

# Environmental Report

## High Valley Water System Improvements Project

Prepared on behalf of the  
High Valley Mutual Domestic Water Consumers Association

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## Table of Contents

Introduction.....	1
1.0 Purpose and Need for Project .....	1
1.1 Project Description .....	1
1.2 Purpose and Need for the Project.....	2
1.2.1 Health, Sanitation and Security .....	2
1.2.2 Aging Infrastructure.....	2
1.2.3 Other Needs .....	3
1.2.4 Reasonable Growth .....	4
2.0 Alternatives Considered .....	4
2.1 Alternative A- No Action.....	4
2.2 Alternative B – Meter & Service Line Replacement .....	4
2.3 Alternative C- Distribution Line Replacement.....	4
2.4 Alternative D- New Booster Station .....	5
2.5 Alternative E- Elevated Water Storage.....	5
2.6 Alternative F- Water System Regionalization.....	5
2.7 Alternative G- New Water Well.....	5
2.8 Selected Alternative(s) .....	6
3.0 Affected Environment / Environmental Consequences.....	7
3.1 Land Use .....	7
3.1.1 General Land Use.....	7
3.1.2 Important Farmland .....	8
3.1.3 Formally Classified Lands.....	8
3.2 Floodplains .....	9
3.3 Wetlands .....	10
3.4 Historic Properties.....	10
3.4.1 Historic Property Information .....	10
3.4.2 Visual Aesthetics.....	11
3.5 Biological Resources .....	12
3.5.1 Threatened and Endangered Species.....	12
3.5.2 Wildlife.....	13
3.5.3 Vegetation .....	14
3.6 Water Resources .....	14
3.6.1 Surface Water.....	14
3.6.2 Groundwater .....	16
3.7 Coastal Resources.....	17
3.8 Socioeconomic/Environmental Justice .....	17
3.8.1 Socioeconomic Issues .....	17
3.8.2 Environmental Justice .....	18
3.9 Other Resources.....	18



3.9.1	Air Quality.....	18
3.9.2	Transportation.....	19
3.9.3	Noise.....	20
3.10	Cumulative Impacts.....	20
4.0	Summary of Mitigation Measures.....	20
4.1	Physical Resources Measures.....	20
4.2	Biological Resource Measures.....	20
4.3	Threatened and Endangered Species Measures.....	21
4.4	Socioeconomic/Environmental Justice Measures.....	21
4.5	Archeological, Cultural, and Historic Resources Measures.....	21
4.6	Environmentally Sensitive Areas.....	21
4.7	Other Resources.....	21
4.8	Cumulative Impact Measures.....	21
5.0	Consultation, Coordination and Public Involvement.....	21
5.1	Agencies Consulted.....	21
5.2	Public Involvement.....	22
5.3	Responsiveness Summary.....	22
6.0	Exhibits.....	22
7.0	List of Preparers.....	23

**FIGURES**

1. Vicinity Map of Proposed Project Area
2. FEMA Map of Proposed Project Area

**TABLES**

- 5.1a Native American Correspondence Summary
- 5.1b Agency Correspondence Summary

**APPENDICES**

- E1. USDA Natural Resources Conservation Service Correspondence
- E2. N.M. Energy, Minerals & Natural Resources Dept. State Parks Division & National Park Service Correspondence
- E3. FEMA Correspondence
- E4. Doña Ana County Flood Manager Correspondence
- E5. United States Army Corps of Engineers Correspondence
- E6. Cultural Resources Survey
- E7. New Mexico State Historic Preservation Office Correspondence
- E8. Native American Correspondence
- E9. Biological Evaluation Report
- E10. US Fish & Wildlife Service Correspondence
- E11. New Mexico Department of Game & Fish Correspondence
- E12. N.M. Energy, Minerals & Natural Resources Dept. Forestry Division Correspondence



- E13. New Mexico Environment Department Correspondence
- E14. New Mexico Office of the State Engineer Correspondence
- E15. Interstate Stream Commission Correspondence
- E16. Elephant Butte Irrigation District Correspondence
- E17. EPA Source Water Protection Branch Correspondence
- E18. US Census Fact Finder Web Site Information
- E19. EPA Region VI Office of Planning & Coordination Correspondence
- E20. Civil Rights Impact Analysis Certification Form RD 2006-38
- E21. EPA Air Planning Section Correspondence
- E22. New Mexico Department of Transportation Correspondence
- E23. Print out of Publication
- E24. Project-Specific Web Site





# **ENVIRONMENTAL REPORT**

## **HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

### **WATER SYSTEM IMPROVEMENTS PROJECT**

#### **INTRODUCTION**

This Environmental Report (ER), alternately referred to as an Environmental Information Document (EID), was prepared following the United States Department of Agriculture (USDA) Rural Utilities Service (RUS) Bulletin 1794A-602, “Guide for Preparing the Environmental Report for Water and Waste Projects” and also in general compliance New Mexico Environment Department (NMED) State Environmental Review Process (SERP). This EID is intended to accurately represent environmental issues surrounding the proposed water system improvements described herein.

High Valley is located approximately 15 miles south of Las Cruces, New Mexico in the southeastern part of Doña Ana County near the unincorporated community of Vado, NM and within Section 12 of Township 25 South, Range 3 East as shown in Figure 1. The planning area lies approximately 2.5 miles east of Interstate 10, along County Rd. B19 (High Valley Road) and 7.5 miles north of Anthony, NM.

The High Valley Water Users Cooperative Association (WUCA) was incorporated in 1982 to manage the water system being built for the High Valley Farms subdivision. The original system was constructed in the early 1980’s and included a water supply well, storage tank, approximately 4,700 linear feet of 3 and 4-inch PVC pipe and a booster station with a single pump and pressure tank. In 1999, improvements were completed which included the construction of a new well and 30,000-gallon water storage tank. High Valley Mutual Domestic Water Consumer Association (MDWCA) was incorporated in December 2013 and currently provides service to 24 developed single-family homes on large lots.

#### **1.0 PURPOSE AND NEED FOR PROJECT**

##### **1.1 Project Description**

The proposed project addresses the need for High Valley MDWCA to provide redundancy for their water source in case of emergencies. The project will also ensure an increase in distribution system pressures, provide the required fire flow per county requirements, reduce water loss through aged and deteriorated lines as well as provide the ability to conduct accurate water loss audits. To this extent, specific items considered for this project include: improvements to/redundancy of the water source; installation of a new distribution network and meters; improvement of pressure in the distribution system and fire flow improvements.



## 1.2 Purpose and Need for the Project

### 1.2.1 Health, Sanitation and Security

The High Valley Consumer Confidence Reports (CCR) show that the system's water supply is meeting State and Federal Drinking water standards. The current water source for the system is a single water supply well located at the northeast corner of the community. Production of the well has diminished to 26 gallons per minute (gpm) possibly due to decreasing water levels and subsequent increase in static head as well as age. At the current production rate, the well struggles to meet demand especially during the summer months when usage is at its peak. The residents have noted that the well produces water with a fine sediment which could be contributing to frequent failure of meters and check valves. The master meter at the well has failed and been replaced twice in the past two years. The community would be left without service in case of a well failure without a second source of water.

The current system does not provide adequate storage and system flows in order to meet the Doña Ana County fire flow recommendations. The system currently has 30,000 gallons of storage and requires 13,349 gallons to provide two days of average flow and a total of 133,349 gallons to provide two days of storage and sufficient reserve to meet potential fire flow demands (1,000 gpm for two hours). However, adding sufficient storage to provide for fire flows would result in poor water quality because the tank would hold ten days of water.

The distribution system has experienced 16% in water losses the past three years due to frequent leaks. This indicates that improvements to the distribution system are needed because of constant leaks and breaks in the aged and deteriorated lines. Improvements would include an adequate amount of isolation valves throughout the distribution system which would aid in the reduction of water loss during breaks and repairs.

The High Valley household water services are constructed with PVC pipe without corporation valves or curb stops after the meters, requiring the operator to shut off water at the meter setter for any repairs. Because all the meters are located on private property, repairs can take longer, leading to more lost water. The existing meters have been replaced as needed so there is a wide variety of meter brands and types. According to records some meters may be 25 years old with poor accuracy. The water distribution and storage system is incapable of meeting County fire flow requirements without substantial improvements to the distribution system and a high flow booster.

During the most recent Sanitary Survey, conducted in 2015, NMED recommended that the Association develop an emergency management plan and suggested interconnection with the neighboring Vista Del Rey water system to the north. Both communities would benefit from the interconnection in case of an emergency. High Valley MDWCA has initiated conversations with the Vista Del Rey water system regarding the proposed regionalization to establish the parameters for an agreement to support each other during water outages or other emergencies.

### 1.2.2 Aging Infrastructure

The system operator has noted that the majority of breaks occur at or near the booster pump house due to age and deterioration of the pump house plumbing. Piping at the booster pump is very shallow and susceptible to freezing, is the oldest part of the system and sees the highest pressures. Records indicate





that the system has up to four breaks per year at the pump house and its associated plumbing. The building has aged considerably and lacks the amount of space needed for upgrades, maintenance and proper record keeping as recommended by NMED. The booster pump currently provides approximately 25 gpm and is only capable of a maximum pressure of 48 psi at the building. The lack of a second pump leaves the Association without redundancy in case of failure and the 21' tall water storage tank can only provide approximately 9 psi. NMED recommends a minimum system pressure of 35 psi with a normal working pressure of approximately 60 to 80 psi.

The supply well is controlled through an irrigation timer or operated manually due to failure of the original tank level controls. There are currently no records of the well pump being serviced or inspected since its replacement in 2004. The chlorination mixer has failed, requiring the system operator to mix the chlorination solution by hand within the well. According to the system operator, meters are typically only replaced once they fail or are inoperable which has led to a wide variety of meter types and ages with varying accuracies. The entire distribution system was built in the early 1980's with small diameter piping of unknown thickness which has reached the end of its useful life.

### **1.2.3 Other Needs**

During a Sanitary Survey, conducted in 2012, NMED recommended that the existing water storage tank be inspected and cleaned or rehabilitated as needed. The tank was constructed in 1998, and there are no records of any inspection or repairs since installation. NMED recommended the tank be rehabilitated to prevent leaks in the system as well as contamination from deteriorated coatings and the eventual shut down of the entire system to complete repairs. NMED also recommended that the tank area be fenced in order to provide security and restrict access. The booster station building is in need of repairs in order to prevent contamination from vermin and birds.

During the most recent Sanitary Survey, conducted in 2015, NMED recommended that the Association remove the old water storage tank and clear the area of high vegetation and debris in order to reduce the risk of a safety hazard to personnel and contamination from vermin and birds.

In case of a fire, the Doña Ana County fire department would not be able to properly utilize the existing hydrant within the subdivision due its inability to provide flows necessary to meet the requirements established by the County. The Association would need to install a high flow pump parallel to their existing domestic flow pump to provide the necessary fire flows. In the meantime, the High Valley MDWCA operator needs to ensure that the existing hydrant is painted or otherwise indicate that it currently does not meet the County requirements and notify local fire protection agencies that the system does not provide adequate fire flows.

There are currently no telemetry or automatic controls to alert operators of failures or leakage in the system. This leads to prolonged response times and higher operation and maintenance costs due to major failures caused by the inability to identify problems in real-time and address problems proactively.

There are currently no backup power resources for any portion of the water system. If there were a prolonged electrical outage, the well and booster station would not function. The system does not have



an alternate source of water and storage is limited to no more than two days with current usage patterns during the summer months.

#### **1.2.4 Reasonable Growth**

The water system serves the High Valley Farms subdivision, which is completely developed and includes 24 single family homes. Although there are no current plans for expansion of the development, the potential for the interconnection of the Vista Del Rey subdivision to the north would require the need to provide emergency service to an additional 24 single family lots.

## **2.0 ALTERNATIVES CONSIDERED**

Seven (7) alternatives were considered in the PER prepared for this project. The alternatives were chosen to address the purpose and need for the project and can be generally grouped into four (4) categories: water supply alternatives, treatment alternatives, storage alternatives, distribution alternatives and other. The ideal overall objective of the selected alternative(s) is to provide a secure, safe and reliable water system, update the current infrastructure and provide expanded system capabilities.

### **2.1 Alternative A- No Action**

The no construction alternative includes optimizing system operations and preparing a preliminary engineering report but taking no actions involving construction or additions to the system to address needs described in the PER. This alternative would result in the continuation of the existing daily operation of the water system with slight increases in efficiency.

### **2.2 Alternative B – Meter & Service Line Replacement**

This residential meter and water service line replacement alternative consists of the construction of approximately 360 lineal feet of ¾-inch water service lines, installation of 24 new meters and the relocation of all meter boxes within the Doña Ana County ROW. These new service lines will replace existing PVC lines and add valves for isolation of the service connections. The new meters will replace the existing meters that are of varying age and type.

This alternative will increase the reliability of the system through the removal of the deteriorated lines. By providing the ability to isolate individual services during repairs and establishing a standards meter type, the project will increase O&M efficiency, reduce water loss during leaks/breaks and reduce the number of residents affected during repairs. Land acquisition will not be required because the majority of the service line construction will occur in Doña Ana County ROW. This will also provide reliable access to meters as well as increase the water use and billing data accuracy.

### **2.3 Alternative C- Distribution Line Replacement**

This distribution line replacement alternative consists of the construction of approximately 4,700 lineal feet of 6-inch water lines within the Doña Ana County ROW. This new distribution network will replace the existing PVC lines, install fire hydrants and add valves for isolation of each street.





This alternative would not require land acquisition because the distribution line construction will occur either in Doña Ana County ROW or on the Association property. The new line will replace the aged and deteriorated waterline which will reduce the number of leaks and breaks and in turn reduce the amount of water loss and waste during repairs by adding easily accessible line isolation through gate valves.

#### **2.4 Alternative D- New Booster Station**

This booster system alternative consists of the construction of a new booster system building and installation of a new triplex booster skid unit that is capable of supplying normal demands, high flows in case of a fire event, maintaining normal working pressures and providing redundancy as recommended by industry standards. The new booster system and associated appurtenances will replace the existing single pump, aged pressure tank and deteriorated plumbing and controls.

By replacing the existing booster system which was a source of frequent leaks and breaks increased system pressures and flows can be provided, redundancy can be provided by the second booster pump and a reduction in O&M cost can be realized. The new building will ensure additional space for future upgrades, maintenance, storage and organization as recommended by NMED. This alternative will also provide automatic alarms in case of failures and lower energy consumption with the use of high efficiency pumps.

#### **2.5 Alternative E- Elevated Water Storage**

This alternative includes the construction of a new elevated welded steel tank to provide 30,000 gallons of storage capacity at the existing tank site in order to meet the industry standard for 2-day storage as well as provide the normal working pressures as outlined by the NMED Recommended Standards for Water Supply Systems. The High Valley water system currently has a single ground water storage tank with a capacity of 30,000 gallons. The elevated tank would also eliminate the need for a booster station to provide the system with pressure.

#### **2.6 Alternative F- Water System Regionalization**

This alternative includes the construction of approximately 2,020 linear feet of 6" PVC transmission line, a metering vault and associated appurtenances to interconnect with the Vista Del Rey water system for redundancy of water supply in case of emergencies as recommended by NMED during the most recent Sanitary Survey, conducted in 2015. The transmission line and all appurtenances would be installed within the county ROW.

#### **2.7 Alternative G- New Water Well**

This alternative includes the construction of a new water supply well with a new pump, controls, building, yard piping and all associated appurtenances. A new well would provide a redundancy in water supply, a potential reduction in energy consumption with high flow rates by reducing pump run times compared to the existing well. In addition, the life of the existing well would be extended by alternating the use of both pumps.



## 2.8 Selected Alternative(s)

Based on the analysis and evaluations conducted, the recommended alternatives for immediate action include:

- Alternative B: Meter & Service Line Replacement
- Alternative C: Distribution Line Replacement
- Alternative D: New Booster Station
- Alternative G: New Water Supply Well

Due to the total project cost of the recommended alternatives, SMA is aware phasing of the recommended alternatives might be required to enhance the potential success in obtaining funding. Therefore, if phasing is required, SMA recommends the following approach:

Phase 1, which would be implemented immediately:

- Alternative G: New Water Supply Well

Phase 2, would consist of:

- Alternative B: Meter & Service Line Replacement
- Alternative C: Distribution Line Replacement
- Alternative D: New Booster Station

To provide redundancy, improve system pressures and reduce water loss and maintenance costs the recommended alternative for immediate implementation consists of a combination of Alternatives B, C, D and G. The project would construct a new well, booster stations and replace the existing distribution line, service lines and meters.

### **Water Supply**

A new water supply well will be constructed (Alternative G) with a new high efficiency pump. The well site will be based on hydrogeological investigation and the new well pump will be sized to match the expected peak demand and aquifer characteristics.

SMA also recommends that the existing well be inspected and the pump either be refurbished or replaced with a higher flow and increased efficiency pump. Inspection or repair of the existing well should be done after the construction of the new well to ensure that the community has a reliable source at all times. The controls for the existing well will also be replaced with a new tank level sensor to control the filling of the tank. Alternatives to eliminate the fine sediment produced from the well will also be evaluated based on the results of the well inspection and water sample analysis. In addition, a new backup generator will be installed in the event of a power failure.

### **Treatment**

Currently no constituents exceed the New Mexico Water Quality Control Commission (NMWQCC) standards. Disinfection is provided by a sodium hypochlorite system. The current chlorination system consists of a chemical metering pump with storage drum and are located within the existing pump house. This project will include the installation of a chlorine mixing unit.





### **Storage**

The current storage tank in the High Valley water system holds 30,000 gallons of water and is capable of supplying the recommended 2-day demand but not adequate reserve for emergency purposes. The tank will be inspected and rehabilitated as part of the project in order to comply with the sanitary survey recommendation and to extend the service life of the tanks.

In order to comply with NMED recommendations during their sanitary surveys, the tank area will be cleared of high vegetation and a fence will be installed in order to provide security and limit access to the site. The old water storage tank will also be removed from the site in order to avoid potential safety hazards.

### **Water Distribution**

Replacement of the residential service lines and meters (Alternative B) as well as the distribution line (Alternative C) will both reduce wasted water and increase O&M efficiency. The ability for operators to easily isolate lines will decrease the number of residents that experience interruption of service during repairs, while replacing the distribution lines will decrease the number of breaks associated with the existing lines. The installation of new meters (Alternative B) will enable the Association to accurately bill for consumption and conduct accurate water loss calculations.

The construction of a new booster station (Alternative D) will provide redundancy, replace the frequently failing plumbing and incorporate new controls with automatic alarms with telemetry to notify operators of failures. In addition, a high flow pump will also be included in the skid unit to provide fire flows and new twin hydro-pneumatic tanks will provide redundant pressure control of the system.

## **3.0 AFFECTED ENVIRONMENT / ENVIRONMENTAL CONSEQUENCES**

### **3.1 Land Use**

#### **3.1.1 General Land Use**

Within the approximately Area of Potential Effect (APE), strictly speaking, most present land use is for roads or for the water system. Adjoining lands are used primarily for residential, farming and public recreation purposes, with some minor commercial use. Zoning within the entire project area is managed by Doña Ana County (DAC) and is listed as “PERFORMANCE DISTRICT” (PD). Typical PD uses can range from low intensity residential through mobile home parks, commercial and industrial. According to the current DAC zoning ordinance:

*“The purpose of the Performance Zone District is to allow flexibility for land use activities in the rural areas of the County, while protecting residents and property values. In the Performance Zone District any use may be approved provided that all standards for that particular use are met and the use is consistent with the character of the surrounding areas. Standards for land uses are based on the intensity of the primary use of a parcel of land. The most intense uses with a potential impact on a larger area of the County, or its resources than, the residential or commercial uses will require approval through the Planned Unit Development process (PUD).”*



The DAC Unified Development Code (UDC) that is currently under review for expected implementation in 2016 identifies the land use around High Valley as Transect Rural Zone (T2), with the majority of the service area identified as Low Density Residential Zones (D1), one lot identified as Medium Density Residential Zone (D2), and the existing tank site identified as Neighborhood Commercial Zone (C1). The UDC Sector plan identifies High Valley as having areas of targeted and intended growth surrounded by areas of rural open space.

The UDC defines the Rural Transect Zone (T2) as an area that consists of sparsely settled lands in open or cultivated conditions. These include bosque, agricultural land, and grazing land. Typical buildings include farmhouses and agricultural buildings. Thoroughfares are rural in character and have no pedestrian facilities. Landscaping is agricultural or that which occurs naturally.

The UDC identifies Low Density Residential (D1) as a zone that permits single-family site-built homes, mobile homes, and related uses necessary to serve residential areas. Medium Density Residential (D2) permits a mixture of single family site-built homes, mobile homes, duplex residences and related residential support uses. Neighborhood Commercial (C1) permits neighborhood commercial activities and small-scale freestanding businesses.

Utility easements through private property will need to be acquired for the replacement and relocation of the water service lines and meters. Several acres will be disturbed through the installation of new and/or upgraded water distribution lines and other system improvements. The majority of the distribution line improvements will take place within previously disturbed county right-of-way.

No aspect of the proposed project (or any alternative) attempts to alter any existing zoning within the APE. No people are anticipated to be displaced as a result of the proposed project (or any alternative) nor will it adversely alter the character of the existing developed areas. Hence, SMA does not believe that general land use will be adversely impacted by the proposed project.

### **3.1.2 Important Farmland**

SMA did not observe any “important farmland” that would be directly impacted by the proposed project. Further, SMA issued a consultation letter to the USDA Natural Resources Conservation Service (NRCS) on July 15, 2016 via fax and a follow-up request for consultation was sent via electronic mail on August 3, 2016. In a response dated August 10, 2016, NRCS stated in part:

*“The proposed project will not cause Prime or Unique Farmlands or hydric soils to be converted to non-agricultural or non-hydric uses, and is not subject to the Farmland Protection Policy Act (FPPA).”*

Hence, SMA does not believe that any important farmlands will be adversely impacted by the proposed project. A copy of all correspondence to and from USDA NRCS is provided in Appendix E1.

### **3.1.3 Formally Classified Lands**

There are no national parks, landmarks, historic sites, wilderness areas, wildlife refuges, wild and scenic rivers, grasslands, state parks and Native American owned lands in or immediately adjacent to the APE. Consultation with Native American groups and the results of a cultural resources study are discussed later





in this report. Consultation was undertaken with the New Mexico Energy, Minerals and Natural Resources Department (EMNRD), State Parks Division (SPD) on July 15, 2016 by facsimile and a follow-up request was submitted via electronic mail on August 3, 2016. In a response dated August 12, 2016, SPD simply stated:

*“I do not see any problems with the project.”*

A copy of all correspondence to and from SPD is provided in Appendix E2.

Consultation was also initiated with the U.S. Department of the Interior, National Park Service (NPS) on August 4, 2016 by electronic mail. In a response dated August 18, 2016, NPS stated in part:

*“The NPS has reviewed this project and has found no comments at this time.”*

A copy of all correspondence to and from NPS is provided in Appendix E2. Based on the above information, SMA does not believe that any formally classified lands will be adversely impacted by the proposed project.

### **3.2 Floodplains**

Trenching and construction of the water distribution line will take place along roads, utility easements and DAC right-of-way (ROW). According to the Flood Insurance Rate Map (FIRM) Number 35013C1350G (effective date July 6, 2016), issued by the Federal Emergency Management Agency (FEMA) for Doña Ana County, New Mexico, the entire project area is in Zone X defined as areas determined to be outside the 500-year floodplain. Figure 2 illustrates the proposed project location on the aforementioned FEMA maps.

Consultation was initiated with the regional FEMA Region VI office in Denton, Texas on July 19, 2016 via US mail and fax. In a response dated August 26, 2016 FEMA stated:

*“We would request that the communities’ floodplain administrators’ be contacted for the review and possible permit requirements for this project. If federally funded, we would request project to be in compliance with EO 11988 & EO 11990.”*

A copy of all correspondence to and from FEMA is provided in Appendix E3.

Consultation was initiated with the local DAC flood coordinator on August 3, 2016; however, no response has been received as of the issuance of this document. A copy of all correspondence to and from DAC is provided in Appendix E4.

Based on the above information, SMA does not believe that floodplains will be adversely impacted by the proposed project.



### 3.3 Wetlands

In order to evaluate potential wetlands within or adjacent to the APE, SMA staff completed a site visit to inspect for possible hydric soils or soils with hydric inclusions, reviewed available wetlands information using the online wetlands mapping service provided by the United States Department of the Interior, Fish & Wildlife Service (USFWS), and reviewed USDA NRCS information regarding hydric soils within the APE. None of these resources indicated any wetlands within the APE.

A copy of all correspondence to and from USDA NRCS is provided in Appendix E1.

Consultation was initiated with the US Army Corps of Engineers (USACoE) on July 19, 2016 by U.S. mail and a follow-up request for consultation was sent via electronic mail on August 3, 2016. In a response dated August 8, 2016 USACoE stated in part:

*“Based on the information provided, we have determined that a Department of the Army permit is not required since the site consists entirely of uplands. This decision is based on an approved jurisdictional determination (JD) (attached) that there are no waters of the United States on the project site. The basis for this JD is that the project site contains entirely uplands.”*

A copy of all correspondence to and from USACoE is provided in Appendix E5. Based on the above information, SMA does not believe that wetlands will be adversely impacted by the proposed project.

### 3.4 Historic Properties

#### 3.4.1 Historic Property Information

A cultural resources survey was directed by SMA for the APE during June 2016. The entirety of the proposed routes and project footprints (including alternatives) was surveyed to determine whether any archeological, cultural and/or historic resources were visible within the APE. No historic or culturally sensitive areas were identified within the APE during the field survey. During a records search no archaeological sites or historic buildings were noted within a half mile of the project area. The record search was then expanded to one mile which revealed two archaeological sites (LA 120446 and LA 35937). Both of these sites are well outside (more than a mile to the west and northwest of the project area) the current APE and will not be impacted by the proposed undertaking. A copy of the full survey completed by SMA is provided in Appendix E6.

Consultation with the New Mexico Office of Cultural Affairs State Historic Preservation Division (SHPD) was initiated on July 15, 2016 by U.S. mail and a follow-up request for consultation was sent via electronic mail on August 3, 2016. In a response dated August 17, 2016, SHPD simply stated:

*“No Historic Properties Affected”*

A copy of all correspondence to and from SHPD is provided in Appendix E7.

Consultation was also undertaken with each of nine (9) Native American groups identified by SHPD as having interest in the Doña Ana County area. A request for consultation was sent on July 15, 2016 by





facsimile and on July 19, 2016 by U.S. mail depending on the contact information available. A follow request for consultation was sent on August 8, 2016 by facsimile and electronic mail. In a response from the Comanche Nation dated August 5, 2016 the Tribe stated in part:

*“The location of your project has been cross referenced with the Comanche Nation site files, where an indication of “No Properties” have been identified. (IAW 36 CFR 800.4(d)(1)).”*

In a response from the Kiowa Tribe of Oklahoma dated August 8, 2016 the Tribe stated in part:

*“Given the information provided, you are hereby notified that the proposal project location should have minimal potential to adversely affect any known Archaeological, Historical, or Sacred Kiowa sites. Therefore, in accordance with 36 CFR 800.4(d) (1), you may proceed with your proposed project. However, please be advised undiscovered properties may be encountered and must be immediately reported to the Kiowa Tribe Office of Historic Preservation under both the NHPA and NAGPRA regulations.”*

In a response from the White Mountain Apache Tribe dated August 16, 2016 the Tribe stated in part:

*“We have received and reviewed information regarding the above proposed environmental assessment for the water system improvement project, encompassing the Colonia of High Valley, Dona Ana County, New Mexico, and we have determined the proposed project **will not have an impact** on the White Mountain Apache tribe’s historic and/or traditional cultural properties. Regardless, any/all ground disturbing activities should be monitored **if** there are reasons to be believe that there are human remains and/or funerary objects are present, and if such remains and/or objects are encountered they shall be treated with respect and handled accordingly until such remains are repatriated to the affiliated tribe(s).”*

SMA has not received a response from the remainder of the Native American groups as of the issuance of this document. A copy of all correspondence to and from all Native American groups is provided in Appendix E8.

Based on the above information, SMA does not believe that historic properties will be adversely impacted by the proposed project.

### **3.4.2 Visual Aesthetics**

The majority of the aboveground expressions of the proposed project will be meter boxes (flush with the ground surface), valve covers (flush with the ground surface), flush hydrants, air/vacuum relief valves (flush with the ground surface), fire hydrants and the new booster station and well. The only potentially visually sensitive area within or in immediate proximity to the APE is that of the current and proposed well and booster station property. Consistency in design for the proposed improvements with respect to the existing structures and color selection will allow for minimal aesthetic disruption.

With consideration of the above precautions, SMA does not believe that visual aesthetics will be adversely impacted by the proposed project.



### 3.5 Biological Resources

The majority of the project area has been moderately disturbed by humans as evidenced by improved dirt roads, existing residential and water system structures and paved county roads. With regard to habitat, the project area is largely disturbed but also includes some original native habitat consisting of Chihuahuan desert vegetation. For a more in depth analysis of the affected environment, please refer to the Biological Evaluation report provided in Appendix E9.

#### 3.5.1 Threatened and Endangered Species

Based on the results of the Biological Evaluation, which in turn was based on the site evaluation and existing data, there will likely be no effects to federally endangered, threatened and candidate species and their designated critical habitat, as a result of the proposed project.

Species of concern are not protected under the Endangered Species Act. However, USFWS typically recommends mitigation efforts to be taken in order to prevent species of concern from becoming listed as threatened or endangered. No species of concern were observed in the project area during the site visit. The proposed action will likely not impact species of concern listed for Doña Ana County.

In addition, no rare plants, as listed on the New Mexico Rare Plant List for Doña Ana County, were observed within the project area. Suitable habitat conditions were not present for the listed rare plants in the project area.

A request for consultation was initiated with USFWS on July 15, 2016 via fax and a follow-up request for consultation was sent via electronic mail on August 4, 2016. In a response dated August 5, 2016, USFWS stated in part:

*"In New Mexico you can now obtain an official letter on Federal trust resources from the U.S. Fish and Wildlife Service (Service) via our Information, Planning, and Conservation System (IPAC)."*

Typically, USFWS will not provide a project-specific response on "no effect" determinations. SMA obtained an official letter from the IPAC system as instructed and a copy of the letter as well as all correspondence to and from USFWS is provided in Appendix E10.

Consultation was initiated with the New Mexico Department of Game & Fish (NMDGF) on July 15, 2016 via facsimile. NMDGF responded on July 20, 2016 with the following recommendations:

*"Open trenches and ditches can trap small mammals, amphibians and reptiles and can cause injury to large mammals. Periods of highest activity for many of these species include night time, summer months and wet weather.*

- *To minimize the amount of open trenches at any given time, keep trenching and backfilling crews close together.*
- *Trench during the cooler months (October - March). However, there may be exceptions (e.g. "critical wintering areas) which need to be assessed on a site-specific basis.*





- *Avoid leaving trenches open overnight. Where trenches cannot be back-filled immediately, escape ramps should be constructed at least every 90 meters. Escape ramps can be short lateral trenches sloping to the surface or wooden planks extending to the surface. The slope should be less than 45 degrees (100%). Trenches that have been left open overnight, especially where endangered species occur, should be inspected and animals removed prior to back-filling.”*

NMDGF further stated:

*“With implementation of these recommendations during construction, the Department believes that this project as proposed is unlikely to adversely affect wildlife or wildlife habitats.”*

A copy of all correspondence to and from NMDGF is provided in Appendix E11.

A request for consultation was initiated with the EMNRD, Forestry Division on August 3, 2016 via electronic mail. In a response dated August 5, 2016, EMNRD Forestry Division stated in part:

*“The NM Forestry Division does not have any information on the occurrence of state listed endangered plant species in the vicinity of the project location. However, there are several state listed plants in Dona Ana County with the potential to occur in the project area, based on the information provided. These include sand pricklypear (*Opuntia arenaria*) and the night-blooming cereus (*Peniocereus greggii* var. *greggii*). The presence of habitat for these state listed plants should be evaluated in the project area. If habitat exist, I recommend clearance surveys to document the potential presence of these species in the project area. If any plants are located, they should be avoided during construction, or impacts should be minimized and properly mitigated.”*

A copy of all correspondence to and from EMNRD is provided in Appendix E12.

With consideration of the above precautions, SMA does not believe that threatened and endangered species will be adversely impacted by the proposed project.

### **3.5.2 Wildlife**

The site visit for the Biological Evaluation was completed on July 27, 2016. Species of wildlife observed within the APE during the site visit included: House Sparrow (*Passer domesticus*) White-winged dove (*Zenaida asiatica*), Inca Dove (*Scardafella inca*), Great-tailed grackle (*Quiscalus mexicanus*), Western Kingbird (*Tyrannus verticalis*), Roadrunner (*Geococcyx californianus*), Desert Cottontail Rabbit (*Sylvilagus audubonii*), Bees (unknown sp. Order: *Hymenoptera*), Harvester Ants (*Pogonomermyx* sp.), Desert Millipede (*Orthoporus* sp.) and Sulfur Butterflies (subfamily: *Coliadinae*) and other small mammal burrows present.

Should nesting of a species protected under the Migratory Bird Treaty Act be identified in the construction zone, construction will be limited to a time of the year outside the general migratory bird nesting season of March through August, or avoided until nesting is complete. If necessary, construction can occur during nesting season; however, a survey will need to be completed to determine absence/presence of species



shortly prior to construction (i.e. within two weeks) and any identified nests will need to be relocated by a permitted professional.

To avoid trapping wildlife and domestic animals, trenches will be covered overnight or constructed with ramps to allow egress. Trenching and backfilling crews will be kept close together to minimize the amount of open trench, and trenching activities should be performed during the cooler months of the year (October through March).

With consideration of the above precautions, SMA does not believe that wildlife will be adversely impacted by the proposed project.

### **3.5.3 Vegetation**

As noted above, the site visit for the Biological Evaluation was completed by SMA on July 27, 2016. Vegetation identified within the APE during this visit included: Honey Mesquite (*Prosopis glandulosa*), Creosote Bush (*Larrea tridentata*), Soaptree Yucca (*Yucca elata*), Desert Agave (*Agave deserti*), Rubber Rabbitbrush (*Ericameria nauseosa*), Russian Thistle (*Salsola iberica*), Lambsquarter (*Chenopodium album*), Mormon Tea (*Ephedra viridis*), Four-wing Saltbush (*Atriplex canescens*), Twinleaf Senna (*Senna bauhinoides*), Silverleaf Nightshade (*Solanum elaeagnifolium*), Whitestem Blazingstar (*Mentzelia albicaulis*), Puncturevine (*Tribulus terrestris*), Broom Snakeweed (*Gutierrezia sarothrae*), Gordon's Bladderpod (*Lesquerella gordonii*), Spectacle Pod (*Dimorphocarpa wislizenii*), Gypsum phacelia (*Phacelia integrifolia*), Purple Sand Verbena (*Abronia angustifolia*), Texas (Engelmann's) Pricklypear Cacti (*Opuntia engelmannii*), Sandhill Muhly (*Muhlenbergia pungens*), Mesa Dropseed (*Sporobolus flexuosus*), Ocotillo (*Fouquieria splendens*), Desert Bird of Paradise (*Caesalpinia gilliesii*), Kochia (*Kochia scoparia*), Chaste Tree (*Vitex agnus-castus*), Oleander (*Nerium oleander*) and Mexican Paloverde (*Parkinsonia aculeata*).

All work within the APE will be completed in already disturbed right-of-way or within previously developed private property, so disturbance of remaining vegetation will be minimal. With consideration of the above precautions, SMA does not believe that vegetation will be adversely impacted by the proposed project.

## **3.6 Water Resources**

The proposed project will cross one arroyo and/or small drainage utilizing existing road right-of-way. Groundwater within the project area is generally considered to be of good quality. The APE is within the Lower Rio Grande groundwater basin as adjudicated by the New Mexico Office of the State Engineer (NMOSE).

### **3.6.1 Surface Water**

The proposed project will not draw water from nor directly discharge into any surface water course.

A request for consultation was initiated with NMED via the designated Environmental Impact Review Coordinator on July 19, 2016 via US mail. A revised request for consultation was issued on August 3, 2016, via electronic mail and a follow-up request for consultation was sent via electronic mail on September 7, 2016. In a response dated October 5September 28, 2016 NMED Surface Water Quality Bureau stated in part:





*“The U.S.EPA requires NPDES permit coverage for storm water discharges from construction projects (common plans of development) that will result in the disturbance (or re-disturbance) of one or more acres (most recent updates effective as of February 16, 2012) including expansions, of total land area.*

*The NPDES Storm Water permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMPs) be installed and maintained both during construction and after construction to prevent, to the extent practicable, pollutants (primarily sediment, oil & grease and construction materials from construction sites) in storm water runoff from entering waters of the U.S. This permit also requires that permanent stabilization measures (revegetation, paving, etc.) and permanent storm water management measures (storm water detention/retention structures, velocity dissipation devices, etc.) be implemented post construction to minimize, in the long term, pollutants in storm water runoff from entering these waters.*

*You should also be aware that EPA requires all "operators" (see Federal Register No. 63, No. 128/Monday, July 6, 1998 pg 36509) obtain NPDES permit coverage for construction projects. Generally, this means that at least two parties will require permit coverage. The owner/developer of this construction project who has operational control over project specifications and the general contractor who has day-to-day operational control of those activities at the site, which are necessary to ensure compliance with the storm water pollution plan and other permit conditions, and possibly other "operators" will require appropriate NPDES permit coverage for this project.”*

A copy of all correspondence to and from NMED is provided in Appendix E13.

NMOSE is charged with administering New Mexico's water resources. NMOSE has authority over the supervision, measurement, appropriation and distribution of almost all surface and groundwater in New Mexico. SMA issued a request for consultation to NMOSE on September 7, 2016 via electronic mail. In a response dated September 12, 2016 NMOSE stated in part:

*“The OSE’s primary concern regarding information on the proposed project is that the High Valley MDWCA have approved permits from the OSE District IV Office for drilling of the proposed new well and for rehabilitation of the old wells. We also require that all wells are metered and readings reported, and that the use of water from the wells remain within the conditions of the High Valley MDWCA’s water right.”*

A copy of all correspondence to and from NMOSE is provided in Appendix E14.

The Interstate Stream Commission (ISC), which is a branch of the OSE, has responsibility on issues that could potentially impact delivery of water to and from New Mexico to neighboring states. Consultation was initiated with ISC on July 15, 2016 via facsimile. In a response dated July 19, 2016 ISC stated in part:

*“To the extent the proposed project has sufficient water rights, recognized by the OSE District 4 office in Las Cruces, for the intended uses and OSE District 4 has approved construction and use of the*



*proposed new well and rehabilitation and use of the existing well, the NMISC has no questions or comments.”*

A copy of all correspondence to and from ISC is provided in Appendix E15.

Finally, surface irrigation in this portion of the Rio Grande valley is administered by EBID. Correspondence was initiated with EBID via facsimile on July 15, 2016. A follow-up electronic mail request for consultation was issued on August 3, 2016. As of the date of this report, no response has been received. A copy of all correspondence to and from EBID is provided in Appendix E16.

Based on the above information, SMA does not believe that surface water will be adversely impacted by the proposed project.

### **3.6.2 Groundwater**

The proposed project will draw water from the existing well and a proposed supplementary well to be located approximately 400 feet west. High Valley MDWCA owns 30.0 AFY of water rights under Point of Diversion (POD) LRG-3918-C. Master meter records indicate that the Association pumped an average of 8.57 AFY over the last three years. The proposed project does not include additional diversion quantities but rather a secondary point of diversion to be utilized as a supplemental source.

The US Environmental Protection Agency (EPA) Source Water Protection (SWP) Branch administers the sole source aquifer (SSA) program under Section 1424 of the Safe Drinking Water Act. A request for consultation was initiated with EPA SWP on July 15, 2016 via U.S. mail and a follow-up request for consultation was sent via electronic mail on August 4, 2016. In a response dated August 5, 2016 EPA SWP stated in part:

*“In the state of New Mexico, the Source Water Protection Program is delegated to the New Mexico Environment Department. The program is managed by Mr. David Torres. I listed his contact information below and he is also cc’ed on this email. I also included a screen capture of our new online tool, DWMAPS (<https://epamap37.epa.gov/dwmaps/>). It shows the watershed for the proposed project and possible sources of contamination in the area. It also marks an .25 mile area around the well were septic systems and other potential sources of contamination could cause a problem. I encourage you to use the mapping tool find more information about the area and visit the EPA Source Water Protection website at <https://www.epa.gov/sourcewaterprotection>.”*

A copy of all correspondence to and from EPA SWP is provided in Appendix E17.

As noted earlier, a request for consultation was initiated with NMED via the designated Environmental Impact Review Coordinator on July 19, 2016 via US mail. A revised request for consultation was issued on August 3, 2016, via electronic mail and a follow-up request for consultation was sent via electronic mail on September 7, 2016. In a response dated September 28, 2016 NMED Ground Water Quality Bureau stated in part:





*“Implementation of the project may involve the use of heavy equipment, thereby leading to a possibility of contaminant releases (e.g., fuel, hydraulic fluid, etc.) associated with equipment malfunctions. The GWQB advises all parties involved in the project to be aware of notification requirements for accidental discharges contained in 20.6.2.1203 NMAC. Compliance with the notification and response requirements will further ensure the protection of groundwater quality in the vicinity of the project.*

*A copy of the Water Quality Control Commission Regulations, 20.6.2 NMAC, is available at <http://www.nmcpr.state.nm.us/nmac/parts/title20/20.006.0002.htm>.”*

NMED Drinking Water Bureau also replied in the September 28, 2016 letter and stated:

*“There are no contaminant sources evident within the 1,000 feet of the proposed well site. Properly executed, this project should improve the sustainability of the water system.*

*The design standard for the well is ANSI/AWWA A-100, which requires a 50-foot annular seal. The proposed design will be examined for conformance to ANSI/AWWA A-100. Direct and indirect additives need to meet ANSI/NSF Standard 60 and ANSI/NSF Standard 61 respectively.”*

A copy of all correspondence to and from NMED is provided in Appendix E13.

Based on the above information, SMA does not believe that groundwater will be adversely impacted by the proposed project.

### **3.7 Coastal Resources**

Coastal resources are not a concern in or near the project area; therefore, SMA does not believe that coastal resources will be adversely impacted by the proposed project.

### **3.8 Socioeconomic/Environmental Justice**

#### **3.8.1 Socioeconomic Issues**

Information regarding basic socioeconomic issues was gathered from the US Census Fact Finder web site. This information suggests that approximately 45% of the population to be served by this project are below the poverty line; in the area approximately 8% of the population has been identified as not being Hispanic while 92% of the population is Hispanic and; there is generally an even split between male and female residents. Approximately 43.7% of the adult population to be served by the proposed project have a high school degree or less. Approximately 36% of the residents are under 18 years of age. A copy of all information obtained through the US Census Fact Finder web site is provided in Appendix E18.

Based on the above information, SMA does not believe that socioeconomic issues will be adversely impacted by the proposed project.



### **3.8.2 Environmental Justice**

In addition to the information from the US Census Fact Finder web site provided immediately above, SMA initiated consultation with the EPA Office of Planning & Coordination (OPC) via facsimile on July 15, 2016, and a follow-up request for consultation was sent via electronic mail on August 4, 2016. In a response dated August 5, 2016, EPA OPC stated in part:

*“The U.S. Environmental Protection Agency, Region 6 NEPA office, has no comments to offer on the proposed project based on the information provided.”*

A copy of all correspondence to and from OPC is provided in Appendix E19.

A copy of completed Form RD 2006-38 (Civil Rights Impact Analysis Certification) is included in Appendix E20.

Based on the above information, SMA does not believe that environmental justice will be adversely impacted by the proposed project.

## **3.9 Other Resources**

### **3.9.1 Air Quality**

The proposed system improvements (once completed) will not generate any negative air quality issues such as increased odor, volatiles or particulate matter. Trenching and compaction may result in locally higher concentrations of dust during construction activities. Areas that have been disturbed or denuded by construction may also result in locally higher dust levels immediately following construction and before vegetation can be re-established.

Doña Ana County is currently considered to be in attainment with all national and New Mexico ambient air quality standards; however, the NMED Air Quality Bureau (AQB) has developed a Natural Events Action Plan (NEAP) for windblown dust in Doña Ana County due to exceedances of the PM-10 standard as monitored in Doña Ana County. Doña Ana County has adopted an ordinance for dust control (Doña Ana County Ordinance No. 194-2000, Erosion Control Regulations) and compliance with this ordinance will be required.

As noted earlier, a request for consultation was initiated with NMED via the designated Environmental Impact Review Coordinator on July 19, 2016 via US mail. A revised request for consultation was issued on August 3, 2016, via electronic mail and a follow-up request for consultation was sent via electronic mail on September 7, 2016. In a response dated September 28, 2016 NMED Ground Water Quality Bureau stated in part:

*“The project, as proposed, is not anticipated to result in nonattainment of the New Mexico of National Ambient Air Quality Standards or contribute negatively to are quality on a long-term basis.”*

In the September 28, 2016 letter, the NMED Solid Waste Bureau also responded in part:



*“The Solid Waste Bureau provides comment that any excavated solid waste, including any special waste such as regulated asbestos waste, must be properly managed, containerized, transported and disposed in accordance with the New Mexico Solid Waste Rules 20.9.2- 20.9.10 NMAC. Upon discovery of any single area requiring excavation of more than 120 cubic yards of solid waste, excavation shall cease and a Waste Excavation Plan in accordance with 20.9.2.10(A)(15) NMAC shall be prepared and submitted to the SWB for review and approval prior to continuing with excavation operations.*

*Excavation or maintenance activities sometimes results in the knowing or inadvertent generation of regulated asbestos waste as there is the potential to excavate or otherwise impact asbestos cement pipes (sewer, water, or conduit). Suspect pipes, fragments or soils contaminated with related fragments or fines shall be sampled and analyzed by Polarized Light Microscopy ("PLM") to determine if the material contains greater than one percent (1%) asbestos. If so, the pipes, fragments, and/or contaminated soils require management as regulated asbestos waste, in accordance with the New Mexico Solid Waste Rules, 20.9.2-10 NMAC, including proper containerization, labeling, manifesting, transport by an approved commercial hauler, and disposal at a permitted solid waste facility.”*

A copy of all correspondence to and from NMED is provided in Appendix E13.

A request for consultation was initiated with EPA Region VI Air Planning Section (APS) on July 15, 2016 via facsimile and a follow-up request for consultation was sent via electronic mail on August 4, 2016. In a response dated August 5, 2016 EPA Region VI APS stated in part:

*“Based on the location listed in your letter, the project area is currently in attainment of all National Ambient Air Quality Standards (NAAQS), and as a result, general conformity regulations do not apply and an applicability analysis is not necessary. However, it should be noted that a portion of Doña Ana County (Anthony, NM) is currently classified as moderate nonattainment of the particulate matter/PM10 NAAQS, and the Sunland Park, NM area is vulnerable to being designated as non-attainment for ozone in the next few years.*

*Because of the air quality concerns of the significant population center near the project area, EPA recommends that best management practices be implemented in order to reduce potential short-term air quality impacts associated with construction activities. Furthermore, construction and waste disposal activities should be conducted in accordance with applicable local, state and federal statutes and regulations.”*

A copy of all correspondence to and from EPA APS is provided in Appendix E21.

