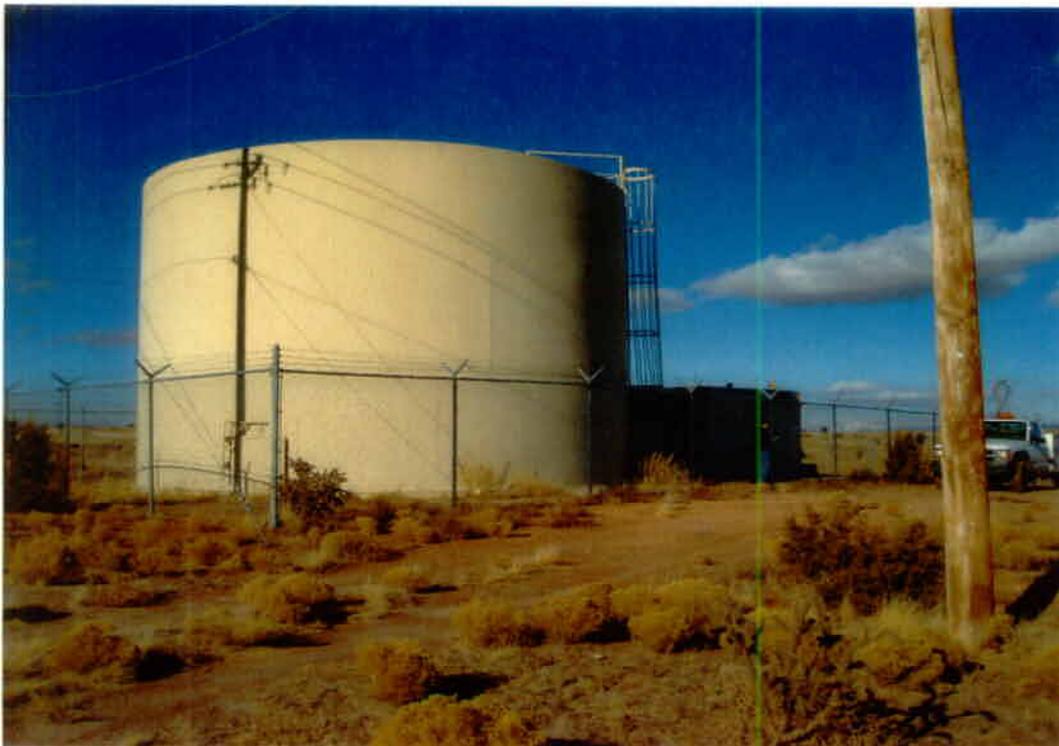


Figure 5. Section 593 Project Location of Water Well #13 Compound. Projection Location falls with the City of Rio Rancho, Sandoval County, New Mexico. Adapted from USGS 7.5' Quadrangle Map: Arroyo De Las Calabacillas, NM (35106-C7, 1990, NAD27, UTM Zone 13).

Rio Rancho Water Supply Wells



1). Water Supply Well 9



2). Water Supply Well 12



3). Water Supply Well 13

from the groundwater shall be first analyzed for their applicability as a RCRA defined waste prior to disposal. Thereafter, sludge will be trucked to a wastewater treatment plant and put into sludge holding tanks. Each well site is secured by an intruder resistant 6-7-foot chain link fence with three-stranded barbed wire and locked gate. Each site is accessible to heavy construction equipment; however, several sites are only accessible by unimproved and unmaintained dirt roads in remote areas. The arsenic removal equipment would be installed within the existing fencing at Wells 12 and 13. The fenced boundary for Well 9 would need to be expanded to sufficiently house the arsenic removal equipment. Currently, the fenced boundary for Well 9 is 0.9 acre and would need to be expanded to one acre.

2.2 The No-Action Alternative

Under the No-Action alternative, installation of the arsenic removal equipment would not take place. No federal funding would be expended and there would be no new effects to the project site or surrounding environment. However, the No-Action alternative would not support the City of Rio Rancho's efforts to be in compliance with the Arsenic Rule. Also, the No-Action Alternative should be perceived as an environmentally unsound course of action with regard to the many concerted efforts to improve the quality of the drinking water within the city of Rio Rancho.

3.0 EXISTING ENVIRONMENTAL AND FORESEEABLE EFFECTS

3.1 Physical Resources

3.1.1 Physiography, Geology, and Soils

The proposed project is in the Middle Rio Grande Valley, a wide floodplain of fertile bottomland (USDA 1977). These fertile soils and shallow water tables support vegetation as well as a variety of resident and migratory wildlife. The Rio Grande Valley is a productive agricultural area that contributes to the quality of life and economies of the urban areas of Albuquerque, Rio Rancho, Bosque Farms, Los Lunas and Belen, New Mexico, as well as several other smaller communities.

The Rio Grande follows a well-defined geologic feature called the Rio Grande graben. The Rio Grande graben contains several thousand feet of poorly consolidated sediment of the Santa Fe Group of the middle Miocene to Pleistocene age.

The terrain in the area is characterized by gently sloping plains from the east to the Rio Grande ranging from about 4,860 feet to 4,875 feet in elevation. Water tables are typically four to five feet in depth and permeability is moderate (USDA 1977). The general soil conditions are deep, nearly level, well-drained soils that are formed in recent alluvium, on flood plains of the Rio Grande.

The major soil series, which occur within the proposed planning area, are described in the following discussion. The information in this section was obtained from the soil survey for Sandoval County (USDA 1977).

Agua Series

The Agua series consists of deep, well-drained soils that formed in recent alluvium on the flood plain along the Rio Grande. Slopes are 0 to 1 percent. Agua soils are mainly associated with Brazito, Gila, and Vinton soils. In a representative profile, the surface layer is light brown loam about 10 inches thick. Next is about 14 inches of brown loam and pink very fine sandy loam. Below this to a depth of 60 inches or more is very pale brown fine sand. The soil is moderately alkaline throughout. Permeability is moderate to a depth of about 24 inches and rapid below.

Agua loam

This level soil is in the irrigated Rio Grande Valley. It has the profile described as representative of the series. In most areas the water table is below 60 inches, but in some it fluctuates between 45 and 60 inches. Slopes are 0 to 1 percent. Runoff is very slow and the hazard of erosion is slight.