Based on the above information, SMA does not believe that air quality resources will be adversely impacted by the proposed project.

### **3.9.2 Transportation**

No portion of the proposed project will utilize highway right-of-way. SMA initiated consultation with the New Mexico Department of Transportation (NMDOT) on August 3, 2016 via electronic mail; however, no





response has been received as of the date of this document. All correspondence to and from NMDOT is included in Appendix E22.

Based on the above information, SMA does not believe that transportation will be adversely impacted by the proposed project.

### **3.9.3 Noise**

The proposed system improvements will not increase the noise level within or immediately adjacent to the APE. However, some construction activities will require the use of heavy equipment and therefore will result in slightly elevated local noise levels. To avoid any unnecessary complaints, construction activities should be limited where possible to typical daylight (working) hours. Following this guideline, SMA does not believe that noise levels will be adversely impacted by the proposed project.

### **3.10 Cumulative Impacts**

All infrastructure installed for this project can be utilized by High Valley MDWCA or any other future entity, which reduces the potential of limited use of the project resources. While improved water quality and flow capabilities may allow for some additional growth, available property, current property uses, zoning and the availability of sewer services will likely continue to be limiting factors for the foreseeable future. Further, there are no other future activities planned at this time that would appear to cumulatively impact this project (such as high density development resulting from the expanded access to water resources).

Given the above information, SMA does not believe that any adverse cumulative impacts will occur as a result of the proposed project.

## **4.0 SUMMARY OF MITIGATION MEASURES**

The following section describes the various mitigation measures recommended for the project. These measures are intended to minimize the potential impact of the proposed project within the APE but should not be considered fully encompassing; *should unanticipated conditions be identified during the development of the project; additional mitigation measures may be required.*

### **4.1 Physical Resources Measures**

Although some additional permitting may be required by certain agencies, no mitigation measures have been identified or recommended at this time.

### **4.2 Biological Resource Measures**

Based on comments from NMDGF, the following mitigation measures are recommended for the project at this time:

- Keep trenching and backfilling crews close together.
- Trench preferentially during the cooler months (October – March).
- Avoid leaving trenches open overnight. Where trenches cannot be back-filled immediately, escape ramps should be constructed at least every 90 meters. Escape ramps can be short lateral



- trenches sloping to the surface or wooden planks extending to the surface. The slope should be less than 45 degrees (100%).
- Trenches that have been left open overnight should be inspected and animals removed prior to back-filling.

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

No threatened or endangered species are anticipated to be encountered during this project; hence, no mitigation measures have been identified or recommended at this time.

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

No socioeconomic/environmental justice issues are anticipated during this project; hence, no mitigation measures have been identified or recommended at this time.

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

Based on comments from several Native American groups, the following mitigation measures are recommended for the project at this time:

- If any Native American remains are identified work should cease at that location and all Native American groups identified as having interest in Doña Ana County be notified immediately.

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

Although some additional permitting may be required by certain agencies, no mitigation measures have been identified or recommended at this time.

#### **4.7 Other Resources**

Based on observations made during the site visits associated with the EID preparation process, the following mitigation measures are recommended for the project at this time:

- To prevent excessive noise disruption within the APE, construction work should be limited where possible to typical daylight (working) hours.

#### **4.8 Cumulative Impact Measures**

No cumulative impacts are anticipated during this project; hence, no mitigation measures have been identified or recommended at this time.

### **5.0 CONSULTATION, COORDINATION AND PUBLIC INVOLVEMENT**

#### **5.1 Agencies Consulted**

As outlined in earlier subsections of this document, SMA consulted with nine (9) Native American groups, eight (8) federal and multi-state agencies and ten (10) state and local agencies. The original request for consultation was sent to all the aforementioned groups on July 15, 2016 or soon thereafter. A follow-up request was sent to all groups and agencies that had not responded on August 3, 2016. A summary of all



correspondence issued, follow-up requests issued and responses received are provided in Tables 5.1a and 5.1b.

## **5.2 Public Involvement**

Public Meeting Notices have been prepared and are scheduled to be printed in the Las Cruces Sun News on October 21, 2016.

The public meeting is scheduled for November 3, 2016 at the Lords Ranch Church, which is located in the community of High Valley. The presentation given at the public meeting will provide a review of the proposed project background and purpose, summary of the EID and will allow for questions from the public to be answered and comments to be provided. Copies of the newspaper printings will be provided in Appendix E23.

In addition, an internet web page was constructed specifically for this project at:

<http://www.soudermiller.com/news/HighValleyEA>

Copies of this web site (with various updates and links) will be provided in Appendix E24.

## **5.3 Responsiveness Summary**

The public comment period will close at 5:00 pm Mountain Daylight Time on November 20, 2016.

## **6.0 EXHIBITS**


All exhibits, including figure, charts, tables, correspondence and supporting reports, are included in the Appendices following the body of this document.






## **7.0 LIST OF PREPARERS**

This Environmental Information Document was prepared following USDA RUS Bulletin 1794A-602 Version 1.2 revised March 2008 and also in general compliance with the NMED SERP. The undersigned hereby acknowledges personal knowledge of the information submitted in this report and the attached documents.

  
\_\_\_\_\_  
J. Alfredo Holguin, E.I.  
Staff Engineering Intern II

October 19, 2016  
Date

  
\_\_\_\_\_  
Karl E. Tonander, P.E., P.G.  
Senior Vice President

October 19, 2016  
Date



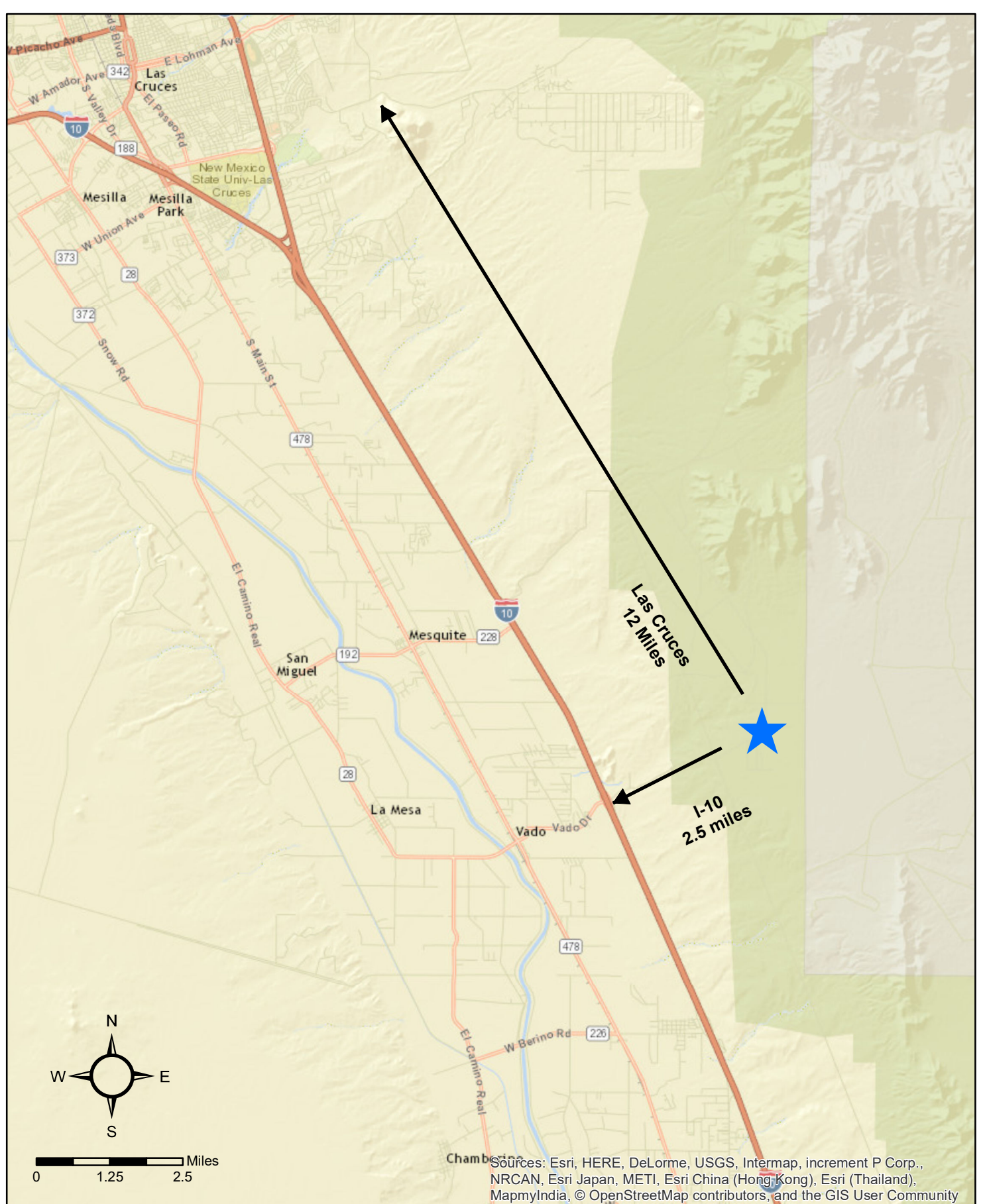
## Figures

Figure 1: Vicinity Map

Figure 2: FEMA Map







Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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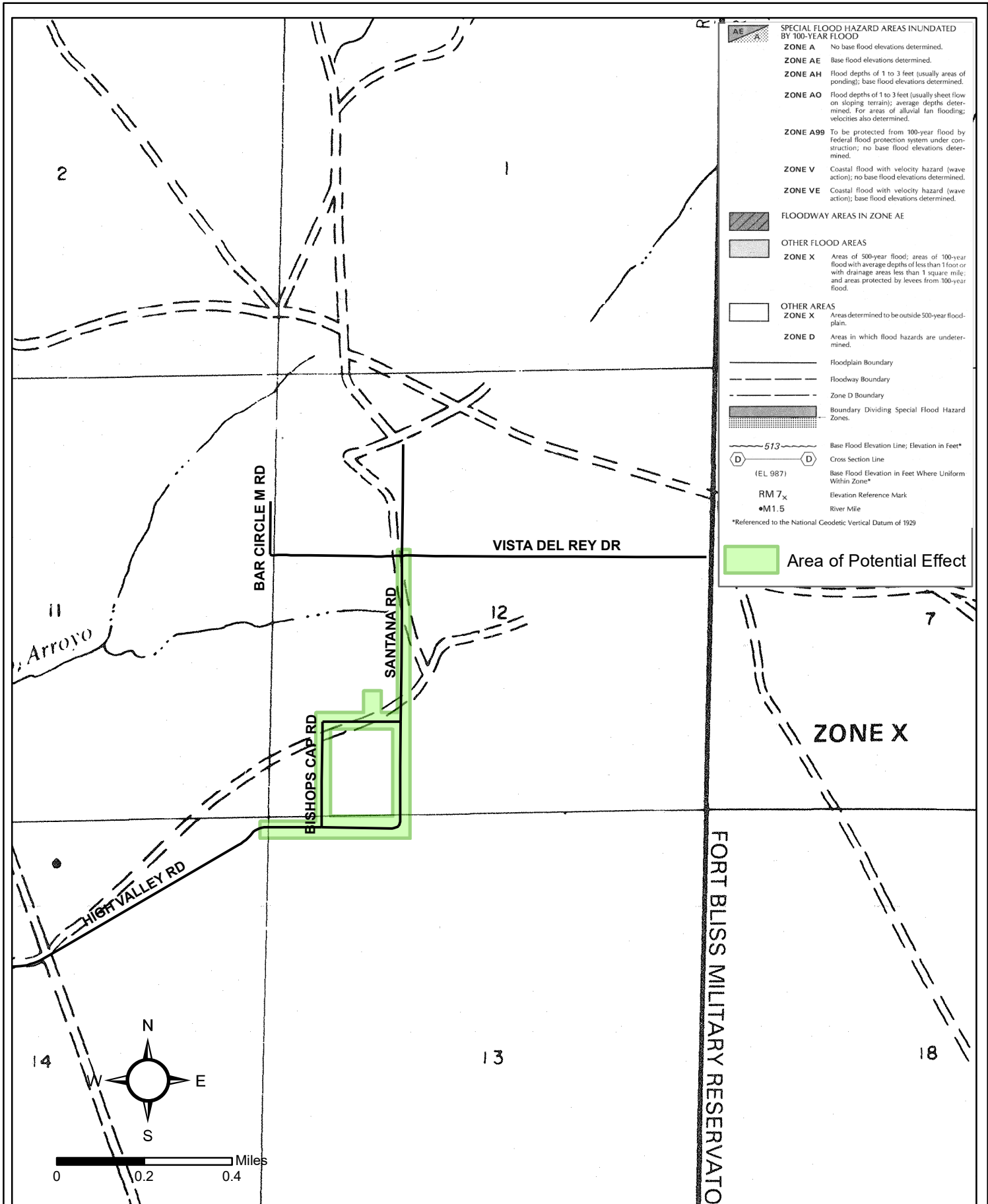


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Vicinity Map  
High Valley MDWCA Environmental Report  
Vado, New Mexico

Figure 1





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FEMA FIRM Map of Proposed Service Area (Panel 3503C0800E)  
High Valley MDWCA Environmental Report  
Vado, New Mexico

Figure 2

## Tables

Table 5.1a: Native American Correspondence

Table 5.1b: Agency Correspondence Summary



Table 5.1a  
 Consulted Native American Correspondence Summary  
 High Valley MDWCA Water System Improvements

Tribe	Contact	Issue Date 1			Issue Date 2		Response Date		Notice of Availability		
		US Mail	Fax	Email	Fax	Email	Due Date	Received	US Mail	Fax	Email
Comanche Nation	Mr. Jimmy W. Arterberry, Historic Preservation Officer #6 SW 'D' Avenue, Suite A Lawton, Oklahoma 73507 Phone: (580) 595-9618 Phone: (580) 595-9960 Fax: (580) 595-9733 historicpreservation@comanchenation.com (jimmya@comanchenation.com)	n/a	7/15/2016			8/4/2016		8/5/2016	n/a	n/a	
Fort Sill Apache Tribe	The Honorable Jeff Houser Haozous, Chairman 43187 US Hwy 281 Apache, OK 73006 Phone: (580) 588-2298 Fax: (580) 588-3133	7/19/2016	7/15/2016	n/a	8/8/2016	n/a			n/a		n/a
Kiowa Tribe of Oklahoma	The Honorable Amber C. Toppah, Chairman P.O. Box 369 Carnegie, OK 73015-0369 Phone: (580) 654-2300 Fax: (580) 654-8714	7/19/2016		n/a	8/8/2016	n/a		8/8/2016	n/a		n/a
Mescalero Apache Tribe	President Danny Breuninger, Jr. P.O. Box 227 Mescalero, NM 88340 Phone: (575) 464-4494 Fax: (575) 464-9220	n/a	7/15/2016	n/a	8/8/2016	n/a			n/a		n/a
	Ms. Holly Houghten PO Box 227 Mescalero, NM 88340 Phone: (575) 464-3005 Fax: (575) 464-3005 holly@mathpo.org	n/a	n/a		n/a	8/4/2016			n/a	n/a	n/a
Navajo Nation	President Russel Begaye P.O. Box 9000 Window Rock, AZ 86515 Phone: (928) 871-6352/6357 Fax: (928) 871-4025 928-871-7807	7/19/2016	7/15/2016	n/a	8/8/2016	n/a			n/a		n/a
	Tamara Billie, Senior Archaeologist Historic Preservation Department, Cultural Resources Compliance Section PO Box 4950 Window Rock, AZ 86515 Phone: (928) 871-7198 Fax: (928) 871-7886 tony@navajohistoricpreservation.org	n/a	n/a		n/a	8/4/2016			n/a	n/a	n/a
Pueblo of Isleta	Governor E. Paul Torres P.O. Box 1270 Isleta Pueblo, NM 87022 Phone: (505) 869-9760 Fax: (505) 869-4236	7/19/2016									
	Dr. Henry Walt, THPO PO Box 1270 Isleta, NM 87022 Tel: 505.869.9767 Fax: 505.869.7596 Email: henryj@toast.net		7/15/2016	n/a	8/8/2016	n/a			n/a		n/a
Pueblo of Tesuque	FORMER Governor Mark Mitchell mamitchell@pueblooftesuque.org Route 42, Box 360-T Santa Fe, NM 87506 Phone: (505) 955-7732 Fax: (505) 982-2331	n/a	7/15/2016	n/a	8/8/2016	n/a			n/a		n/a
	Mr. Charles Dorame, THPO Office of the Governor Route 42, Box 360-T Santa Fe, NM 87506 Phone: (505) 955-7771 Fax: 505.955.7791 cdorame@pueblooftesuque.org charlie.dorame27@gmail.com	n/a	n/a		n/a	8/8/2016			n/a	n/a	n/a
White Mountain Apache Tribal Council	The Honorable Ronnie Lupe, Chairman P.O. Box 700 Whiteriver, AZ 85941 Phone: (928) 338-4346 Fax: (928) 338-6055	7/19/2016	n/a	n/a	n/a	n/a			n/a	n/a	n/a
	Mr. Mark T. Altaha White Mountain Apache Tribe Historic Preservation Office PO Box 507 Fort Apache, AZ 85926 Phone: (928) 338-3033 Fax: (928) 338-6055 markaltaha@wmat.us	n/a	7/15/2016			8/8/2016		8/16/2016	n/a	n/a	
Ysleta del Sur Pueblo	Governor Frank Paiz P.O. Box 17579 – Ysleta Station El Paso, TX 79917 Phone: (915) 859-8053 Fax: (915) 859-2988	7/19/2016	n/a	n/a	n/a	n/a			n/a		n/a



Table 5.1b  
 Consulted Agency Correspondence Summary  
 High Valley MDWCA Water System Improvements

Agencies	Contact	Issue Date 1			Issue Date 2		Response Date		Notice of Availability		
		US Mail	Fax	Email	US Mail	Email	Due Date	Received	US Mail	Fax	Email
<b>Local</b>											
Elephant Butte Irrigation District	Mr. Zach Libbin Elephant Butte Irrigation District 530 South Melendres Street Las Cruces, NM 88005 Phone: 575-526-6671 Fax: 575-541-5716 zlibbin@ebid-nm.org	n/a	7/15/2016			8/3/2016			n/a	n/a	
Dona Ana County Flood Plain Administrator	Mr. Paul Dugie, P.E., CFM Doña Ana County Flood Commission Director 845 North Motel Boulevard, Room 1-250 Las Cruces, NM 88007 Phone: (575) 647-7256 Fax: (575) 525-5567 pauld@donaanacounty.org	n/a	X			8/3/2016			n/a	n/a	
<b>State</b>											
N.M. Department of Game & Fish Conservation Services Division	Mr. Matt Wunder, Ph.D. P.O. Box 25112 Santa Fe, NM 87504 Phone: 505-476-8118 Fax: 505-476-8123 matthew.wunder@state.nm.us	n/a	7/15/2016					7/20/2016	n/a	n/a	
N.M. Department of Transportation Environmental Section	Mr. Gary Funkhouser P.O. Box 1149 Santa Fe, NM 87504 Phone: 505-827-5356 Fax: 505-827-3243 gary.funkhouser@state.nm.us	n/a				8/3/2016		10/6/2016	n/a	n/a	
N.M. Energy, Minerals & Natural Resources Dept. Forestry Division	Ms. Daniela Roth, Botany Program Coordinator P.O. Box 1948 Santa Fe, NM 87504-1948 Phone: 505-476-3347 Fax: 505-476-3330 daniela.roth@state.nm.us	n/a				8/3/2016		8/5/2016	n/a	n/a	
N.M. Energy, Minerals & Natural Resources Dept. State Parks Division	Ms. Judy Kowalski New Mexico State Parks Division, Design & Development Bureau Chief Energy, Minerals and Natural Resources Dept. 1220 South St. Francis Drive Santa Fe, NM 87505 (505) 476-3387 (505) 476-3361 (fax) Judy.Kowalski@state.nm.us	n/a	7/15/2016			8/3/2016		8/12/2016	n/a	n/a	
N.M. Environment Department	Mr. Thomas Skibitski PO Box 5469 Santa Fe, NM 87502-5469 Phone: 505-827-0419 Fax: 505-827-2836 thomas.skibitski@state.nm.us	7/19/2016	n/a			8/3/2016, Resent on 9/7/16		10/5/2016	n/a	n/a	
	Air Quality Bureau										
	Drinking Water Bureau										
	Ground Water Quality Bureau										
	Solid Waste Bureau										
	Surface Water Quality Bureau										
	Hazardous Waste Bureau										
Petroleum Storage Tank Bureau											
N.M. Interstate Stream Commission	Ms. Deborah Dixon, P.E. Director 407 Galisteo Street Bataan Memorial Building P.O. Box 25102 Santa Fe, NM 87504-5102 Phone: (505) 827-6160 Fax: (505) 827-6188 deborah.dixon@state.nm.us		7/15/2016					7/19/2016	n/a	n/a	
N.M. Office of Cultural Affairs State Historic Preservation Division	Ms. Michelle Ensey, DCA Santa Fe, NM 87501 Phone: 505-827-6320 Fax: 505-827-6338 michelle.ensey@state.nm.us	n/a	7/15/2016			8/3/2016		8/17/2016	n/a	n/a	
N.M. Office of the State Engineer	Andrea Mendoza, District Supervisor 1680 Hickory Loop - Suite J Las Cruces, NM 88005-6598 Phone: 575-524-6161 andrea.mendoza@state.nm.us		n/a	9/7/2016				9/12/2016	n/a	n/a	

Table 5.1b  
 Consulted Agency Correspondence Summary  
 High Valley MDWCA Water System Improvements

Agencies	Contact	Issue Date 1			Issue Date 2		Response Date		Notice of Availability		
		US Mail	Fax	Email	US Mail	Email	Due Date	Received	US Mail	Fax	Email
<b>Federal</b>											
U.S. Army Corps of Engineers	Mr. Rick Gatewood Regulatory Manager for Southern NM and West TX 505 S. Main St., Suite 142 Las Cruces, NM 88001 Phone: 575-556-9939 richard.h.gatewood@usace.army.mil	7/19/2016	n/a			8/3/2016		8/10/2016	n/a	n/a	
U.S. Department of Agriculture Natural Resources Conservation Service	Mr. Xavier Montoya, State Conservationist New Mexico State Office 6200 Jefferson, NE Albuquerque, NM 87109-3734 Phone: 505-761-4400 Fax: 855-538-6003 xavier.montoya@nm.usda.gov	n/a	7/15/2106			8/3/2016		8/13/2016	n/a	n/a	
U.S. Department of Homeland Security Federal Emergency Management Agency Region VI	Ms. Jennifer Knecht Ms. Mayra Diaz 800 N. Loop 288 Denton, TX 76209 Phone: 940-898-5541 Fax: 940-898-5195	7/19/2016	7/15/2016	n/a				8/26/2016	n/a		n/a
U.S. Department of the Interior Fish and Wildlife Service N.M. Ecological Services Field Office	George D. Dennis III, Ph.D. Aquatic Ecosystems Branch Chief 2105 Osuna NE Albuquerque, NM 87113-1001 Phone: 505-761-4781 Fax: 505-346-2542 nmesfo@fws.gov george_dennis@fws.gov	n/a	7/15/2016			8/4/2016		8/5/2016, also IPAC official letter.	n/a	n/a	
U.S. Department of the Interior National Park Service	Mr. David Hurd 12795 Alameda Parkway Denver, CO 80225 Phone: 303-969-2377 IMRextrev@nps.gov david_hurd@nps.gov	n/a	n/a			8/4/2016		8/19/2016	n/a	n/a	
U.S. Environment Protection Agency Air Planning Section (Region 6)	Mr. Jeffrey Riley Air Planning Section EPA Region 6, 6 PD-L 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733 Phone: 214-665-8542 Fax: 214-665-7263 riley.jeffrey@epa.gov	n/a	7/15/2016	Prefers email		8/4/2016		8/5/2016	n/a	n/a	
U.S. Environment Protection Agency Office of Planning and Coordination	Mr. Robert Houston, Chief 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733 Phone: 214-665-8565 Fax: 214-665-7446 houston.robert@epa.gov	7/19/2016	7/15/2016			8/4/2016		8/5/2016	n/a	n/a	
U.S. Environment Protection Agency Source Water Protection Branch Groundwater Section	David Torres Source Water Specialist 505-841-5306 David.torres@state.nm.us										
	Mr. Miguel Moreno 1445 Ross Avenue, Suite 1200 Dallas, TX 75202-2733 Phone: 214-665-7296 Fax: 214-665-6490 moreno.miguel@epa.gov	n/a	7/15/2016			8/4/2016		Said to contact David Torres/use online map	n/a	n/a	

Appendix E1  
USDA Natural Resources  
Conservation Service  
Correspondence







August 10, 2016

RECEIVED

AUG 13 2016

Mr. Marty Howell  
Senior Engineer II  
Souder, Miller & Associates  
401 North Seventeenth Street, Suite 4  
Las Cruces, New Mexico 88005

Dear Mr. Howell:

Thank you for providing the Natural Resources Conservation Service (NRCS) the opportunity to review the proposed High Valley Mutual Domestic Water Consumers Association, Doña Ana County, New Mexico.

The Farmland Protection Policy Act (FPPA) authorizes the NRCS to provide review of proposed projects that have the potential to irreversibly convert farmlands to non-farmland or irreversibly converting hydric areas to non-hydric uses as the result of programs funded by the federal government. In review of the information provided on the project, it is determined that the entire project is located in an urban or development area in an existing easement, or is in an area not designated as Prime or Important Farmland. The FPPA rules define farmland conversion to be "to the extent that it irreversibly converts farmland to other purposes", this project is not expected to have that effect. With this acknowledged, the proposed project will not cause Prime or Unique Farmlands or hydric soils to be converted to non-agricultural or non-hydric uses, and is not subject to the Act.

If you have any questions concerning soils information, please contact Richard Strait, State Soil Scientist, at (505) 761-4433 or email at [Richard.Strait@nm.usda.gov](mailto:Richard.Strait@nm.usda.gov).

Sincerely,



J. XAVIER MONTOYA  
State Conservationist

cc:

Adrian Tafoya, District Conservationist, Team 9, NRCS, Las Cruces, NM  
Richard Strait, State Soil Scientist, NRCS, Albuquerque, NM



July 14, 2016

#6324631

Mr. Xavier Montoya, State Conservationist  
United States Department of Agriculture – Natural Resources Conservation Service  
New Mexico State Office  
6200 Jefferson, NE  
Albuquerque, NM 87109-3734  
(505) 761-4400  
(505) 761-4462 (fax)  
[xavier.montoya@nm.usda.gov](mailto:xavier.montoya@nm.usda.gov)

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Montoya:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well to be located in the northeast section of the High Valley service area. The extent of the work is shown on the attached Figure 2.
- Replacement of the existing booster station as shown on the attached Figure 2.
- Rehabilitation of the existing water storage tank as shown on the attached Figure 2.
- Rehabilitation of the existing water supply well as shown on the attached Figure 2.
- Installation of new water distribution and service lines as shown on the attached Figure 2.

Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.

*Mr. Xavier Montoya*

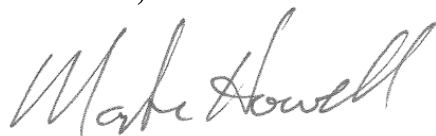
*July 14, 2016*

*Page 2*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

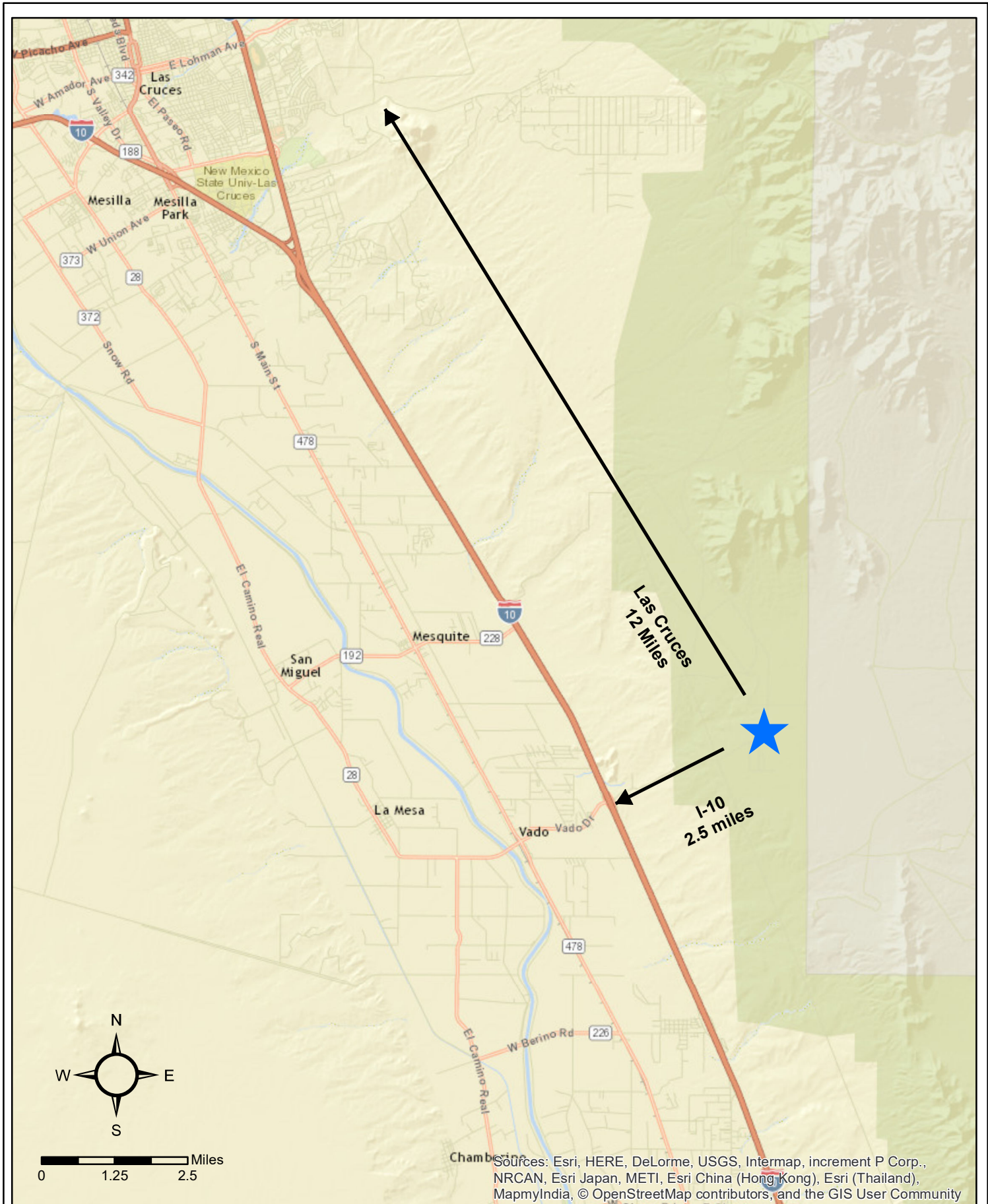
Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326





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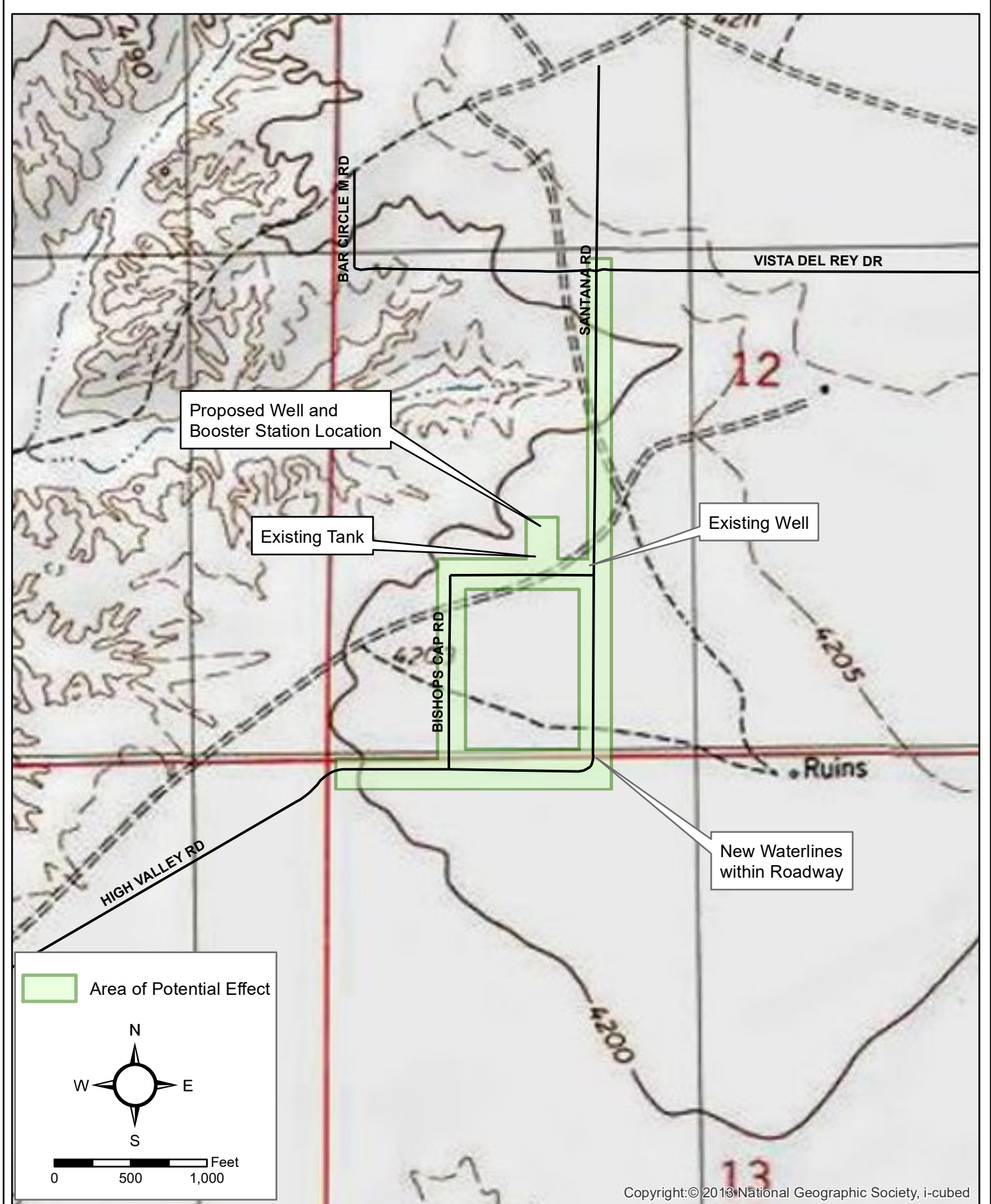
Date Saved:  
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Vicinity Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 1



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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2



Appendix E2  
N.M. Energy, Minerals & Natural Resources  
Dept. State Parks Division  
and U.S. Department of Interior  
National Park Service Correspondence







July 14, 2016

#6324631

Ms. Judy Kowalski  
New Mexico State Parks Division, Design & Development Bureau Chief  
Energy, Minerals and Natural Resources Dept.  
1220 South St. Francis Drive  
Santa Fe, NM 87505  
(505) 476-3387  
(505) 476-3361 (fax)  
*judy.kowalski@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Kowalski:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.

*Ms. Judy Kowalski*

*July 14, 2016*

*Page 2*

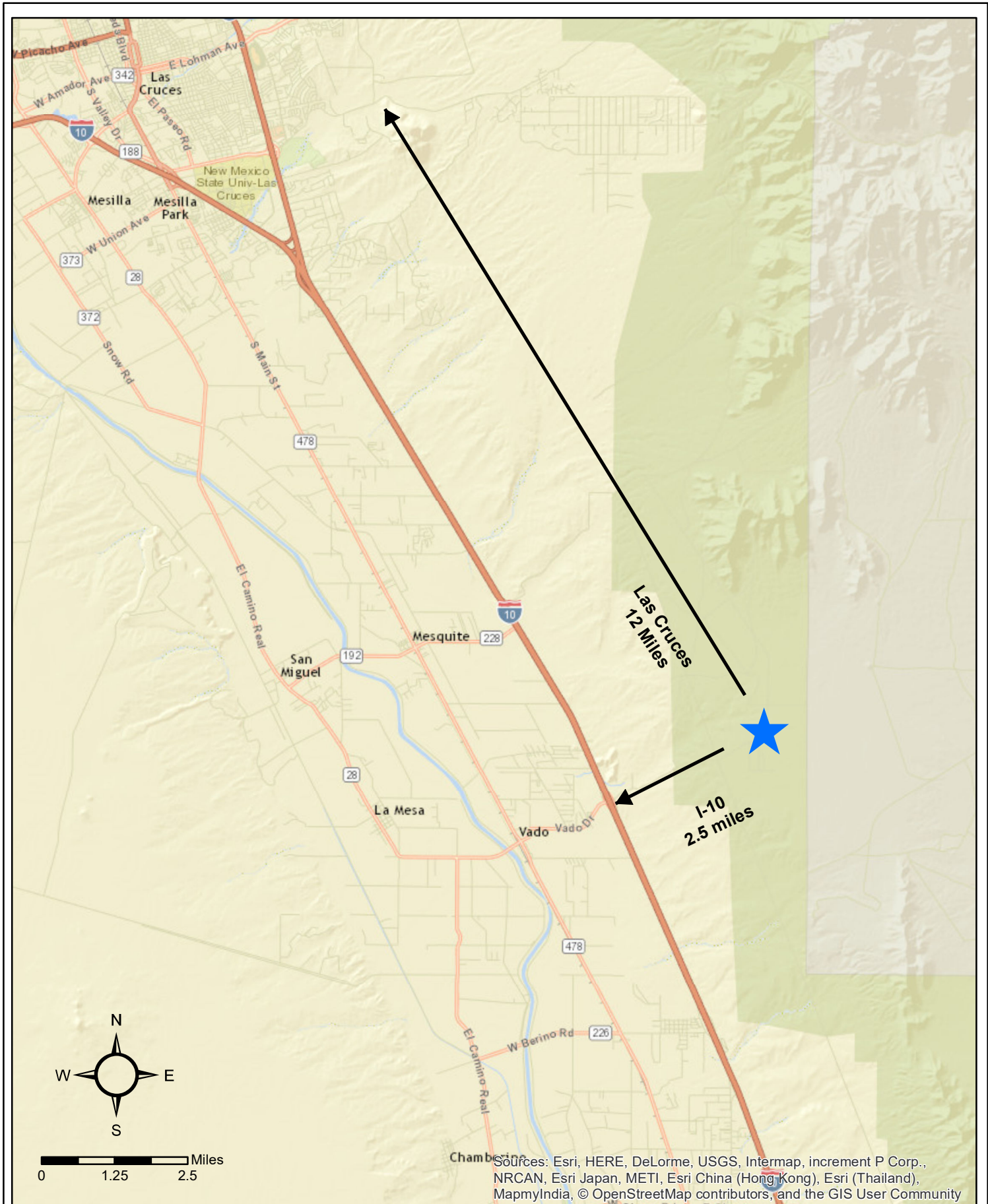
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com).

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
[marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)  
Extension: 1326



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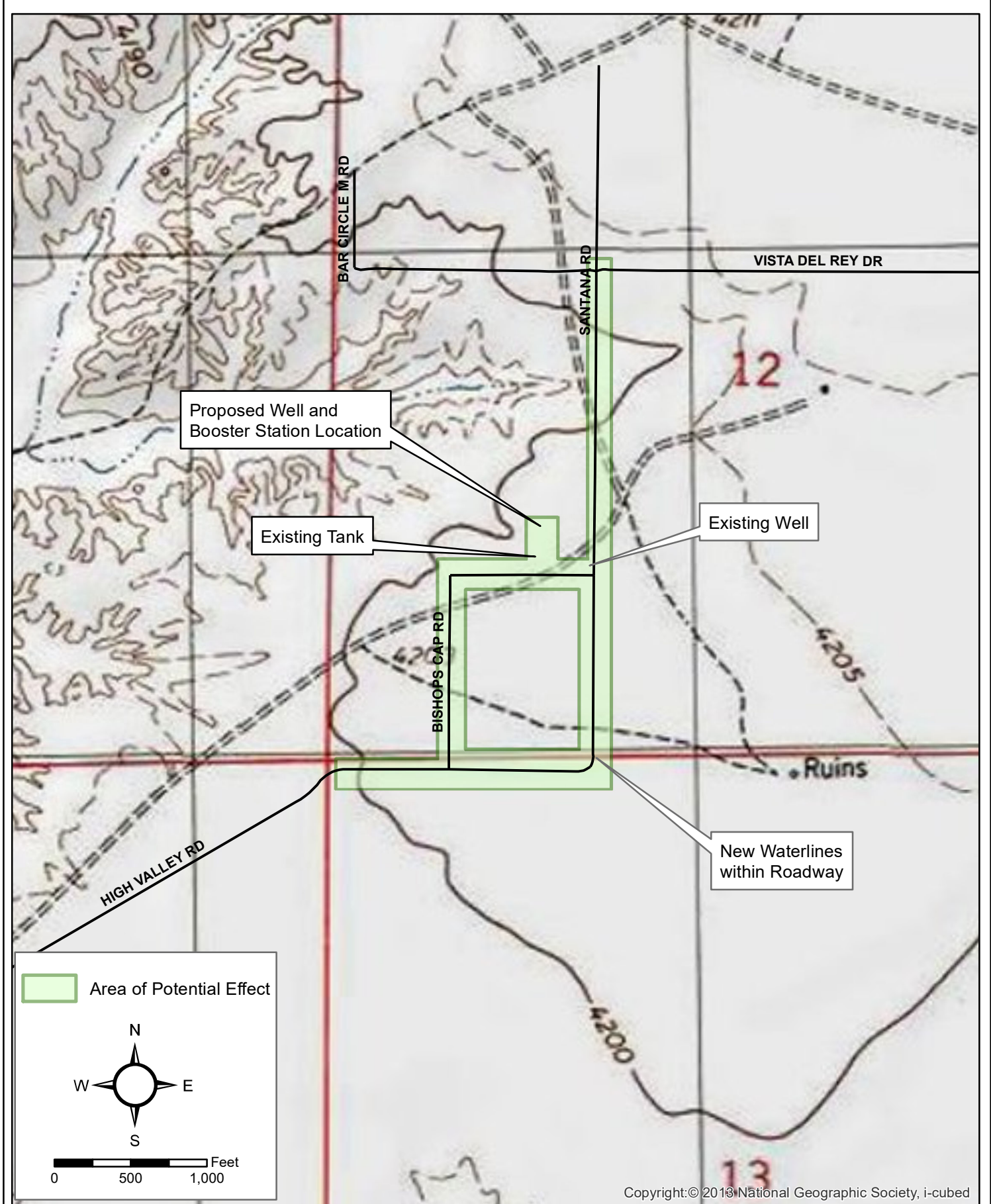


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 Vado, New Mexico

Figure 1





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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2

## Alfredo Holguin

---

**From:** Kowalski, Judy, EMNRD <Judy.Kowalski@state.nm.us>  
**Sent:** Friday, August 12, 2016 12:22 PM  
**To:** Alfredo Holguin  
**Subject:** RE: High Valley MDWCA - Request for Consultation

Thank you, Mr. Holguin. I do not see any problems with the project.

J

*Judy Kowalski, Bureau Chief*

Design and Development Bureau  
State Parks Division, EMNRd  
1220 S. St. Francis Drive  
Santa Fe, NM 87505  
505-476-3387

---

**From:** Alfredo Holguin [mailto:alfredo.holguin@soudermiller.com]  
**Sent:** Wednesday, August 3, 2016 1:09 PM  
**To:** Kowalski, Judy, EMNRD <Judy.Kowalski@state.nm.us>  
**Subject:** High Valley MDWCA - Request for Consultation

Ms. Judy Kowalski,

Please find attached a follow-up request for consultation regarding a proposed water system improvement project to be completed by High Valley MDWCA in Doña Ana County, New Mexico. We have not received a reply to the original request submitted July 15, 2016. Please respond at your earliest convenience or let us know if you have any questions and require additional information.

Thank you,



J. Alfredo Holguin, E.I.  
*Staff Civil Designer*

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX PST CAPM (CS-0000051), TX Surveying Firm (10162200), WY Surveying Firm (S-1704)



**Souder, Miller & Associates**

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Las Cruces, NM 88005  
[www.soudermiller.com](http://www.soudermiller.com)  
(575) 647-0799 (office)



July 14, 2016

#6324631

Mr. David Hurd  
12795 Alameda Parkway  
Denver, CO 80225  
Phone: 303-969-2377  
*IMRextrev@nps.gov*  
(*david\_hurd@nps.gov*)

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Hurd:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

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*Mr. David Hurd*

*July 14, 2016*

*Page 2*

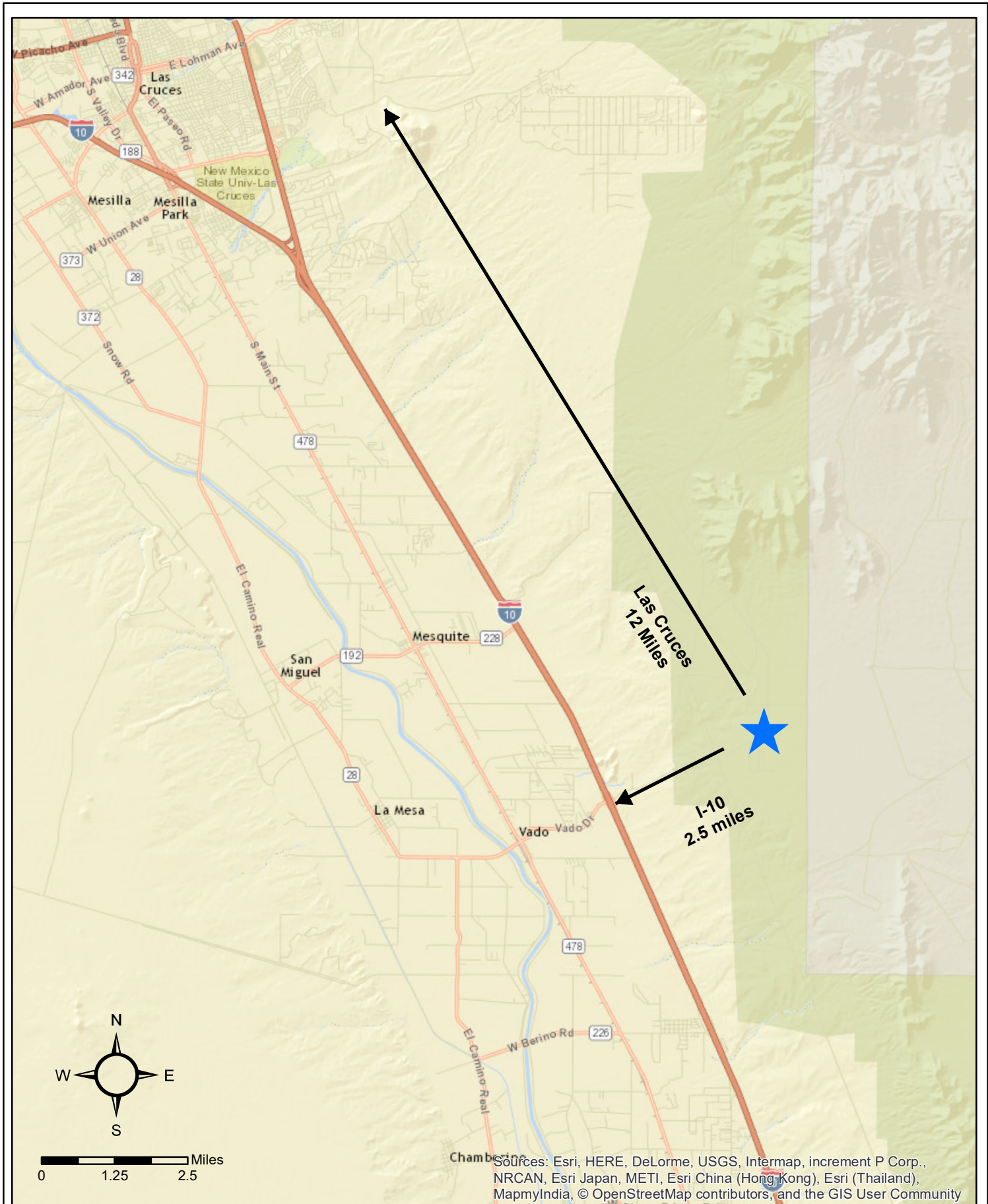
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive style with a large, prominent "M" and "H".

Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326



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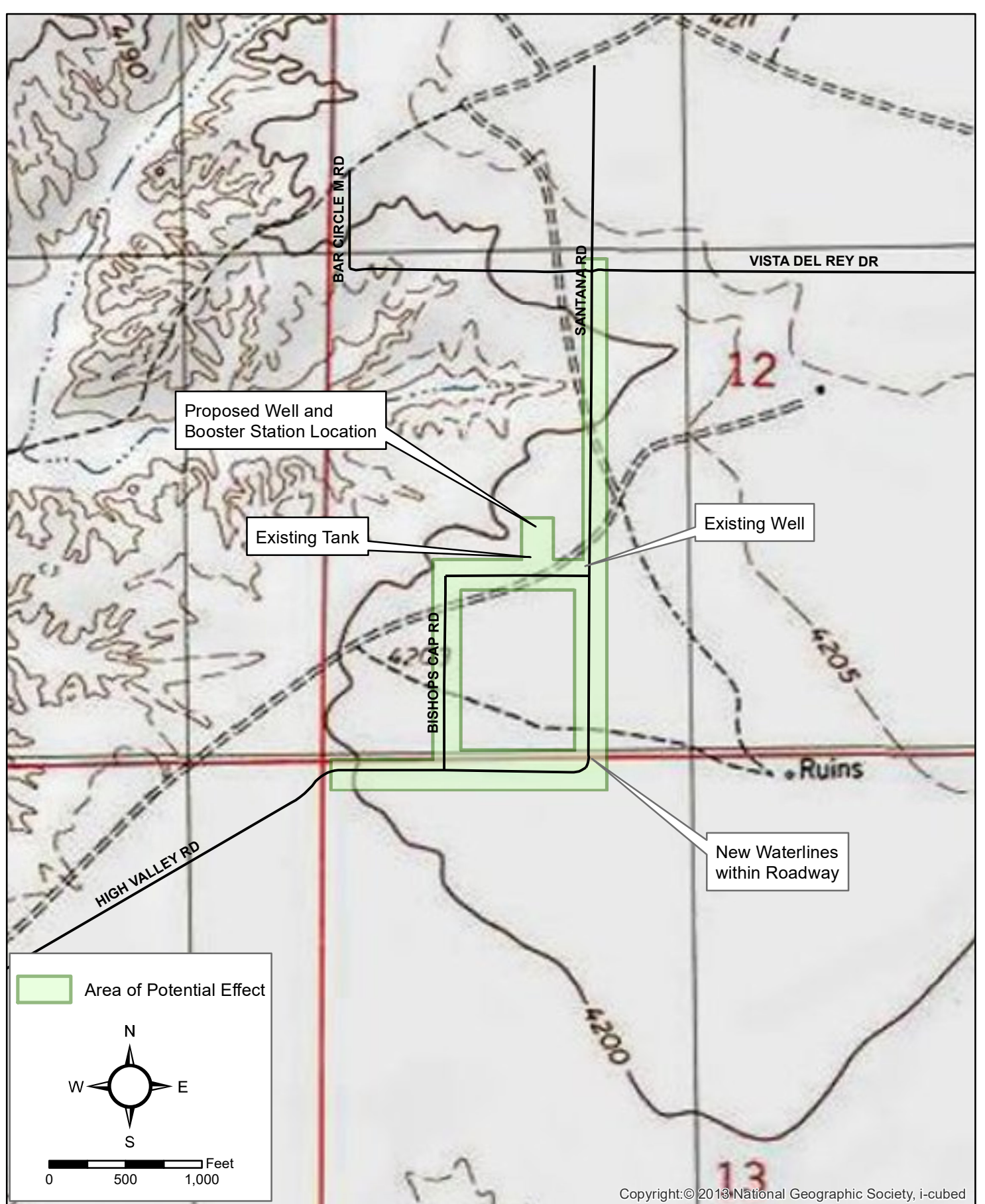
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Vado, New Mexico

Figure 1



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US Topographic Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 2



## Alfredo Holguin

---

**From:** david\_hurd@nps.gov on behalf of IMRextrev, NPS <imrxtrev@nps.gov>  
**Sent:** Friday, August 19, 2016 10:32 AM  
**To:** Alfredo Holguin  
**Subject:** Re: High Valley MDWCA - Request for Consultation

Dear Mr. Holguin,

The National Park Service (NPS) would like to thank you for the opportunity to be involved in your project. The NPS has reviewed this project and has found no comments at this time.

Regards,

National Park Service  
Intermountain Region External Review Team  
Serving MT, UT, WY, CO, AZ, NM, OK, TX  
[imrxtrev@nps.gov](mailto:imrxtrev@nps.gov)

On Thu, Aug 4, 2016 at 10:52 AM, Hurd, David <[david\\_hurd@nps.gov](mailto:david_hurd@nps.gov)> wrote:

----- Forwarded message -----  
From: **Alfredo Holguin** <[alfredo.holguin@soudermiller.com](mailto:alfredo.holguin@soudermiller.com)>  
Date: Thu, Aug 4, 2016 at 10:19 AM  
Subject: High Valley MDWCA - Request for Consultation  
To: "[david\\_hurd@nps.gov](mailto:david_hurd@nps.gov)" <[david\\_hurd@nps.gov](mailto:david_hurd@nps.gov)>

Mr. David Hurd,

Please find attached a request for consultation regarding a proposed water system improvement project to be completed by High Valley MDWCA in Doña Ana County, New Mexico. Please let us know if you have any questions or require any further information.

Thank you,

---



J. Alfredo Holguin, E.I.

*Staff Civil Designer*

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX PST CAPM (CS-0000051), TX Surveying Firm (10162200), WY Surveying Firm (S-1704)



### **Souder, Miller & Associates**

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Las Cruces, NM 88005

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(575) 642-8537 (mobile)

(575) 647-0680 (fax)

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--

David Hurd  
Environmental Protection Specialist  
NPS - Intermountain Regional Office  
12795 W. Alameda Pkwy.  
Denver, Colorado 80225-0287  
Tel: 303.987.6705

Fax: 303.969.2717

Email: [david\\_hurd@nps.gov](mailto:david_hurd@nps.gov)



Appendix E3  
FEMA Correspondence





July 14, 2016

#6324631

Ms. Jennifer Knecht  
Federal Emergency Management Agency  
Region VI  
800 North Loop 288  
Denton, TX 76209  
(940) 898-5541  
(940) 898-5195 (fax)

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Knecht:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Ms. Jennifer Knecht*

*July 14, 2016*

*Page 2*

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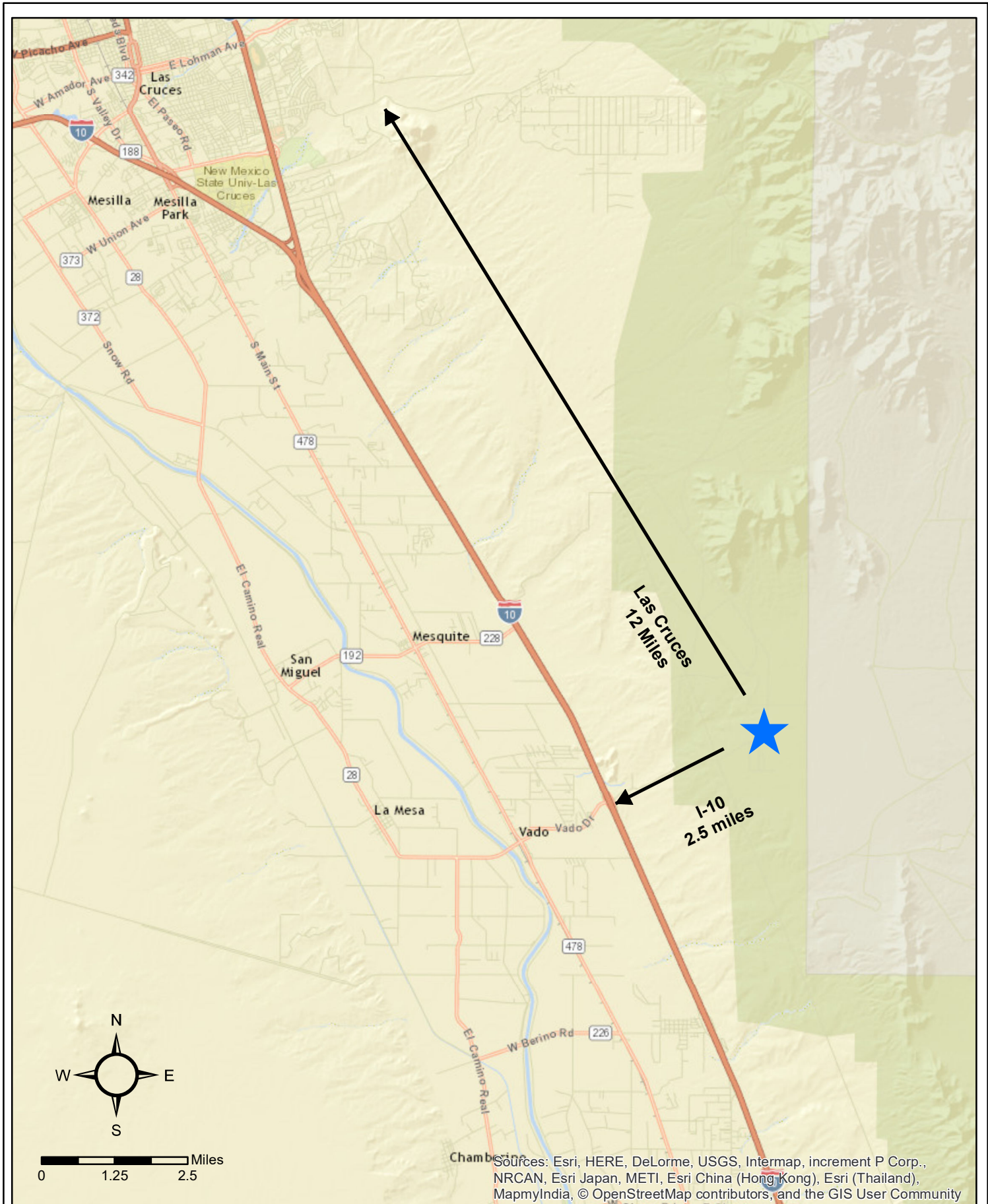
Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326





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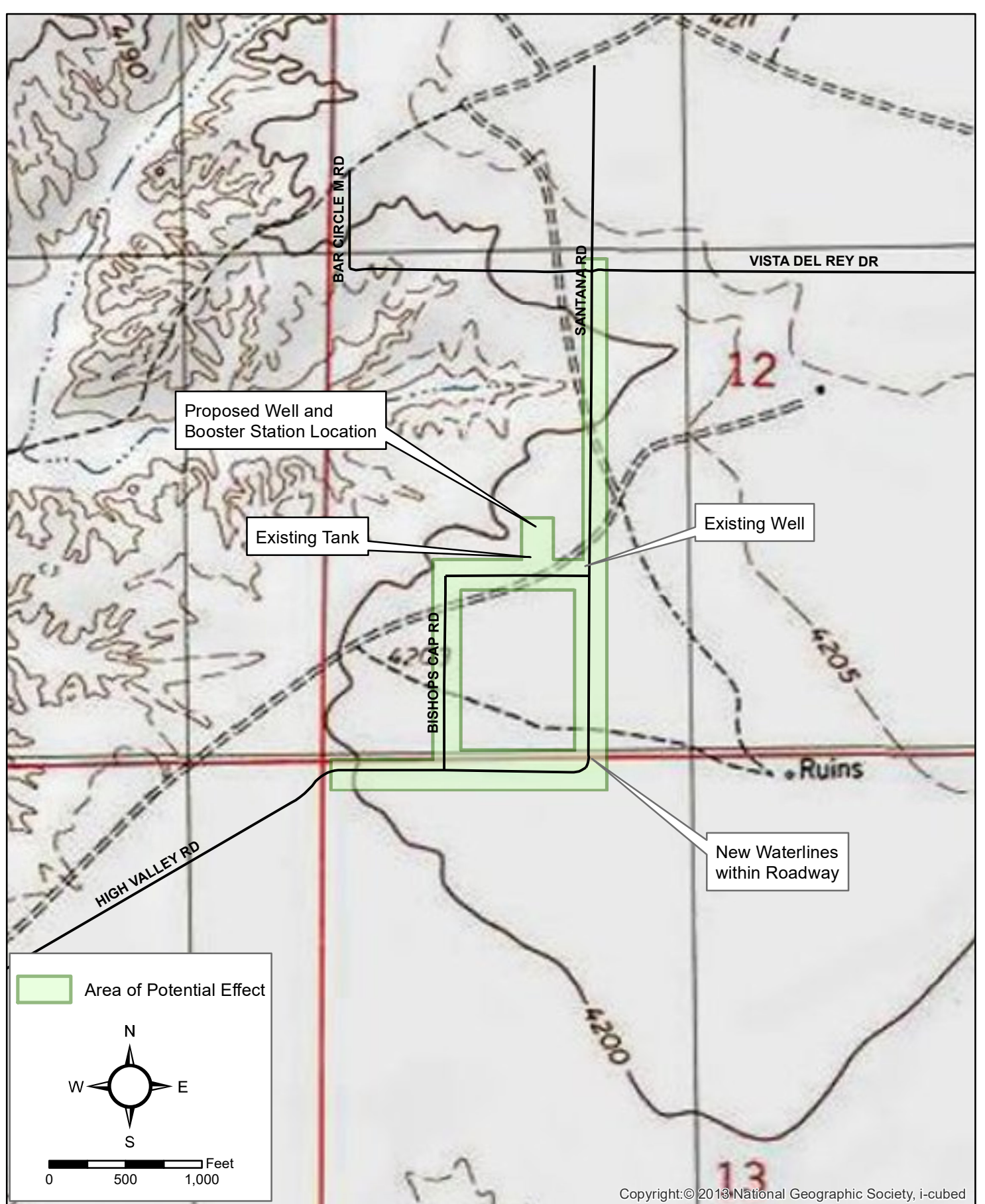
Date Saved:  
6/30/2016



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Vicinity Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 1



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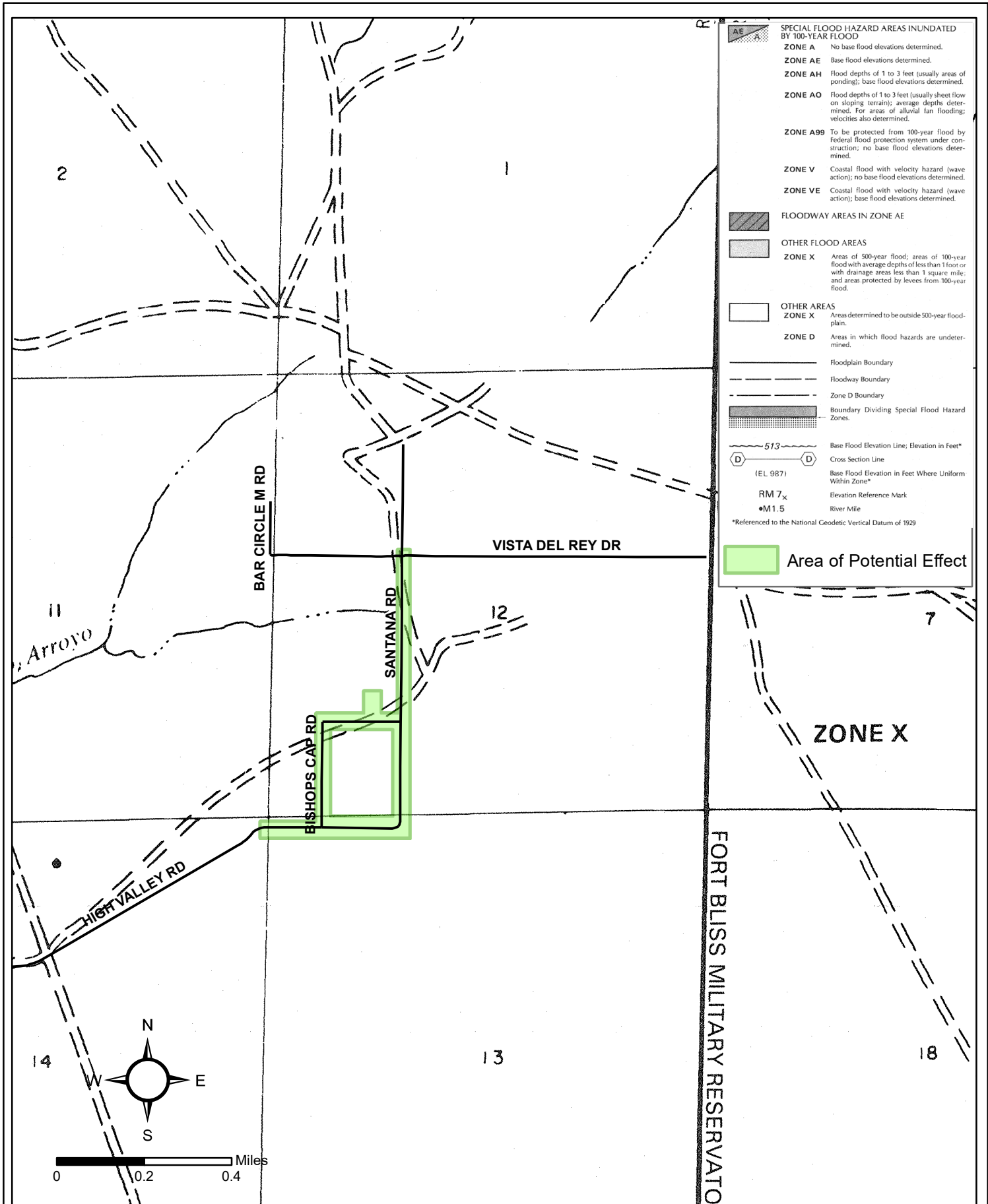


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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2





**SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD**

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**FLOODWAY AREAS IN ZONE AE**

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**OTHER AREAS**

- ZONE X** Areas determined to be outside 500-year floodplain.
- ZONE D** Areas in which flood hazards are undetermined.

— Floodplain Boundary  
 - - - Floodway Boundary  
 - - - Zone D Boundary  
 - - - Boundary Dividing Special Flood Hazard Zones

513  
 (D) — (D)  
 (EL 987)  
 Base Flood Elevation Line; Elevation in Feet\*  
 Cross Section Line  
 Base Flood Elevation in Feet Where Uniform Within Zone\*

RM 7x  
 •M1.5  
 Elevation Reference Mark  
 River Mile

\*Referenced to the National Geodetic Vertical Datum of 1929

**Area of Potential Effect**

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FEMA FIRM Map of Proposed Service Area (Panel 3503C0800E)  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 3



RECEIVED

AUG 26 2016



FEMA

FEDERAL EMERGENCY MANAGEMENT AGENCY  
REGION VI  
MITIGATION DIVISION

## NOTICE REVIEW/ENVIRONMENTAL CONSULTATION

---

We have no comments to offer.  We offer the following comments:

**WE WOULD REQUEST THAT THE COMMUNITIES' FLOODPLAIN ADMINISTRATORS' BE CONTACTED FOR THE REVIEW AND POSSIBLE PERMIT REQUIREMENTS FOR THIS PROJECT. IF FEDERALLY FUNDED, WE WOULD REQUEST PROJECT TO BE IN COMPLIANCE WITH EO11988 & EO 11990.**

---

REVIEWER:

*Mayra G. Diaz*  
Floodplain Management and Insurance Branch  
Mitigation Division  
(940) 898-5541

DATE: July 27, 2016



July 14, 2016

2016 JUL 25 P 2 13

#6324631

Ms. Jennifer Knecht  
Federal Emergency Management Agency  
Region VI  
800 North Loop 288  
Denton, TX 76209  
(940) 898-5541  
(940) 898-5195 (fax)

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Knecht:

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All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.

*Ms. Jennifer Knecht*

*July 14, 2016*

*Page 2*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in cursive script that reads "Marty Howell".

Marty Howell

Senior Engineer II

*marty.howell@soudermiller.com*

Extension: 1326



Appendix E4  
Doña Ana County Flood  
Administrator Correspondence





July 14, 2016

#6324631

Mr. Paul Dugie  
Doña Ana County Flood Commission Director  
845 North Motel Boulevard  
Room 1-250  
Las Cruces, NM 88007  
(575) 647-7256  
(575) 525-5567 (fax)  
*pauld@donaanacounty.org*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Dugie:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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SMA is requesting clearance for the project areas as defined above. Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. The center of the project area is located at approximately 32° 08' 40" N latitude and 106° 35' 38" W longitude. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

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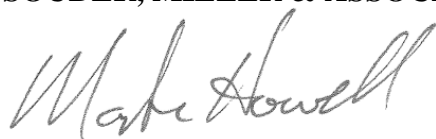
*Mr. Paul Dugie*  
*July 14, 2016*  
*Page 2*

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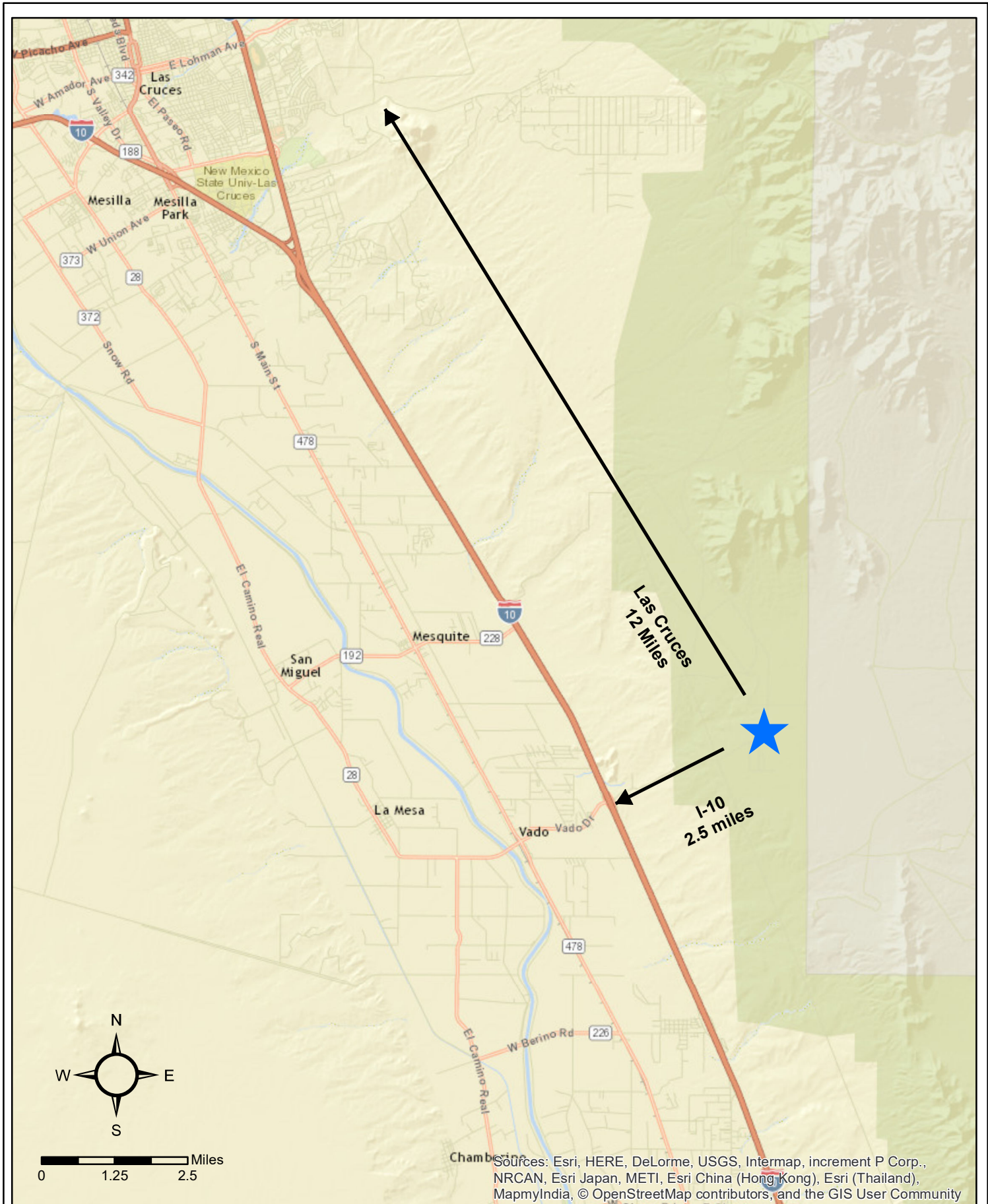
Sincerely,

**MILLER ENGINEERS, INC. D/B/A**  
**SOUDER, MILLER & ASSOCIATES**

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Marty Howell  
Senior Engineer II  
marty.howell@soudermiller.com  
Extension: 1326





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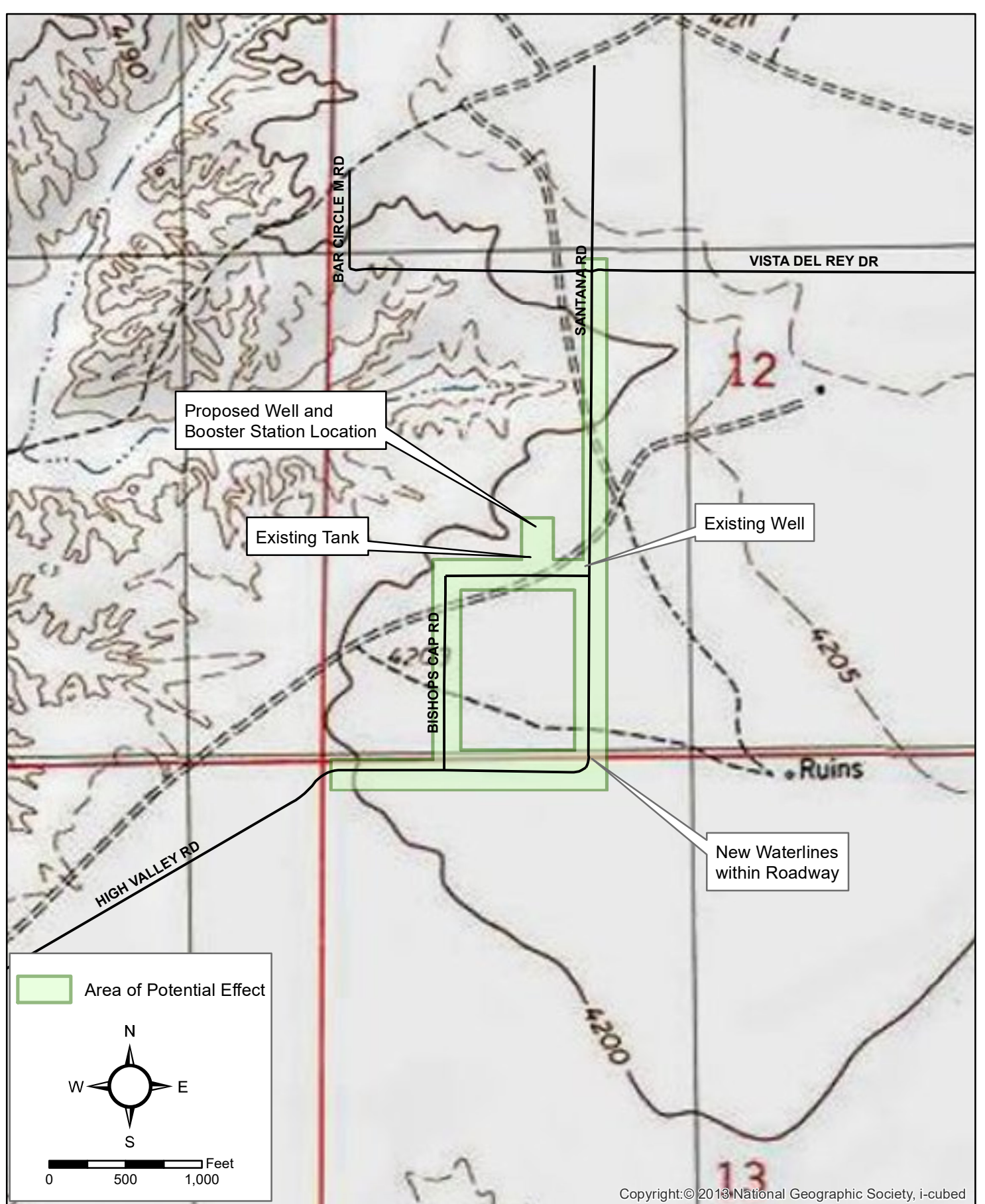
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Vicinity Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 1



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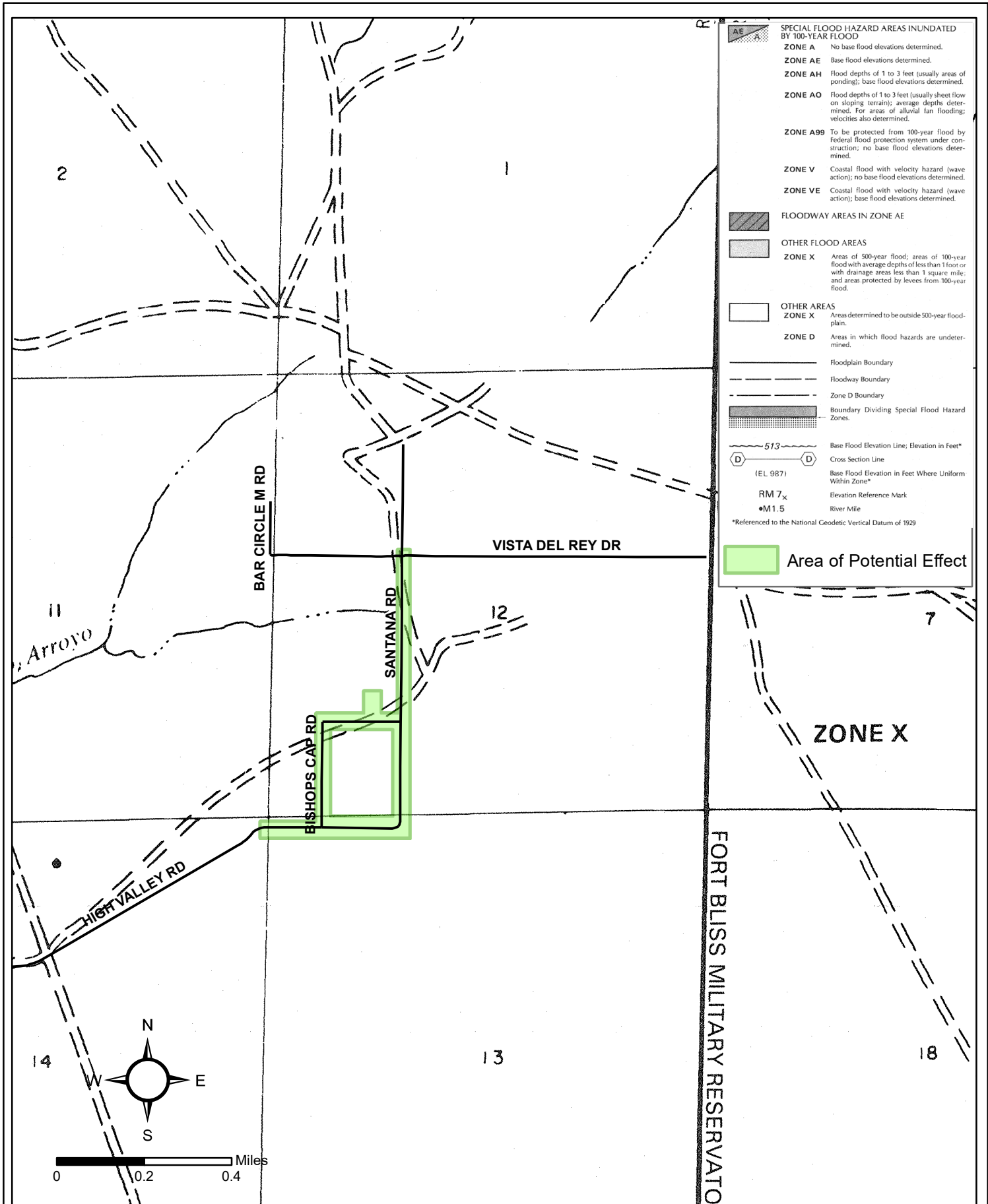
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US Topographic Map  
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Vado, New Mexico

Figure 2





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FEMA FIRM Map of Proposed Service Area (Panel 3503C0800E)  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 3



Appendix E5  
United States Army  
Corps of Engineers Correspondence





July 14, 2016

#6324631

Mr. Rick H. Gatewood  
Regulatory Manager for Southern NM and West TX  
US Army Corps of Engineers  
505 S. Main Street, Suite 142  
Las Cruces, NM 88001  
(575)556-9939  
*richard.h.gatewood@usace.army.mil*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Gatewood:

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*Mr. Rick H. Gatewood*

*July 14, 2016*

*Page 2*

All of the proposed improvements will be placed in an entirely upland area. Regardless, all improvements will be undertaken in a manner which does not disturb wetland areas and no aspect of the improvements will result in discharged material.

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

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SOUDER, MILLER AND ASSOCIATES**

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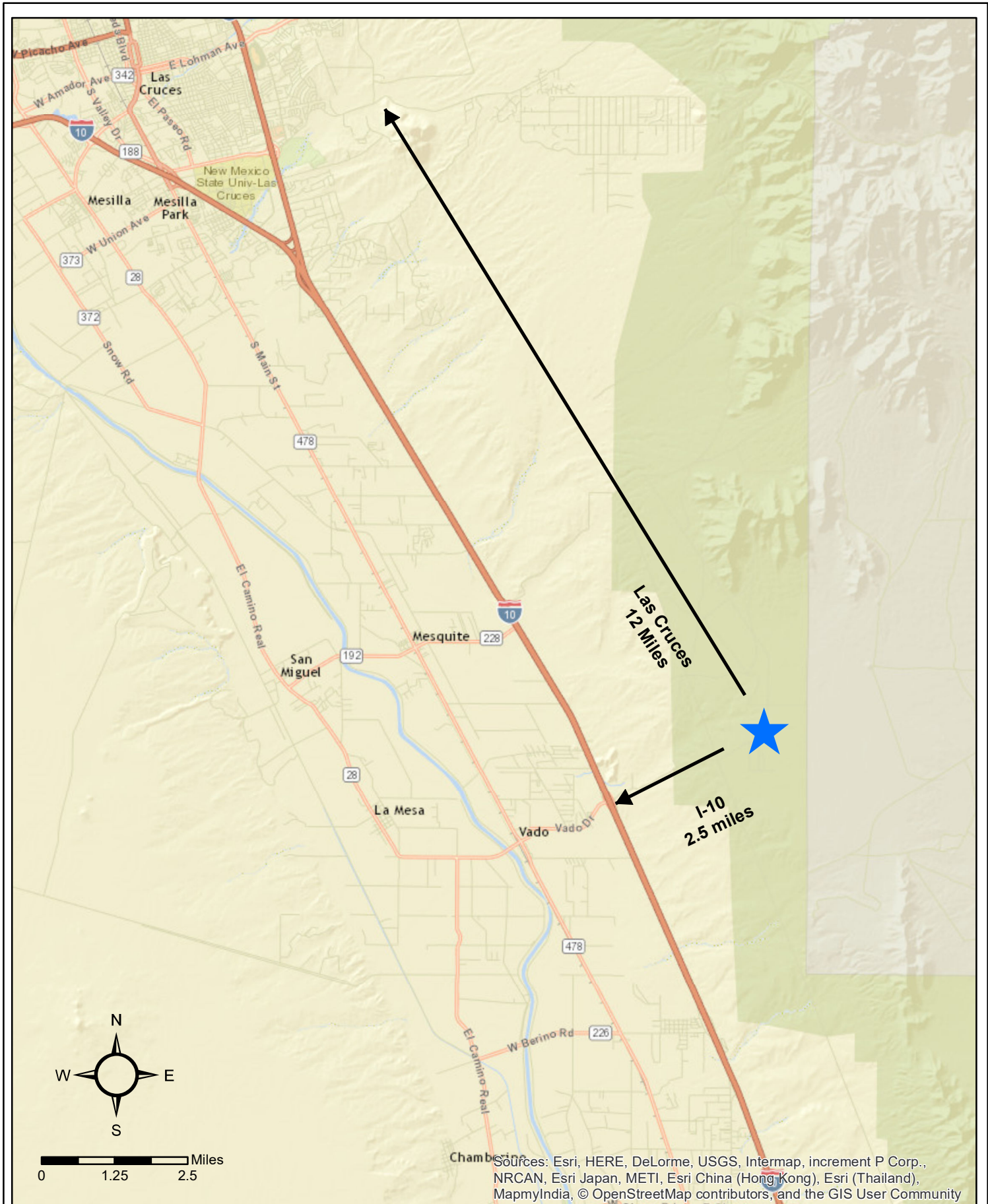
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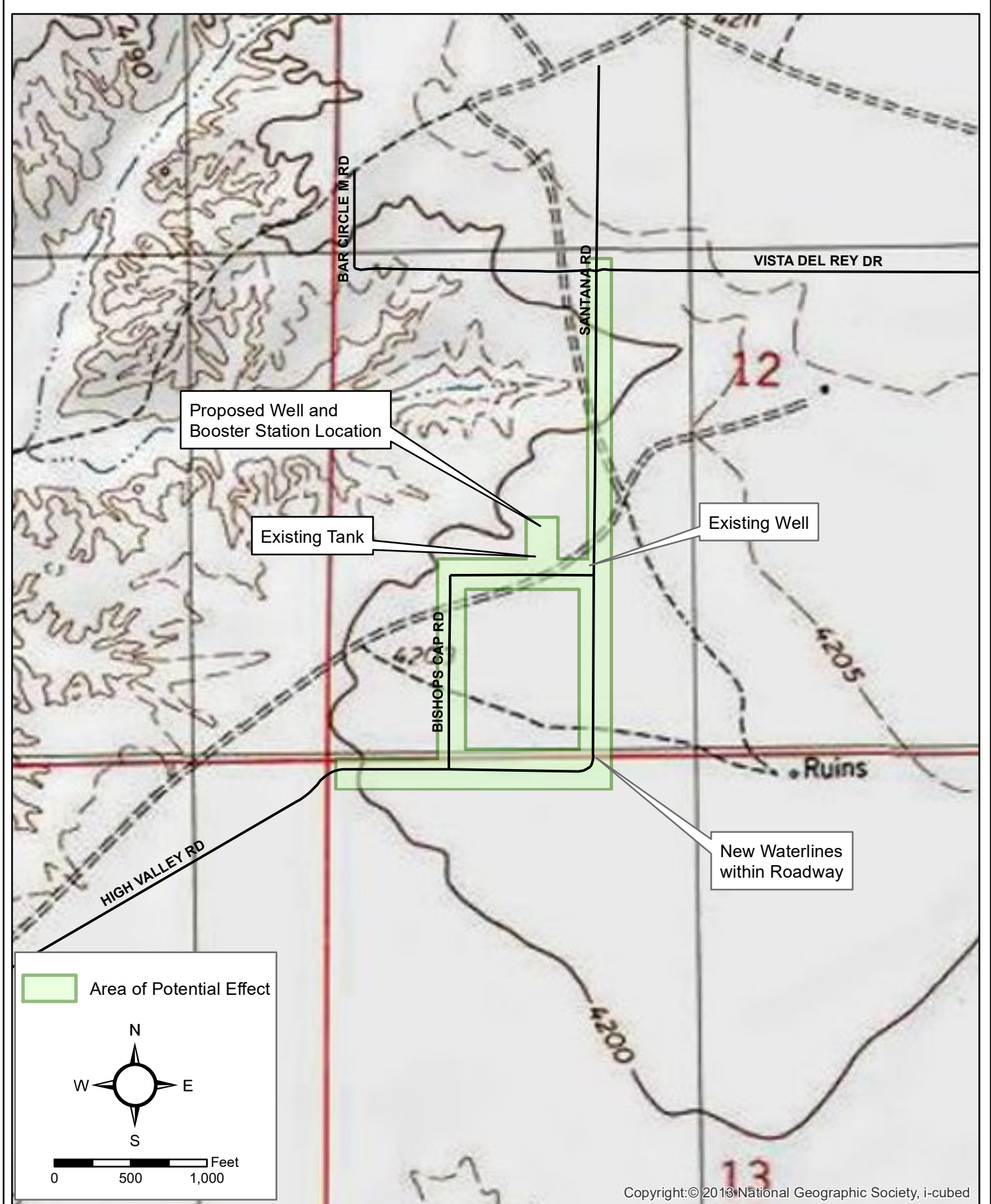
Senior Engineer II

*marty.howell@soudermiller.com*

Extension: 1326







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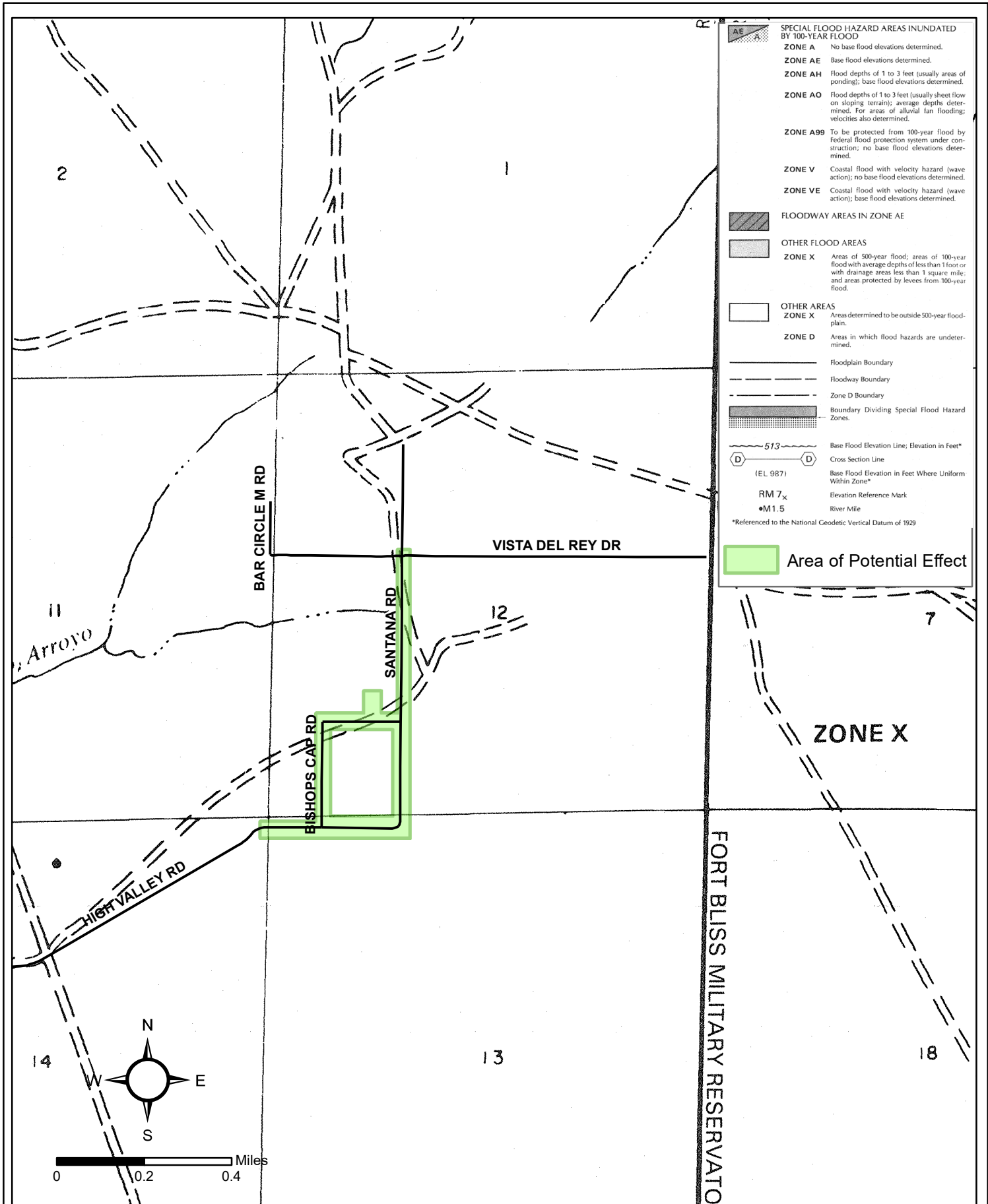


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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2





**SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD**

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 Base Flood Elevation in Feet Where Uniform Within Zone\*

RM 7x  
 •M1.5  
 Elevation Reference Mark  
 River Mile

\*Referenced to the National Geodetic Vertical Datum of 1929

**Area of Potential Effect**

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FEMA FIRM Map of Proposed Service Area (Panel 3503C0800E)  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 3



## Marty Howell

---

**From:** Gatewood, Richard H SPA <richard.h.gatewood@usace.army.mil>  
**Sent:** Wednesday, August 10, 2016 8:55 AM  
**To:** Marty Howell  
**Subject:** SPA-2016-00273-LCO, Water System Improvements for the High Valley Mutual Domestic Water Consumers Association  
**Attachments:** 2016-273.20160808.NPR.pdf; 2016-273.20160808.AJD.pdf; Appeal Form NAO-NAP-RFA Form Revised 17 Dec 2010.pdf

Please find attached a jurisdictional determination letter, approved JD, and appeals form for the above project.

Please let us know how we did, by completing a short Customer Service Survey  
[http://corpsmapu.usace.army.mil/cm\\_apex/f?p=regulatory\\_survey](http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey)

Thank you,  
Richard Gatewood  
Environmental Engineer  
P.M.P, C.F.M., P.W.S., C.P.E.S.C., DAWIA FE II Corps of Engineers, Albuquerque District, Las Cruces Regulatory Field Office  
Regulatory Manager for Southern NM and West TX  
505 S. Main St., Ste. 142  
Las Cruces, NM 88001  
(575)-556-9939  
Richard.h.gatewood@usace.army.mil



REPLY TO  
ATTENTION OF

**DEPARTMENT OF THE ARMY**  
ALBUQUERQUE DISTRICT, CORPS OF ENGINEERS  
LAS CRUCES REGULATORY FIELD OFFICE  
505 S. MAIN ST. SUITE 142  
LAS CRUCES, NEW MEXICO 88001  
(575)-556-9939

August 8, 2016

Regulatory Division

SUBJECT: No Permit Required – Action No. SPA-2016-00273-LCO, Water System Improvements for the High Valley Mutual Domestic Water Consumers Association

Mr. Marty Howell, P.E.  
Souder Miller Associates  
401 N. Seventeenth St., Ste. 4  
Las Cruces, NM 88005-8131

Dear Mr. Howell:

I am writing this letter in response to your request for a determination of Department of the Army permit requirements for the proposed Water System Improvements for the High Valley Mutual Domestic Water Consumers Association (MDWCA) located at approximately latitude 32.1444, longitude -106.5938, in Dona Ana County, New Mexico. The work, as described in your letter, consist of a proposal by the High Valley MDWCA to construct a new water supply well, 7,260-feet of new water distribution and service lines, replace existing booster stations, rehabilitate existing water storage tanks and rehabilitate an existing water supply well. We have assigned Action No. SPA-2016-00273-LCO to this project. Please reference this number in all future correspondence concerning the project.

Based on the information provided, we have determined that a Department of the Army permit is not required since the site consists entirely of uplands. However, it is incumbent upon you to remain informed of any changes in the U.S. Army Corps of Engineers (Corps) Regulatory Program regulations and policy as they relate to your project. If your plans change such that waters of the U.S. could be impacted by the proposed project, please contact our office for a reevaluation of permit requirements.

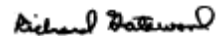
This decision is based on an approved jurisdictional determination (JD) (attached) that there are no waters of the United States on the project site. The basis for this JD is that the project site contains entirely uplands. A copy of this JD is also available at <http://www.spa.usace.army.mil/reg/JD>. This approved JD is valid for five years unless new information warrants revision of the determination before the expiration date.

You may accept or appeal this approved JD or provide new information in accordance with the attached Notification of Administration Appeal Options and Process and Request for Appeal (NAAOP-RFA). If you elect to appeal this approved JD, you

must complete Section II of the form and return it to the Army Engineer Division, South Pacific, CESPDPDS-O, Attn: Tom Cavanaugh, Administrative Appeal Review Officer, 1455 Market Street, Room 1760, San Francisco, CA 94103-1399 within 60 days of the date of this notice. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety and waive all rights to appeal the approved JD.

If you have any questions concerning our regulatory program, please contact me at 575-556-9939 or by e-mail at [richard.h.gatewood@usace.army.mil](mailto:richard.h.gatewood@usace.army.mil). At your convenience, please complete a Customer Service Survey on-line available at [http://corpsmapu.usace.army.mil/cm\\_apex/f?p=136:4:0](http://corpsmapu.usace.army.mil/cm_apex/f?p=136:4:0).

Sincerely,



Richard Gatewood  
Regulatory Manager for  
Southern New Mexico and West Texas

Enclosure(s)  
Approved Jurisdictional Determination (AJD)  
Appeals Form



**APPROVED JURISDICTIONAL DETERMINATION FORM**  
**U.S. Army Corps of Engineers**

This form should be completed by following the instructions provided in Section IV of the JD Form Instructional Guidebook.

**SECTION I: BACKGROUND INFORMATION**

**A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): August 08, 2016**

**B. DISTRICT OFFICE, FILE NAME, AND NUMBER:CESPA-RD-LC, SPA-2016-00273-LCO; High Valley Mutual Domestic Water Consumers Association**

**C. PROJECT LOCATION AND BACKGROUND INFORMATION:**

State:New Mexico

County/parish/borough: Dona Ana

City:

Center coordinates of site (lat/long in degree decimal format): Lat. 32.1444° **N**, Long. -106.5938° **W**.

Universal Transverse Mercator:

Name of nearest waterbody: Uplands

Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows:

Name of watershed or Hydrologic Unit Code (HUC):

Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.

Check if other sites (e.g., offsite mitigation sites, disposal sites, etc...) are associated with this action and are recorded on a different JD form.

**D. REVIEW PERFORMED FOR SITE EVALUATION (CHECK ALL THAT APPLY):**

Office (Desk) Determination. Date: August 08, 2016

Field Determination. Date(s):

**SECTION II: SUMMARY OF FINDINGS**

**A. RHA SECTION 10 DETERMINATION OF JURISDICTION.**

There **Are no** "navigable waters of the U.S." within Rivers and Harbors Act (RHA) jurisdiction (as defined by 33 CFR part 329) in the review area. [Required]

Waters subject to the ebb and flow of the tide.

Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce.  
Explain: .

**B. CWA SECTION 404 DETERMINATION OF JURISDICTION.**

There **Are no** "waters of the U.S." within Clean Water Act (CWA) jurisdiction (as defined by 33 CFR part 328) in the review area. [Required]

**1. Waters of the U.S.**

**a. Indicate presence of waters of U.S. in review area (check all that apply):<sup>1</sup>**

TNWs, including territorial seas

Wetlands adjacent to TNWs

Relatively permanent waters<sup>2</sup> (RPWs) that flow directly or indirectly into TNWs

Non-RPWs that flow directly or indirectly into TNWs

Wetlands directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs

Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs

Impoundments of jurisdictional waters

Isolated (interstate or intrastate) waters, including isolated wetlands

**b. Identify (estimate) size of waters of the U.S. in the review area:**

Non-wetland waters: linear feet: width (ft) and/or acres.

Wetlands: acres.

**c. Limits (boundaries) of jurisdiction based on: **Pick List****

Elevation of established OHWM (if known): .

**2. Non-regulated waters/wetlands (check if applicable):<sup>3</sup>**

Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional.

Explain: .

<sup>1</sup> Boxes checked below shall be supported by completing the appropriate sections in Section III below.

<sup>2</sup> For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).

<sup>3</sup> Supporting documentation is presented in Section III.F.

**SECTION III: CWA ANALYSIS**

**A. TNWs AND WETLANDS ADJACENT TO TNWs**

The agencies will assert jurisdiction over TNWs and wetlands adjacent to TNWs. If the aquatic resource is a TNW, complete Section III.A.1 and Section III.D.1. only; if the aquatic resource is a wetland adjacent to a TNW, complete Sections III.A.1 and 2 and Section III.D.1.; otherwise, see Section III.B below.

**1. TNW**

Identify TNW: .

Summarize rationale supporting determination: .

**2. Wetland adjacent to TNW**

Summarize rationale supporting conclusion that wetland is “adjacent”:

**B. CHARACTERISTICS OF TRIBUTARY (THAT IS NOT A TNW) AND ITS ADJACENT WETLANDS (IF ANY):**

This section summarizes information regarding characteristics of the tributary and its adjacent wetlands, if any, and it helps determine whether or not the standards for jurisdiction established under *Rapanos* have been met.

The agencies will assert jurisdiction over non-navigable tributaries of TNWs where the tributaries are “relatively permanent waters” (RPWs), i.e. tributaries that typically flow year-round or have continuous flow at least seasonally (e.g., typically 3 months). A wetland that directly abuts an RPW is also jurisdictional. If the aquatic resource is not a TNW, but has year-round (perennial) flow, skip to Section III.D.2. If the aquatic resource is a wetland directly abutting a tributary with perennial flow, skip to Section III.D.4.

A wetland that is adjacent to but that does not directly abut an RPW requires a significant nexus evaluation. Corps districts and EPA regions will include in the record any available information that documents the existence of a significant nexus between a relatively permanent tributary that is not perennial (and its adjacent wetlands if any) and a traditional navigable water, even though a significant nexus finding is not required as a matter of law.

If the waterbody<sup>4</sup> is not an RPW, or a wetland directly abutting an RPW, a JD will require additional data to determine if the waterbody has a significant nexus with a TNW. If the tributary has adjacent wetlands, the significant nexus evaluation must consider the tributary in combination with all of its adjacent wetlands. This significant nexus evaluation that combines, for analytical purposes, the tributary and all of its adjacent wetlands is used whether the review area identified in the JD request is the tributary, or its adjacent wetlands, or both. If the JD covers a tributary with adjacent wetlands, complete Section III.B.1 for the tributary, Section III.B.2 for any onsite wetlands, and Section III.B.3 for all wetlands adjacent to that tributary, both onsite and offsite. The determination whether a significant nexus exists is determined in Section III.C below.

**1. Characteristics of non-TNWs that flow directly or indirectly into TNW**

**(i) General Area Conditions:**

Watershed size: **Pick List**

Drainage area: **Pick List**

Average annual rainfall: inches

Average annual snowfall: inches

**(ii) Physical Characteristics:**

**(a) Relationship with TNW:**

Tributary flows directly into TNW.

Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.

Project waters are **Pick List** river miles from RPW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Project waters are **Pick List** aerial (straight) miles from RPW.

Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW<sup>5</sup>: .

Tributary stream order, if known: .

<sup>4</sup> Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.

<sup>5</sup> Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

(b) General Tributary Characteristics (check all that apply):

**Tributary is:**  Natural  
 Artificial (man-made). Explain: \_\_\_\_\_  
 Manipulated (man-altered). Explain: \_\_\_\_\_

**Tributary properties with respect to top of bank (estimate):**

Average width: \_\_\_\_\_ feet  
Average depth: \_\_\_\_\_ feet  
Average side slopes: **Pick List**.

**Primary tributary substrate composition (check all that apply):**

Silts  Sands  Concrete  
 Cobbles  Gravel  Muck  
 Bedrock  Vegetation. Type/% cover: \_\_\_\_\_  
 Other. Explain: \_\_\_\_\_

**Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain:** \_\_\_\_\_

**Presence of run/riffle/pool complexes. Explain:** \_\_\_\_\_

**Tributary geometry: Pick List**

**Tributary gradient (approximate average slope):** \_\_\_\_\_ %

(c) Flow:

**Tributary provides for: Pick List**

**Estimate average number of flow events in review area/year: Pick List**

Describe flow regime: \_\_\_\_\_

**Other information on duration and volume:** \_\_\_\_\_

**Surface flow is: Pick List. Characteristics:** \_\_\_\_\_

**Subsurface flow: Pick List. Explain findings:** \_\_\_\_\_

Dye (or other) test performed: \_\_\_\_\_

**Tributary has (check all that apply):**

Bed and banks  
 OHWM<sup>6</sup> (check all indicators that apply):  
 clear, natural line impressed on the bank  the presence of litter and debris  
 changes in the character of soil  destruction of terrestrial vegetation  
 shelving  the presence of wrack line  
 vegetation matted down, bent, or absent  sediment sorting  
 leaf litter disturbed or washed away  scour  
 sediment deposition  multiple observed or predicted flow events  
 water staining  abrupt change in plant community  
 other (list): \_\_\_\_\_  
 Discontinuous OHWM.<sup>7</sup> Explain: \_\_\_\_\_

**If factors other than the OHWM were used to determine lateral extent of CWA jurisdiction (check all that apply):**

High Tide Line indicated by:  Mean High Water Mark indicated by:  
 oil or scum line along shore objects  survey to available datum;  
 fine shell or debris deposits (foreshore)  physical markings;  
 physical markings/characteristics  vegetation lines/changes in vegetation types.  
 tidal gauges  
 other (list): \_\_\_\_\_

(iii) **Chemical Characteristics:**

Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).

Explain: \_\_\_\_\_

Identify specific pollutants, if known: \_\_\_\_\_

<sup>6</sup>A natural or man-made discontinuity in the OHWM does not necessarily sever jurisdiction (e.g., where the stream temporarily flows underground, or where the OHWM has been removed by development or agricultural practices). Where there is a break in the OHWM that is unrelated to the waterbody's flow regime (e.g., flow over a rock outcrop or through a culvert), the agencies will look for indicators of flow above and below the break.

<sup>7</sup>Ibid.



(iv) **Biological Characteristics. Channel supports (check all that apply):**

- Riparian corridor. Characteristics (type, average width):
- Wetland fringe. Characteristics:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

2. **Characteristics of wetlands adjacent to non-TNW that flow directly or indirectly into TNW**

(i) **Physical Characteristics:**

(a) General Wetland Characteristics:

Properties:

Wetland size:        acres

Wetland type. Explain:

Wetland quality. Explain:

Project wetlands cross or serve as state boundaries. Explain:

(b) General Flow Relationship with Non-TNW:

Flow is: **Pick List**. Explain:

Surface flow is: **Pick List**

Characteristics:

Subsurface flow: **Pick List**. Explain findings:

- Dye (or other) test performed:

(c) Wetland Adjacency Determination with Non-TNW:

Directly abutting

Not directly abutting

Discrete wetland hydrologic connection. Explain:

Ecological connection. Explain:

Separated by berm/barrier. Explain:

(d) Proximity (Relationship) to TNW

Project wetlands are **Pick List** river miles from TNW.

Project waters are **Pick List** aerial (straight) miles from TNW.

Flow is from: **Pick List**.

Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) **Chemical Characteristics:**

Characterize wetland system (e.g., water color is clear, brown, oil film on surface; water quality; general watershed characteristics; etc.). Explain:

Identify specific pollutants, if known:

(iii) **Biological Characteristics. Wetland supports (check all that apply):**

- Riparian buffer. Characteristics (type, average width):
- Vegetation type/percent cover. Explain:
- Habitat for:
  - Federally Listed species. Explain findings:
  - Fish/spawn areas. Explain findings:
  - Other environmentally-sensitive species. Explain findings:
  - Aquatic/wildlife diversity. Explain findings:

3. **Characteristics of all wetlands adjacent to the tributary (if any)**

All wetland(s) being considered in the cumulative analysis: **Pick List**

Approximately (        ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

Directly abuts? (Y/N)      Size (in acres)      Directly abuts? (Y/N)      Size (in acres)

Summarize overall biological, chemical and physical functions being performed: .

### C. SIGNIFICANT NEXUS DETERMINATION

**A significant nexus analysis will assess the flow characteristics and functions of the tributary itself and the functions performed by any wetlands adjacent to the tributary to determine if they significantly affect the chemical, physical, and biological integrity of a TNW. For each of the following situations, a significant nexus exists if the tributary, in combination with all of its adjacent wetlands, has more than a speculative or insubstantial effect on the chemical, physical and/or biological integrity of a TNW. Considerations when evaluating significant nexus include, but are not limited to the volume, duration, and frequency of the flow of water in the tributary and its proximity to a TNW, and the functions performed by the tributary and all its adjacent wetlands. It is not appropriate to determine significant nexus based solely on any specific threshold of distance (e.g. between a tributary and its adjacent wetland or between a tributary and the TNW). Similarly, the fact an adjacent wetland lies within or outside of a floodplain is not solely determinative of significant nexus.**

**Draw connections between the features documented and the effects on the TNW, as identified in the *Rapanos* Guidance and discussed in the Instructional Guidebook. Factors to consider include, for example:**

- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to carry pollutants or flood waters to TNWs, or to reduce the amount of pollutants or flood waters reaching a TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), provide habitat and lifecycle support functions for fish and other species, such as feeding, nesting, spawning, or rearing young for species that are present in the TNW?
- Does the tributary, in combination with its adjacent wetlands (if any), have the capacity to transfer nutrients and organic carbon that support downstream foodwebs?
- Does the tributary, in combination with its adjacent wetlands (if any), have other relationships to the physical, chemical, or biological integrity of the TNW?

**Note: the above list of considerations is not inclusive and other functions observed or known to occur should be documented below:**

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D: .
2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .
3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

### D. DETERMINATIONS OF JURISDICTIONAL FINDINGS. THE SUBJECT WATERS/WETLANDS ARE (CHECK ALL THAT APPLY):

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:

- TNWs: linear feet width (ft), Or,      acres.
- Wetlands adjacent to TNWs:      acres.

2. **RPWs that flow directly or indirectly into TNWs.**

- Tributaries of TNWs where tributaries typically flow year-round are jurisdictional. Provide data and rationale indicating that tributary is perennial: .
- Tributaries of TNW where tributaries have continuous flow “seasonally” (e.g., typically three months each year) are jurisdictional. Data supporting this conclusion is provided at Section III.B. Provide rationale indicating that tributary flows seasonally: .

Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters: linear feet width (ft).  
 Other non-wetland waters: acres.  
Identify type(s) of waters: .

**3. Non-RPWs<sup>8</sup> that flow directly or indirectly into TNWs.**

- Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):

- Tributary waters: linear feet width (ft).  
 Other non-wetland waters: acres.  
Identify type(s) of waters: .

**4. Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.  
 Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .  
 Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

**5. Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**

- Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide acreage estimates for jurisdictional wetlands in the review area: acres.

**6. Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**

- Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional wetlands in the review area: acres.

**7. Impoundments of jurisdictional waters.<sup>9</sup>**

As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.

- Demonstrate that impoundment was created from "waters of the U.S.," or  
 Demonstrate that water meets the criteria for one of the categories presented above (1-6), or  
 Demonstrate that water is isolated with a nexus to commerce (see E below).

**E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):<sup>10</sup>**

- which are or could be used by interstate or foreign travelers for recreational or other purposes.  
 from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.  
 which are or could be used for industrial purposes by industries in interstate commerce.  
 Interstate isolated waters. Explain: .  
 Other factors. Explain: .

**Identify water body and summarize rationale supporting determination:** .

<sup>8</sup>See Footnote # 3.

<sup>9</sup>To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.

<sup>10</sup>Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA Memorandum Regarding CWA Act Jurisdiction Following Rapanos.



Provide estimates for jurisdictional waters in the review area (check all that apply):

- Tributary waters:        linear feet        width (ft).
- Other non-wetland waters:        acres.  
    Identify type(s) of waters:        .
- Wetlands:        acres.

**F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):**

- If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
- Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
  - Prior to the Jan 2001 Supreme Court decision in "SWANCC," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
- Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:        .
- Other: (explain, if not covered above):        .

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):

- Non-wetland waters (i.e., rivers, streams):        linear feet        width (ft).
- Lakes/ponds:        acres.
- Other non-wetland waters:        acres. List type of aquatic resource:        .
- Wetlands:        acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):

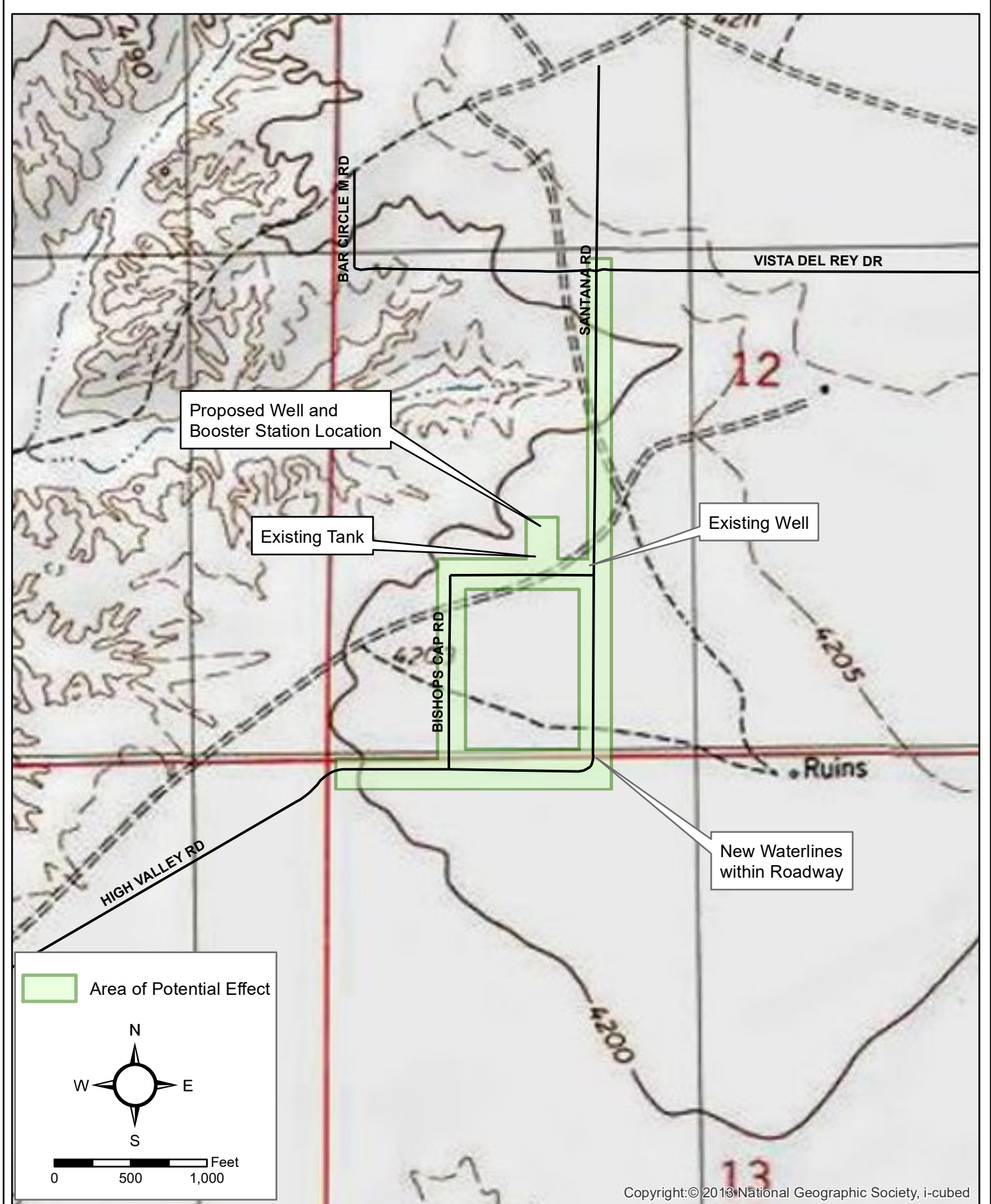
- Non-wetland waters (i.e., rivers, streams):        linear feet,        width (ft).
- Lakes/ponds:        acres.
- Other non-wetland waters:        acres. List type of aquatic resource:        .
- Wetlands:        acres.

**SECTION IV: DATA SOURCES.**

**A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):**

- Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: letter dated July 14, 2016 from Souder Miller Associates.
- Data sheets prepared/submitted by or on behalf of the applicant/consultant.
  - Office concurs with data sheets/delineation report.
  - Office does not concur with data sheets/delineation report.
- Data sheets prepared by the Corps:        .
- Corps navigable waters' study:        .
- U.S. Geological Survey Hydrologic Atlas:        .
  - USGS NHD data.
  - USGS 8 and 12 digit HUC maps.
- U.S. Geological Survey map(s). Cite scale & quad name:        .
- USDA Natural Resources Conservation Service Soil Survey. Citation:        .
- National wetlands inventory map(s). Cite name:        .
- State/Local wetland inventory map(s):        .
- FEMA/FIRM maps:        .
- 100-year Floodplain Elevation is:        (National Geodetic Vertical Datum of 1929)
- Photographs:  Aerial (Name & Date):        .  
    or  Other (Name & Date):        .
- Previous determination(s). File no. and date of response letter:        .
- Applicable/supporting case law:        .
- Applicable/supporting scientific literature:        .
- Other information (please specify): ORM2 Map.

**B. ADDITIONAL COMMENTS TO SUPPORT JD:** The site is composed entirely of uplands and upland drainage.



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Date Saved:  
7/13/2016



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 Serving the Southwest & Rocky Mountains

US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2

Appendix E6  
Cultural Resource Survey





## NMCRI INVESTIGATION ABSTRACT FORM (NIAF)

<b>1. NMCRI Activity No.:</b> 135943	<b>2a. Lead (Sponsoring) Agency:</b> United States Department of Agriculture (USDA)	<b>2b. Other Permitting Agency(ies):</b> N/A	<b>3. Lead Agency Report No.:</b> N/A									
<b>4. Title of Report:</b>  Cultural Resource Survey for Souder, Miller and Associates of Approximately 7,350 Linear Feet for Proposed Water Pipeline Improvements for the High Valley Mutual Domestic Water Consumers Association, Dona Ana County, New Mexico  <b>Author(s)</b> Michael Stowe, M.A., RPA		<b>5. Type of Report</b> <input checked="" type="checkbox"/> Negative <input type="checkbox"/> Positive										
<b>6. Investigation Type</b> <input type="checkbox"/> Research Design <input checked="" type="checkbox"/> Survey/Inventory <input type="checkbox"/> Test Excavation <input type="checkbox"/> Excavation <input type="checkbox"/> Collections/Non-Field Study <input type="checkbox"/> Overview/Lit Review <input type="checkbox"/> Monitoring <input type="checkbox"/> Ethnographic study <input type="checkbox"/> Site specific visit <input type="checkbox"/> Other												
<b>7. Description of Undertaking (what does the project entail?):</b>  On June 2nd, 2016 Advanced Archaeological Solutions (ADAS) conducted an archaeological survey (State Survey Permit #NM-16-172/ NMCRI# 135943) of approximately 7,350 Linear Feet for proposed water pipeline improvements along portions of High Valley Road, Bishops Cap Road, Arapaho Road and Santana Road within the High Valley subdivision within Dona Ana County, New Mexico. In addition, a 150' by 300' and a 50' by 100' water tank location was also surveyed located just north of Arapaho Road. The total survey acreage for the pipeline ROW and tank site is roughly 18.70 acres and the entire extent of the survey ROW is comprised of currently paved, improved dirt and developed roadways.  The High Valley Mutual Domestic Water Consumers Association (MDWCA) has sought funding from the Colonias Infrastructure Fund grant administered by NMFA. Additional funding will be sought from Colonias as well as the USDA. The project utilizes property owned and administered by Private land owners and is located within Dona Ana County on the USGS 7.5' San Miguel, NM topographic map.		<b>8. Dates of Investigation: (from: 6/2/2016 to: 6/2/2016)</b>  <b>9. Report Date: June 3, 2016</b>										
<b>10. Performing Agency/Consultant:</b> Michael Stowe, M.A., RPA <b>Principal Investigator:</b> Michael Stowe, M.A., RPA <b>Field Supervisor:</b> Michael Stowe, M.A., RPA <b>Field Personnel Names:</b> Michael Stowe, M.A., RPA, Nate Montalvo		<b>11. Performing Agency/Consultant Report No.:</b> AAS 16-398										
<b>13. Client/Customer (project proponent):</b> <i>Souder Miller and Associates</i> <b>Contact:</b> Alfredo Holguin <b>Address:</b> 401 North Seventeenth Street, Suite 4 Las Cruces, New Mexico 88005 <b>Phone:</b> (575) 647-0799		<b>12. Applicable Cultural Resource Permit No(s):</b> 216-2920-07B, NM 16-172										
<b>14. Client/Customer Project No.:</b> N/A		<b>15. Land Ownership Status (<u>Must</u> be indicated on project map):</b>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Land Owner</th> <th style="text-align: center;">Acres Surveyed</th> <th style="text-align: center;">Acres in APE</th> </tr> </thead> <tbody> <tr> <td>Private</td> <td style="text-align: center;">18.70</td> <td style="text-align: center;">18.70</td> </tr> <tr> <td style="text-align: right;"><b>TOTALS</b></td> <td style="text-align: center;"><b>18.70</b></td> <td style="text-align: center;"><b>18.70</b></td> </tr> </tbody> </table>				Land Owner	Acres Surveyed	Acres in APE	Private	18.70	18.70	<b>TOTALS</b>	<b>18.70</b>	<b>18.70</b>
Land Owner	Acres Surveyed	Acres in APE										
Private	18.70	18.70										
<b>TOTALS</b>	<b>18.70</b>	<b>18.70</b>										

16 Records Search(es):

Date(s) of ARMS File Review 6/1/2016	Name of Reviewer(s) Michael Stowe	
Date(s) of NR/SR File Review 6/1/2016	Name of Reviewer(s) Michael Stowe	
Date(s) of Other Agency File Review	Name of Reviewer(s)	Agency

17. Survey Data:

- a. Source Graphics  NAD 27  NAD 83  
 USGS 7.5' (1:24,000) topo map  Other topo map, Scale:  
 GPS Unit Accuracy  <1.0m  1-10m  10-100m  >100m

b. USGS 7.5' Topographic Map Name USGS Quad Code

San Miguel, NM	32106-B6
Bishop Cap, NM	32106-B5

c. County(ies): Dona Ana County

17. Survey Data (continued):

d. Nearest City or Town: Vado, NM

e. Legal Description:

Township (N/S)	Range (E/W)	Section	1/4	1/4	1/4
25 South	3 East	12	Central Southern Portion		
25 South	3 East	13	NW, NW		

Projected legal description? Yes  , No  Unplatted

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.): The area of potential effect (APE) is defined as approximately 7,350 Linear Feet for proposed water pipeline improvements along portions of High Valley Road, Bishops Cap Road, Arapaho Road and Santana Road within the High Valley subdivision within Dona Ana County, New Mexico. In addition, a 150' by 300' and a 50' by 100' water tank location was also surveyed located just north of Arapaho Road. The total survey acreage for the pipeline ROW and tank site is roughly 18.70 acres and the entire extent of the survey ROW is comprised of currently paved, improved dirt and developed roadways. See attached project map for exact location.

18. Survey Field Methods:

- Intensity:  100% coverage  <100% coverage  
 Configuration:  block survey units  linear survey units (l x w): **Approx. 7,350 Linear Feet**  other survey units (specify):  
 Scope:  non-selective (all sites recorded)  selective/thematic (selected sites recorded)  
 Coverage Method:  systematic pedestrian coverage  other method (describe)  
 Survey Interval (m): 15 meters (45 feet) Crew Size: 1 Fieldwork Dates: 6/2/2016 through 6/2/2016  
 Survey Person Hours: 4 Recording Person Hours: 0 Total Hours: 4

Additional Narrative:

The project area was delineated by coordinates marked on maps provided by the client, *Souder Miller and Associates*. Archaeologists used known topographic landmarks and associated project coordinates in conjunction with GPS units to locate accurate project R-O-W boundaries. The survey crew walked multiple, parallel, non-overlapping transects spaced at approximately 50 ft (15 m) intervals, in accordance with Federal and State guidelines. All cultural resources encountered were documented these resources were categorized as I.O.s (Isolated Occurrences) or archaeological sites.

Prior to the start of fieldwork, ADAS completed a remote Archaeological Record Management System (ARMS) query (June 1, 2016). No isolated occurrences were observed within the the survey ROW. During a records search no archaeological sites or historic buildings were noted within a half mile of the project area. The record search was then expanded to one mile which revealed two archaeological sites (LA 120446 and LA 35937). Both of these sites are well outside (More than a mile to the west and northwest of the project area) the current area of potential effect (APE) and will not be impacted by the proposed undertaking.

19. Environmental Setting (NRCS soil designation; vegetative community; elevation; etc.):

The project area is defined as approximately 1.4 miles (7,350 Linear Feet) for proposed water pipeline improvements along portions of High Valley Road, Bishops Cap Road, Arapaho Road and Santana Road within the High Valley subdivision within Dona Ana County, New Mexico. In addition, a 150' by 300' water tank location as a well as a 50' by 100' parcel was also surveyed located just north of Arapaho Road. All of the survey area has been previously disturbed and bladed by past construction/ road improvement and maintenance activities. Soils within the project area consist of a sandy loam intermixed with numerous gravels and no discernable slope. The entire project area appears to have been impacted by numerous blading events and retains little integrity. Ground cover throughout the survey parcel is excellent with surface visibility estimated at 75-99 percent. The biotic community is comprised of assorted upland grasses and forbs. Elevation is estimated at between 4200 and 4300-ft above mean sea level (amsl).

20.a. Percent Ground Visibility: 75-99% b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):

Entire survey area has been disturbed and impacted by surface erosion, namely sheetwashing throughout the project area. Additionally, all of the project pipeline ROW lands have been significantly impacted by various modern activities (i.e. blading, road maintenance, previous development of roadways).

21. CULTURAL RESOURCE FINDINGS  Yes, See Page 3  No, Discuss Why:

Sterile of cultural manifestations. The entire ROW has been significantly impacted by various modern activities (i.e. blading, road maintenance, previous development of roadways).

22. Required Attachments (check all appropriate boxes):

- USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
- Copy of NMCRIS Mapserver Map Check
- LA Site Forms - new sites (*with sketch map & topographic map*)
- LA Site Forms (update) - previously recorded & un-relocated sites (*first 2 pages minimum*)
- Historic Cultural Property Inventory Forms
- List and Description of isolates, if applicable
- List and Description of Collections, if applicable

23. Other Attachments:

- Photographs and Log
  - Other Attachments
- (Describe): Google Earth Project Location Map Provided by SMA

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Michael A. Stowe, M.A., RPA

Signature 

Date 6/3/2016

Title (if not PI):

25. Reviewing Agency:  
Reviewer's Name/Date

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable):  Yes  No

26. SHPO  
Reviewer's Name/Date:

HPD Log #:

SHPO File Location:

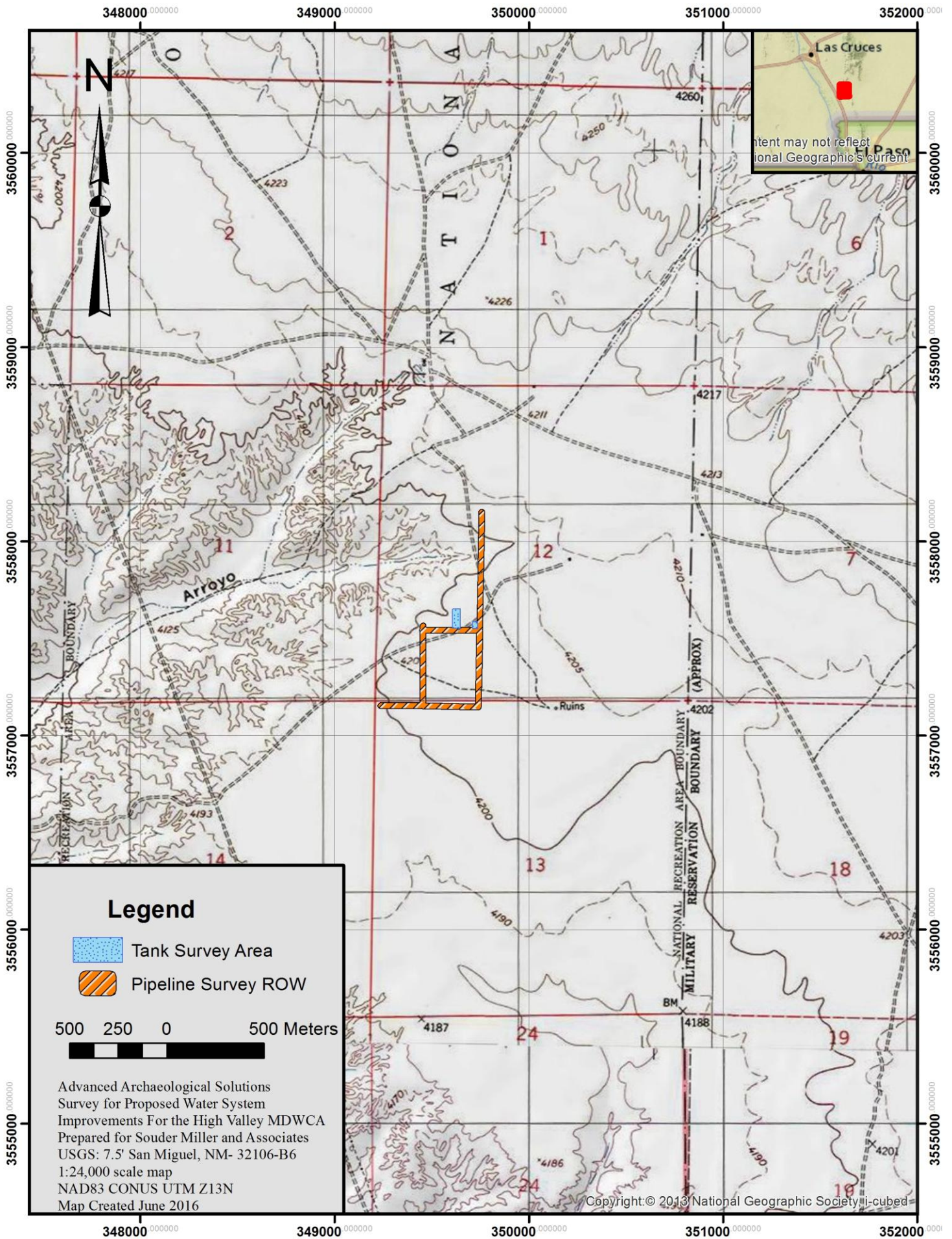
Date sent to ARMS:





## CULTURAL RESOURCE FINDINGS

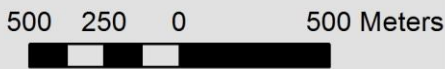
*[fill in appropriate section(s)]*

<b>1. NMCRIS Activity No.:</b> <b>135943</b>	<b>2. Lead (Sponsoring) Agency:</b> <b>United States Department of Agriculture (USDA)</b>	<b>3. Lead Agency Report No.:</b> <b>N/A</b>
<p><b>SURVEY RESULTS:</b></p> <p>Sites discovered and registered: <b>0</b> Sites discovered and NOT registered: <b>0</b> Previously recorded sites revisited <i>(site update form required)</i>: <b>0</b> Previously recorded sites not relocated <i>(site update form required)</i>: <b>0</b></p> <p><b>TOTAL SITES VISITED: 0</b></p> <p>Total isolates recorded: <b>0</b>      Non-selective isolate recording? <input type="checkbox"/> Total structures recorded <i>(new and previously recorded, including acequias)</i>: <b>0</b></p> <p><b>MANAGEMENT SUMMARY:</b></p> <p>Prior to the start of fieldwork, ADAS completed a remote Archaeological Record Management System (ARMS) query (June 1, 2016). No isolated occurrences were observed within the the survey ROW. During a records search no archaeological sites or historic buildings were noted within a half mile of the project area. The record search was then expanded to one mile which revealed two archaeological sites (LA 120446 and LA 35937). Both of these sites are well outside (More than a mile to the west and northwest of the project area) the current area of potential effect (APE) and will not be impacted by the proposed undertaking.</p> <p>Archaeological clearance Approximately 7,350 Linear Feet for Proposed Water Pipeline Improvements for the High Valley Mutual Domestic Water Consumers Association, Dona Ana County, New Mexico is recommended to proceed as currently staked. Souder Miller and Associates and Advanced Archaeological Solutions should be immediately notified if cultural resources are encountered during the construction phase of this undertaking.</p>		



**Legend**

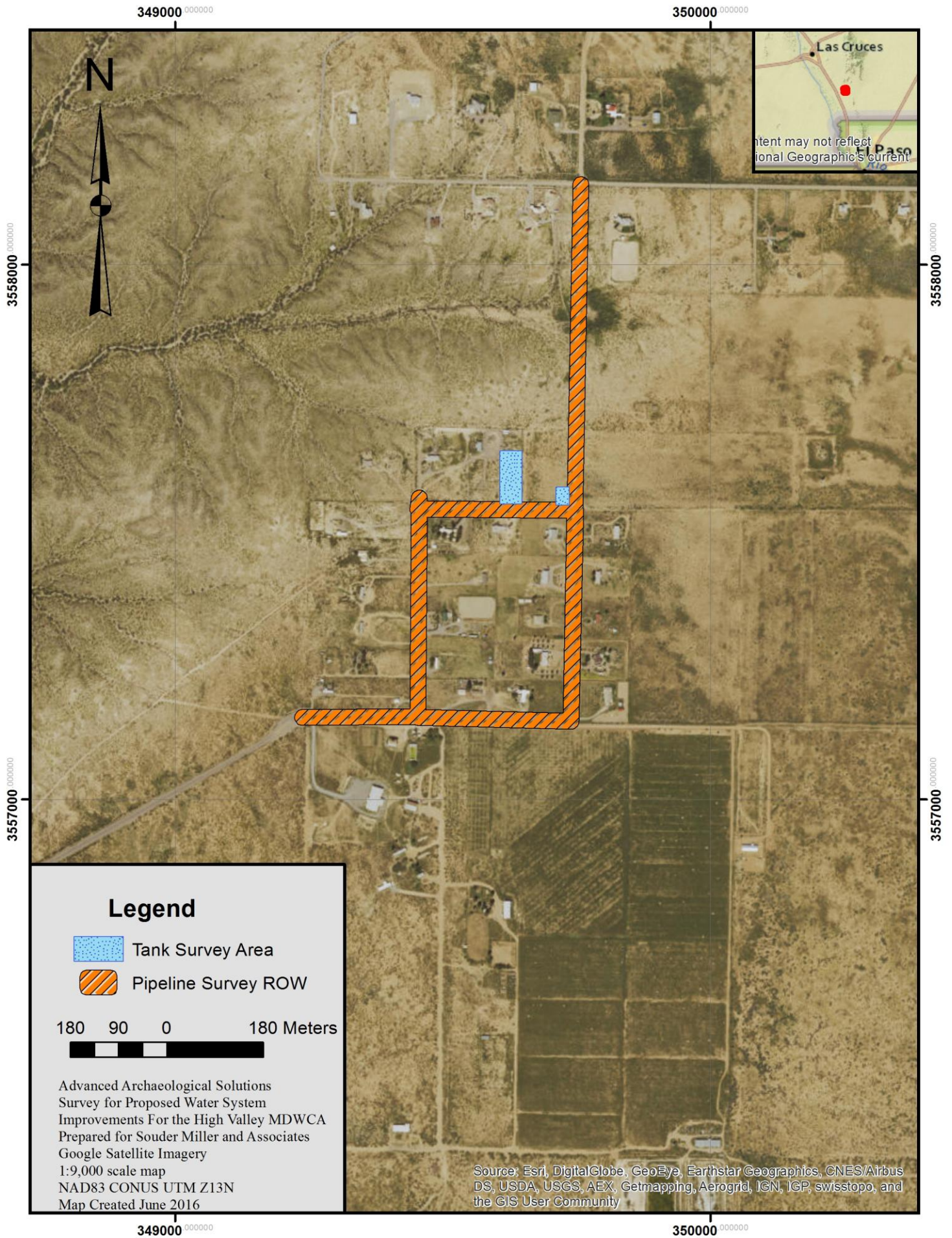
-  Tank Survey Area
-  Pipeline Survey ROW



Advanced Archaeological Solutions  
 Survey for Proposed Water System  
 Improvements For the High Valley MDWCA  
 Prepared for Souder Miller and Associates  
 USGS: 7.5' San Miguel, NM- 32106-B6  
 1:24,000 scale map  
 NAD83 CONUS UTM Z13N  
 Map Created June 2016

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Project overview of High Valley Pipeline ROW



Project overview of High Valley Pipeline ROW



Project overview of High Valley Pipeline ROW



Project overview of High Valley Water Tank Survey Parcel





Appendix E7  
New Mexico State Historic Preservation Office  
Correspondence





July 14, 2016

#6324631

Ms. Michelle Ensey  
New Mexico Office of Cultural Affairs  
407 Galisteo St #260  
Santa Fe, NM 87501  
(505) 827-4064  
(505) 827-6338 (fax)  
*Michelle.ensey@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Ensey:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well to be located in the northeast section of the High Valley service area. All of the construction would take place within the existing tank yard property owned by the Association. None of this work would be completed in depressional areas and the extent of the work is shown on the attached Figure 2.
- Replacement of the existing booster station, rehabilitation of the existing water storage tank and rehabilitation of the existing water supply well will take place within the existing disturbed Association property shown on the attached Figure 2. None of this work would be completed in depressional areas.
- Installation of new water distribution and service lines to replace the aged and deteriorated system will be routed in a loop around the entire community. This work will be conducted within the existing public rights-of-way, developed roadway and private property. None of this work would be completed in depressional areas and the extent of the work is shown on the attached Figure 2.

SMA is requesting clearance for the project areas as defined above. Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. The center of the project area is located at approximately 32° 08' 40" N latitude and 106° 35' 38" W longitude. Please

*Ms. Michelle Ensey*

*July 14, 2016*

*Page 2*

refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites. A cultural resource survey has been completed for all areas of disturbance for the contemplated projects and is attached for your review.

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

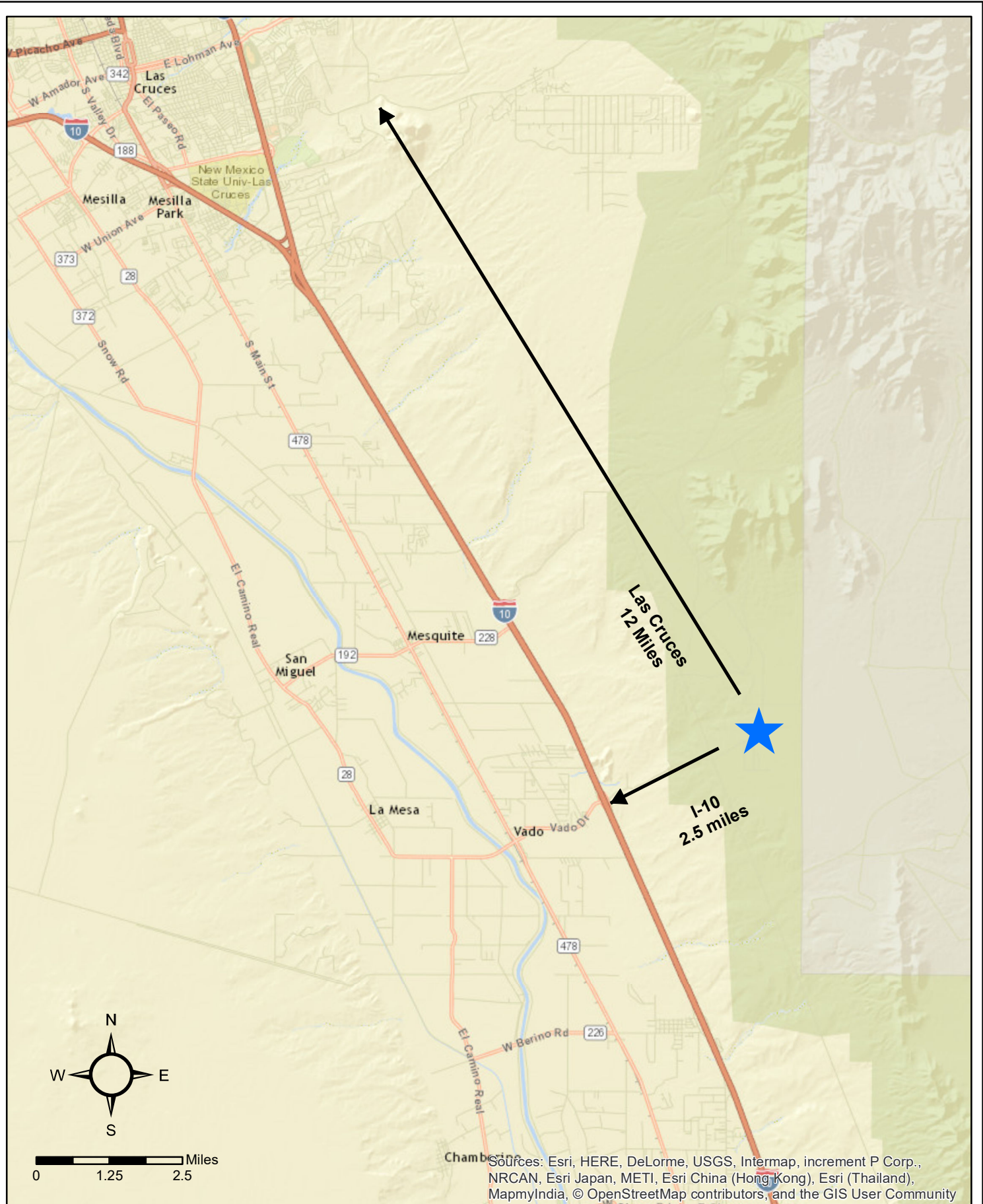
Sincerely,

MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES

A handwritten signature in cursive script that reads "Marty Howell". The signature is written in black ink and is positioned above the typed name and contact information.