Agua silty clay loam

This level soil is in the irrigated Rio Grande Valley. It has a profile similar to that described representative of the series, but the surface layer differs in texture. In most areas the water table is below 60 inches, but in some it fluctuates between 45 and 60 inches. Slopes are 0 to 1 percent. Runoff is very slow, and the hazard of erosion is slight.

Gila Series

The Gila series consists of deep, well-drained soils that formed in recent alluvium on the flood plains along the Rio Grande and Rio Puerco. Slopes are 0 to 2 percent. Gila soils are associated with Agua, Anapra, Hantz, Vinton, and Brazito soils. In a representative profile the surface layer is brown loam about 7 inches thick. Next is about 37 inches of stratified brown and light yellowish brown very fine sandy loam and sandy loam. Below this to a depth of 60 inches or more is pale brown sand. The soil is moderately alkaline throughout. Permeability is moderate.

Gila loam

Slopes are 0 to 1 percent. Runoff is slow, and the hazard of water erosion is slight.

Gila clay loam

The surface layer texture is about 10 inches thick. Slopes are 0 to 1 percent. Runoff is slow, and the hazard of water erosion is slight.

Vinton Series

The Vinton series consists of deep, well-drained soils that formed in recent alluvium on the flood plains of the Rio Grande. Slopes are 0 to 3 percent. Vinton soils are associated with Brazito, Bluepoint, Agua, and Gila soils. In a representative profile, the surface layer is brown sandy loam and pinkish gray loamy sand and pinkish gray very fine sand. The soil is moderately alkaline throughout. Permeability is moderately rapid.

Vinton loamy sand

The surface layer is pale brown. In most areas the water table is below 60 inches, but on about 1.5 percent of the acreage it fluctuates between 45 and 60 inches. Slopes are 0 to 1 percent. Runoff is very slow, and the hazard of soil blowing is moderate to severe.

Vinton sandy loam, 0 to 1 percent slopes

In most areas the seasonal water table is below 60 inches, but on about two percent of the acreage it is between depths of 45 and 60 inches and the soil is moderately saline. Runoff is slow, and the hazard of soil blowing is severe.

So, in conclusion, there would be no effect to soils by the proposed project or by the no-action alternative.

3.1.2 Climate

The climate in the vicinity of the proposed project is classified as arid (USDA 1977). The temperature occasionally reaches 100 degrees F or falls to zero or below, but not in all years. The average annual precipitation ranges from seven to ten inches. Although an average of only one day a year has more than half-inch of precipitation, these infrequent, brief, heavy showers may bring one half to one inch of rain, except in the dry winter season. Occasionally, hail accompanies summer thunderstorms. The average annual snowfall is less than five inches and snowfall seldom exceeds one or two inches and generally melts in a few hours. The growing season is about five and a half months long. The last freeze date in spring is May 2, and the first freeze date in fall is October 25. Relative humidity averages less than 50 percent and generally

less than 20 percent on hot sunny afternoons. In winter the prevailing winds are northerly and in summer the prevailing winds are southerly. Wind speed averages nearly ten miles per hour for the year. There would be no effect to climate by the proposed project or by the no-action alternative.

3.1.3 Water Resources

Section 402 of the Clean Water Act (CWA; 33 U.S.C. 1251 *et seq.*) as amended, regulates point-source discharges of pollutants into waters of the United States and specifies that storm-water discharges associated with construction activities shall be conducted under the National Pollution Discharge Elimination System (NPDES) guidance. Construction activities associated with storm-water discharges are characterized by such things as clearing, grading, and excavation, subjecting the underlying soils to erosion by storm-water, which results in a disturbance to one or more acres of land. The NPDES general permit guidance would apply to this project because the project area is greater than one acre. Therefore, a Storm-Water Pollution Prevention Plan (SWPPP) is required and would be prepared by the contractor. Impacts from storm-water are expected to be negligible.

Section 404 of the CWA, (CWA; 33 U.S.C. 1251 *et seq.*) as amended, provides for the protection of waters of the United States through regulation of the discharge of dredged or fill material. The Corps' Regulatory Program (33 CFR Parts 320-330) requires that a Section 404 permit evaluation be conducted for all proposed construction that may affect waters of the United States. Section 404 of the CWA does not apply to this project, as there would be no discharge of dredged or fill material into waters of the United States.

Section 401 of the CWA, (CEA; 33 U.S.C. 1251 *et seq.*) as amended, requires that a Water Quality Certification Permit be obtained for anticipated discharges associated with construction activities or other disturbance within waterways. Section 401 of the CWA does not apply to this project, as there would be no discharge associated with construction activities or other disturbance within waters or wetlands of the United States.

3.1.4 Floodplains and Wetlands

Executive Order 11988 (Floodplain Management) provides Federal guidance for activities within floodplains of inland and coastal waters. The order requires Federal agencies to take action to reduce the risk of flood loss, to minimize the impact of floods on human safety, health, and welfare, and to restore and preserve the natural and beneficial values served by floodplains. The proposed project areas are not located within any special flood hazard areas inundated by the 100-year flood. They are located in an area that is either outside the 500-year floodplain or in an area in which flood hazards are undetermined (Flood Insurance Rate Map 1996). The proposed project areas are located outside the 100-year floodplain and the proposed action would take place entirely within the existing fencing at two of the sites, Wells 12 and 13. At Well 9, the existing fenced boundary would need to be extended, but would still be located outside the 100-year floodplain. Therefore, the proposed project does not constitute any alterations or development within the historical floodplain and would have no new impacts to the historical or current floodplains. Executive Order 11990 (Protection of Wetlands) requires the avoidance, to the greatest extent possible, of both long and short-term impacts associated

with the destruction, modification, or other disturbance of wetland habitats. There are no wetlands within the project area, and therefore, no impacts to wetlands would occur.

3.1.5 Air Quality, Noise and Aesthetics

The Rio Rancho area is in New Mexico's Air Quality Control Region No.2 for air quality monitoring and Sandoval County is "in attainment" (does not exceed State and Federal Environmental Protection Agency air quality standards) for all criteria pollutants (NMED/ABQ 1995). Air quality in the project area is generally good. The closest Class I area is Bandelier Wilderness, approximately 88 miles to the north of the project area. Class I areas are special areas of natural wonder and scenic beauty, such as national parks, national monuments, and wilderness areas, where air quality should be given special protection. Class I areas are subject to maximum limits on air quality degradation.