Marty Howell  
Senior Engineer  
*marty.howell@soudermiller.com*  
Extension: 1326





Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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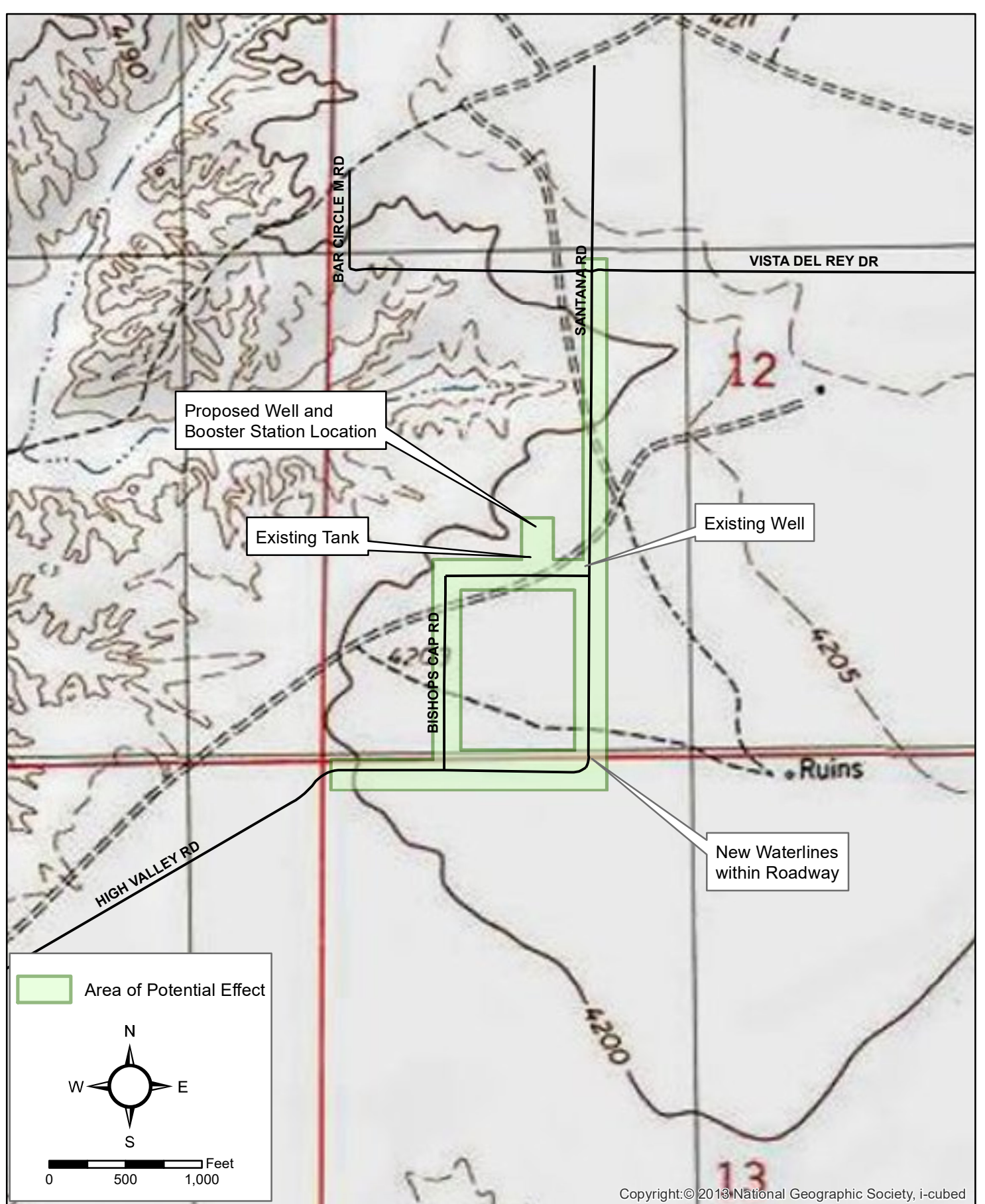
Date Saved:  
6/30/2016



401 North Seventeenth Street, Suite 4  
Las Cruces, New Mexico 88005-8131  
(575) 647-0799 / 647-0680 (Fax)  
www.soudermiller.com  
Serving the Southwest & Rocky Mountains

Vicinity Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 1



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Date Saved:  
7/13/2016

401 North Seventeenth Street, Suite 4  
Las Cruces, New Mexico 88005-8131  
(575) 647-0799 / 647-0680 (Fax)  
www.soudermiller.com  
Serving the Southwest & Rocky Mountains

US Topographic Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 2



## NMCRI INVESTIGATION ABSTRACT FORM (NIAF)

<b>1. NMCRI Activity No.:</b> 135943	<b>2a. Lead (Sponsoring) Agency:</b> United States Department of Agriculture (USDA)	<b>2b. Other Permitting Agency(ies):</b> N/A	<b>3. Lead Agency Report No.:</b> N/A									
<b>4. Title of Report:</b>  Cultural Resource Survey for Souder, Miller and Associates of Approximately 7,350 Linear Feet for Proposed Water Pipeline Improvements for the High Valley Mutual Domestic Water Consumers Association, Dona Ana County, New Mexico  <b>Author(s)</b> Michael Stowe, M.A., RPA		<b>5. Type of Report</b> <input checked="" type="checkbox"/> Negative <input type="checkbox"/> Positive										
<b>6. Investigation Type</b> <input type="checkbox"/> Research Design <input checked="" type="checkbox"/> Survey/Inventory <input type="checkbox"/> Test Excavation <input type="checkbox"/> Excavation <input type="checkbox"/> Collections/Non-Field Study <input type="checkbox"/> Overview/Lit Review <input type="checkbox"/> Monitoring <input type="checkbox"/> Ethnographic study <input type="checkbox"/> Site specific visit <input type="checkbox"/> Other												
<b>7. Description of Undertaking (what does the project entail?):</b>  On June 2nd, 2016 Advanced Archaeological Solutions (ADAS) conducted an archaeological survey (State Survey Permit #NM-16-172/ NMCRI# 135943) of approximately 7,350 Linear Feet for proposed water pipeline improvements along portions of High Valley Road, Bishops Cap Road, Arapaho Road and Santana Road within the High Valley subdivision within Dona Ana County, New Mexico. In addition, a 150' by 300' and a 50' by 100' water tank location was also surveyed located just north of Arapaho Road. The total survey acreage for the pipeline ROW and tank site is roughly 18.70 acres and the entire extent of the survey ROW is comprised of currently paved, improved dirt and developed roadways.  The High Valley Mutual Domestic Water Consumers Association (MDWCA) has sought funding from the Colonias Infrastructure Fund grant administered by NMFA. Additional funding will be sought from Colonias as well as the USDA. The project utilizes property owned and administered by Private land owners and is located within Dona Ana County on the USGS 7.5' San Miguel, NM topographic map.		<b>8. Dates of Investigation: (from: 6/2/2016 to: 6/2/2016)</b>  <b>9. Report Date: June 3, 2016</b>										
<b>10. Performing Agency/Consultant:</b> Michael Stowe, M.A., RPA <b>Principal Investigator:</b> Michael Stowe, M.A., RPA <b>Field Supervisor:</b> Michael Stowe, M.A., RPA <b>Field Personnel Names:</b> Michael Stowe, M.A., RPA, Nate Montalvo		<b>11. Performing Agency/Consultant Report No.:</b> AAS 16-398										
<b>13. Client/Customer (project proponent):</b> <i>Souder Miller and Associates</i> <b>Contact:</b> Alfredo Holguin <b>Address:</b> 401 North Seventeenth Street, Suite 4 Las Cruces, New Mexico 88005 <b>Phone:</b> (575) 647-0799		<b>12. Applicable Cultural Resource Permit No(s):</b> 216-2920-07B, NM 16-172										
<b>14. Client/Customer Project No.:</b> N/A		<b>15. Land Ownership Status (<u>Must</u> be indicated on project map):</b>										
<table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="text-align: left;">Land Owner</th> <th style="text-align: center;">Acres Surveyed</th> <th style="text-align: center;">Acres in APE</th> </tr> </thead> <tbody> <tr> <td>Private</td> <td style="text-align: center;">18.70</td> <td style="text-align: center;">18.70</td> </tr> <tr> <td style="text-align: right;"><b>TOTALS</b></td> <td style="text-align: center;"><b>18.70</b></td> <td style="text-align: center;"><b>18.70</b></td> </tr> </tbody> </table>		Land Owner	Acres Surveyed	Acres in APE	Private	18.70	18.70	<b>TOTALS</b>	<b>18.70</b>	<b>18.70</b>		
Land Owner	Acres Surveyed	Acres in APE										
Private	18.70	18.70										
<b>TOTALS</b>	<b>18.70</b>	<b>18.70</b>										



16 Records Search(es):

Date(s) of ARMS File Review 6/1/2016	Name of Reviewer(s) Michael Stowe	
Date(s) of NR/SR File Review 6/1/2016	Name of Reviewer(s) Michael Stowe	
Date(s) of Other Agency File Review	Name of Reviewer(s)	Agency

17. Survey Data:

- a. Source Graphics  NAD 27  NAD 83  
 USGS 7.5' (1:24,000) topo map  Other topo map, Scale:  
 GPS Unit Accuracy  <1.0m  1-10m  10-100m  >100m

b. USGS 7.5' Topographic Map Name USGS Quad Code

San Miguel, NM	32106-B6
Bishop Cap, NM	32106-B5

c. County(ies): Dona Ana County

17. Survey Data (continued):

d. Nearest City or Town: Vado, NM

e. Legal Description:

Township (N/S)	Range (E/W)	Section	1/4	1/4	1/4
25 South	3 East	12	Central Southern Portion		
25 South	3 East	13	NW, NW		

Projected legal description? Yes  , No  Unplatted

f. Other Description (e.g. well pad footages, mile markers, plats, land grant name, etc.): The area of potential effect (APE) is defined as approximately 7,350 Linear Feet for proposed water pipeline improvements along portions of High Valley Road, Bishops Cap Road, Arapaho Road and Santana Road within the High Valley subdivision within Dona Ana County, New Mexico. In addition, a 150' by 300' and a 50' by 100' water tank location was also surveyed located just north of Arapaho Road. The total survey acreage for the pipeline ROW and tank site is roughly 18.70 acres and the entire extent of the survey ROW is comprised of currently paved, improved dirt and developed roadways. See attached project map for exact location.

18. Survey Field Methods:

- Intensity:  100% coverage  <100% coverage  
 Configuration:  block survey units  linear survey units (l x w): **Approx. 7,350 Linear Feet**  other survey units (specify):  
 Scope:  non-selective (all sites recorded)  selective/thematic (selected sites recorded)  
 Coverage Method:  systematic pedestrian coverage  other method (describe)  
 Survey Interval (m): 15 meters (45 feet) Crew Size: 1 Fieldwork Dates: 6/2/2016 through 6/2/2016  
 Survey Person Hours: 4 Recording Person Hours: 0 Total Hours: 4

Additional Narrative:

The project area was delineated by coordinates marked on maps provided by the client, *Souder Miller and Associates*. Archaeologists used known topographic landmarks and associated project coordinates in conjunction with GPS units to locate accurate project R-O-W boundaries. The survey crew walked multiple, parallel, non-overlapping transects spaced at approximately 50 ft (15 m) intervals, in accordance with Federal and State guidelines. All cultural resources encountered were documented these resources were categorized as I.O.s (Isolated Occurrences) or archaeological sites.

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20.a. Percent Ground Visibility: 75-99% b. Condition of Survey Area (grazed, bladed, undisturbed, etc.):

Entire survey area has been disturbed and impacted by surface erosion, namely sheetwashing throughout the project area. Additionally, all of the project pipeline ROW lands have been significantly impacted by various modern activities (i.e. blading, road maintenance, previous development of roadways).

21. CULTURAL RESOURCE FINDINGS  Yes, See Page 3  No, Discuss Why:

Sterile of cultural manifestations. The entire ROW has been significantly impacted by various modern activities (i.e. blading, road maintenance, previous development of roadways).

22. Required Attachments (check all appropriate boxes):

- USGS 7.5 Topographic Map with sites, isolates, and survey area clearly drawn
- Copy of NMCRIS Mapserver Map Check
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- Photographs and Log
  - Other Attachments
- (Describe): Google Earth Project Location Map Provided by SMA

24. I certify the information provided above is correct and accurate and meets all applicable agency standards.

Principal Investigator/Responsible Archaeologist: Michael A. Stowe, M.A., RPA

Signature 

Date 6/3/2016

Title (if not PI):

25. Reviewing Agency:  
Reviewer's Name/Date

Accepted ( ) Rejected ( )

Tribal Consultation (if applicable):  Yes  No

26. SHPO  
Reviewer's Name/Date:

HPD Log #:

SHPO File Location:

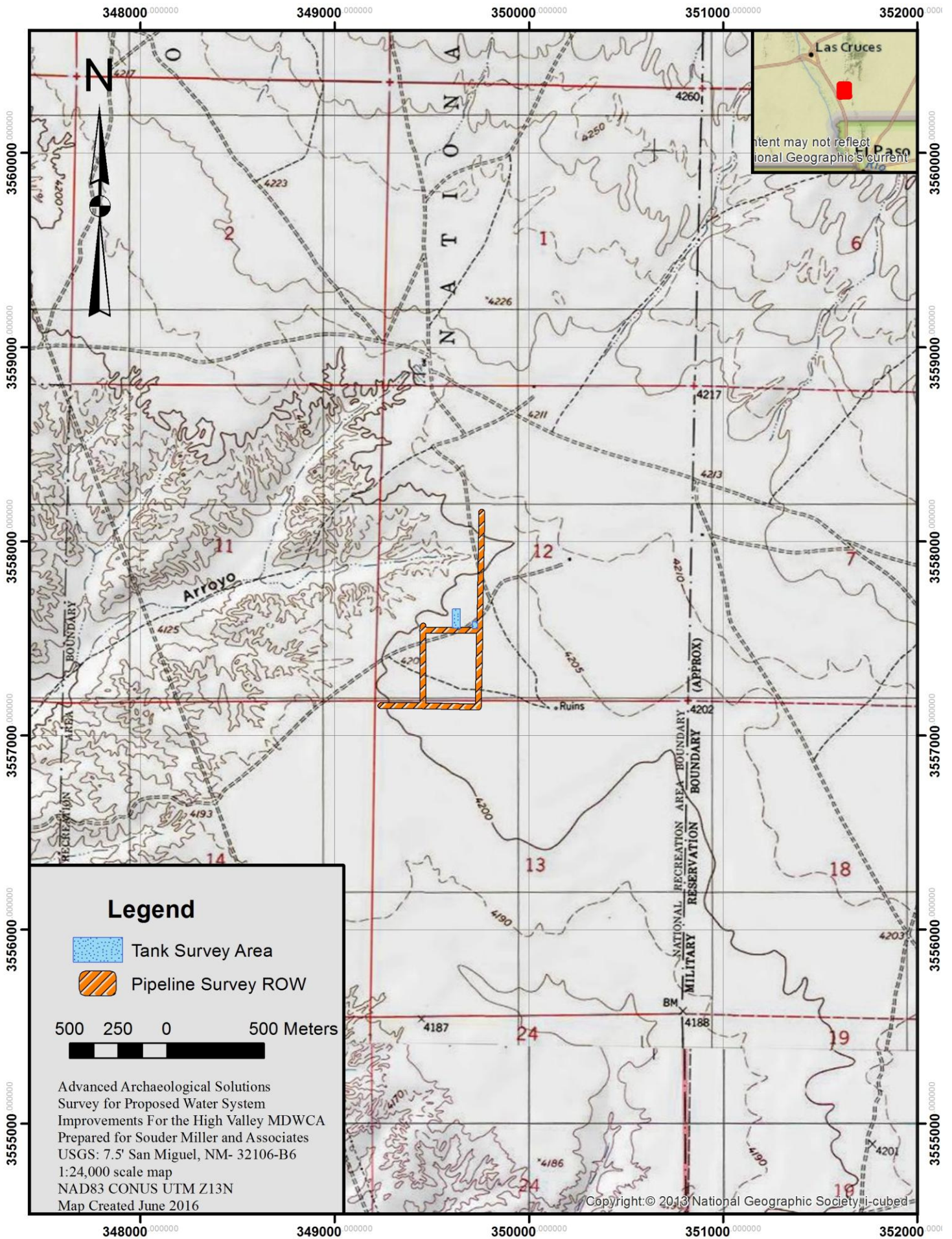
Date sent to ARMS:

## CULTURAL RESOURCE FINDINGS



*[fill in appropriate section(s)]*

<b>1. NMCRIS Activity No.:</b> <b>135943</b>	<b>2. Lead (Sponsoring) Agency:</b> <b>United States Department of Agriculture (USDA)</b>	<b>3. Lead Agency Report No.:</b> <b>N/A</b>
<p><b>SURVEY RESULTS:</b></p> <p>Sites discovered and registered: <b>0</b> Sites discovered and NOT registered: <b>0</b> Previously recorded sites revisited <i>(site update form required)</i>: <b>0</b> Previously recorded sites not relocated <i>(site update form required)</i>: <b>0</b></p> <p><b>TOTAL SITES VISITED: 0</b></p> <p>Total isolates recorded: <b>0</b>      Non-selective isolate recording? <input type="checkbox"/> Total structures recorded <i>(new and previously recorded, including acequias)</i>: <b>0</b></p> <p><b>MANAGEMENT SUMMARY:</b></p> <p>Prior to the start of fieldwork, ADAS completed a remote Archaeological Record Management System (ARMS) query (June 1, 2016). No isolated occurrences were observed within the the survey ROW. During a records search no archaeological sites or historic buildings were noted within a half mile of the project area. The record search was then expanded to one mile which revealed two archaeological sites (LA 120446 and LA 35937). Both of these sites are well outside (More than a mile to the west and northwest of the project area) the current area of potential effect (APE) and will not be impacted by the proposed undertaking.</p> <p>Archaeological clearance Approximately 7,350 Linear Feet for Proposed Water Pipeline Improvements for the High Valley Mutual Domestic Water Consumers Association, Dona Ana County, New Mexico is recommended to proceed as currently staked. Souder Miller and Associates and Advanced Archaeological Solutions should be immediately notified if cultural resources are encountered during the construction phase of this undertaking.</p>		





**Legend**

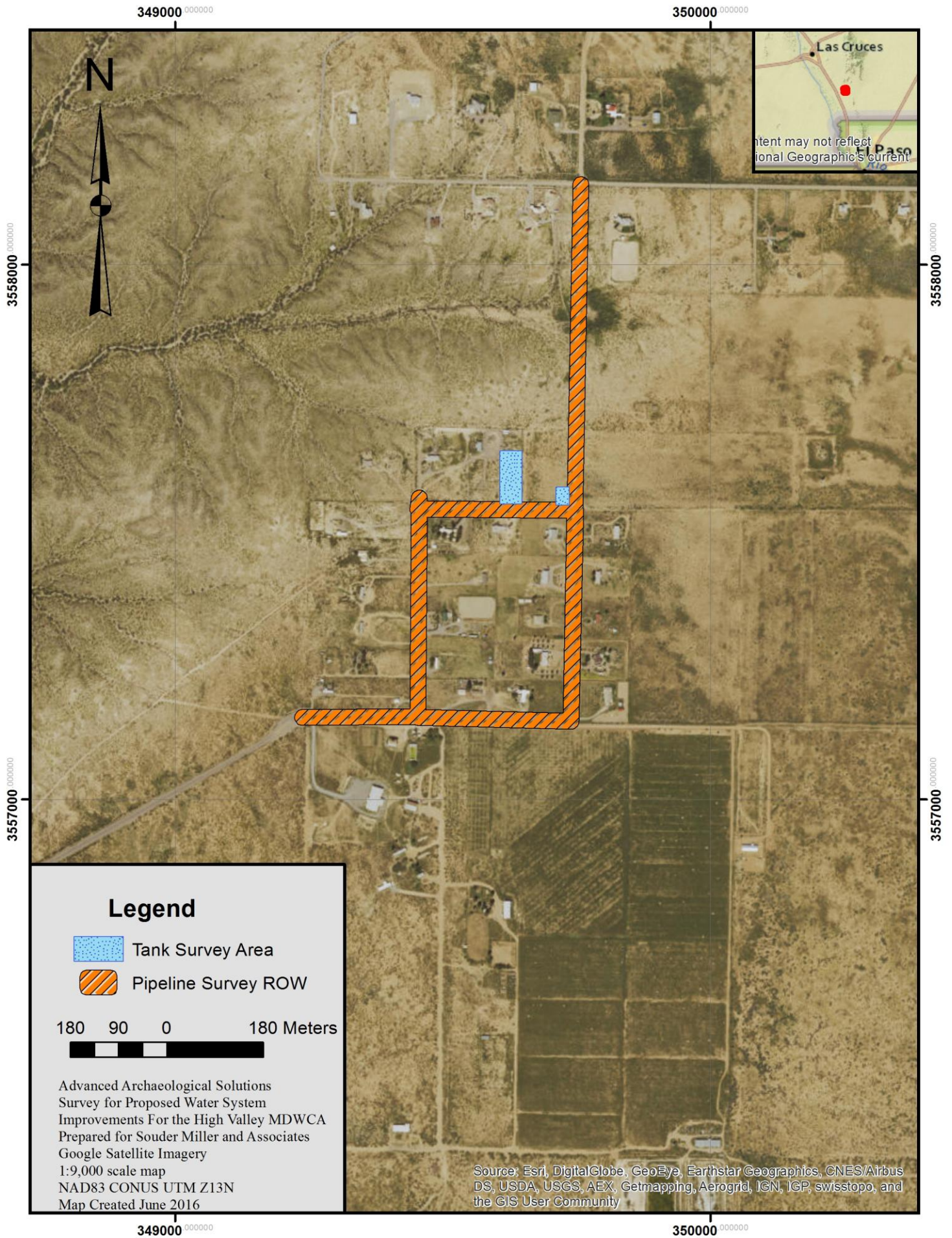
-  Tank Survey Area
-  Pipeline Survey ROW





Advanced Archaeological Solutions  
 Survey for Proposed Water System  
 Improvements For the High Valley MDWCA  
 Prepared for Souder Miller and Associates  
 USGS: 7.5' San Miguel, NM- 32106-B6  
 1:24,000 scale map  
 NAD83 CONUS UTM Z13N  
 Map Created June 2016

Copyright © 2013 National Geographic Society





**Legend**

-  Tank Survey Area
-  Pipeline Survey ROW



Advanced Archaeological Solutions  
 Survey for Proposed Water System  
 Improvements For the High Valley MDWCA  
 Prepared for Souder Miller and Associates  
 Google Satellite Imagery  
 1:9,000 scale map  
 NAD83 CONUS UTM Z13N  
 Map Created June 2016

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus  
 DS, USDA, USGS, AEX, Getmapping, Aerogrid, IGN, IGP, swisstopo, and  
 the GIS User Community





Project overview of High Valley Pipeline ROW



Project overview of High Valley Pipeline ROW





Project overview of High Valley Pipeline ROW



Project overview of High Valley Water Tank Survey Parcel





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104112

AUG 11 2016

AW

#6324631

July 14, 2016

HISTORIC PRESERVATION DIVISION

RECEIVED

AUG 17 2016

Ms. Michelle Ensey  
New Mexico Office of Cultural Affairs  
407 Galisteo St #260  
Santa Fe, NM 87501  
(505) 827-4064  
(505) 827-6338 (fax)  
Michelle.ensey@state.nm.us

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Ensey:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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SMA is requesting clearance for the project areas as defined above. Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. The center of the project area is located at approximately 32° 08' 40" N latitude and 106° 35' 38" W longitude. Please



*Ms. Michelle Ensey*  
*July 14, 2016*  
*Page 2*

refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites. A cultural resource survey has been completed for all areas of disturbance for the contemplated projects and is attached for your review.

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES



Marty Howell  
Senior Engineer  
*marty.howell@soudermiller.com*  
Extension: 1326

**No Historic Properties Affected**

*S. Mikhefeld* *08/12/2016*  
for NM State Historic Preservation Office

Appendix E8  
Native American Correspondence





July 14, 2016

#6324631

Mr. Jimmy W. Arterberry  
Historic Preservation Officer  
Comanche Nation  
#6 SW 'D' Avenue, Suite A  
Lawton, Oklahoma 73507  
(580) 595-9618 / (580) 595-9960  
(580) 595-9733 (fax)  
*historicpreservation@comanchenation.com*  
*ec: jimmya@comanchenation.com*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Arterberry:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Mr. Jimmy Arterberry*

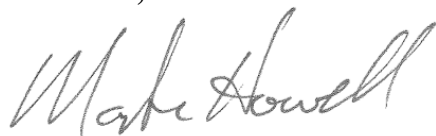
*July 14, 2016*

*Page 2*

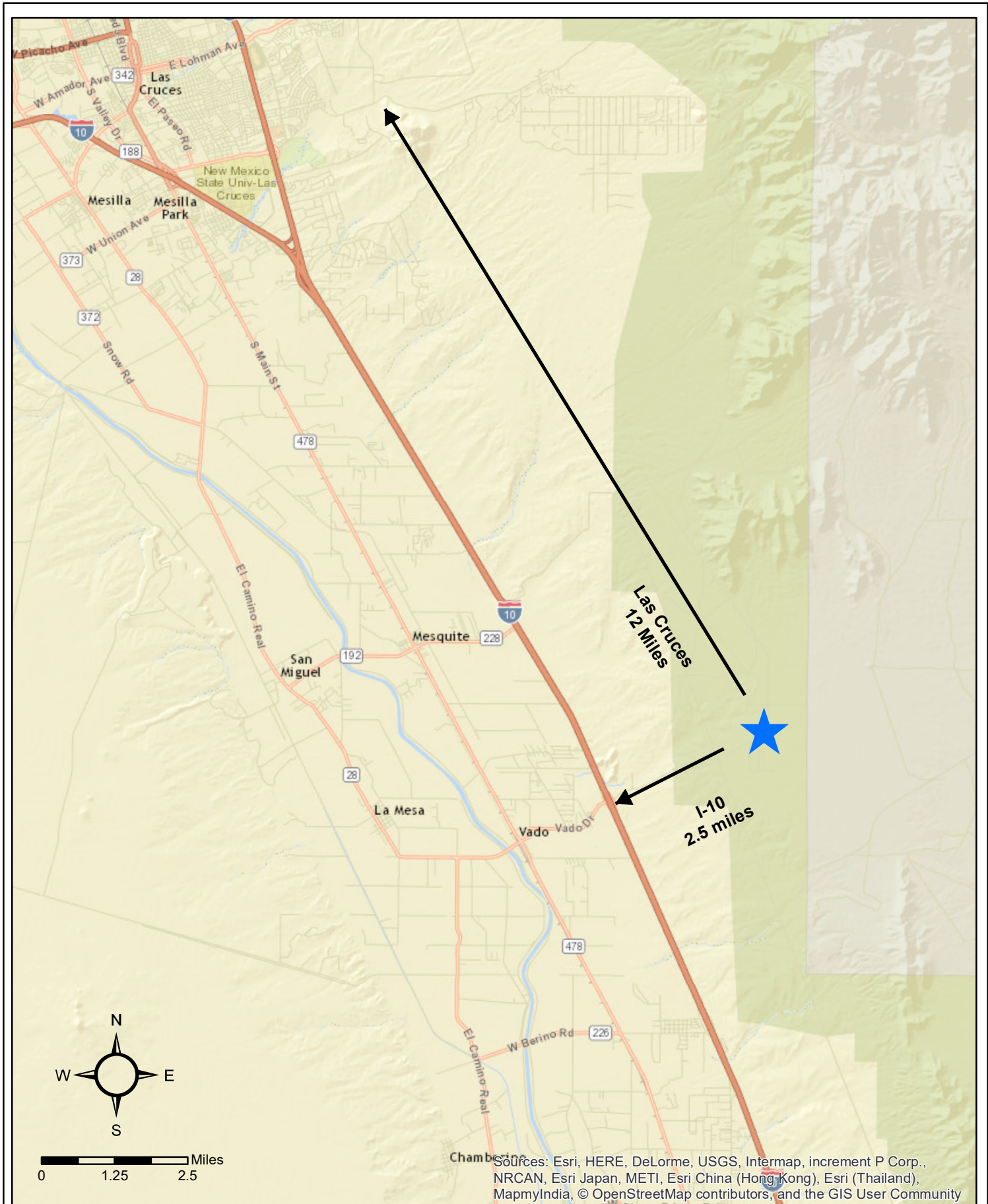
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326



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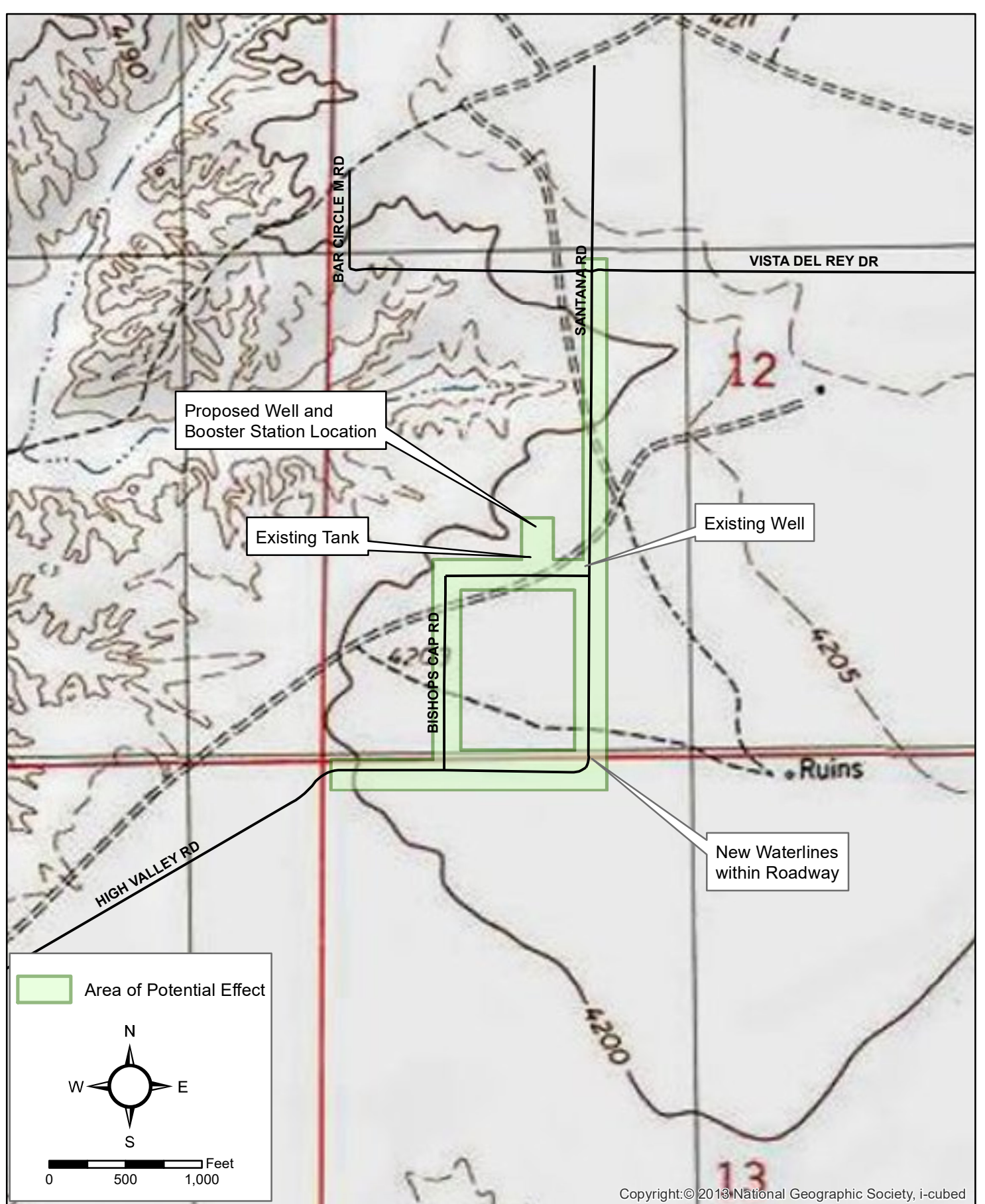
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Vicinity Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 1



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Figure 2





Souder, Miller & Associates  
Attn: Mr. Marty Howell  
401 North Seventeenth Street, Suite 4  
New Mexico 88005-8131

August 5, 2016

**Re: Request for Information Concerning Water System Improvements for the  
High Valley Mutual Domestic Water Consumers Association**

Dear Mr. Howell:

In response to your request, the above reference project has been reviewed by staff of this office to identify areas that may potentially contain prehistoric or historic archeological materials. The location of your project has been cross referenced with the Comanche Nation site files, where an indication of “*No Properties*” have been identified. (IAW 36 CFR 800.4(d)(1)).

Please contact this office at (580) 595-9960/9618 if you require additional information on this project.

This review is performed in order to identify and preserve the Comanche Nation and State cultural heritage, in conjunction with the State Historic Preservation Office.

Regards

Comanche Nation Historic Preservation Office  
Theodore E. Villicana ,Technician  
#6 SW “D” Avenue , Suite C  
Lawton, OK. 73502



July 14, 2016

#6324631

The Honorable Jeff Haozous  
Chairman Fort Sill Apache Tribe  
43187 US Hwy 281  
Apache, OK 73006  
*Phone: (580) 588-2298*  
*Fax: (580) 588-3133*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Honorable Mr. Haozous:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Honorable Jeff Haozous*

*July 14, 2016*

*Page 2*

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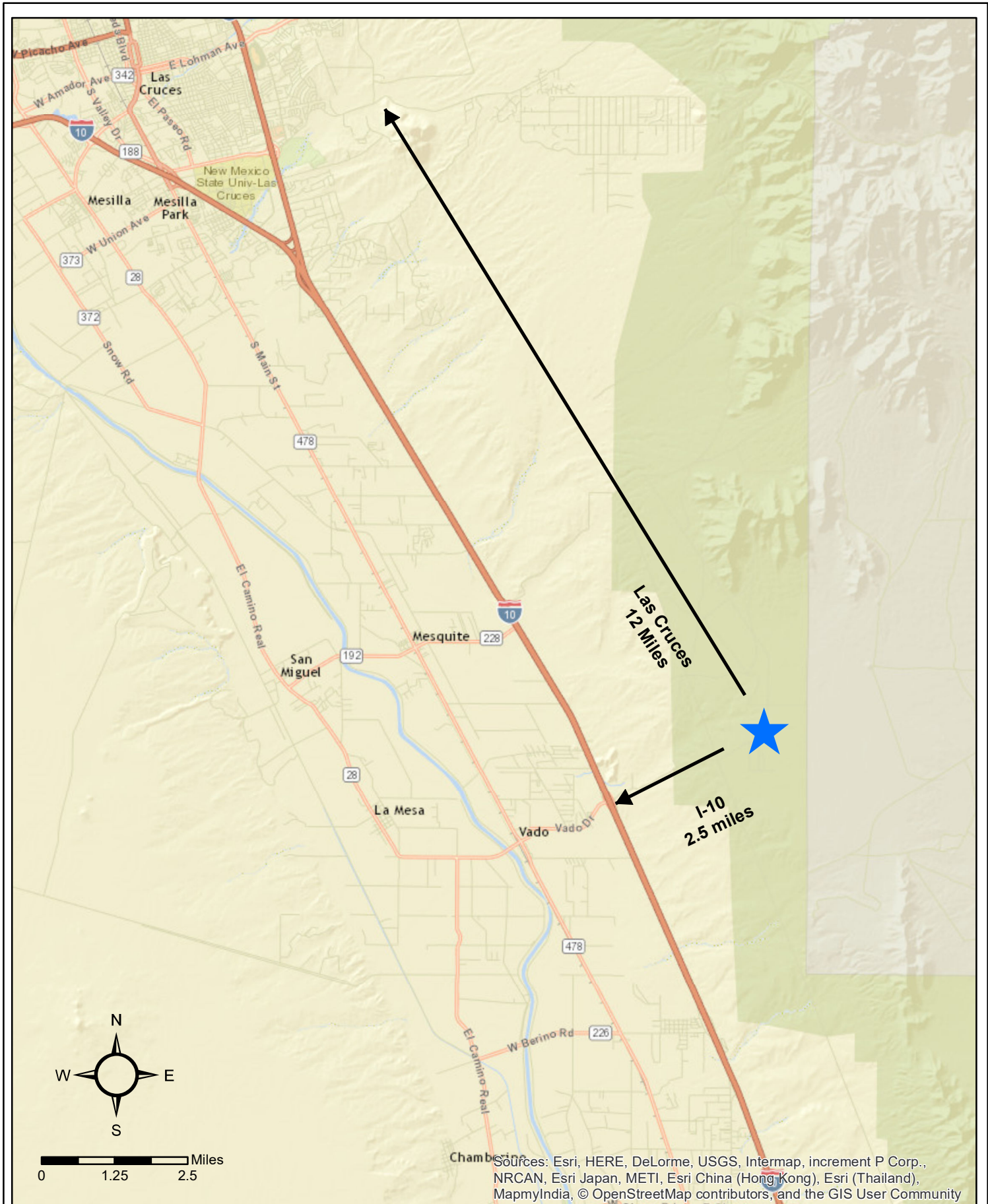
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**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

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Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326





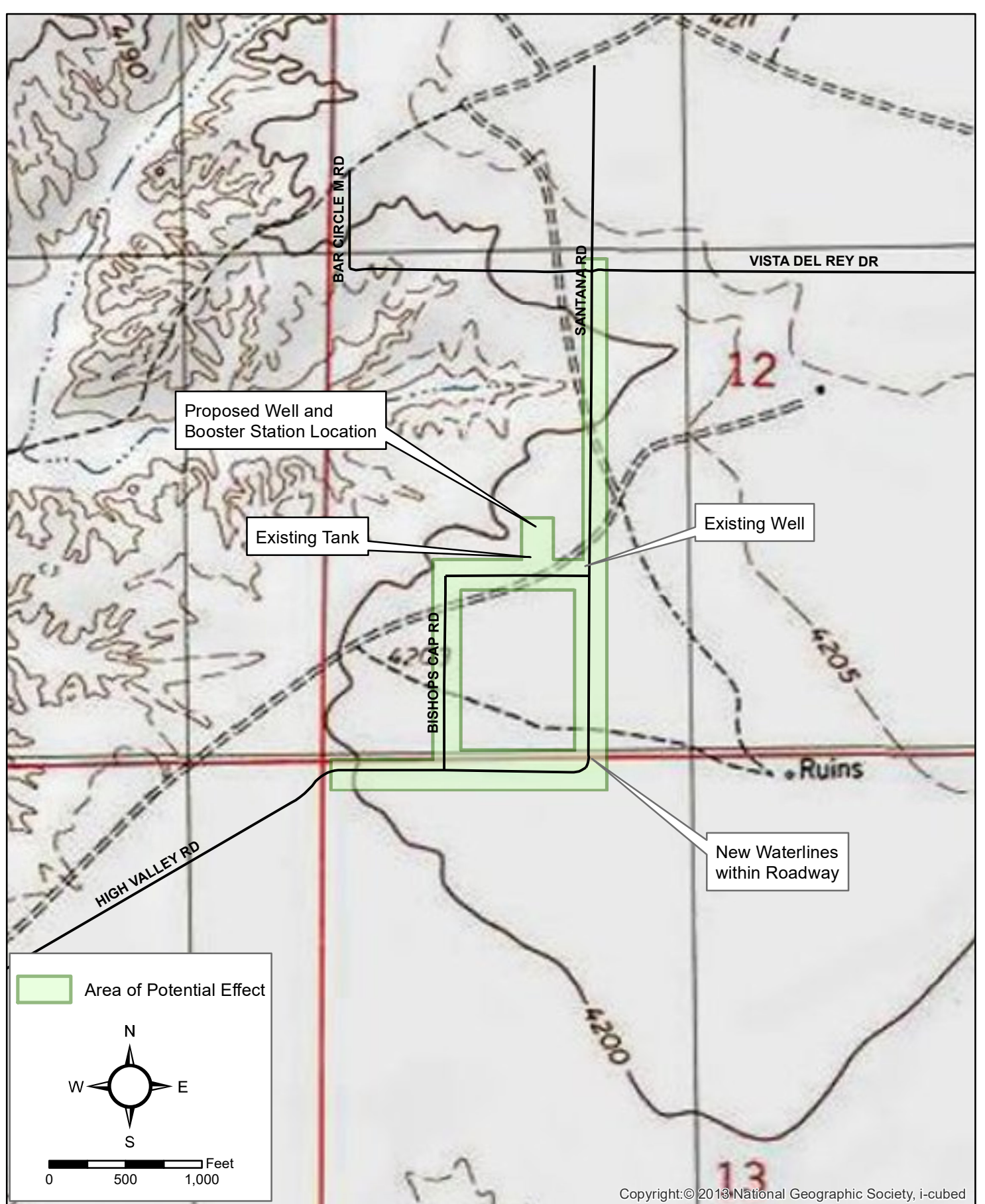
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Figure 1



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Figure 2





July 14, 2016

#6324631

The Honorable Amber C. Toppah  
Chairman, Kiowa Tribe of Oklahoma  
P.O. Box 369  
Carnegie, OK 73015-0369  
*Phone: (580) 654-2300*  
*Fax: (580) 654-8714*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Honorable Amber C. Toppah:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Honorable Amber C. Toppah*

*July 14, 2016*

*Page 2*

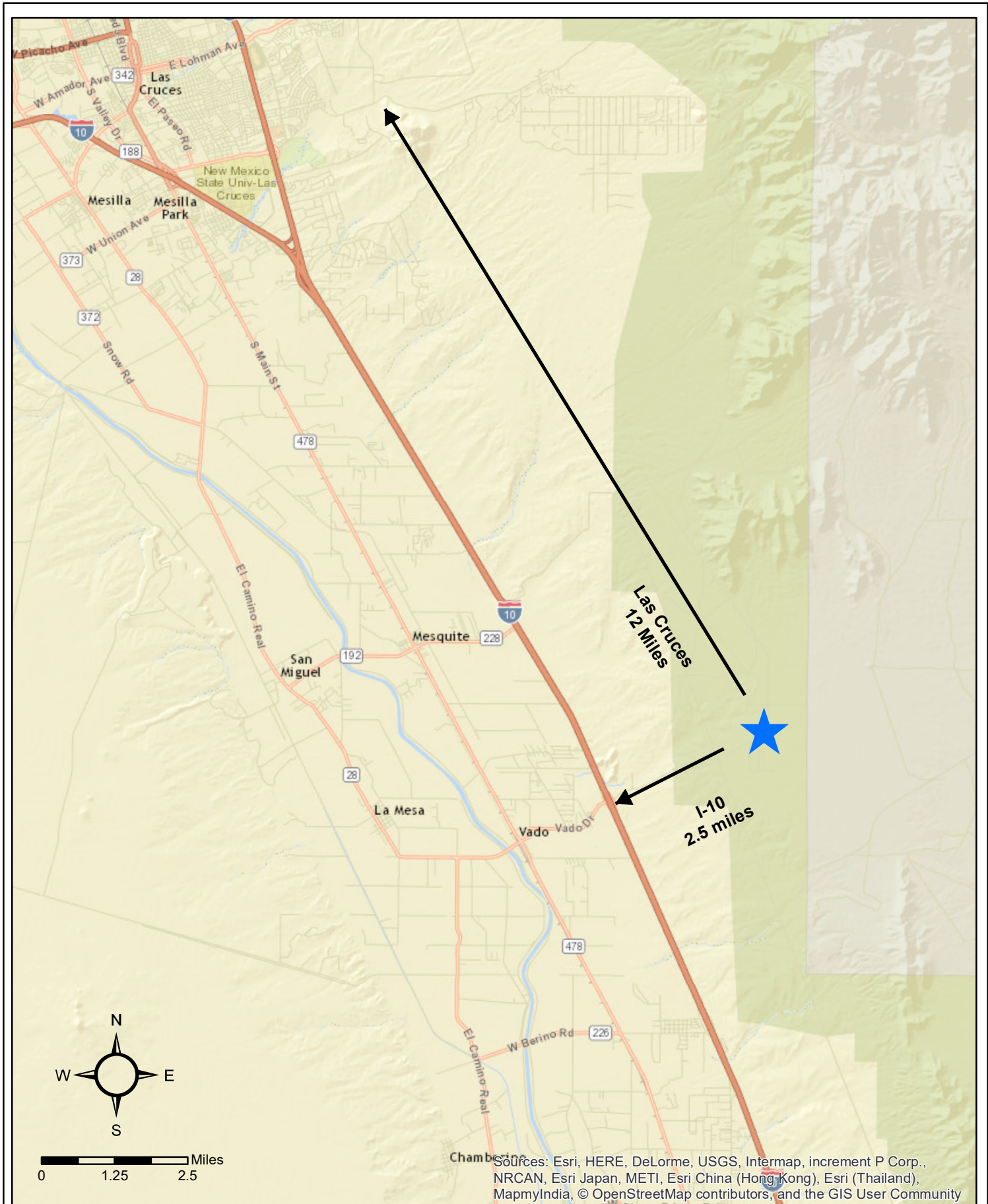
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Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

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Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension 1326



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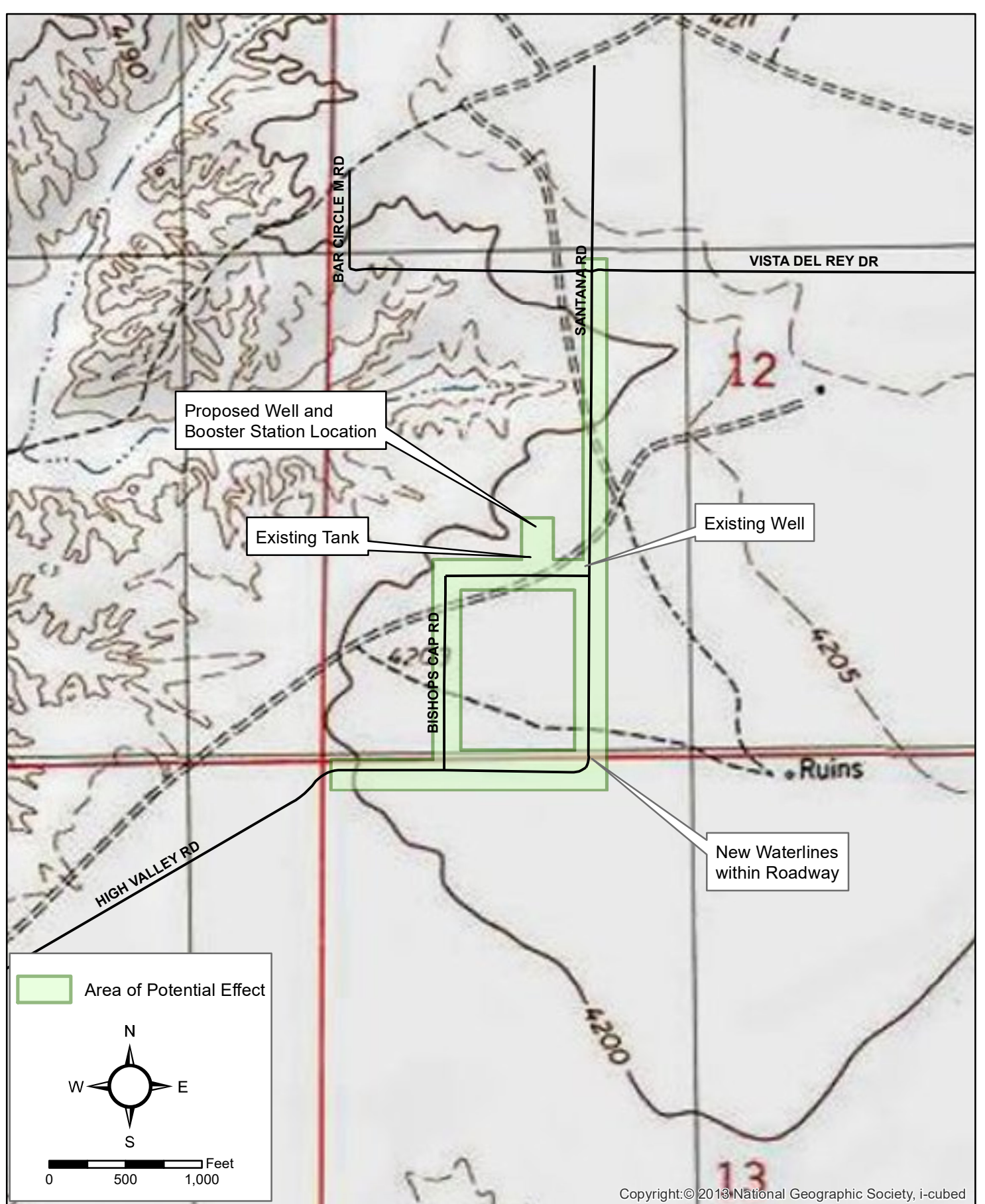
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Figure 1



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Figure 2



## **Marty Howell**

---

**From:** Ivy Smith <Ivy@tribaladmins-services.org>  
**Sent:** Monday, August 08, 2016 5:26 PM  
**To:** Marty Howell  
**Cc:** Kellie J. Poolaw  
**Subject:** High Valley MDWCA project  
**Attachments:** SouderMiller.HighValley.DonaAnaCo.NM.NAE.pdf

Good Evening,

Attached you will find the response letter from the Kiowa Tribe regarding the indicated project.