All vehicles involved in transporting rubble and spoil from the project site to the deposition area will be required to have passed a current New Mexico emissions test and have required emission control equipment. The proposed project would result in a temporary but negligible increase in suspended dust particles from construction activities. Equipment with water sprinklers would be used during construction to minimize dust. A Fugitive Dust Control Permit is needed when there will be surface disturbance to three-quarters of an acre or more. Because the proposed project would disturb more than three-quarters of an acre, the contractor will need to apply and obtain an approved permit. Air quality in Rio Rancho, Sandoval County, and Bandelier National Monument would not be affected by the proposed project or by the no-action alternative.

Background noise levels in the proposed project areas are low. According to the Noise Center for the League for the Hard of Hearing (League for the Hard of Hearing, 2004), a typical, quiet residential area has a noise level of 40 decibels. A residential area near heavy traffic has a noise level of 85 decibels. Heavy machinery has a noise level of 120 decibels. During construction, noise would temporarily increase in the vicinity during vehicle and equipment operation. The Noise Center advises that noise levels above 85 decibels will harm hearing over time and noise levels above 140 decibels can cause damage to hearing after just one exposure. However, the increase in noise during construction would be minor and temporary, ending when construction is complete. Therefore, the proposed project would have no significant effect on noise.

Aesthetically, the terrain of the project areas can be characterized as open land. Dirt roads exist to access the well sites. Overhead power lines perimeter the boundaries of these sites. At Well 13, a couple of mobile homes are located on the southwest side of the well. Although these areas are not unique in nature, the open land provides quite an impressive view. All of the proposed work would be confined to the existing well sites and all equipment would be installed within the fenced boundaries of the well sites. Neither the proposed project nor the no-action alternative would have an effect on aesthetic values or scenic quality in the area.

3.2 Biological Resources

3.2.1 Vegetation Communities

The project sites are part of the Plains Mesa Sand Scrub vegetation community as described by Dick-Peddie (1993). However, soils and vegetation within the immediate project areas have been disturbed from the original installments of the wells. A site visit on 6 January 2005, by Corps personnel, revealed vegetation consisting of kochia (*Kochia scoparia*), tumble pigweed (*Amaranthus albus* L.), Douglas rabbitbrush (*Chrysothamnus viscidiflorus*), horseweed (*Conyza Canadensis*), Russian thistle (*Salsola iberica*), one-seed juniper (*Juniperus monosperma*), cane cholla (*Opuntia spinosior*), fourwing saltbrush (*Atriplex canescens*), common ragweed (*Ambrosia artemisiifolia*), and broom snakeweed (*Gutierrezia sarothrae*). Within the fenced boundaries of the three wells sites, very little vegetation exists, including the species mentioned above. Installation of new equipment at Wells 12 and 13 would be housed within the existing well site where little vegetation exists. At Well 9, the fenced boundary would be expanded from 0.9 acres to one acre and some vegetation in this small area may be permanently lost where the new equipment would be installed. None of the vegetational impacts are substantial or would significantly alter the vegetation of the area.

3.2.2 Wildlife

According to Brown (1982), the project areas occur within the biotic community of the Great Basin grasslands. Wildlife species that could frequent this area may include: Western Meadow Lark (*Sturnella neglecta*), Western Kingbird (*Tyrannus verticalis*), Say's Phoebe (*Sayornis saya*), Loggerhead Shrikes (*Lanius ludovicianus*), Horned Lark (*Eremophila alpestris*), Scaled Quail (*Callipepla squamata*), Burrowing Owl (*Speotyto cunicularia*), Gunnison's Prairie Dog (*Cynomys gunnisoni*), Eastern Fence Lizard (*Sceloporous undulates*), Little Striped Whiptail (*Cnemidophorus inornatus*). In addition, various mammals and reptiles such as mice, rabbits, skunks, beaver, and snakes may also transit through the project area.

Because the proposed project work would be confined to the existing well sites and all equipment would be installed within the fenced boundaries of the well sites, minimal wildlife would be displaced during installation. The United State Fish and Wildlife (USFWS) recommended that all construction activities occur outside of the migratory bird nesting season, which is March through August. If construction would occur during this time, USFWS recommends that the areas proposed for construction be surveyed, and when occupied, avoided until nesting is complete. Because the proposed construction is schedule for June 2006, surveys will be done prior to the start of construction. No significant impacts should occur to wildlife as a result of the proposed project or the no-action alternative.

3.2.3 Special Status Species

While all Federal, State and Tribal agencies have a responsibility for the protection and conservation of plant and animal species in the proposed project area, two agencies have this task as their primary responsibility. The United States Fish and Wildlife Service (USFWS), under authority of the Endangered Species Act of 1973 (16 U.S.C. 1531), as amended, has the responsibility for Federally listed species. The New Mexico Department of Game and Fish (NMDGF) has the responsibility for state-listed wildlife species. Each agency maintains a

continually updated list of species that are classified, or are candidates for classification, as protected based on their present status and potential threats to future survival and recruitment into viable breeding populations. These types of status rankings represent an expression of threat level to a given species survival as a whole and/or within local or discrete populations. Special status species that potentially occur in Sandoval County and may occur near the proposed project area are listed below in Table 1.

Table 1. Special Status Species Listed for Sandoval County, New Mexico, that have the Potential to Occur in the Vicinity of the Proposed Project Area.