If there are questions or comments please contact Kellie Poolaw, Acting THPO for the Kiowa Tribe:  
Kellie@tribaladmins-services.org

Thank You,  
Ivy Smith  
Tribal Admin Services



July 14, 2016

#6324631

President Danny Breuninger  
P.O. Box 227  
Mescalero, NM 88340  
*Phone: (575) 464-4494*  
*Fax: (580) 464-9220*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

President Breuninger:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Mr. Danny Breuninger*

*July 14, 2016*

*Page 2*

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Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

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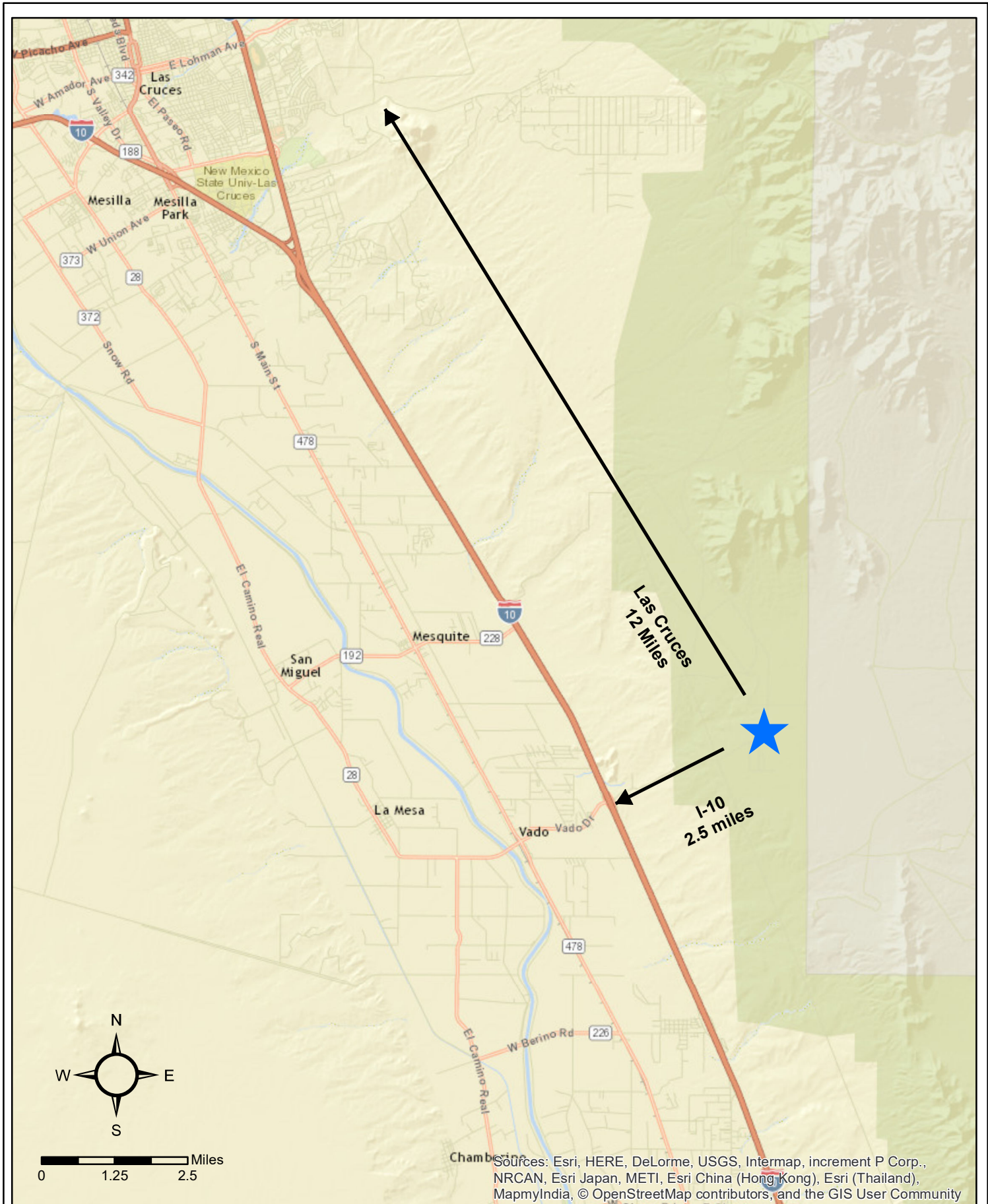
Marty Howell

Senior Engineer II

*marty.howell@soudermiller.com*

*Extension: 1326*





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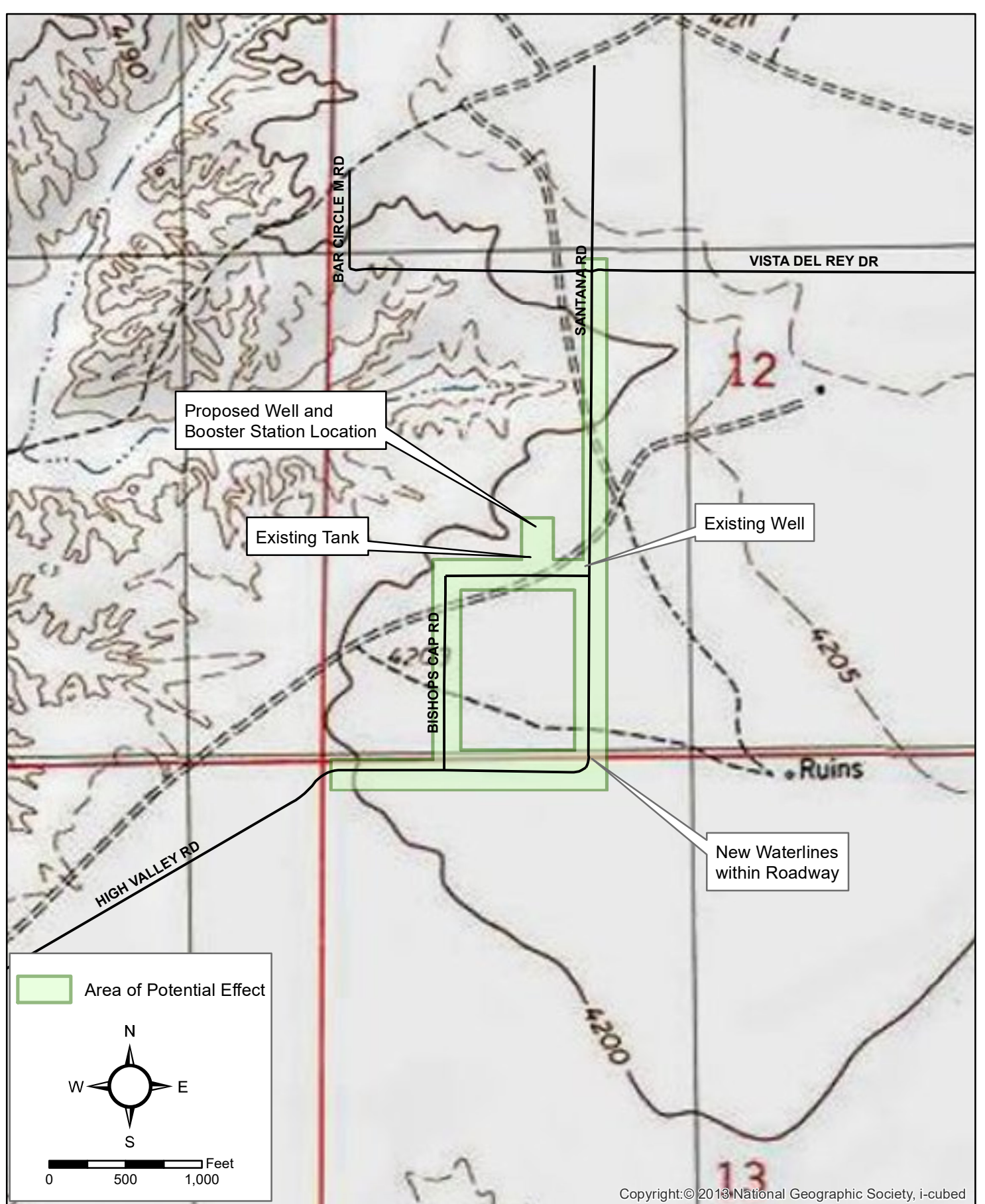
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Figure 1



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Figure 2





July 14, 2016

#6324631

Ms. Holly Houghten  
P.O. Box 227  
Mescalero, NM 88340  
*Phone: (575) 464-3005*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION OF DOÑA ANA COUNTY, NEW MEXICO**

Ms. Houghten:

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*Ms. Holly Houghten*

*July 14, 2016*

*Page 2*

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Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
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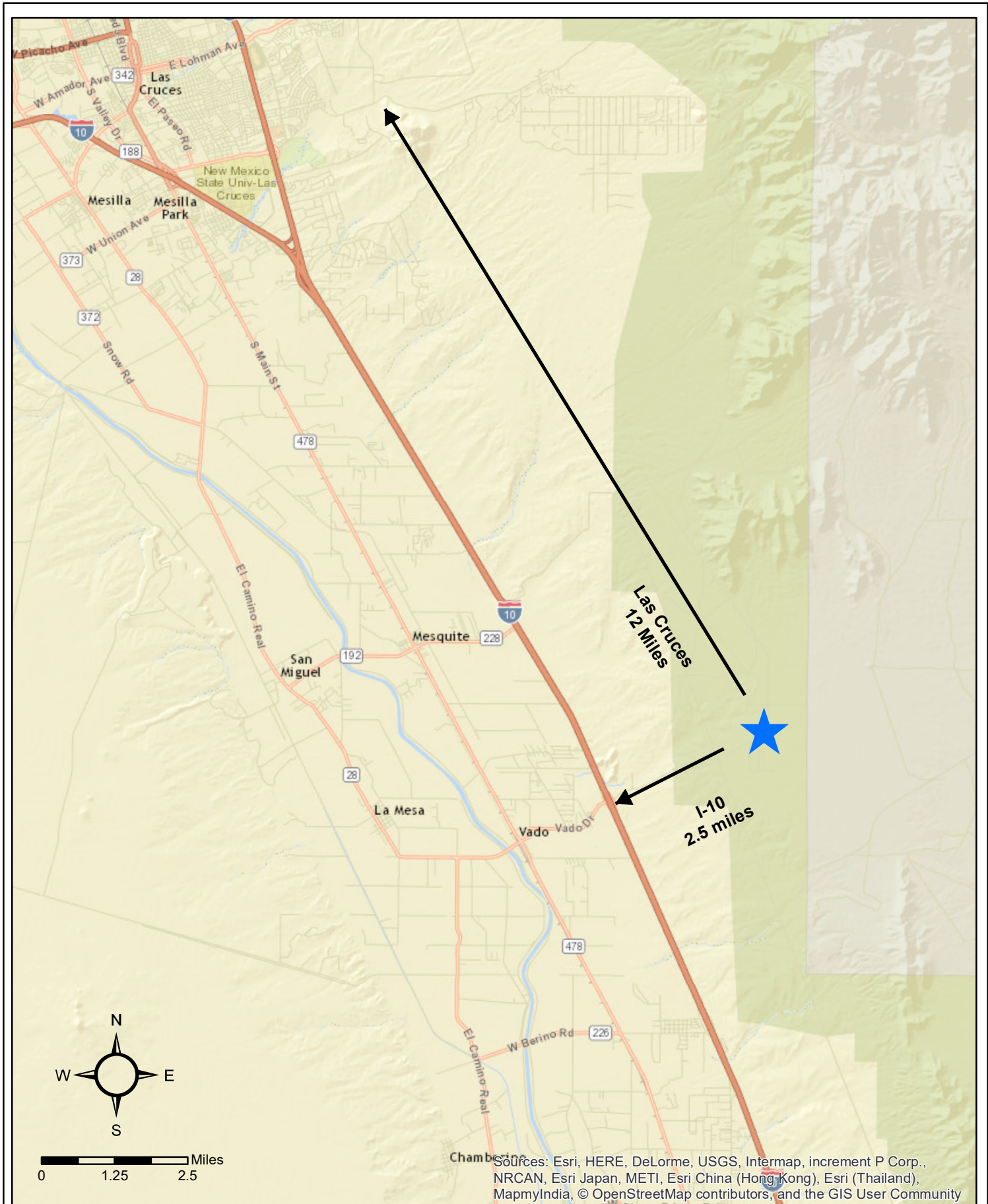
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Marty Howell

Senior Engineer II

*marty.howell@soudermiller.com*

*Extension: 1326*



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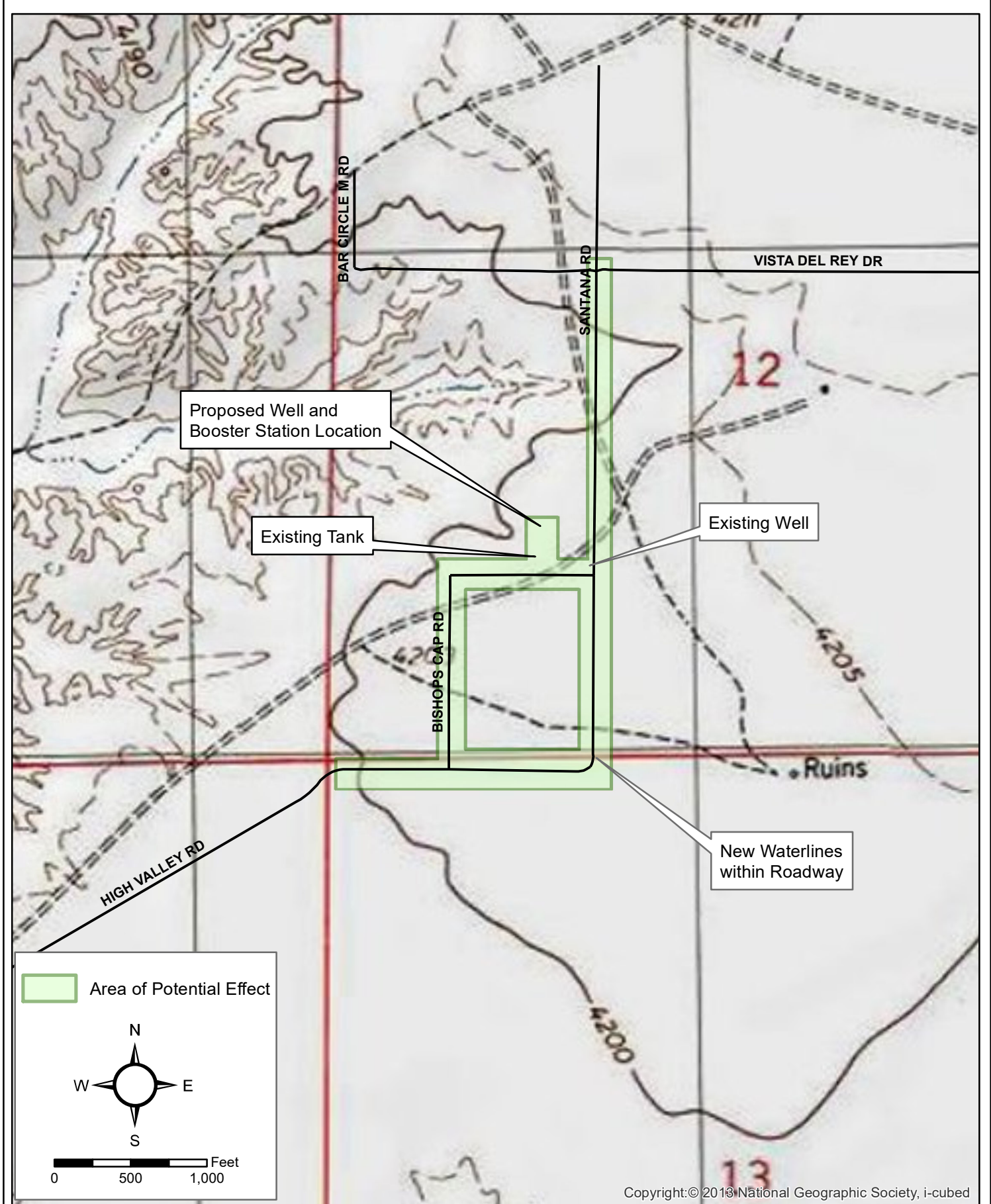
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Figure 1



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Figure 2





July 14, 2016

#6324631

President Ben Shelly  
P.O. Box 9000  
Window Rock, AZ 86515  
*Phone: (928) 871-6352/6357*  
*Fax: (928) 871-4025/7807*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION OF DOÑA ANA COUNTY, NEW MEXICO**

President Shelly:

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*President Ben Shelley*

*July 14, 2016*

*Page 2*

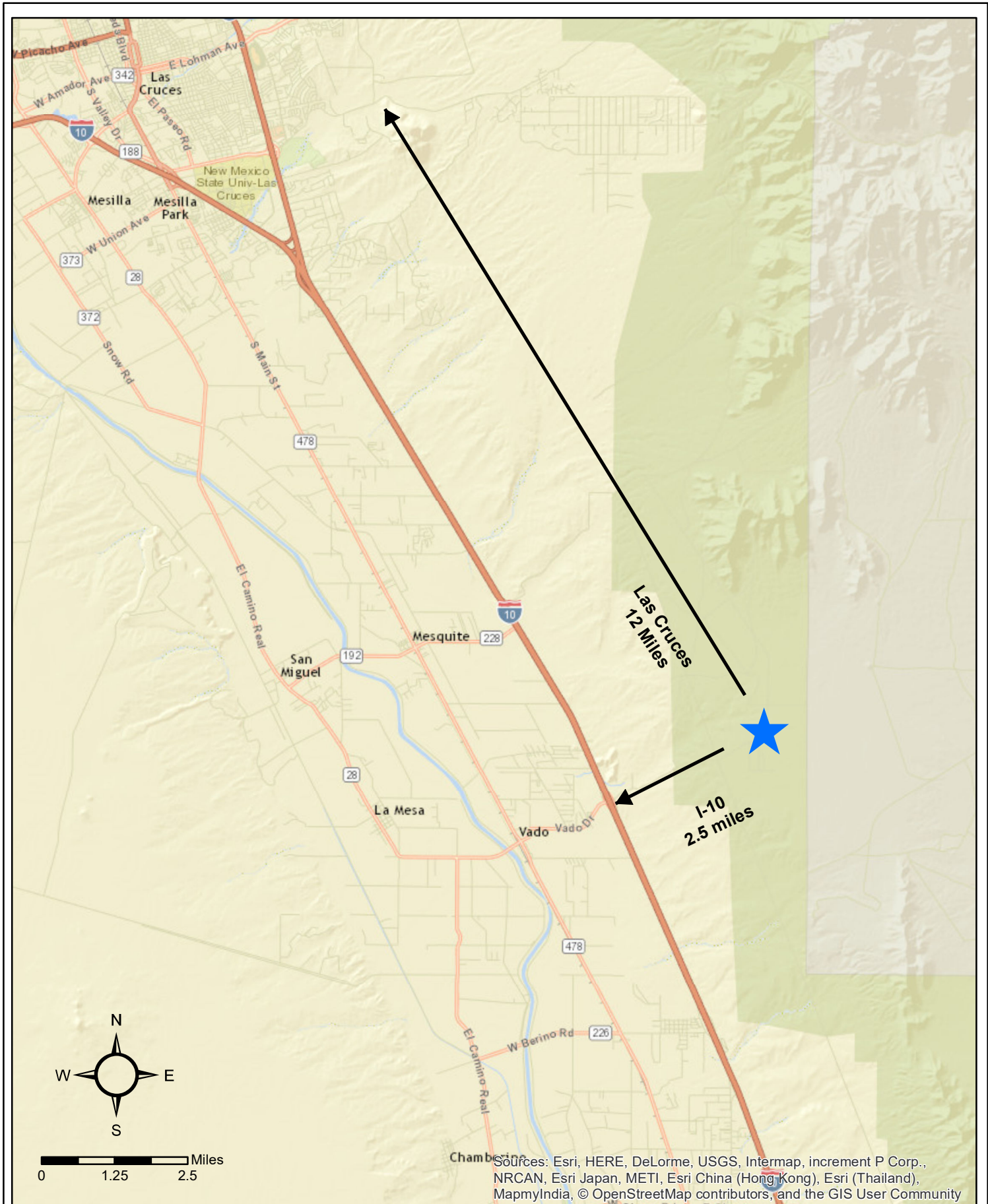
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SOUDER, MILLER & ASSOCIATES

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Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326



Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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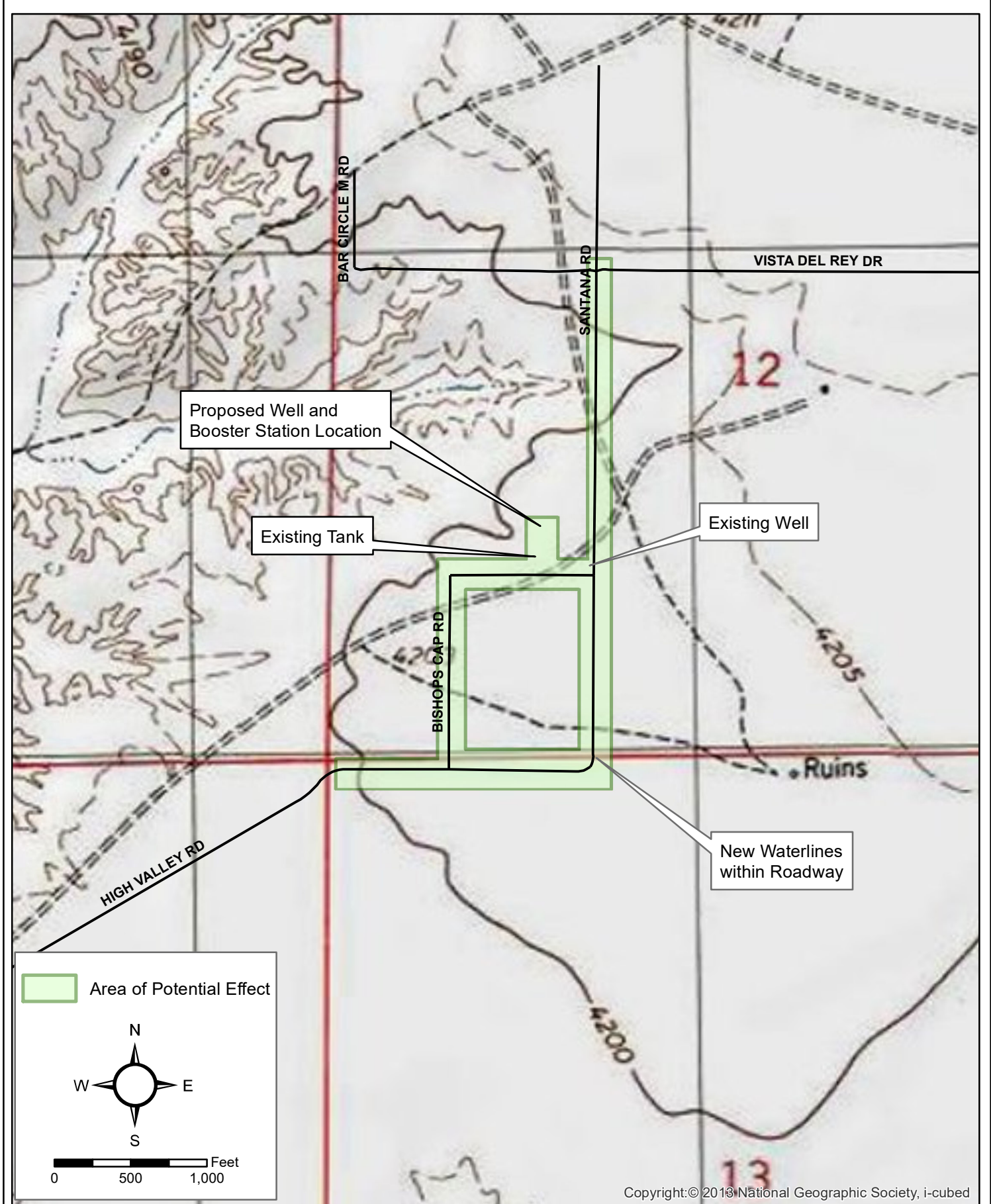


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Figure 2



July 14, 2016

#6324631

Dr. Alan S. Downer,  
THPO and Department Manager, Historic Preservation  
PO Box 4950  
Window Rock, AZ 86515  
*Phone: (928) 871- 7136*  
*Fax: (928) 871- 7886*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION OF DOÑA ANA COUNTY, NEW MEXICO**

Dr. Downer:

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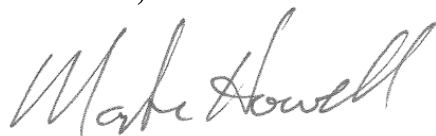
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SOUDER, MILLER & ASSOCIATES**

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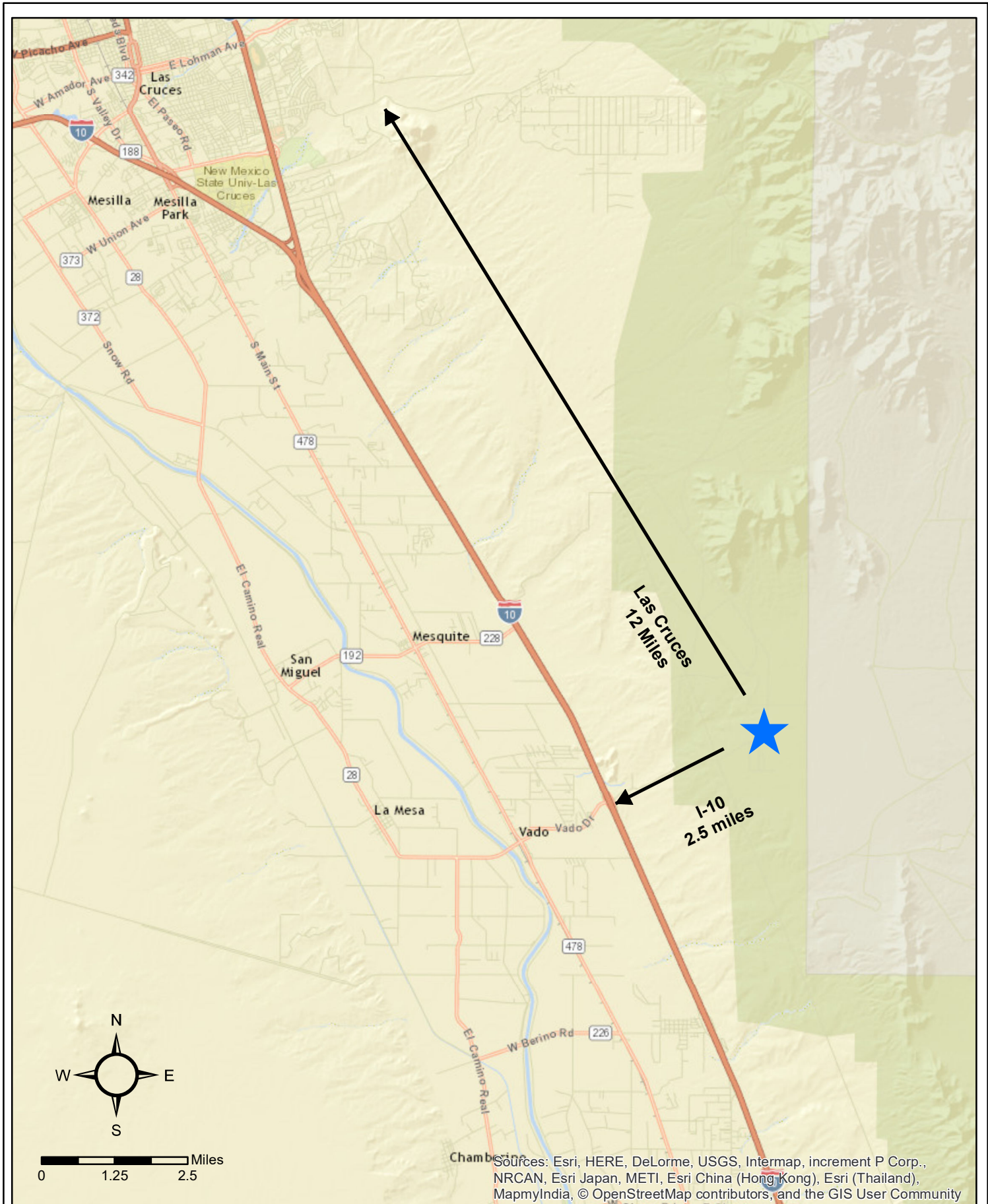
Marty Howell

Senior Engineer II

*marty.howell@soudermiller.com*

*Extension: 1326*





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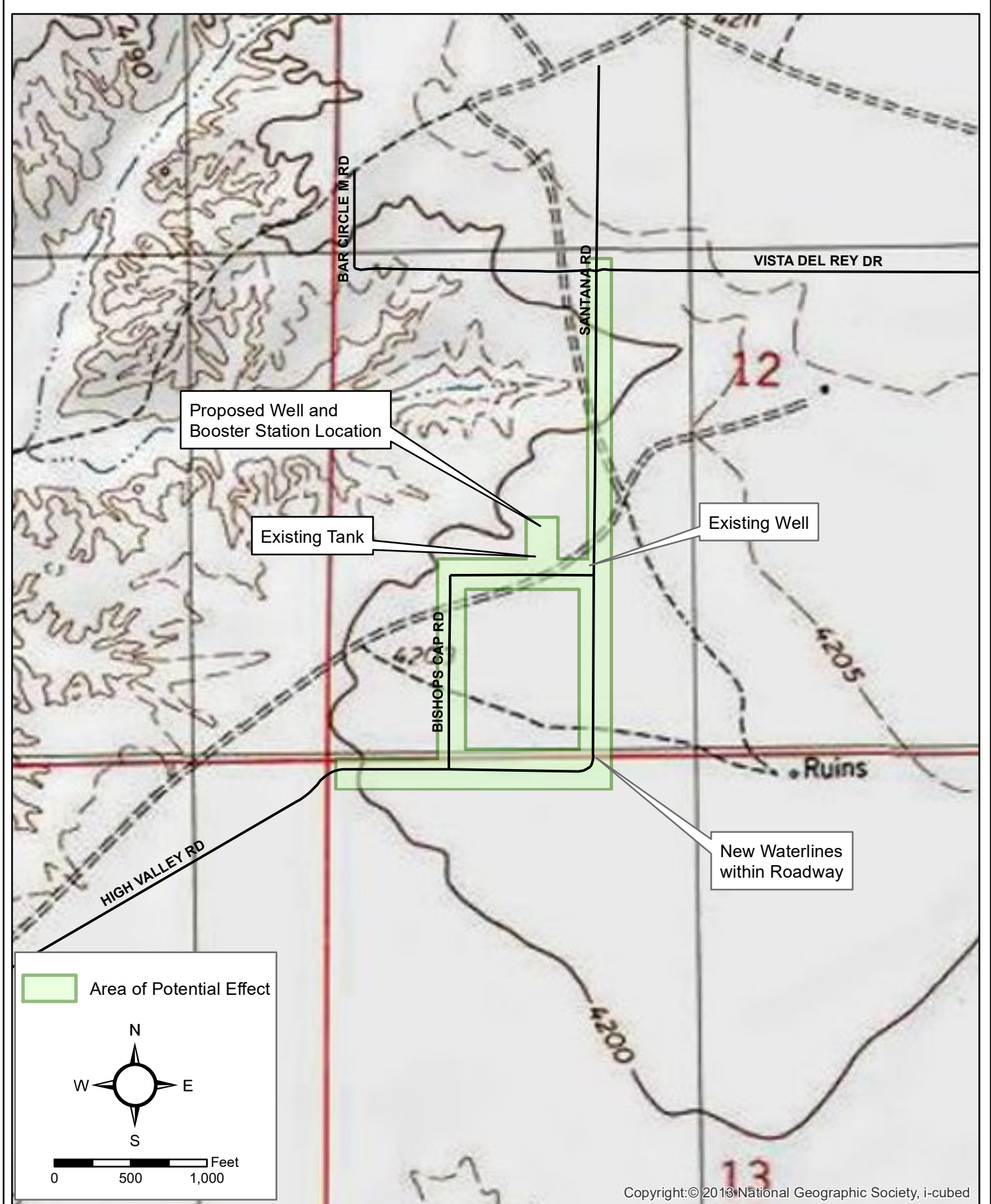
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Figure 2





July 14, 2016

#6324631

Tamara Billie, Senior Archaeologist  
Navajo Nation Historic Preservation Department  
Cultural Resources Compliance Section  
P.O. Box 4950  
Window Rock, AZ 86515  
*Phone: (928) 871-7880*  
*tbillie@navajo-nsn.gov*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION OF DOÑA ANA COUNTY, NEW MEXICO**

Ms. Billie:

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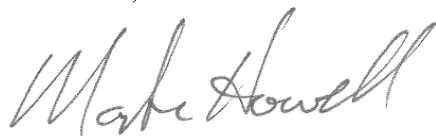


*Tamara Billie*  
*July 14, 2016*  
*Page 2*

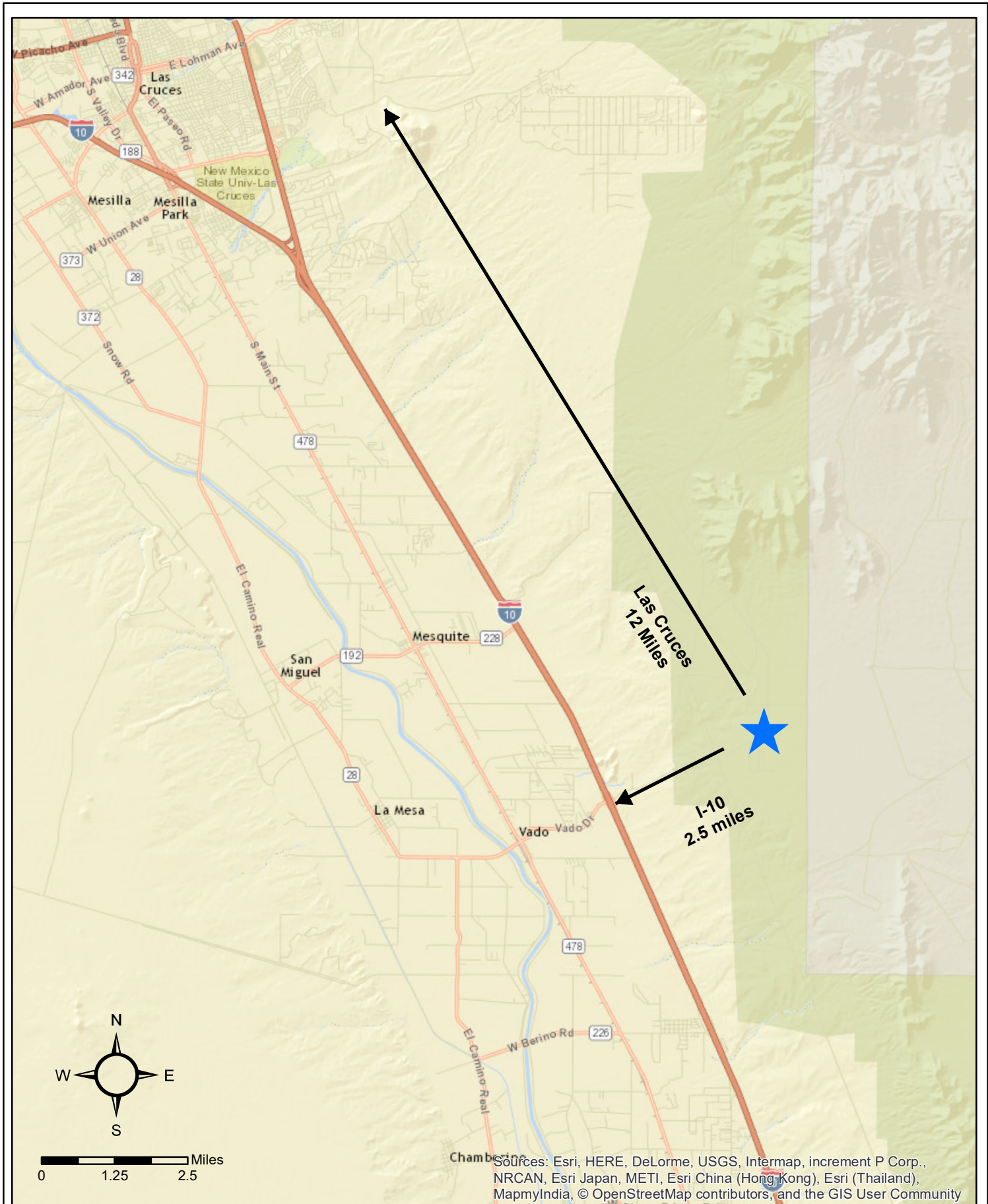
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Sincerely,

MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326



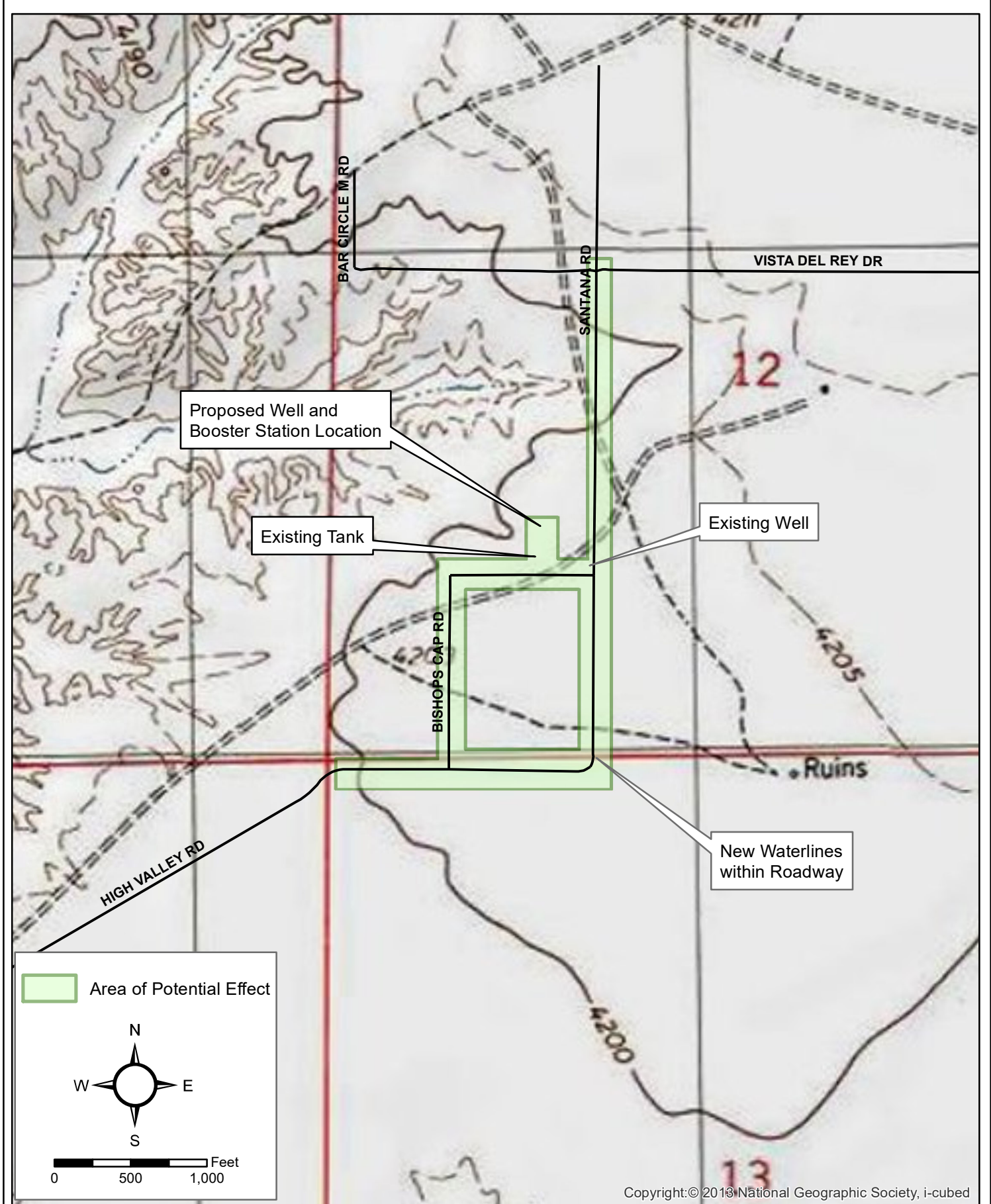
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July 14, 2016

#6324631

Governor Eddie Paul Torres Sr.  
P.O. Box 1270  
Isleta Pueblo, NM 87022  
*Phone: (505) 869-3111/6333*  
*Fax: (505) 869-7596*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Governor Torres:

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*Governor Eddie Paul Torres Sr.*