Common Name	Scientific Name	Federal Status (USFWS) ^a	State of New Mexico status (NMDGF) ^b
Animals			
Whooping Crane	<i>Grus american</i>	E	E
Black-footed Ferret	<i>Mustela nigripes</i>	E	---
Bald Eagle	<i>Haliaeetus leucocephalus</i>	T	T
Mexican Spotted Owl	<i>Strix occidentalis lucida</i>	T	---
Wrinkled Marshsnail	<i>Stagnicola caperatus</i>	---	E
Jemez Mountains Salamander	<i>Plethodon neomexicanus</i>	---	T
Baird's Sparrow	<i>Ammodramus bairdii</i>	---	T
Common Black-Hawk	<i>Buteogallus anthracinus</i>	---	T
American Peregrine Falcon	<i>Falco peregrinus anatum</i>	---	T
Broad-billed Hummingbird	<i>Cynanthus latirostris magicus</i>	---	T
Costa's Hummingbird	<i>Calypte costae</i>	---	T
Gray Vireo	<i>Vireo vicinior</i>	---	T
Spotted Bat	<i>Euderma maculatum</i>	---	T
Meadow Jumping Mouse	<i>Zapus hudsonius luteus</i>	---	T
American Marten	<i>Martes americana origenes</i>	---	T
Gunnison's Prairie Dog	<i>Cynomys gunnisoni</i>	---	S
Plants			
Tufted sand verbana	<i>Abronia bigelovii</i>	---	R
Knight's milkvetch	<i>Astragalus knightii</i>	---	R
La Jolla prairie clover	<i>Dalea scariosa</i>	---	R
Robust larkspur	<i>Delphinium robustum</i>	---	R
Sapello Canyon larkspur	<i>Delphinium sapellonis</i>	---	R
New Mexico stickseed	<i>Hackelia hirsute</i>	---	R
Sandia alumroot	<i>Heuchera pulchella</i>	---	R
Springer's blazing star	<i>Mentzelia springeri</i>	---	R
Parish's blazing star	<i>Puccinellia parishii</i>	---	R
Plank's campion	<i>Silene plankii</i>	---	R
Gypsum Townsend's aster	<i>Townsendia gypsophila</i>	---	R
Santa Fe milkvetch	<i>Astragalus feenis</i>	---	R

- ^a **Endangered Species Act (ESA)** (as prepared by U.S. Fish and Wildlife Services) **status:** Only Endangered and Threatened species are protected by the ESA.
- E=** Endangered: any species that is in danger of extinction throughout all or a significant portion of its range.
- T=** Threatened: any species that is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range.
- C=** Candidate: taxa for which the Services has on file sufficient information on biological vulnerability and threat(s) to support proposals to list them as endangered or threatened species.
- SC=** Species of Concern: taxa for which information now in the possession of the Service indicates that proposing to list as endangered or threatened is possible appropriate, but for which sufficient data on biological vulnerability and threat are not currently available to support proposed rules.
- P=** Proposed for listing in the identified category listed above.
- S/A=** Similarity of Appearance.

^b **State of New Mexico status:**

- E=** Endangered Animal species whose prospects of survival or recruitment within the state are in jeopardy.
- T=** Threatened Animal species whose prospects of survival or recruitment within the state are likely to become jeopardized in the foreseeable future.
- SC=** Species of Special Concern.
- R=** Rare Plant Species.
- S=**Sensitive

Special status animal species listed by USFWS (USFWS 2004) and New Mexico Department of Game and Fish for Sandoval County (NMDGF 2004) that might occur in or near the project area but are not anticipated to occur include the following:

The American Peregrine Falcon (*Falco peregrinus anatum*) is a Federally delisted species with an approved recovery plan, and a State threatened species. The peregrine falcon may fly over the construction area during spring and fall migrations. The peregrine prefers breeding habitat that is in isolated wooded areas with cliffs that create “gulfs” of air in which the peregrine may forage. The Peregrine’s preferred wooded-forested habitat does not occur in or near the project area. Due to the ease of mobility of the peregrine, the limited disturbance of the proposed project and the lack of preferred habitat in the project area, there would be no effect to the American Peregrine Falcon.

Baird’s Sparrow (*Ammodramus bairdii*), a State Threatened species, favors shrubby short-grass habitats. The sparrow is a migrant to New Mexico, occurring mainly in autumn primarily in the eastern plains and southern lowlands, but is considered rare to uncommon and a vagrant. The sparrow may fly over the construction area during migration; however, due to the ease of mobility, the limited disturbance of the proposed project and the lack of preferred habitat within the project area, there would be no effect to Baird’s sparrow.

The Black-footed Ferret (*Mustella nigripes*), a Federal listed Endangered species, prefers mixed shrub habitat. The distribution of the Black-footed Ferret is closely sympatric with that of prairie dogs and all viable breeding populations have been associated with prairie dog colonies, which they use for food and shelter. There were no prairie dog towns observed at or near the proposed project area during the site visits. All of the proposed work would be confined to the existing well sites and all equipment would be installed within the fenced boundaries of the well sites. Due to lack of preferred habitat within the project area and no presence of prairie dog

towns, there would be no effect to this to this species by the proposed project.

The Bald eagle (*Haliaeetus leucocephalus*), a Federal and State Threatened species, is normally found near major waterways and larger lakes where adequate food supplies may be found. The Bald Eagle is known to occur in New Mexico primarily during the late fall and winter months. The Bald Eagle utilizes large trees for perching and forages primarily for fish, ducks, and carrion along rivers and at local reservoirs. No preferred habitat exists within or near the project area. Due to the lack of preferred habitat and the limited disturbance of the proposed project, there would be no effect to the Bald eagle.

The Whooping Crane (*Grus americana*) was listed as endangered with critical habitat by the U.S. Fish and Wildlife Service in 1978 (43 FR 20938) due to the destruction of wintering and breeding habitat, hunting, collisions with power lines and fences, specimen collecting and other human disturbance. The bird once ranged over most of North America, but probably never occurred in large numbers. By the 19th century, only a few thousand birds survived. Whooping Cranes were not sighted in New Mexico after 1938 until an experimental reintroduction was initiated in 1975.

The Middle Rio Grande was the wintering area of the experimental Rocky Mountain population. Within the Bosque del Apache National Wildlife Refuge, all areas at or below 4,600 feet in elevation have been designated critical habitat for the whooping crane. This designation includes most of the floodplain including the riverine and riparian zone. During the winter months, Whooping Cranes will use sandbars in the Rio Grande near the refuge and isolated areas outside the refuge for night roosting.

Since there are no longer any birds in the experimental Rocky Mountain Population in the Middle Rio Grande, the proposed work would have no effect on the Whooping Crane.

The Gunnison's Prairie Dog (*Cynomys gunnisoni*) is listed as sensitive by the State of New Mexico Game and Fish Department. Areas of short and mid-grass rangeland are the prairie dog's preferred habitat. Prairie dog colonies are most recognizable by the mounds at their burrow entrances. No prairie dog colonies were observed near or at the proposed project sites during the Corps' site visit. All of the proposed work would be confined to the existing well sites and all equipment would be installed within the fenced boundaries of the well sites. Due to the limited disturbance and no presence of prairie dog towns, there would be no effect to this to this species by the proposed project.

In addition, the New Mexico Department of Minerals, Natural Resources, Forestry Division has the responsibility for maintaining the list of state-listed rare plant species. The State species list indicates that there are twelve status plant species that occur in Sandoval County, the Tufted sand verbena (*Abronia bigelovii*), Santa Fe milkvetch (*Astragalus feensis*), Knight's milkvetch (*Astragalus knightii*), La Jolla prairie clover (*Dalea scariosa*), Robust larkspur (*Delphinium robustum*), Sapello Canyon larkspur (*Delphinium sapellonis*), New Mexico stickseed (*Hackelia hirsuta*), Sandia alumroot (*Heuchera pulchella*), Springer's blazing star (*Mentzelia springeri*), Parish's alkali grass (*Puccinellia parishii*), Plank's campion (*Silene plankii*), and Gypsum Townsend's aster (*Townsendia gypsophila*). They are each listed by the State of New Mexico Division of Forestry as a rare plant on the New Mexico Rare Plants

Technical Council Website. Although these plants are known to occur in Sandoval County, they are not likely to occur within the project area. None of the above rare plants were seen during the Corps' site visit on 6 January 2005. None of the above rare plant's preferred habitat is located within the project area, and therefore there would be no effect to these rare plants.

3.3 Cultural Resources

On January 6, 24, and March 7, 2005, a Corps archaeologist conducted an intensive cultural resources inventory of approximately 2.7 hectares (6.7 acres) of three existing groundwater well compounds, Wells 9, 12, 13, within the City of Rio Rancho, Sandoval County, New Mexico (see Figures 3, 4 and 5). The surveys were conducted in anticipation of construction activities that include the installation of three water filtration facilities for potable water consumption. During survey, the archaeologist encountered two archaeological sites, LA 121436 (a lithic scatter) and LA 80890 (a small Pueblo IV habitation site) within or adjacent to existing water wells. These two sites were previously recorded and documented by past projects (Reinhart 1968, Schamder 1990) respectively.

Prior to the January 6th survey, a search of the New Mexico Historic Preservation Division's (NMHPD) Archaeological Records Management Section (ARMS) database, and of the State Register of Cultural Properties and the National Register of Historic Places found that 59 archaeological sites are known within 1-mile radius of the project area. None of these sites, LA 80889, LA 80867, LA 80864, LA 80868, LA 80869, LA 80873, LA 80876, LA 80881, LA 80882, LA 80884, LA 80887, LA 99711, LA 99710, LA 18430, LA 99709, LA 99696, LA 99697, LA 80886, LA80880, LA 80872, LA 80875, LA 80885, LA 80883, LA 80879, LA 80878, LA 80891, LA 18434, LA 18433, LA 18432, LA 99708, LA 99695, LA 18431, LA 99697, LA 99696, LA 112419, LA 112418, LA 136506, LA 98327, LA 18421, LA 18420, LA 18419, LA 18418, LA 121435, LA 121437, LA 121426, LA 121426, LA 54633, LA 121428, LA 121427, LA 121400, LA 121401, LA 121393, LA 121391, LA 121392, LA 121439, LA121434, LA 121433, LA 121418, and LA 121397, would be affected by the project.

The archaeological sites on the West Mesa go back to the Paleo-Folsom period with intermitted use by Archaic hunter and gatherers, and during the Basketmaker pithouse and Pueblo periods. Early Spanish also have traveled and occupied this region during their exploration of the Southwest.

LA 121436 was found to be adjacent to existing Water Well Compound #13 but not within the compound. However, site LA 80890 extends within and adjacent to existing Water Well Compound #12. Both of these sites have previously been determined to be eligible for nomination to the National Register.

Based on this information, the Corps recommended that the portion of site LA 80890, within Water Well Compound #12, be tested to ascertain the nature and extent of any subsurface remains. Testing of this area has now been completed and no intact subsurface remains are present. As originally surveyed in 1990, the site consisted of six discreet artifact clusters scattered for a distance of over 600 meters. After the original archaeological survey, the well, pumping facility, under-ground utility lines, access road, parking lot, and surrounding fence associated with Well Compound #12 were constructed within one of the artifact clusters,

Provenience B; it was resurveyed in conjunction with this project. Chipped stone, ceramics from between AD 1300 and 1600, and burned rock were found. Most of the cultural material is outside of the fenced well compound and will not be affected as a result of this project. A total of 47 auger holes was placed within and adjacent to the construction area within the fenced well compound. The holes were terminated at the top of the sterile caliche layer which varied from 20 to 130 centimeters below the surface. Seventeen stone flakes and modern debris was recovered from eight holes from just below the surface to just above the caliche layer. The project area is badly disturbed, and intact buried archaeological deposits are not present. There will be no historic properties affected as a result of the proposed work at Water Well Compounds 9, 12, and 13. The New Mexico State Historic Preservation Officer concurred with the Corps' determination of no adverse effect by their letter of April 25, 2006.

The Corps is of the opinion that there would be "No Historic Properties Affected" by the proposed undertaking on the historic and cultural resources of the City of Rio Rancho or of the region for the work in Water Well Compounds #9, #12 and #13.

Should previously undiscovered artifacts or features be unearthed during construction, work would be stopped in the immediate vicinity of the find, a determination of significance made, and a mitigation plan formulated in coordination with the New Mexico State Historic Preservation Officer and with Native American groups that may have concerns in the project area. Consultation regarding cultural resources is documented in Appendix A.

3.4 Human Health and Safety

Rio Rancho does not have surface water rights, and therefore, must operate twenty groundwater wells to supply the City of Rio Rancho with drinking water. It appears that thirteen of the City's wells exceed the arsenic MCL of 10ppb. Three of these thirteen wells exceed 35 ppb and therefore these three wells must comply with the Arsenic Rule as soon as possible.

In 1942, the U.S. Public Health Service established an arsenic drinking water standard for interstate water carriers of 50ppb. On December 24, 1975, under the authority of the Safe Drinking Water Act (SDWA) of 1974, USEPA issued a National Interim Primary Drinking Water Regulation (NIPDWR) for arsenic of 50ppb. Since then, there have been an increasing number of scientific studies that have linked arsenic in drinking water to skin cancer in humans. USEPA's Arsenic Work reflected scientific uncertainties about health effects of low concentrations of carcinogens and animal studies suggested that arsenic may be an essential nutrient (USEPA 2002). The 1996 Amendments to the SDWA included new statutory deadlines for the arsenic regulation, requiring USEPA to propose a revised Arsenic Rule by January 1, 2001. Therefore, the Final Rule, published on January 22, 2001, established the MCL at 10ppb.