*July 14, 2016*

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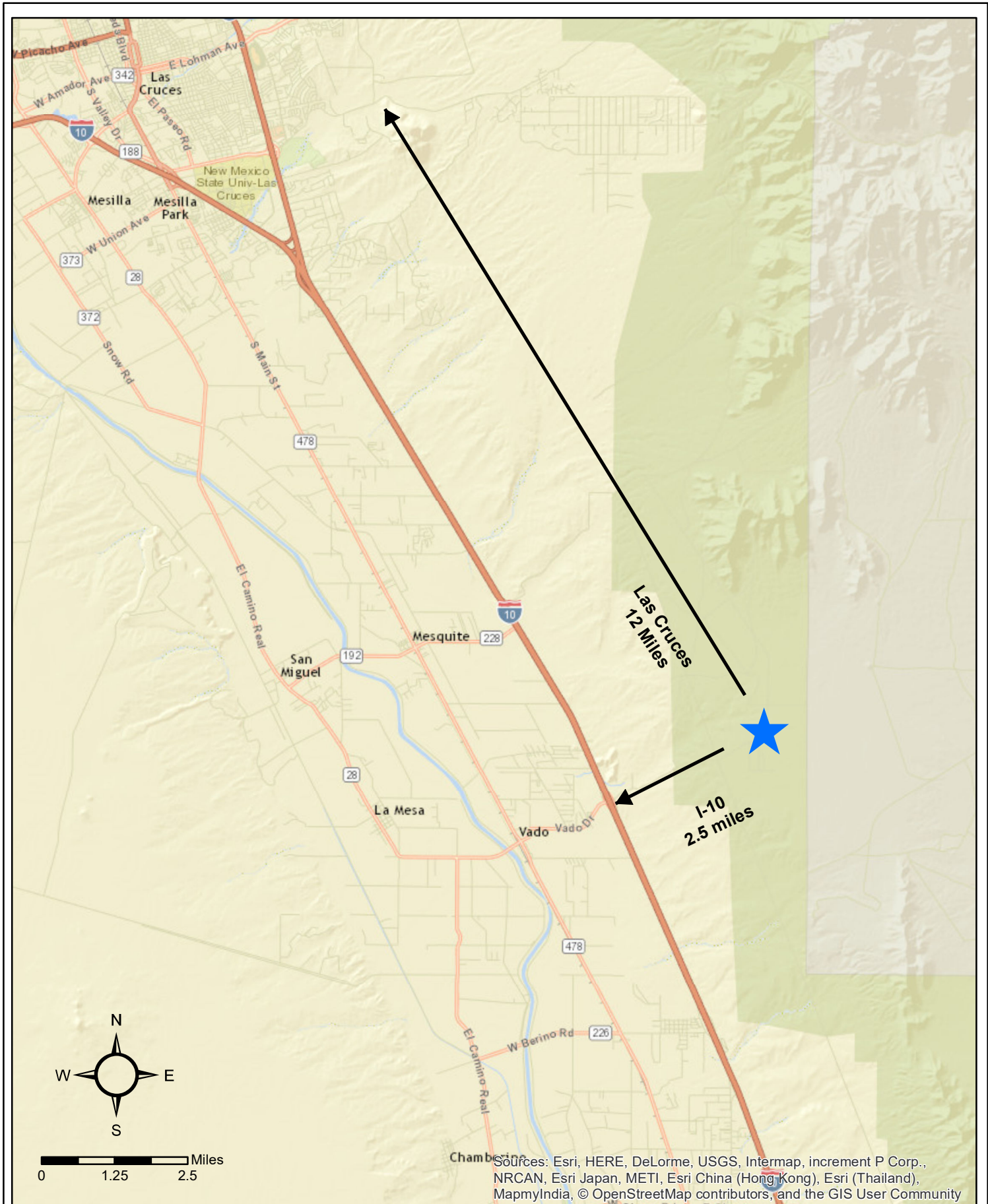
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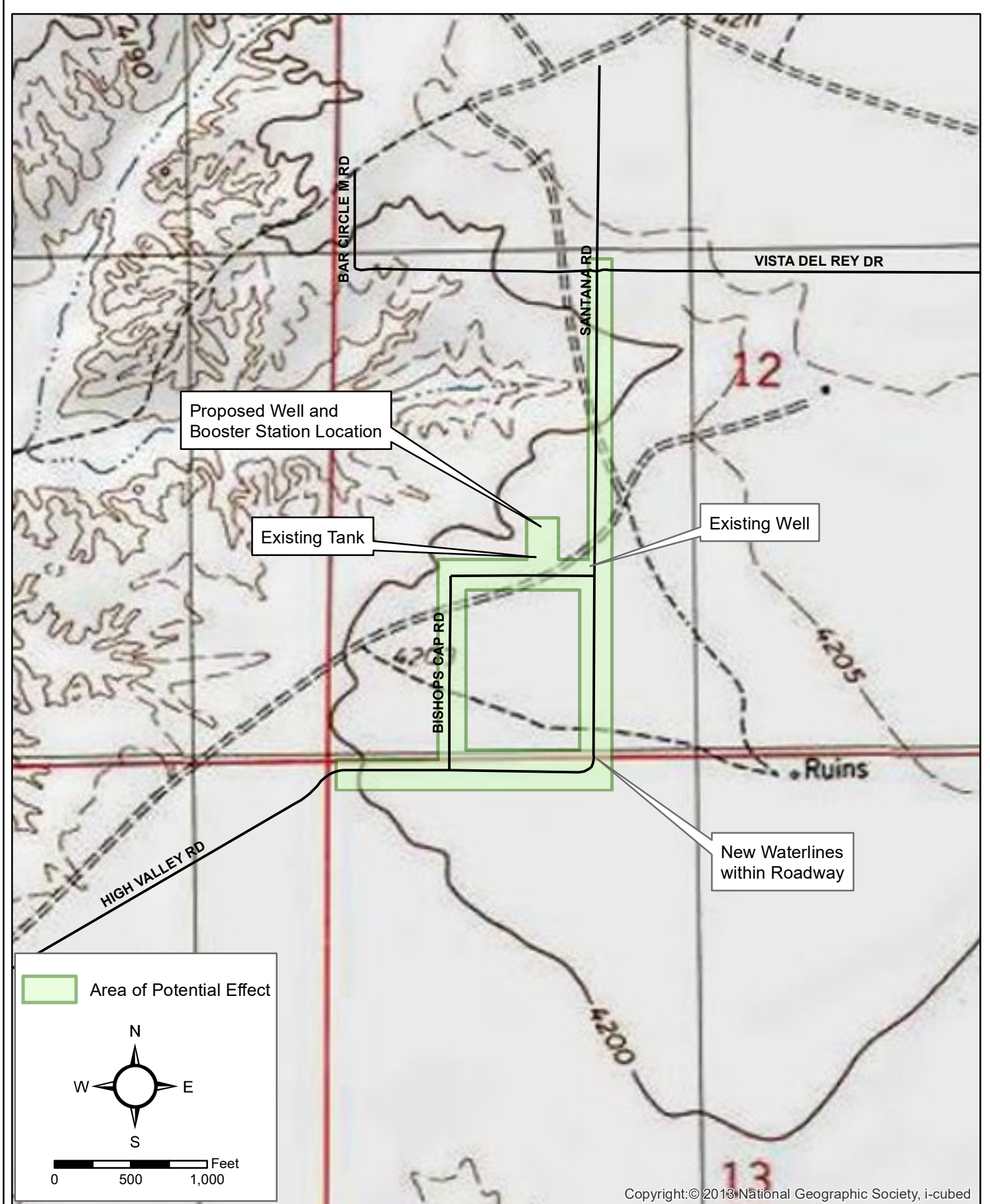


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July 14, 2016

#6324631

Governor Mark Mitchell  
Route 42, Box 360-T  
Santa Fe, NM 87506  
*Phone: (505) 955-7732*  
*Fax: (505) 982-2331*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Governor Mark Mitchell:

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*Governor Mark Mitchell*

*July 14, 2016*

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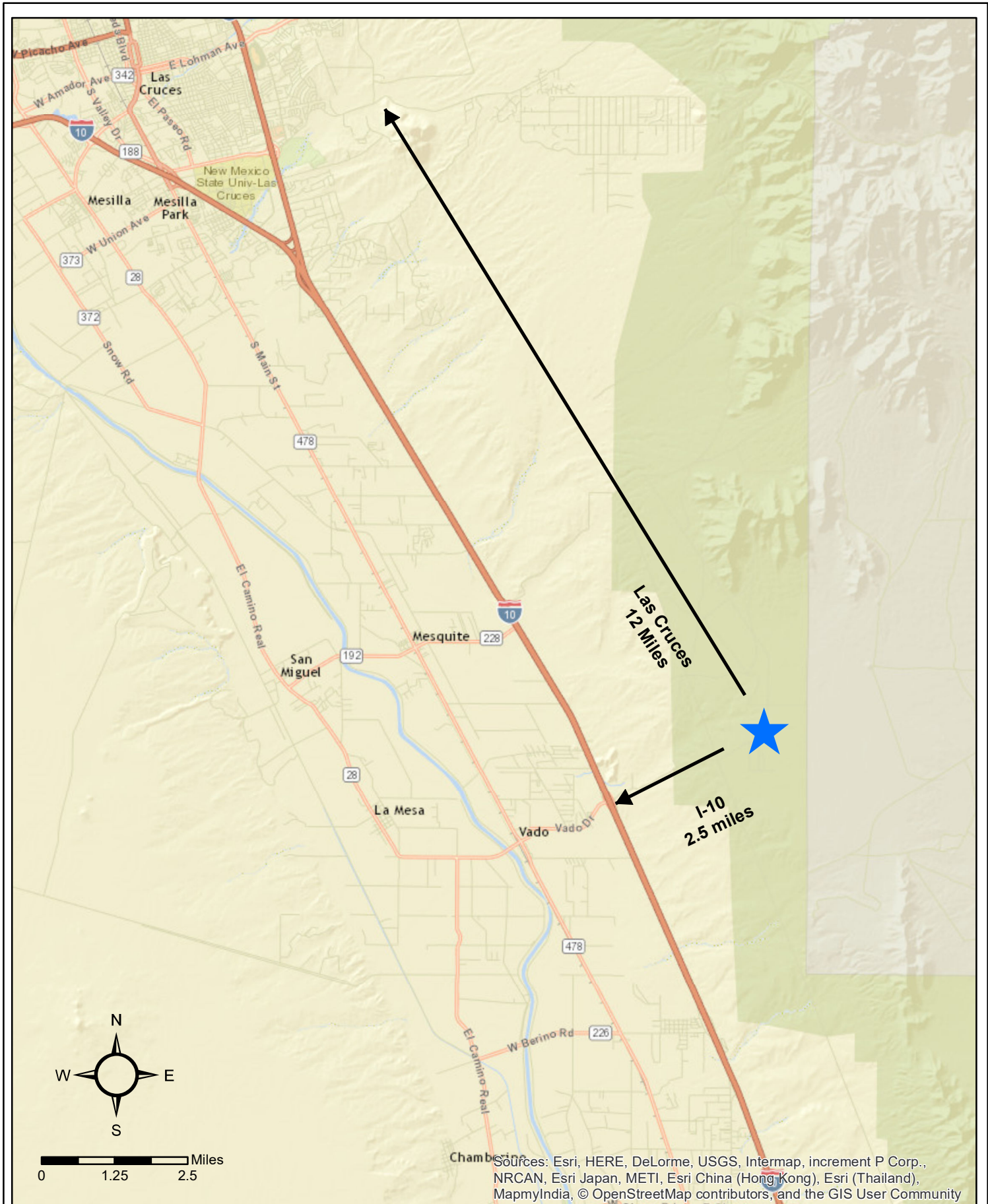
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SOUDER, MILLER & ASSOCIATES**

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Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326





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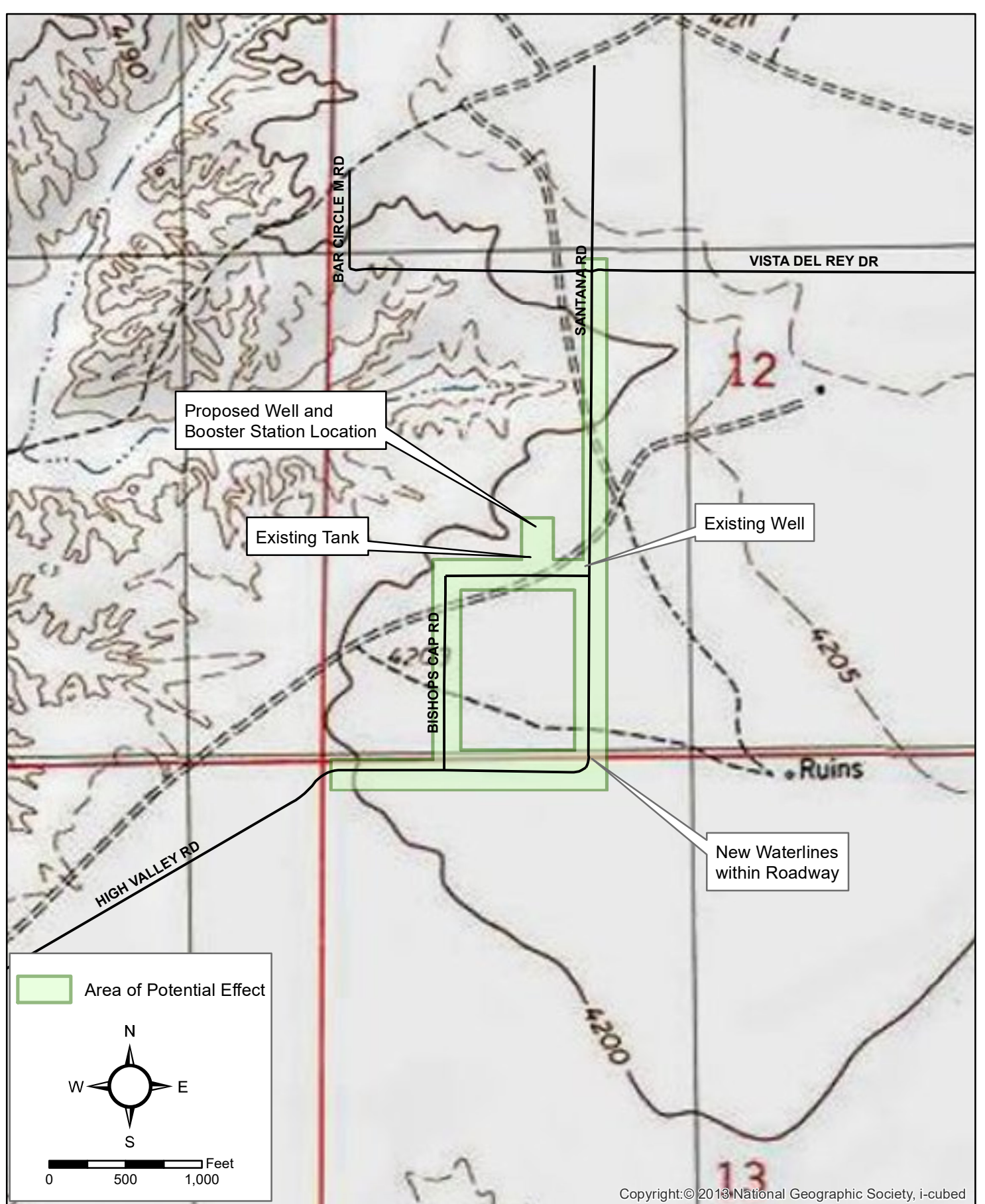
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July 14, 2016

#6324631

Mr. Charles Dorame, THPO  
Route 42, Box 360-T  
Santa Fe, NM 87506  
*Phone: (505) 955-7745*  
*Fax: (505) 983-2331*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Dorame:

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*Mr. Charles Dorame*

*July 14, 2016*

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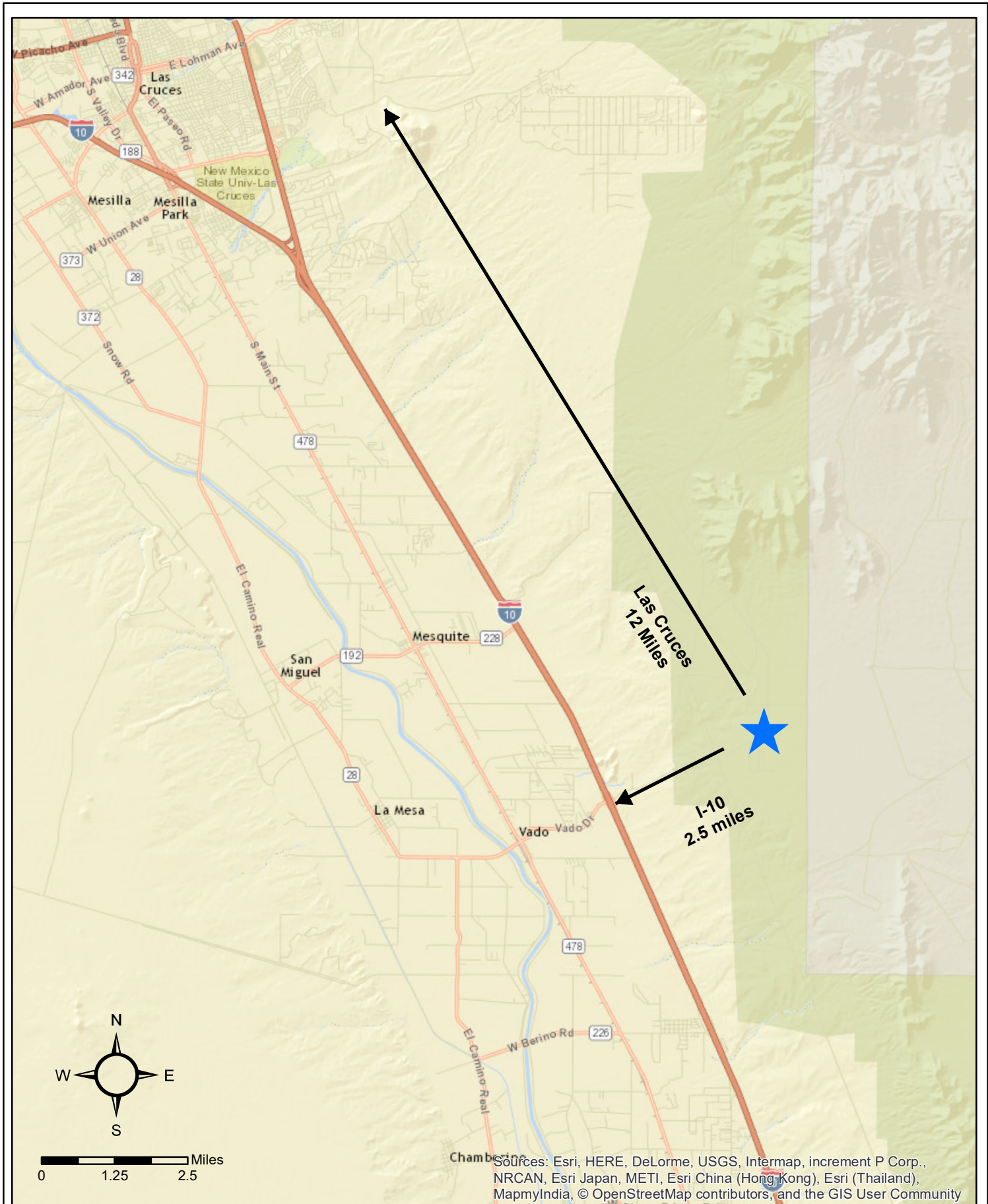
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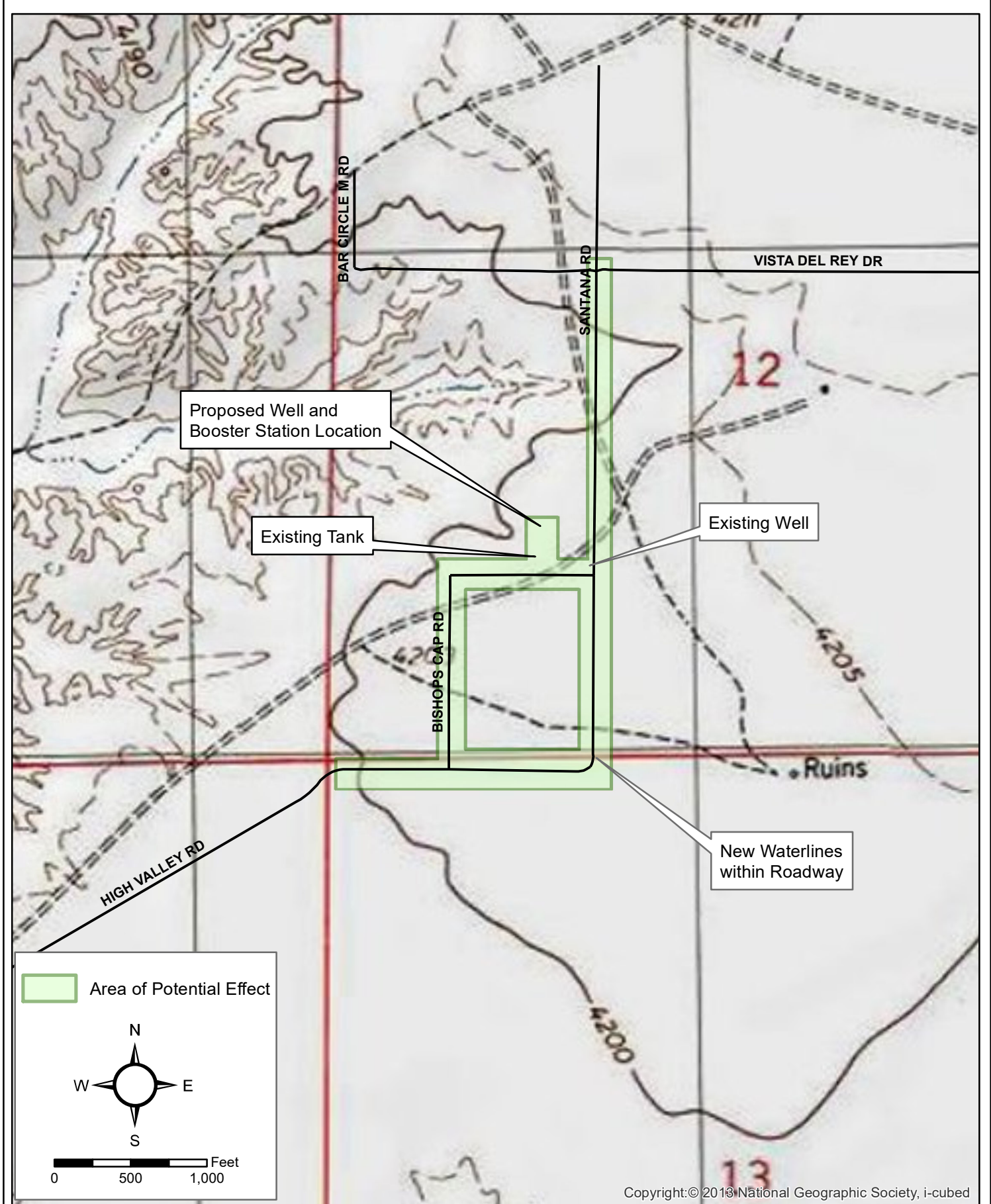
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Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326





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July 14, 2016

#6324631

The Honorable Ronnie Lupe, Chairman  
P.O. Box 700  
Whiteriver, AZ 85941  
*Phone: (928) 338-4346*  
*Fax: (928) 338-4778*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Honorable Ronnie Lupe:

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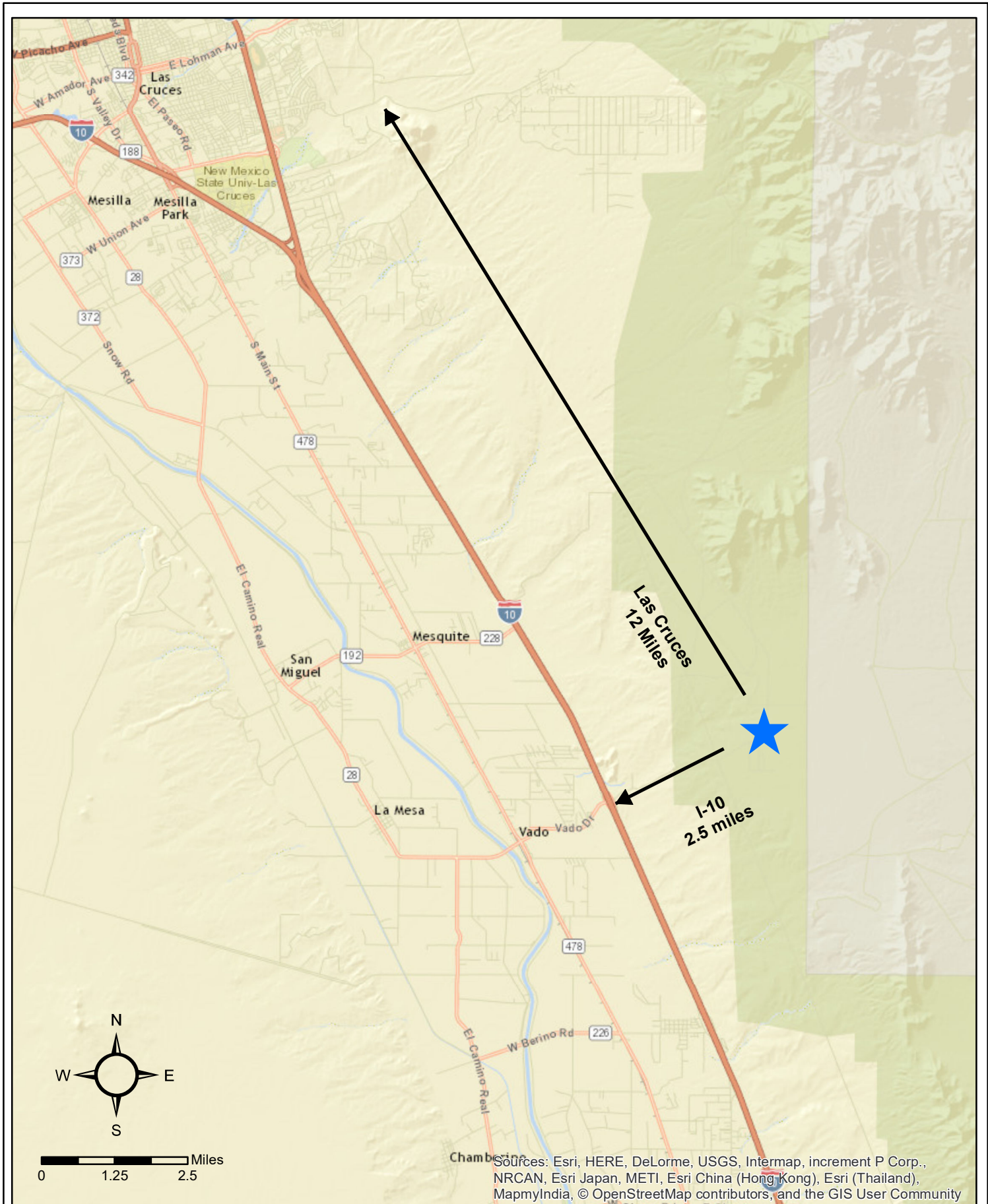
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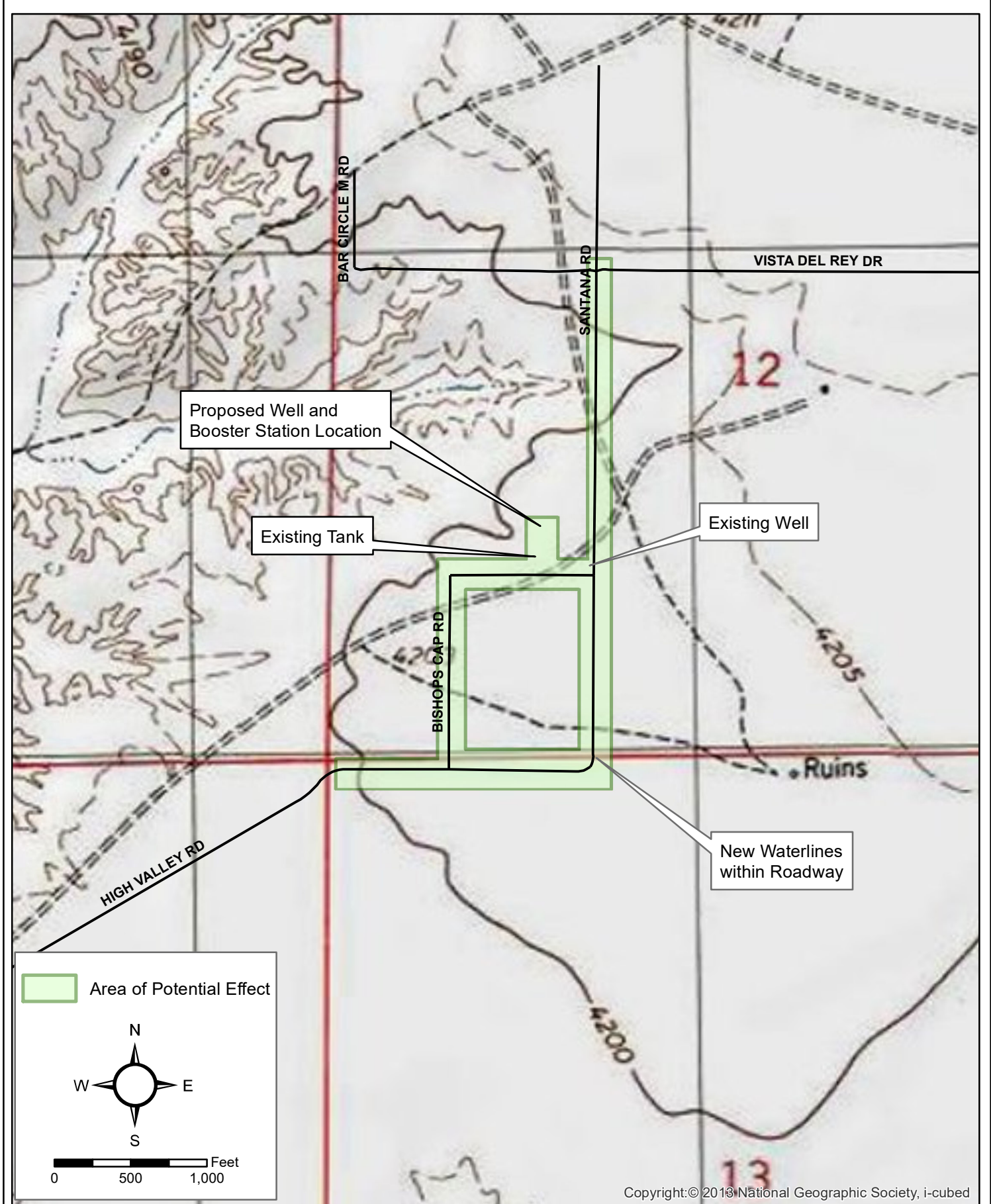


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July 14, 2016

#6324631

Mr. Mark T. Altaha  
White Mountain Apache Tribe  
Historic Preservation Office  
PO Box 507  
Fort Apache, AZ 85926  
*Phone: (928) 338-3033*  
*Fax: (928) 338-6055*  
*markaltaha@wmat.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Altaha:

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*Mr. Mark T. Altaha*

*July 14, 2016*

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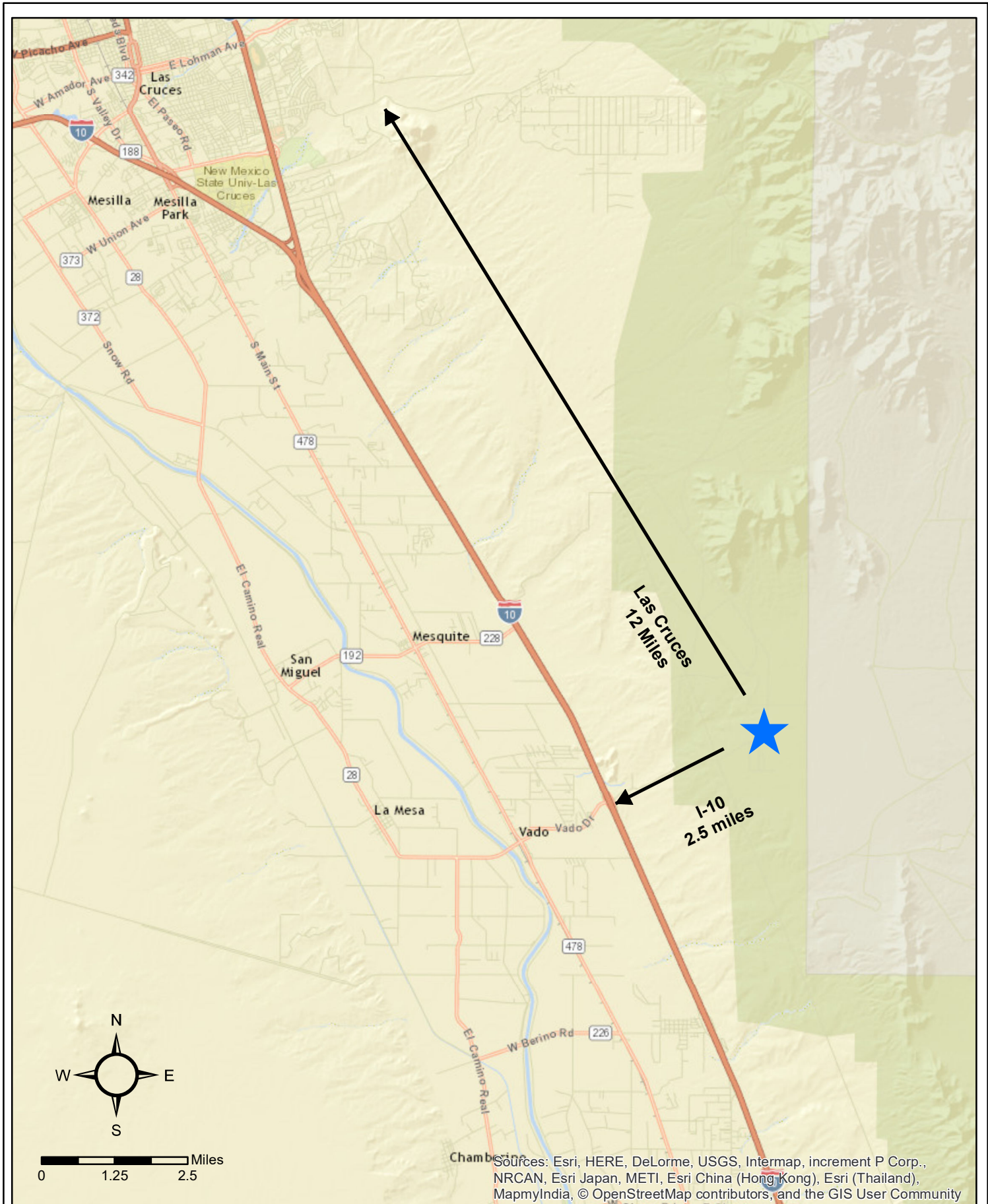
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Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326





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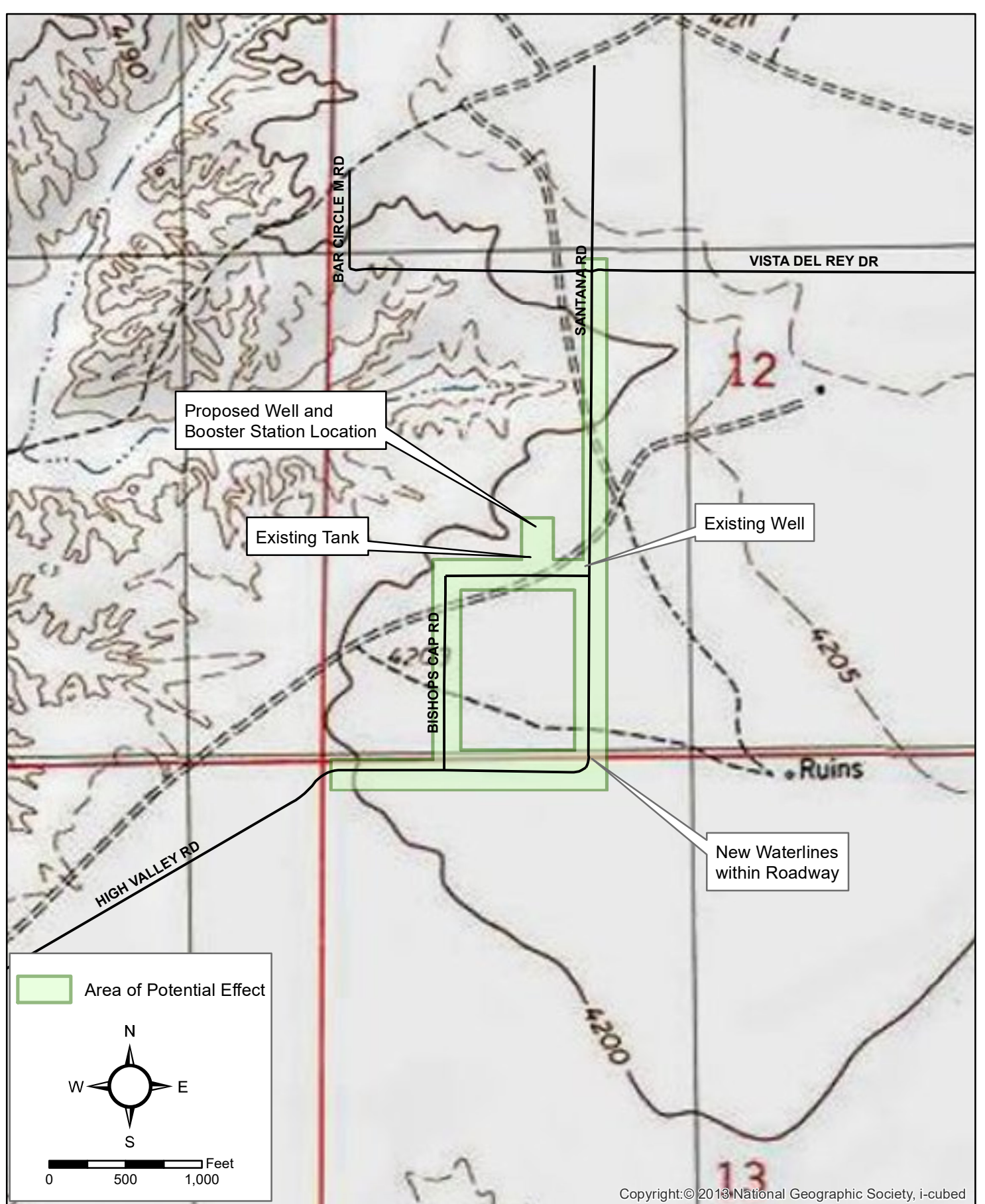
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Figure 2





# White Mountain Apache Tribe

Office of Historic Preservation

PO Box 1032

Fort Apache, AZ 85926

Ph: (928) 338-3033 Fax: (928) 338-6055

**To:** Mark Howell, Senior Engineer MILLER ENGINEERS, INC. D/B/A

**Date:** August 16, 2016

**Re:** Water System Improvement for the High Valley Mutual Domestic Water Consumer

.....

The White Mountain Apache Tribe Historic Preservation Office appreciates receiving information on the proposed project, dated July 14, 2016. In regards to this, please attend to the following checked items below.

\_\_\_N/A\_\_\_ The proposed project is located within an area of probably cultural or historical importance to the White Mountain Apache tribe (WMAT). As part of the effort to identify historical properties that may be affected by the project we recommend further discussions with the tribe's Cultural Heritage Resource Director Mr. Ramon Riley may be contacted at **(928) 338-4625**.

**Please refer to the additional notes in regards to the proposed project:**

We have received and reviewed information regarding the above proposed environmental assessment for the water system improvement project, encompassing the Colonia of High Valley, Dona Ana County, New Mexico, and we have determined the proposed project **will not have an impact** on the White Mountain Apache tribe's historic and/or traditional cultural properties.

Regardless, any/all future ground disturbing activities should be monitored **if** there are reasons to believe that there are human remains and/or funerary objects are present, and if such remains and/or objects are encountered they shall be treated with respect and handled accordingly until such remains are repatriated to the affiliated tribe(s).

Thank you. We look forward to continued collaborations in the protection and preservation of places of cultural and historical importance.

Sincerely,

*Mark T. Altaha - THPO*

White Mountain Apache Tribe - THPO





July 14, 2016

#6324631

Governor Frank Paiz  
P.O. Box 17579 – Ysleta Station  
El Paso, TX 79917  
*Phone: (915) 859-8053*  
*Fax: (915) 859-2988*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Governor Paiz:

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*Governor Frank Paiz*

*July 14, 2016*

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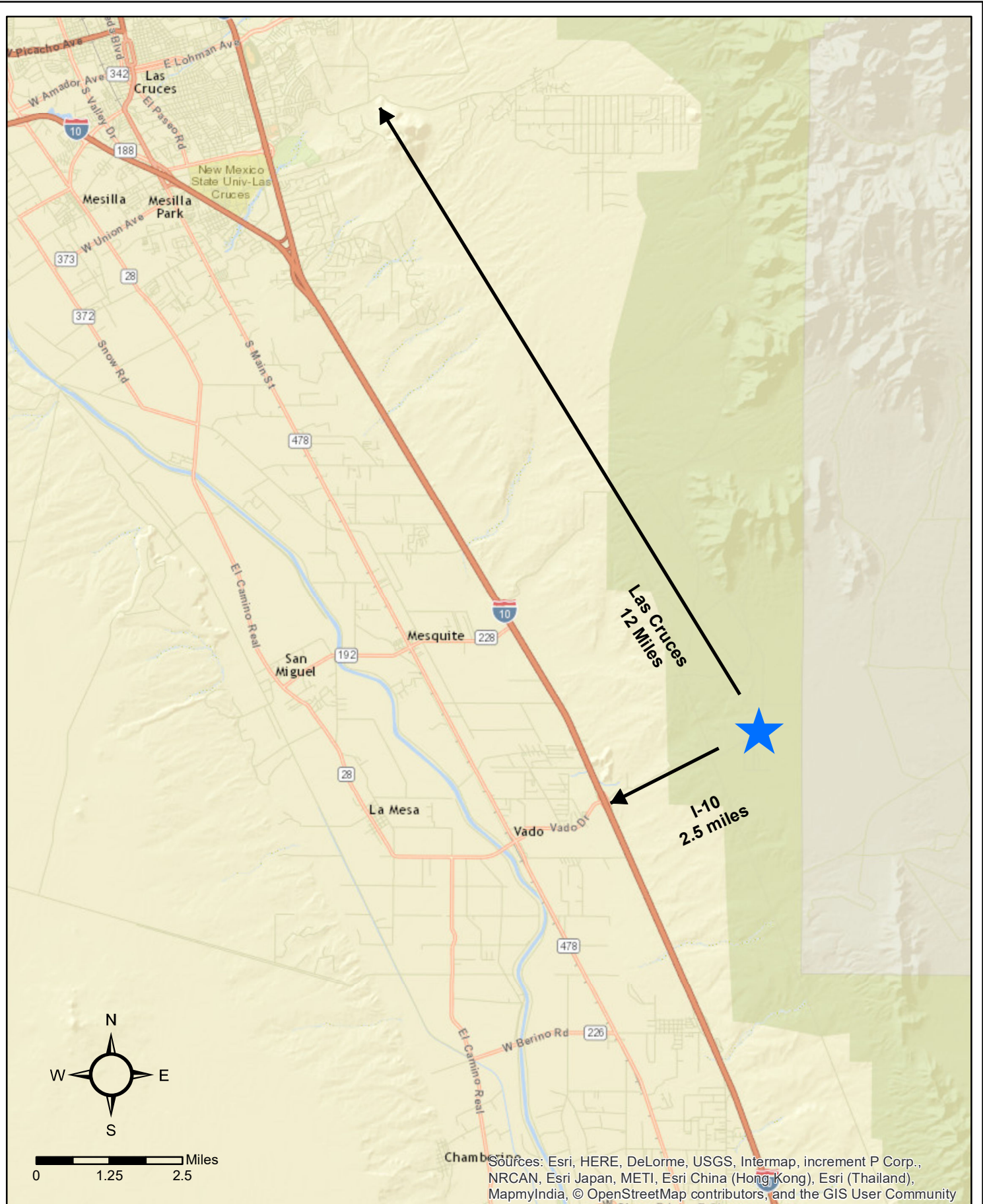
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SOUDER, MILLER & ASSOCIATES**

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Marty Howell  
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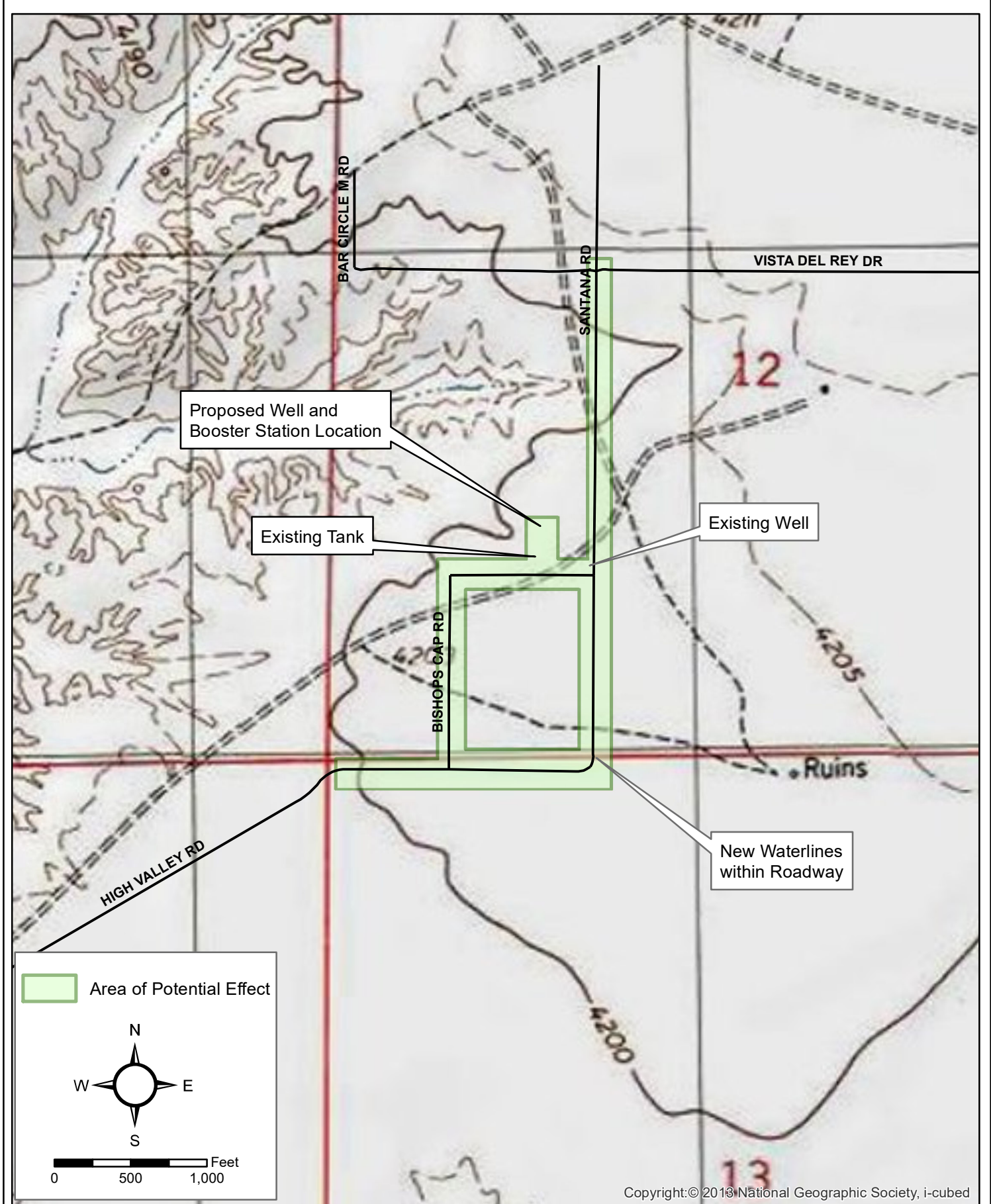


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Figure 2

Appendix E9  
Biological Evaluation Report





**Biological Evaluation  
for the  
High Valley Mutual Domestic Water Consumers Association (MDWCA)  
Water System Improvements Project  
Doña Ana County, New Mexico**



Prepared for the High Valley MDWCA by  
Nicole M. Harings, Ph.D. & Karl E. Tonander, P.E., P.G.  
Souder, Miller, & Associates (575) 647-0799

**October 20, 2016**



**Souder, Miller & Associates**  
*Engineering ♦ Environmental ♦ Surveying*

401 N. Seventeenth Street, Suite 4 ♦ Las Cruces, NM 88005-8131  
(575) 647-0799 ♦ (800) 647-0799 ♦ fax (575) 647-0680 ♦ [www.soudermiller.com](http://www.soudermiller.com)



**Table of Contents**

1.0 Introduction..... 1

2.0 Project History ..... 3

3.0 Action Area..... 3

4.0 Methods..... 3

5.0 Regulatory Context ..... 4

6.0 General Environmental Setting..... 4

7.0 Survey Results ..... 5

8.0 Listed Species and Critical Habitat Analysis..... 9

9.0 Project Area Direct Effects Analysis ..... 11

10.0 Project Area Indirect Effects Analysis..... 12

11.0 Action Area Direct and Indirect Effects Analysis..... 12

12.0 Recommendations for Avoidance, Minimization, and Mitigation..... 12

13.0 Conclusion ..... 12

14.0 Report Preparers and Certification..... 13

15.0 References..... 14

**Appendices**

- B1: Maps and Figures
- B2: Photographs of Project Area and Survey Area
- B3: U. S. Fish & Wildlife Service, Listed and Sensitive Species in Doña Ana County
- B4: New Mexico Department of Game and Fish, County, Federal, State Species Status for Doña Ana County
- B5: New Mexico Rare Plant Technical Council, List of New Mexico Rare Plants for Doña Ana County
- B6: List of Birds Protected by the Migratory Bird Treaty Act
- B7: Agency Correspondence, Permitting, and Regulatory Documentation
- B8: Résumés

## **1.0 Introduction**

The purpose of this Biological Evaluation (BE) is to report the observations from a biological survey of the project area. The report includes the Action Area (i.e., observed natural resources and species in project area), provides an analysis of the impacts that would result given the proposed project; and provides recommendations to avoid, minimize and/or mitigate impacts to natural resources and species consistent with federal, state, tribal and local laws.