The proposed installation of the arsenic removal equipment would allow for the reduction of arsenic, from 50ppb to 10ppb, in all three groundwater wells. Eventually all groundwater wells within Rio Rancho will comply with USEPA's new standard for arsenic levels and will therefore make the drinking water much safer within the City. Human health and safety would be beneficially affected due to the proposed project.

3.5 Land Use and Socioeconomic Considerations

The City of Rio Rancho is located in Sandoval County, New Mexico. The total population of Sandoval County in 2003 was estimated to be 98,786 (U.S. Census Bureau 2004). The total population of Rio Rancho in 2000 was 51,765 (U.S. Census Bureau 2000). The ethnic background for Sandoval County is: white (non-Hispanic), 65.1%; Hispanic (any race), 29.4%; black (non-Hispanic), 1.7%; and other, 3.8%. In 2000, the per capita personal income in Sandoval County was \$19,174 (U.S. Department of Commerce, Bureau of Economics 2004). The unemployment rate for Sandoval County in 2002 was 5.5% (New Mexico Department of Labor 2003). Industries making major economic contributions to the county's economy include construction, retail trade, professional and technical services, and health care and social assistance (New Mexico Department of Labor 2003).

The proposed project would take place within existing well sites and all equipment would be installed within the fenced boundaries of the well sites. Adjacent property includes undeveloped land and a few mobile homes at Well 13. The proposed project would not affect land use or socioeconomic resources in the project area.

3.6 Environmental Justice

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Low-Income Populations; February 11, 1994) was designed to focus the attention of federal agencies on the human health and environmental conditions of minority and low-income communities. It requires federal agencies to adopt strategies to address environmental justice concerns within the context of agency operations and proposed actions. In an accompanying memorandum, President Clinton emphasized that existing laws, such as the National Environmental Policy Act (NEPA), should provide an opportunity for federal agencies to assess the environmental hazards and socioeconomic impacts associated with any given agency action upon minority and low-income communities. In April of 1995, the USEPA released a guidance document entitled Environmental Justice Strategy: Executive Order 12898. In short, this document defines the approaches by which the USEPA will ensure that disproportionately high environmental and/or socioeconomic effects on minority and low-income communities are identified and addressed. Further, it establishes agency wide goals for all Native Americans with regard to Environmental Justice issues and concerns.

The Rio Rancho Water Upgrade Project would be conducted under Section 593 of the Water Resources Development Act of 1999 (Public Law 106-53; 33 U.S.C. 2201 *et seq.*) as amended. This program is largely intended to provide needed assistance (technical, financial, etc.) to communities in which water resources are degrading and in need of improvement. As such, this project would benefit several areas within a minority and low-income community. No adverse impacts on minority and/or low-income populations are expected. Under the definition of Executive Order 12898, there would be no adverse environmental justice impacts under the proposed action.

3.7 Cumulative Impacts

NEPA defines cumulative effects as "...the impact on the environment which results

from the incremental impact of the action when added to other past, present and reasonable foreseeable future actions regardless of what agency (Federal or non-Federal) or person undertakes such other actions.”

The footprint of the proposed project lies within a primarily undeveloped area, except for the three existing wells. Since the installment of the arsenic removal equipment occurs within the existing well sites, most environmental impacts associated with the proposed project would have occurred from the development of the existing wells. These impacts have stabilized and have been considered the baseline against which impacts of the proposed project have been compared. Installation of the new equipment would be confined to the existing fencing of the well sites. Positive improvement to the quality of drinking water is expected to occur from the proposed project. For these reasons, the proposed project when combined with past, present, and future activities in the City of Rio Rancho would not significantly add to or raise local cumulative environmental impacts to a level of significance.

4.0 CONCLUSIONS AND SUMMARY

The proposed action evaluated in this EA addresses the method and potential effects for the installation of the arsenic removal equipment.

The analysis indicates that the proposed installment of arsenic removal equipment would serve a local need for improved drinking water quality, and would also support the City of Rio Rancho’s efforts to be in compliance with the USEPA’s Arsenic Rule. The proposed project would not result in any moderate or significant, short-term, long-term, or cumulative adverse effects. Therefore, construction of the proposed project would not significantly affect the quality of the human environment and is recommended for implementation.

5.0 PREPARATION, CONSULTATION AND COORDINATION

5.1 Preparation

This Environmental Assessment (EA) was prepared for the City of Rio Rancho by the U.S. Army Corps of Engineers, Albuquerque District (USACE). Personnel primarily responsible for preparation include:

Danielle A. Galloway	Biologist, USACE, Albuquerque District
Garyald S. Benally	Archeologist, USACE, Albuquerque District
Pete K. Doles	Project Manager, USACE, Albuquerque District
Champe Green	Ecologist, USACE, Albuquerque District (Quality Control)
Julie Hall	Supervisory Ecologist, USACE, Albuquerque District (Quality Control)

5.2 General Consultation and Coordination

Agencies and entities contacted formally or informally in preparation of this Environmental Assessment include:

Ms. Susan Mac Mullin
US Fish and Wildlife Service
New Mexico Ecological Services Field Office

Mr. Rob Lawrence
US Environmental Protection Agency, Region 6
Office of Planning and Coordination

Mr. Steve Hansen
US Bureau of Reclamation

Mr. Dan Malanchuk
Chief, Regulatory Branch
US Army Corps of Engineers

Mr. Subhas K. Shah
Chief Engineer
Middle Rio Grande Conservancy District

Mr. Robert Sivinski
NM Forestry and Resources Conservation Division
Energy, Minerals, and Natural Resources Department

Mr. Tod Stevenson
NM Department of Game and Fish
Conservations and Services Division

Mr. Ed Kelley
Water and Waste Management Division
NM Environmental Department

Mr. John R. D'Antonio, Jr.
NM State Engineer

Mr. Estevan Lopez
NM Interstate Stream Commission

Ms. Debbie Hays
Manager
Sandoval County

Ms. Lisa Vornholt
Public Works
Sandoval County

Ms. Toni Beatty
Librarian
Rio Rancho Public Library

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Appendix A
Cultural Resources Consultation Letter



DEPARTMENT OF THE ARMY
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS
4101 JEFFERSON PLAZA NE
ALBUQUERQUE NM 87109-3435

April 19, 2006

Planning, Project and Program Management Division
Planning Branch
Environmental Resources Section

Ms. Katherine Slick
State Historic Preservation Officer
New Mexico Department of Cultural Affairs
Historic Preservation Division
Bataan Memorial Building
407 Galisteo Street, 2nd Floor
Santa Fe, New Mexico 87501



Dear Ms. Slick:

The U.S. Army Corps of Engineers (Corps), Albuquerque District, conducted archaeological survey in advance of construction of a treatment plant to regulate the maximum contaminant level of arsenic at the existing Rio Rancho Water Well No. 12. Sometime after the original 1990 archaeological survey of this area and prior to any Corps involvement, the well, associated pumping facility, and chain link fence were built on a portion of an archaeological site, LA 80890, Provenience B. Based on the ceramics the site was dated to the Pueblo IV Period (AD 1300-1600), and was determined eligible for the National Register under criterion "d" of 36 CFR 60.4 in October, 1991.

The Corps hired The Office of Contract Archaeology, University of New Mexico, to conduct a survey of seven acres and sufficient testing to determine whether or not buried deposits existed below the surface. The Corps is submitting a draft of the report entitled Cultural Resources Survey and Testing Nearby Water Well No. 12, Rio Rancho, New Mexico by Adrienne Actis and Richard Chapman and the associated Laboratory of Anthropology investigation form for your review. Since the site was already heavily disturbed and the 17 subsurface artifacts come from a disturbed context, the Corps is seeking your concurrence in our determination of "no adverse effect" for this project.

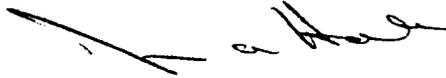
LA 80890 spans more than 600 meters and in 1990 consisted of six discrete artifact clusters designated as proveniences A through F. Provenience B is the only provenience that is located within the current project area, and during this update it was completely re-recorded. Provenience B measures 241 meters north-south by 220 meters east-west and is located on a small hill, surrounding slopes, and flat sandy dune areas. It consists of a lithic and ceramic artifact scatter with two features, one firecracked rock scatter and a concentration of seven cobbles. The majority of the artifacts and both features are outside of the fence that surrounds the well, and therefore, not within the project area. Fire cracked rock was also noted, very lightly scattered throughout the Provenience B boundaries. The area of potential effect is approximately 4.8 acres and is defined by the chainlink fence surrounding the well compound. The actual area of direct effect is the construction area, 30.5 meters (100 feet) by 37.2 meters (122 feet) or 0.28 acres. In addition to the water tank, pumping facility, and fence, the portion of Provenience B within the compound has been disturbed by transformers, underground utility lines, and a bladed and graveled driveway, road, and parking lot. Other disturbances to Provenience B outside of the perimeter fence include five one meter by one meter test pits that are presumably archaeological in origin and a 95 m by 60 m portion of the southeast corner that was impacted by construction equipment.

Transects were walked 15 meters apart both within and outside of the fenced area. A 75 percent sample (166 artifacts, Table 3) was recorded. A total of 47 auger holes were placed within and adjacent to the 100 foot by 122 foot construction area, each to depths ranging from 20 to 130 centimeters until the caliche lense was reached. The dirt trapped within the auger was examined at 10 to 15 centimeter levels depending on the size of the auger. A total of 17 flakes was recovered (Table 4) from eight auger holes. Eight flakes were within 10 cm of the surface. Pieces of foil were recovered from each of the three levels (0-10, 10-20, and 20-30 cm below ground surface) in hole number 23. Neither flakes nor any other material were found below 30 centimeters in depth. The project area is badly disturbed, and intact buried archaeological deposits are unlikely to occur in the construction area for the proposed treatment plant. There will be no adverse effect to Provenience B, LA 80890, as a result of the arsenic treatment plant construction.

The Corps sent scoping letters to the 16 tribes with concerns in Sandoval County. Pursuant to 36 CFR 800.11, should previously unknown artifacts or cultural resource manifestations be encountered during construction, work would cease in the immediate vicinity of the resource. A determination of significance would be made and a mitigation plan would be formulated in consultation with your office and with Native American tribes that have concerns in the area.

If you have questions or require additional information regarding the site update and limited auger testing of LA 80890, please contact Cheryl Fogle, archaeologist at (505) 342-3424, or John Schelberg, archaeologist (505) 342-3359.

Sincerely,



Julie A. Hall
Chief, Environmental Resources
Section

4/25/06
Date

I Concur 
Katherine Slick
New Mexico State Historic
Preservation Officer

Enclosures

→ as it appears that the historic values that make this site eligible are not found with any integrity within Providence B.

Public Review Comments and Appendix B Corps' Responses



United States Department of the Interior

FISH AND WILDLIFE SERVICE

New Mexico Ecological Services Field Office
2105 Osuna NE
Albuquerque, New Mexico 87113
Phone: (505) 346-2525; Fax: (505) 346-2542

MAY 31 2005

Cons. #2-22-05-T-0396

Julie A. Hall, Chief
Environmental Resources Section, Albuquerque District
Department of the Army Corps of Engineers
4101 Jefferson Plaza, NE
Albuquerque, New Mexico 87109-3435

Dear Ms. Hall:

This responds to your April 27, 2005, letter requesting our review of the Draft Environmental Assessment (DEA) for the Rio Rancho Water Upgrade, Rio Rancho, Sandoval County, New Mexico. The proposed project would include installing arsenic removal equipment at three existing Rio Rancho water supply wells in Sandoval County, New Mexico. The proposed project would install arsenic removal equipment, including absorption media, filters, and waste collection and disposal techniques at Wells 9, 12, and 13. The proposed project would reduce the amount of arsenic in the drinking water supply for the Town of Rio Rancho and its residents to reduce the arsenic risks to its members.

Based on our review of the DEA, a reasonable range of alternatives were analyzed for the proposed project. The DEA provides background information and adequately explains the purpose and need of the project. We have reviewed the information provided and have concluded that the survey protocols were appropriate for this project. The DEA also adequately addresses the direct effects of the alternatives on fish and wildlife resources in the project area and potential project-related impacts to those resources.

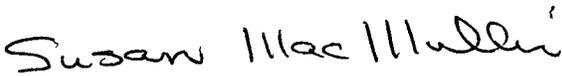
However, to ensure that construction-related migratory bird impacts are avoided, we recommend that construction activities occur outside the general migratory bird nesting season of March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until nesting is complete. Additional measures to protect the environment from potential waste management impacts (e.g., waste collection failures, transport accidents) could also be considered. Implementation of these measures should ensure that the proposed project would have minimal impacts to fish and wildlife resources.

Julie A. Hall, Chief

2

Thank you for your concern for New Mexico's wildlife and their habitats. In future correspondence regarding this project, please refer to Consultation #2-22-05-T-396. If you have any questions about the information in this letter, please contact Joel D. Lusk at the letterhead address or at 505-346-2525, extension 4709.

Sincerely,

A handwritten signature in black ink that reads "Susan MacMullin". The signature is written in a cursive, slightly slanted style.

Susan MacMullin
Field Supervisor

cc: Director, New Mexico Department of Game and Fish, Santa Fe, NM
Director, New Mexico Energy, Minerals, and Natural Resources Department, Forestry
Division, Santa Fe, NM

Draft Environmental Assessment Comments Submitted by the United States Fish and Wildlife Service and Corps' Response:

Comment: To ensure that construction-related migratory bird impacts are avoided, we recommend that construction activities occur outside the general migratory bird nesting season of March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until nesting is complete.

Response: Proposed construction is scheduled to start in June 2006. Because the start of construction occurs within the migratory bird nesting season, the areas proposed for construction will be surveyed prior to any work. If nesting is found, the area would be avoided until nesting is complete.



United States Department of the Interior

BUREAU OF RECLAMATION

Albuquerque Area Office
555 Broadway Blvd., NE Suite 100
Albuquerque, New Mexico 87102-2352

IN REPLY REFER TO:

ALB-184
ENV-1.10

MAY 25 2005

FEDERAL EXPRESS

Ms. Danielle Pecastaing
Environmental Resources Section
Army Corps of Engineers
4101 Jefferson Plaza NE
Albuquerque, NM 87109-3435

Subject: Draft Environmental Assessment (DEA) Entitled "Rio Rancho Water Upgrade, Rio Rancho, Sandoval County, New Mexico"

Dear Ms. Pecastaing:

We have one comment pertaining to the subject document.

Page 15:

The DEA mentions that Site LA 80890 extends within and adjacent to the existing Water Well Compound #12. Since the nature and extent of any subsurface remains within this area has not yet been inventoried, it seems the decision to issue a FONSI (Finding of No Significant Impact) should be reevaluated.

Thank you for providing us the opportunity to review the document.

Sincerely,

A handwritten signature in black ink, appearing to read "A. Jack Garner".

A. Jack Garner
Area Manager

f.s.

Draft Environmental Assessment Comments Submitted by the Bureau of Reclamation and Corps' Response:

Comment: The DEA mentions that Site LA80890 extends within and adjacent to the existing Water Well Compound #12. Since the nature and extent of any subsurface remains within this area has not yet been inventoried, it seems the decision to issue a FONSI (Finding of No Significant Impact) should be reevaluated.

Response: Additional testing was conducted at Water Well Compound #12. Testing included a total of 47 auger holes that were placed within and adjacent to the construction area. The holes were terminated at the top of the sterile caliche layer which varied from 20 to 130 centimeters below the surface. Seventeen stone flakes and modern debris were recovered from eight holes from just below the surface to just above the caliche layer. The project area is badly disturbed, and intact buried archaeological deposits are not present. There will be no historic properties affected as a result of the proposed work at Water Well Compounds 9, 12, and 13. The New Mexico State Historic Preservation Officer concurred with the Corps' determination of no adverse effect by their letter of April 25, 2006.

Appendix C
Notice of Draft EA Availability

AFFIDAVIT of PUBLICATION

, being first duly sworn, deposes and says: That (he) (she) is the Agent to the Publisher of the Rio Rancho Observer printed and published 2 days a week in the County of Sandoval, State of New Mexico and of general circulation in the City of Rio Rancho, County of Sandoval, State of New Mexico and elsewhere, and the here to attached

Notice of Availability

The U.S. Army Corps of Engineers, Albuquerque District, has completed the Draft Environmental Assessment (DEA) entitled "Rio Rancho Water Upgrades, Rio Rancho, Sandoval County, New Mexico." The purpose of installing arsenic removal equipment at three existing Rio Rancho Water Supply Wells is to comply with the Environmental Protection Agency's (EPA) Arsenic Rule. The EPA adopted a new standard for arsenic in drinking water at

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10 parts per billion (ppb), replacing the old standard of 50 ppb. All systems must comply with this new standard by January 23, 2006.

The DEA is electronically available for viewing and copying at the Albuquerque District website (under "FONSI/ Environmental Assessments") at:

~~http://www.usace.army.mil~~

or a hard copy will be sent upon written request to the following address:

U.S. Army Corps of Engineers
Albuquerque District
Environmental Resources
Section
Attn: CESPA-PM-LE (Ms. Danielle Pecastaing)
Albuquerque, New Mexico 87109-3435

Paper copies of this document are also available for review at:
Rio Rancho Public Library
950 Pinetree Road SE
Rio Rancho, New Mexico 87124

The public review will extend from April 27, 2005 to June 1, 2005. Written comments should be sent to the above address and will be accepted until 4:00 PM, June 1, 2005. Alternatively, comments may be sent electronically to Danielle.pecastaing@spac.usace.army.mil

Date(s) of publication: May 26, 2005

was printed and published correctly in the regular and entire issue of said The Rio Rancho Observer for 1 issues, that the

first was made on the 26 day of May 2005

and the last publication thereof was made on the _____ day of _____

20 _____ that said publication

was made on each of the following dates, to wit:

Request of
THE RIO RANCHO OBSERVER

By: *[Signature]*
Affiant

Subscribed sworn to before me this 26 day of May 2005

[Signature]
Notary

NotaryPublic in and for the County of Sandoval, State of New Mexico

OFFICIAL SEAL
ANN SAUNIER
NOTARY PUBLIC
STATE OF NEW MEXICO
My commission expires: 11-8-2006