The project proponent is the High Valley Mutual Domestic Water Consumer Association (MDWCA) in Doña Ana County encompassing the subdivision of High Valley Farms, who contracted Souder, Miller & Associates (SMA) to prepare the following BE pursuant to the National Environmental Policy Act.

The project is located approximately 12 miles south of the city of Las Cruces in Doña Ana County, New Mexico, approximately 2.5 miles east of New Mexico Interstate 10 (Figure 1). This area was surveyed on 27 July 2016.

### **1.1 Project Numbers #6324631**

### **1.2 Project Location** (Figure 1, Appendix B1)

- a. County:** Doña Ana County
- b. Streets, Numbers, and Side of Roadway Surveyed:** County Road ROW, dirt roads, and some disturbed Chihuahuan Desert habitat leading to the existing tank, booster station and well within the areas surveyed.
- c. Mile Posts:** No mile posts applicable for this portion of the survey.
- d. USGS Topographic Map Name:** NM U.S.G.S. Bishop Cap Quadrangle Map (2013) (Figure 2, Appendix B1)
- e. Township and Range:** The Project is located within Township 25 South, Range 3 East, Section 12.
- f. Latitude/Longitude and UTM Coordinates (meters):**  
Approximate Center of Project (COP):

Longitude: 106° 35' 41" W (UTM: X= 3557340.6)

Latitude: 32° 08' 34" N (UTM: Y= 349593.5)

### **1.3 Project Description**

The project consists of the construction of a new water supply well in the northeast section of High Valley service area, replacement of the existing booster station, rehabilitation of the existing water storage tank and water supply well, as well as the installation of new water distribution and service lines. All of the project components will be installed within the already disturbed and developed roadway and private property.

### **1.4 Project Footprint**

The project alignment length is approximately 5,900 linear feet of waterline. The footprint of the proposed structures will be approximately 600 square feet within 0.75 acres of private property. All work is to be completed on property owned by High Valley MDWCA, private

property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites. The overall project area depicted in Figure 3 lies within Zone X (Areas determined to be outside 500-year floodplain).

### **1.5 Land Status**

This project is approximately 12 miles south of Las Cruces, New Mexico. The High Valley Farms subdivision is located in the Chihuahuan desert at approximately 4,210 feet above mean sea level (amsl).

### **1.6 Purpose and Need of Project**

The purpose of the project is to make improvements to the existing water system by creating a redundant water supply, improving pressures to the recommended standards and increasing efficiency so that High Valley MDWCA can continue to provide a reliable source of potable water to the community.

#### **Project Timeframe**

The beginning of construction and duration to complete are yet to be determined.

### **1.7 Project Construction Details**

#### **a. Construction Equipment and Methods:**

Typical construction equipment utilized for utility and site improvement projects will be used for this project. Typical equipment may include but is not limited to one or more of the following: excavator, backhoe, motor-grader, front-end loader, water truck, belly dump, end dump, scraper and/or bulldozer.

#### **b. Storm Water Pollution Prevention Plan (SWPPP) Measures:**

Construction will require that temporary erosion control measures be implemented in accordance with United States Environmental Protection Agency (USEPA) regulations for storm water prevention. A National Pollutant Discharge Elimination System (NPDES) permit for storm water discharge from a construction site in excess of one acre is required and, in this instance, a Storm Water Pollution Prevention Plan (SWPPP) must be implemented and maintained at the project site by the Contractor. The SWPPP will address all construction phases and the proposed pollution prevention and sediment control measures before the start of construction.

#### **c. Temporary detours, diversions and other structures:**

Temporary traffic control will be utilized in areas where public travel will be affected in order to ensure safe and efficient access to all public and private right-of-way.

#### **d. Permanent structures:**

Permanent structures would include a well house, booster station and distribution lines.

### **1.8 Planning Measures to Minimize Impacts**

The proposed project and related operations are not anticipated to have any adverse effects to the environment. As stated in Section 1.7.b and in anticipation of temporary soil disturbances during construction, measures will be outlined in the SWPPP to minimize and mitigate temporary soil disturbance throughout the entire project area. Given most of the project area has already experienced some sort of disturbance, SMA does not anticipate that the project will have any permanent adverse impacts to threatened or endangered species or critical habitat.



## **1.9 Project Alternatives**

There are no alternatives under consideration.

*Section 1.0 Figures: Project Location Map, USGS Topographic Map and FEMA Firm Map (Figures 1, 2 and 3, Appendix B1)*

## **2.0 Project History**

### **2.1 Project Description within the Larger Corridor**

This project will improve the water system for the community of High Valley Farms near the unincorporated community of Vado, NM.

### **2.2 Previous Biological Findings and Pertinent Findings**

There are no known previous biological surveys of the project area.

### **2.3 Project History and Agency Consultations**

High Valley MDWCA has had multiple sanitary surveys completed by the New Mexico Environment Department Drinking Water Bureau where multiple system deficiencies have been identified. The Association has obtained state funding through the Colonias Infrastructure Fund to complete a preliminary engineering report and environmental assessment in order to evaluate the current condition of the system and identify proposed improvements. The Association has board meetings once a month and SMA has had preliminary discussions regarding the project alternatives at these meetings.

### **2.4 Changes to Project and/or Control Numbers**

*Not applicable- There are no assigned project and/or control numbers.*

### **2.5 STIP Project Phasing**

*Not applicable- There is no STIP project phasing anticipated at this time.*

## **3.0 Action Area**

The action area of this project includes the entire project area and the entire biological survey area. The action area includes an existing water storage tank and well, a new water supply well, booster station and their associated waterlines that run the extent of the surveyed roadways (Figure 4, Appendix B1).

*Section 3.0 Figures: Action Area (Figure 4, Appendix B1)*

## **4.0 Methods**

### **4.1 Biological Survey Area Boundaries**

The new well and booster station are in the approximate center of the biological survey area, adjacent to Arapaho Road near the unincorporated community of Vado, NM; 2.75 miles east of Interstate 10 (Figure 1 and 4, Appendix B1). Proposed new waterlines will extend from High Valley Road, north along Bishop's Cap and Santana Road and along Arapaho Road (Figure 4, Appendix B1).

### **4.2 Methods**

Pedestrian survey – The project area was investigated for endangered and threatened species and their potential critical habitat; candidate species, species of concern, noxious weeds, rare plants and existing plants and animals. The survey extended outward 30 feet (10 meters), from the centerline of the road for the entire length of the project area except in areas where obstructions (i.e. fences, buildings, private property) prohibited the survey.

#### **4.3 Tools and Literature Reviewed**

Tools used in the field to aid in the completion of the biological survey were a pair of binoculars, a field book for species listing and a field guide for identifying North American plants (Stubbenieck et. al 2003). Before performing the survey in the field, the United States Fish & Wildlife Service (USFWS) listed and sensitive species list and critical habitat, Biota Information System of New Mexico (BISON-M) for state and federal listed species, New Mexico Rare Plant species list and the New Mexico Department of Agriculture noxious weed list were reviewed and referenced.

#### **4.4 Action Area Definition Methods**

The action area was defined by combining the project area and survey area. This action area was defined to ensure full investigation into potential impacts of the project.

#### **4.5 Agency Contacts**

No specific agency contacts are currently applicable. However, for any additional information or clarification regarding the High Valley MDWCA Water System Improvements Project please contact:

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*Section 4.0 Figures: Vicinity Map and Action Area (Figures 1 and 4, Appendix B1)*

### **5.0 Regulatory Context**

Listed below is a list of regulatory laws that pertain to this project:

- Endangered Species Act
- Migratory Bird Treaty Act
- Bald and Golden Eagle Protection Act
- Noxious Weed Management Act
- Clean Water Act Section 401, 402 & 404

### **6.0 General Environmental Setting**

#### **6.1 Elevation and Climate**

The elevation of the project area is approximately 4,010 feet (1,222 meters) above mean sea level (Figure 2, Appendix B1). The action area is 12 miles south of Las Cruces located in a semi-arid climate within the northern Chihuahuan Desert. Average annual precipitation in the Chihuahuan Desert is 10.35 inches (26.3 centimeters) with the most precipitation occurring in July.

#### **6.2 Topography and Geology**

The topography of the project area is relatively flat other than the arroyos in the surrounding area (Figure 2, Appendix B1). The geology of the project area consists of basin-fill surface and valley-fill alluvium formed by the Santa Fe Group with discontinuous overlay (generally less than 100 feet thick) of younger valley-fill alluvial, aeolian and minor lacustrine deposits.

**6.3 Ecoregion and Vegetation Communities**

The project area falls within the Chihuahuan Desert ecoregion and vegetation community.

**6.4 Mapped Soil Types**

Soil composition, as obtained from Natural Resource Conservation Service (NRCS), consists primarily of Berino-Doña Ana association fine sandy loam and sandy clay loam (100%) and Bluepoint-Caliza-Yturbide complex with traces of other soils.

**6.5 Waters and Floodplains**

There is one drainage area that will be crossed as part of the project scope which can be observed on the FEMA firm map (Figure 3, Appendix B1). The arroyo only conveys water on a seasonal basis. The general direction of drainage is to the west across the project areas.

**6.6 Land Use**

The project area can be classified as rural and the roadway within the project area is developed for residential use.

**6.7 Human or Natural Disturbance**

The area is rural with little natural vegetation where proposed waterlines will be constructed; however, the existing and proposed well are surrounded by moderately disturbed Chihuahuan Desert habitat. The area includes human landscape features such as buildings, pavement, power lines, underground cables and utilities.

Section 6.0 Figures: Topo and FEMA Firm Map (Figure 2 and 4, Appendix B1)

**7.0 Survey Results**

**7.1 Fauna Observed**

Table 1. Fauna Observed within the Biological Survey Area

Fauna Type	Common Name (Scientific Name)	Indicator	Abundance
Invertebrates Observed	Desert Millipede ( <i>Orthoporus</i> sp.)	Visual confirmation of millipedes out after recent precipitation.	3
	Bees (unknown sp. Order: Hymenoptera)	Visual confirmation of bees (species unknown) and sulfur butterflies pollinating flowering shrubs.	Several
	Sulfur butterflies (subfamily: Coliadinae)		Few
	Harvester Ants ( <i>Pogonomermyx</i> sp.)	Visual confirmation of harvester ants and nests.	Several
Fish Observed	None	No existence of water in the survey area, no fish habitat available	0
Amphibians Observed	None	No amphibians observed.	0



Reptiles Observed	None	No reptiles observed.	0
Birds Observed	House Sparrow ( <i>Passer domesticus</i> )	Visual confirmation of birds listed; perched in trees and shrubs within the ditch/irrigation channel along the survey area.	Several
	White-winged Dove ( <i>Zenaida asiatica</i> )		Several
	Inca Dove ( <i>Scardafella inca</i> )		Several
	Great-tailed Grackle ( <i>Quiscalus mexicanus</i> )		Few
	Western Kingbird ( <i>Tyrannus verticalis</i> )		Few
	Roadrunner ( <i>Geococcyx californianus</i> )		1
Mammals Observed	Small mammal burrows present (rabbit, kangaroo and cotton rat)	Visual observation of mammals (i.e., rabbits) and evidence of mammals within the survey area.	Several
	Desert Cottontail Rabbit ( <i>Sylvilagus audubonii</i> )		Several

- a. **Invertebrates Observed:** Only common Hymenopteran invertebrates were identified or detected during the survey.
- b. **Fish Observed:** There is no flowing or standing water within the project area, no fish species were observed during the survey.
- c. **Amphibians Observed:** No amphibians were identified or detected during the survey (not that amphibians do not persist in the area but due to lack of water none were observed).
- d. **Reptiles Observed:** No reptiles were identified or detected during the survey (not that reptiles do not persist in the area but due to a mostly rural landscape none were observed).
- e. **Birds Observed:** Several common avian species were observed around the project area. Smaller song birds were found perched among shrubs and power lines, while larger birds (e.g., ravens and raptors) were observed soaring above the project area. Some nests were observed (and waypoints marked), but none of the birds observed during the study were nesting.
- f. **Mammals Observed:** No mammals were identified, but small mammal burrows were detected during the survey (not that mammals do not persist in the area but due to lack of vegetation and presence of mostly rural landscape none were observed).

**7.2 Flora Observed**

Table 2. Flora Observed within the Biological Survey Area

<b>Common Name (Scientific Name)</b>	<b>Abundance</b>	<b>NM Noxious Weed Class and Location</b>
Honey Mesquite ( <i>Prosopis glandulosa</i> )	Several	N/A
Creosote Bush ( <i>Larrea tridentata</i> )	Several	N/A
Soaptree Yucca ( <i>Yucca elata</i> )	Few	N/A
Desert Agave ( <i>Agave deserti</i> )	Few	N/A
Rubber Rabbitbrush ( <i>Ericameria nauseosa</i> )	Several	N/A
Russian Thistle ( <i>Salsola iberica</i> )	Several	Fully naturalized, exotic
Lambsquarter ( <i>Chenopodium album</i> )	Few	N/A
Mormon Tea ( <i>Ephedra viridis</i> )	Few	N/A
Four-wing Saltbush ( <i>Atriplex canescens</i> )	Few	N/A
Twinleaf Senna ( <i>Senna bauhinioides</i> )	Several	N/A
Silverleaf Nightshade ( <i>Solanum elaeagnifolium</i> )	Few	N/A
Whitestem Blazingstar ( <i>Mentzelia albicaulis</i> )	Few	N/A
Puncturevine ( <i>Tribulus terrestris</i> )	Few	N/A
Broom Snakeweed ( <i>Gutierrezia sarothrae</i> )	Several	N/A
Gordon's Bladderpod ( <i>Lesquerella gordonii</i> )	Few	N/A
Spectacle Pod ( <i>Dimorphocarpa wislizenii</i> )	Several	N/A
Gypsum Phacelia ( <i>Phacelia integrifolia</i> )	Several	N/A

Purple Sand Verbena ( <i>Abronia angustifolia</i> )	Few	N/A
Texas (Engelmann's) Pricklypear Cacti ( <i>Opuntia engelmannii</i> )	Few	N/A
Sandhill Muhly ( <i>Muhlenbergia pungens</i> )	Few	N/A
Mesa Dropseed ( <i>Sporobolus flexuosus</i> )	Several	N/A
Ocotillo ( <i>Fouquieria splendens</i> )	Few	N/A
Desert Bird of Paradise ( <i>Caesalpinia gilliesii</i> )	Few	N/A
Kochia ( <i>Kochia scoparia</i> )	Few	N/A
Chaste Tree ( <i>Vitex agnus-castus</i> )	Individual	N/A
Oleander ( <i>Nerium oleander</i> )	Several	Ornamental
Mexican Paloverde ( <i>Parkinsonia aculeata</i> )	Individual	Ornamental

- a. **Noxious Weeds Observed:** Attention was given to look for listed noxious weeds. The New Mexico Department of Agriculture Noxious Weed List and the U. S. Department of Agriculture Noxious Weed List were used as resources for currently listed weeds. These lists are provided in Appendix B6. No noxious weeds were observed with in the survey area during the site visit.
- b. **Rare Plants Observed:** During the site evaluation, care was given to look for New Mexico rare plants, according to a list (by county) obtained from the New Mexico Rare Plant Technical Council website. The list for Doña Ana County is provided in Appendix B5. No listed rare plants were observed in the project area.

**7.3 Observed Waterways and Soils**

- a. **Observed Soils and Erosion:** Soils in the project area consist primarily of Berino-Doña Ana fine sandy loam, sandy clay loam and Bluepoint-Caliza-Yturbide complex.
- b. **100-year floodplain observations:** According to the FEMA Flood Insurance Rate Map dated July 6, 2016, (Figure 3, Appendix B1) the majority of the project area is in Zone X defined as areas determined to be outside the 500-year floodplain.
- c. **Observed waterways and classifications:** No waterways were observed throughout the project area.
- d. **Wetland delineation:** There are no wetlands within the project area; hence, a wetland delineation and corresponding figure is not applicable.



Section 7.3 Figures: FEMA Firm Map (Figure 3, Appendix B1).

#### 7.4 Observed Surrounding Landscape and Land Use

The project area can be characterized as rural with little natural landscape. The project area consists of paved roads, graded gravel roads and unpaved shoulders. Most of the area is disturbed and only a small portion on the north side of the road is vegetated, consisting of Chihuahuan Desert vegetation, with much evidence of human alteration and disturbance. The natural and mature vegetation in this portion of the site is fragmented.

#### 7.5 Observed Human or Natural Disturbance:

The project area has telephone lines, utility lines, homes and other buildings throughout. The roadway is highly disturbed by associated traffic (trucks and tractors). The vegetation in this area is fragmented.

### 8.0 Listed Species and Critical Habitat Analysis

Referenced lists regarding listed species: USFWS Listed (Appendix B3), Sensitive species for the county (Appendix B4), BISON-M (Appendix B4), New Mexico rare plants (Appendix B5), and other relevant agency specific lists (Appendix B6).

#### 8.1 Critical Habitat Analysis

There is no critical habitat for any listed species in Doña Ana County within the project area. The project area is small, fragmented and residential. There is lack of any significant suitable habitat for wildlife within the project area.

#### 8.2 Listed Species Eliminated from Further Consideration

##### a. Plants eliminated from further consideration

**Snead pincushion cactus (*Escobaria sneedii sneedii*):** Snead pincushion cactus is eliminated from further evaluation. It was not seen in the survey area during the time of the biological survey. Although this species can occur in southern New Mexico, it is found mainly in El Paso County, Texas in the Franklin Mountain. It is very unlikely that this species would occur within the project area or action area.

##### b. Invertebrates eliminated from further consideration

There are no federally listed invertebrates in Doña Ana County, New Mexico.

##### c. Fish eliminated from further consideration

There are no federally listed fish in Doña Ana County, New Mexico.

##### d. Amphibians eliminated from further consideration

There are no federally listed amphibians in Doña Ana County, New Mexico.

##### e. Reptiles eliminated from further consideration

There are no federally listed reptiles in Doña Ana County, New Mexico.

##### f. Birds eliminated from further consideration



**Yellow-billed Cuckoo (*Coccyzus americanus*):** The Yellow-billed Cuckoo is eliminated from further evaluation. This species was not observed during the biological survey. The Yellow-billed Cuckoo is a secretive bird that migrates from southern Canada to the Greater Antilles and Mexico. The Yellow-billed Cuckoo is an obligate riparian nester, especially areas dominated by white alder (*Alnus rhombifolia*), sycamore (*Plantanus* sp.), bigleaf maple (*Acer macrophyllum*), willow (*Salix* sp.), and cottonwood stands (*Populus* sp.). This species ranges from California, to Minnesota and southern New Brunswick and southward. The cuckoo winters in South America. The western

populations are separated from the eastern populations by the Rocky Mountains in Montana, Wyoming, and the northern and central parts of Colorado, and by the eastern crest of the Rio Grande watershed in southern Colorado, New Mexico, and western Texas. They are regular migrants and breeders throughout New Mexico where suitable riparian habitat is available, such as along the Rio Grande, Pecos River, Gila River, Mogollon Creek, San Francisco River Valley, Tularosa River, Ute Creek, Canadian River, and on the Gray Ranch in Hidalgo County. They feed on caterpillars, grasshoppers, beetles, ants, wasps, frogs, lizards, small fruit, and various other insects. While cottonwoods were detected, their limited density makes this an unlikely area for them to reside. The project and associated actions will not likely impact this species.



**Aplomado Falcon (*Falco femoralis septentrionalis*):** The Aplomado Falcon is eliminated from further evaluation. This species was not seen during the biological survey. Northern Aplomado Falcons are known to have bred historically in southern New Mexico, Arizona, and Texas. They range primarily in Mexico, with the southwestern United States at the northern limit of their range. They inhabit grassland, savanna, and other open woodland habitats. In New Mexico, Chihuahuan Desert areas with open

grassland and scattered mesquite and soap-tree yucca or Torrey yucca are typical habitats. Recent releases of Northern Aplomado Falcons have occurred along the southern border of Texas. As of 2002, only one nest has been observed along the border of Mexico and New Mexico, southeast of Deming, NM. The USFWS has proposed to reintroduce a nonessential experimental population of Northern Aplomado Falcons in New Mexico and Arizona. The proposed nonessential population area covers all of New Mexico and Arizona, with the expectation that falcons would only persist within the Chihuahuan Desert, which extends from Mexico into southern Texas, southern New Mexico, and southeast Arizona. According to a U. S. Department of Interior News Release (August 1, 2006) and The Peregrine Fund website, 11 Northern Aplomado Falcons were released in August 2006 at the Armenderis Ranch east of Truth or Consequences, New Mexico. This population is considered to be an experimental, non-essential population and it is extremely unlikely that this species would exist within the project or action area. The project and associated actions will not likely impact this species.



**Least Tern (*Sternula antillarum athalassos*):** The Least Tern is eliminated from further evaluation. The bird was not seen during the biological survey within the project area. The habitat of the interior least tern typically consists of barren to sparsely vegetated sandbars along rivers, sand and gravel pits, or lake and reservoir shorelines where there is a source of fish which they feed on, according to the USFWS. The range of the interior least tern includes isolated areas along the Mississippi, Missouri, Ohio,

Red, and Rio Grande river systems. In New Mexico, they have been observed nesting at Brantley Lake and Bitter Lake National Wildlife Refuge. Their winter home is not well known, but probably includes coastal areas of Central and South America, according to reported observations. The preferred and typical habitat of the least tern does not occur within the project or action area and it is extremely unlikely that this species would exist within the project or action area. The project and associated actions will not likely impact this species.

**g. Mammals eliminated from further consideration**

There are no federally listed mammals in Doña Ana County, New Mexico.

**8.3 Listed Species Evaluated Further**

Table 3. Listed Species with the Potential to Occur in the Project Area and/or Action Area.

Species Category	Species	Status	Location of Habitat	Species Present or Absent at Time of Survey within the Survey Area
Listed Plants	NA	NA	NA	NA
Listed Invertebrates	NA	NA	NA	NA
Listed Fish	NA	NA	NA	NA
Listed Amphibians	NA	NA	NA	NA
Listed Reptiles	NA	NA	NA	NA
Listed Birds	NA			
Listed Mammals	NA	NA	NA	NA

**a. Listed Plants**

All listed plant species were eliminated from further evaluation. They were not present in the survey or action area.

**b. Listed Invertebrates**

There are no federally listed invertebrates in Doña Ana County, New Mexico.

**c. Listed Fish**

There are no federally listed fish in Doña Ana County, New Mexico.

**d. Listed Amphibians**

There are no federally listed amphibians in Doña Ana County, New Mexico.

**e. Listed Reptiles**

There are no federally listed reptiles in Doña Ana County, New Mexico.

**f. Listed Birds**

All listed bird species were eliminated from further evaluation. They were not present in the survey or action area.

**g. Listed Mammals**

There are no federally listed mammals in Doña Ana County, New Mexico.

**9.0 Project Area Direct Effects Analysis**

The Council on Environmental Quality (CEQ) definition of direct effects:

*“caused by the action and occur at the same time and place”.*



**Direct effects/impacts of the proposed project may include:**

- The proposed project would permanently remove a small portion of vegetation from the location of the new booster station and well.
- The proposed project would temporarily remove vegetation from the areas being trenched; predominantly the shoulders of existing roadways.
- The proposed project would generate a temporary noise increase during construction.

**10.0 Project Area Indirect Effects Analysis**

The CEQ definition of indirect effects:

*“are caused by the action and are later in time and farther removed in distance, but are still reasonably foreseeable”.*

**Indirect effects/impacts of the proposed project may include:**

- There are no foreseeable indirect effects/impacts by the proposed project.

**11.0 Action Area Direct and Indirect Effects Analysis**

Direct and Indirect effects/impacts of the project on the action area may include:

- The noise effect will be temporary and no listed species or critical habitat will be impacted.
- This project will ultimately improve the drinking water system of the High Valley community and directly improve fire safety.

**12.0 Recommendations for Avoidance, Minimization, and Mitigation**

The following recommendations are made in an attempt to avoid, minimize and mitigate potential impacts and effects the project may have on the action area.

- USFWS recommends carrying out construction activities outside of the typical breeding season (March-August) in order to avoid impacts to migratory birds. If construction must occur during the breeding season, and nesting migratory or other birds are observed in the project area, all active nests will need to be located and/or avoided until young birds have successfully fledged.

**13.0 Conclusion**

**13.1 Listed species and critical habitat within the project area and potential impacts found.**

**USFWS listed species determinations.**

In conclusion, based on the site evaluation and existing data, SMA has been determined that there will likely be *no effects to federally endangered, threatened and candidate species and their designated critical habitat*, as a result of the proposed project. Consequently, SMA has found that there will be no potential negative impacts to listed species or critical habitat due to this project.

**13.2 Distance to nearest critical habitat and direct or indirect impact determination**

The project will not adversely impact critical habitat for any listed species adversely.

**13.3 USFWS Consultation Necessity**

Formal or informal consultation with USFWS is not necessary regarding this project.

**13.4 Project Impacts and applicable permitting to mitigate or minimize those impacts.**

Anticipated water quality impacts will be mitigated and minimized by implementation of a SWPPP. No impacts have been identified as part of this evaluation that will require any special permitting.

**13.5 Survey Observations Summary**

The High Valley Farms Subdivision in Vado, NM is mainly a small rural community surrounded by disturbed Chihuahuan Desert habitat and rangeland. There were several common bird species detected during the survey, but none were nesting or breeding within the area observed. The project area is fragmented and littered with disturbance. The action area, although having some small areas of vegetation is not suitable habitat for wildlife. The vegetation species observed are not listed as threatened or endangered and do not provide critical habitat to any species.

**14.0 Report Preparers and Certification**

This report was prepared by SMA for the High Valley MDWCA in Doña Ana County, New Mexico. The undersigned hereby acknowledges personal knowledge of the information provided in this report.

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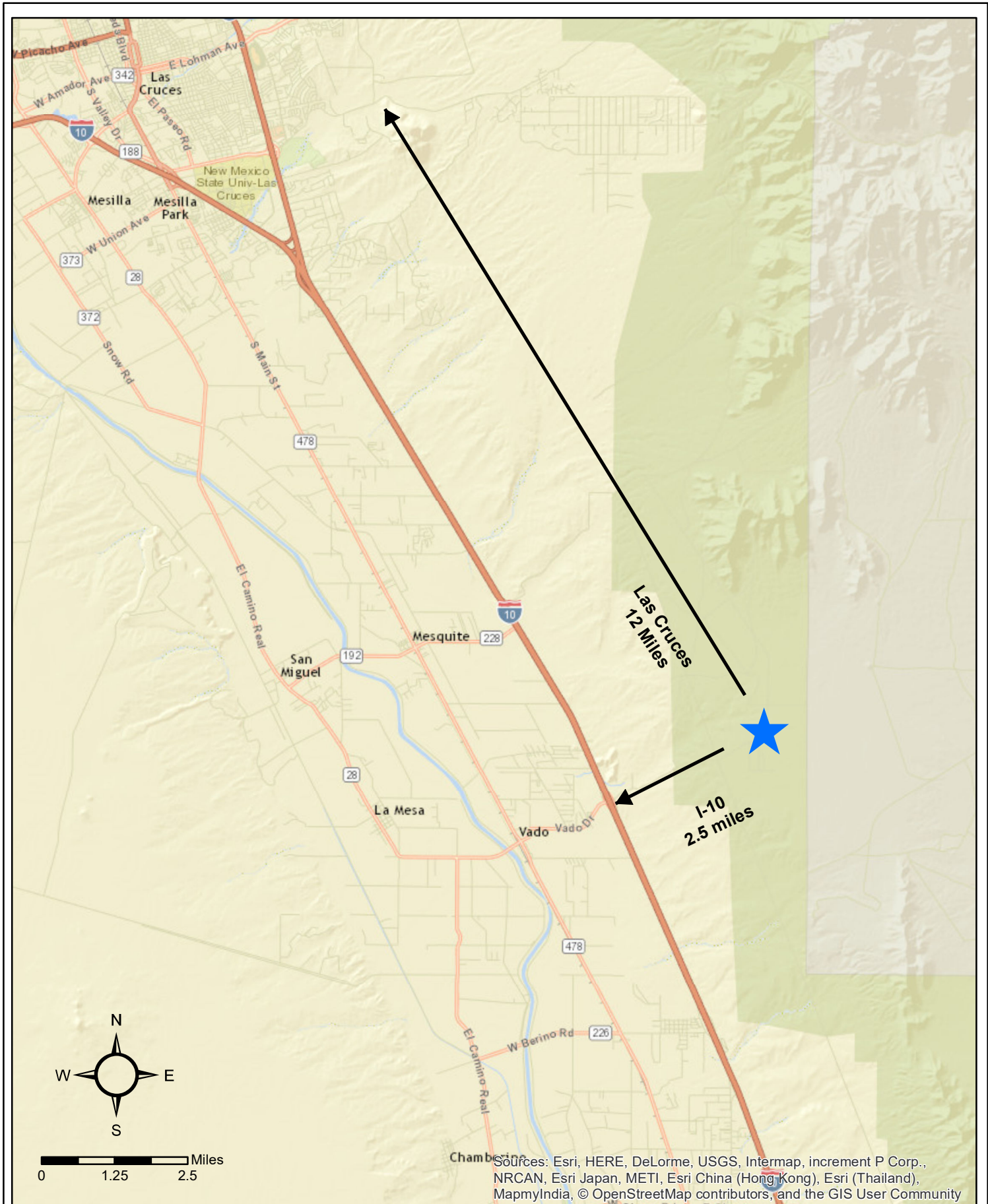


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# **APPENDIX B1:**

## **Maps and Figures**





Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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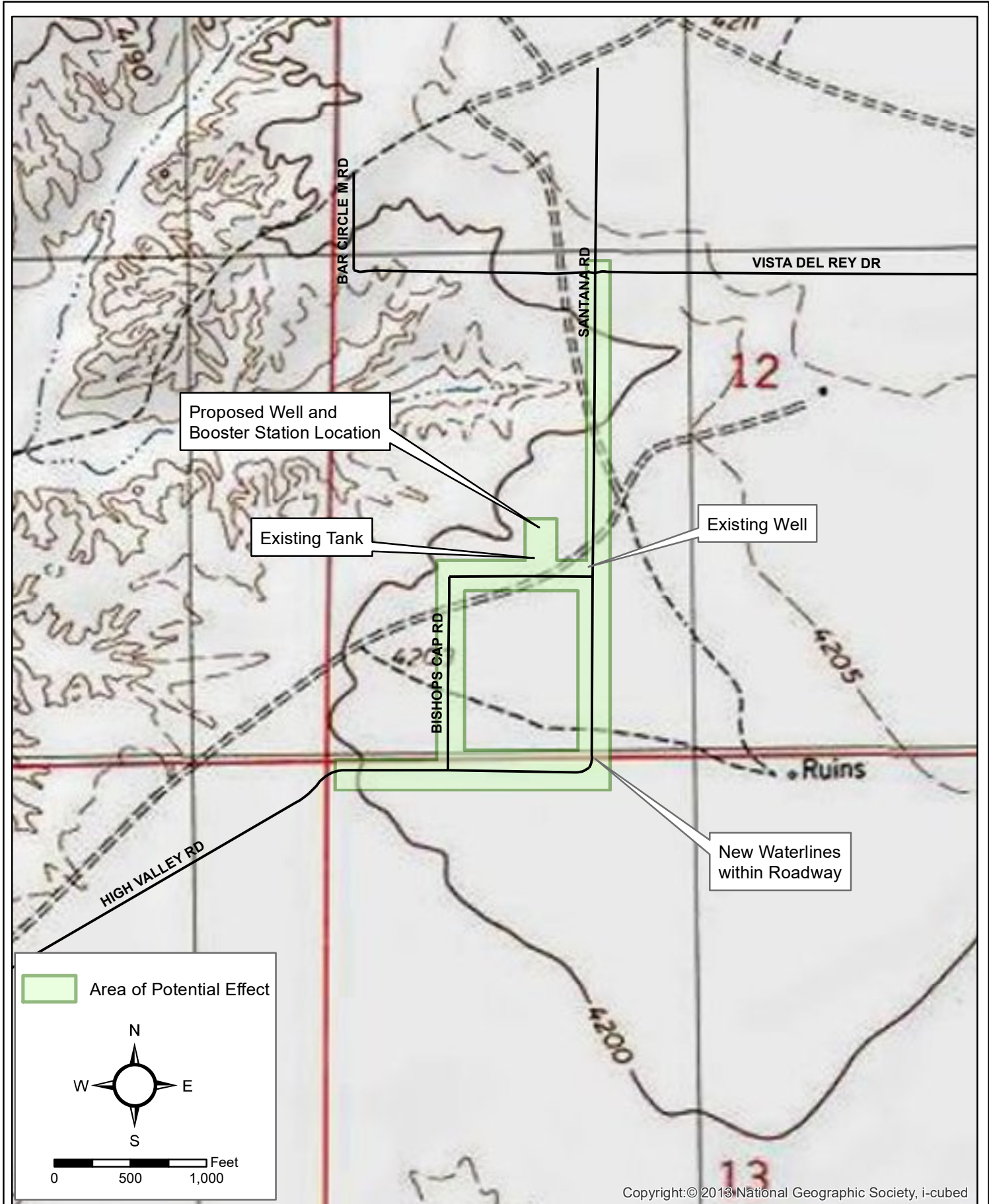


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Vicinity Map  
High Valley MDWCA Biological Evaluation  
Vado, New Mexico

Figure 1





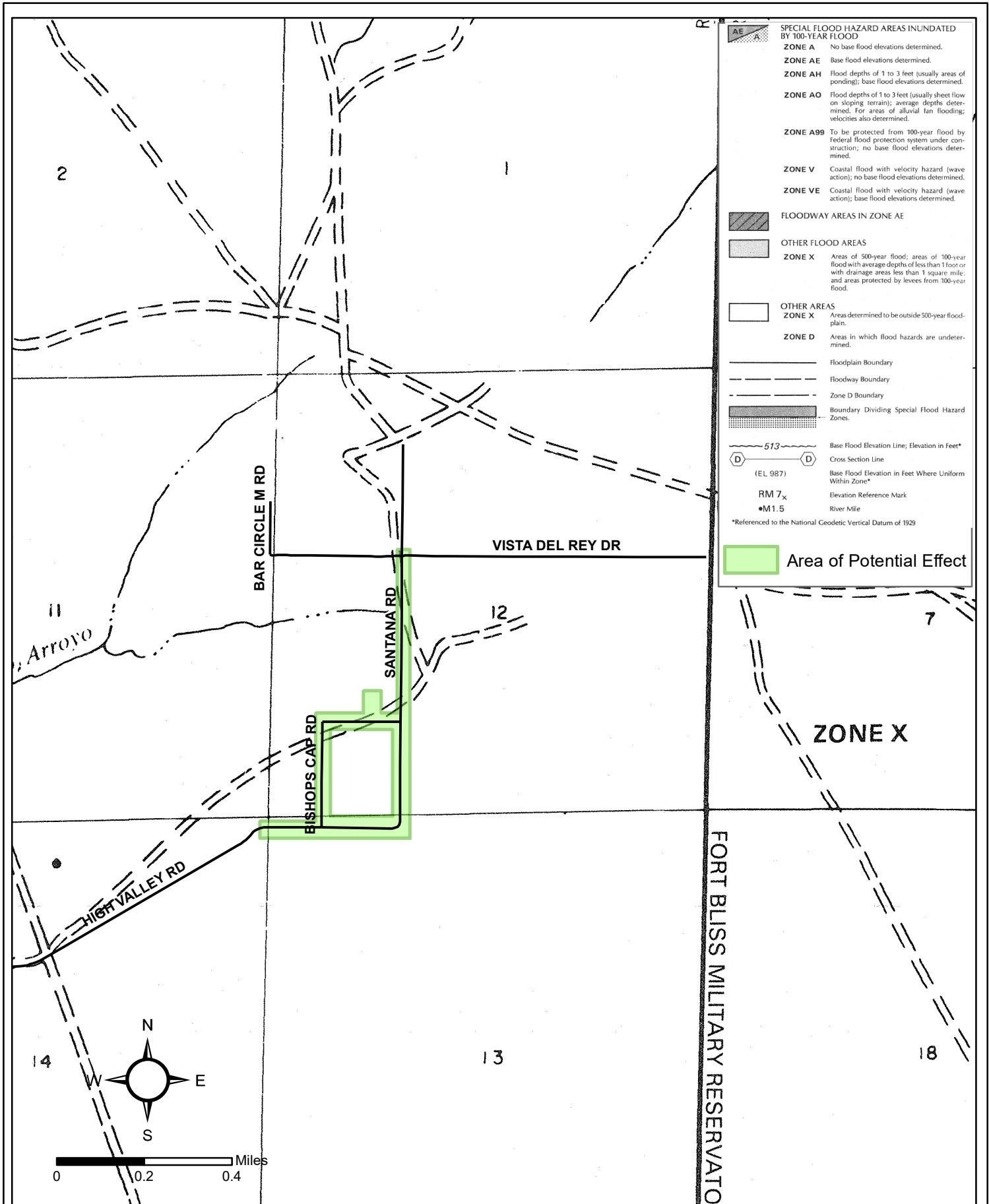
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US Topographic Map  
High Valley MDWCA Biological Evaluation  
Vado, New Mexico

Figure 2



**SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD**

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding; velocities also determined.
- ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

**FLOODWAY AREAS IN ZONE AE**

**OTHER FLOOD AREAS**

- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

**OTHER AREAS**

- ZONE X** Areas determined to be outside 500-year floodplain.
- ZONE D** Areas in which flood hazards are undetermined.

— Floodplain Boundary  
 - - - Floodway Boundary  
 - - - Zone D Boundary  
 - - - Boundary Dividing Special Flood Hazard Zones

513  
 (D) — (D)  
 (EL 987)  
 Base Flood Elevation Line; Elevation in Feet\*  
 Cross Section Line  
 Base Flood Elevation in Feet Where Uniform Within Zone\*

RM 7<sub>x</sub> Elevation Reference Mark  
 •M1.5 River Mile

\*Referenced to the National Geodetic Vertical Datum of 1929

**Area of Potential Effect**

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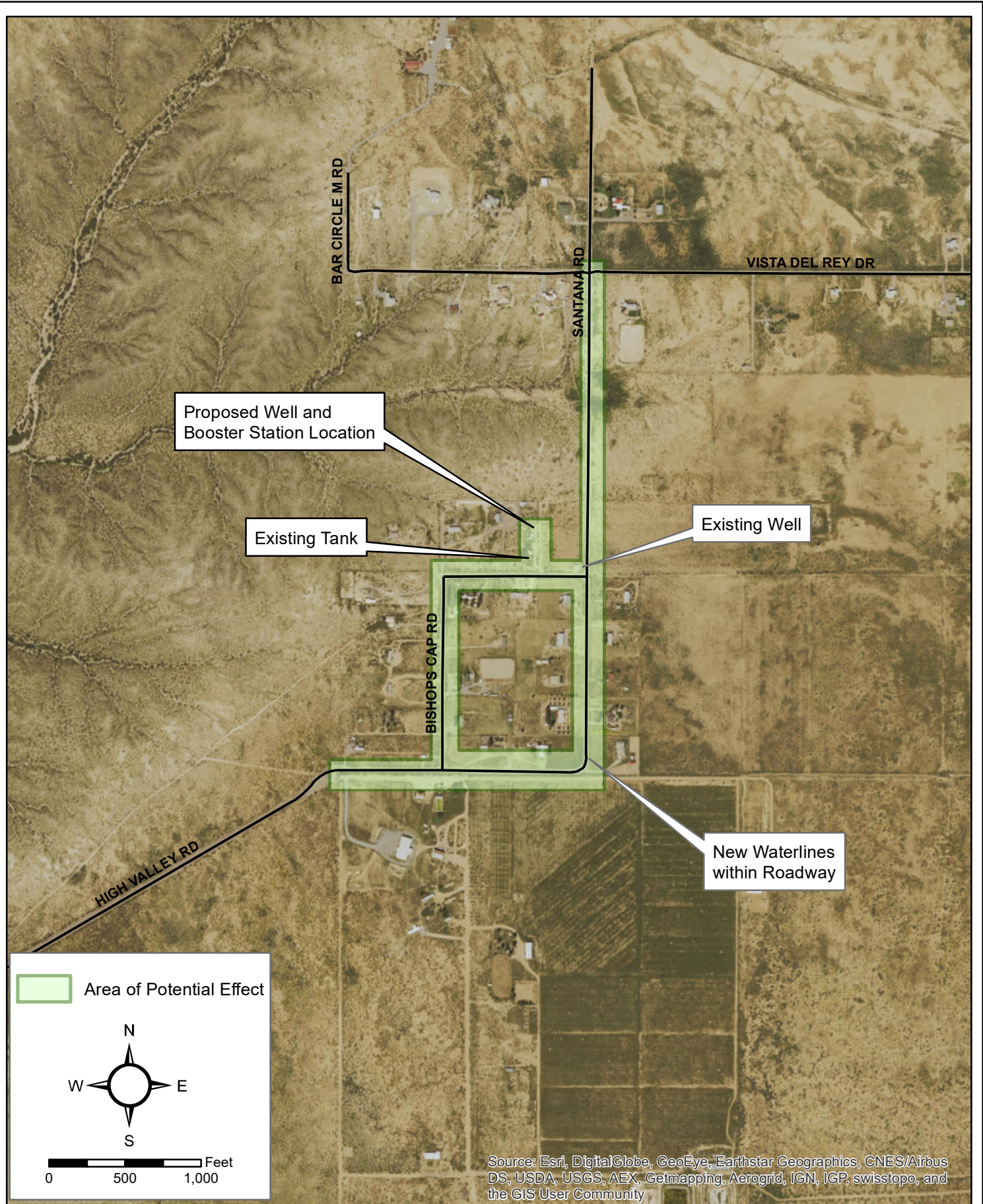


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FEMA FIRM Map of Proposed Service Area (Panel 3503C0800E)  
 High Valley MDWCA Biological Evaluation  
 Vado, New Mexico

Figure 3





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Action Area Map  
 High Valley MDWCA Biological Evaluation  
 Vado, New Mexico

Figure 4



**APPENDIX B2:**  
**Photographs of Project Area and Survey Area**



Photo 1. View of Bishop Cap's Road from High Valley Road, facing north.



Photo 2. View of High Valley Road from Bishop's Cap Road, facing east.





Photo 3. View of The Lord's Ranch from the Bishop's Cap Road and High Valley Road intersection, facing south.



Photo 4. View of High Valley Road from Bishop's Cap Road, facing west.







Photo 5. View from the western portion of the project area on Lord Ranch Drive, facing north.



Photo 6. View of Lord Ranch Drive/High Valley Road from western extent of project area, facing east.





Photo 7. View of The Lord's Ranch entrance from western extent of project area, facing south.



Photo 8. View of Lord Ranch Drive from western extent of project area, facing west.







Photo 9. View of small mammal burrow, specifically characteristic of kangaroo rats, along project area.



Photo 10. View from center of Bishop's Cap Road, facing north.







Photo 11. View from center of Bishop's Cap Road, facing south.



Photo 12. View of intersection of Bishop Cap's Road and Arapaho Road, facing east.





Photo 13. View of Arapaho Road from Bishop Cap's Road, facing east.



Photo 14. View of Bishop Cap's Road from Arapaho Road, facing south.







Photo 15. View from intersection of Bishop Cap's Road and Arapaho Road, facing west.



Photo 16. View from intersection of Bishop Cap's Road and Arapaho Road, facing north.







Photo 17. View of millipede along the roadway of project area.



Photo 18. View of the tank site with the old water tank from Arapaho Road, facing north.





Photo 19. View of Arapaho Road from tank site, facing east.



Photo 20. View from tank site, facing south.







Photo 21. View of Arapaho Road from tank site, facing west.



Photo 22. View of larger water tank at the tank site.







Photo 23. View of smaller tank at the tank site.



Photo 24. View of old water tanks, structure and surrounding landscape at the tank site, facing southwest.





Photo 25. View of the dirt road from the northern portion of the tank site, facing south.



Photo 26. View of well site from Arapaho Road, facing north.







Photo 27. View of Santana Road from Arapaho Road, adjacent to well site, facing north.



Photo 28. View from Santana Road and Arapaho Road intersection, facing east.







Photo 29. View of Santana Road from Arapaho Road, facing south



Photo 30. View of Arapaho Road from Santana Road, facing west.





Photo 31. View of Santana Road from Arapaho Road, facing north



Photo 32. View of well site, facing northwest.







Photo 33. View of Santana Road from the midpoint between Arapaho Road and Vista Del Ray, facing north.



Photo 34. View of Santana Road from the midpoint between Arapaho Road and Vista Del Ray, facing south.







Photo 35. View of the northern extent of the project area roadway, facing north.



Photo 36. View of Vista Del Ray from Santana Road, facing east.





Photo 37. View of Santana Road from Vista Del Ray, facing south.



Photo 38. View of Vista Del Ray from Santana Road, facing west.







Photo 39. View of private property landscaping on Santana Road, between Arapaho Road and High Valley Road, facing north.



Photo 40. View from midpoint between Arapaho Road and High Valley Road, facing south.







Photo 41. View from Santana Road and High Valley Road intersection, facing north.



Photo 42. View from Santana Road and High Valley Road intersection, facing east.





Photo 43. View from Santana Road and High Valley Road intersection, facing south.



Photo 44. View from Santana Road and High Valley Road intersection, facing west.



**APPENDIX B3:**  
**U. S. Fish & Wildlife Service, Listed and  
Sensitive Species in Doña Ana County**







U.S. Fish &amp; Wildlife Service

**ECOS**
[ECOS](#) / [Species Reports](#) / Species By County Report

## Species By County Report

The following report contains Species that are known to or are believed to occur in this county. Species with range unrefined past the state level are now excluded from this report. If you are looking for the Section 7 range (for Section 7 Consultations), please visit the [IPaC](#) application.

County: Doña Ana, New Mexico

**CSV**

Need to contact a FWS field office about a species? Follow [this link](#) to find your local FWS Office.

Group	Name	Population	Status	Lead Office	Recovery Plan	Recovery Plan Action Status	Recovery Plan Stage
Birds	Yellow-billed Cuckoo ( <i>Coccyzus americanus</i> )	Western U.S. DPS	Threatened	Sacramento Fish and Wildlife Office			
Birds	northern aplomado falcon ( <i>Falco femoralis septentrionalis</i> )	U.S.A (AZ, NM)	Experimental Population, Non-Essential	Office of the Regional Director			
Birds	Least tern ( <i>Sterna antillarum</i> )	interior pop.	Endangered	Mississippi Ecological Services Field Office	<a href="#">Least Tern (Interior Pop.)</a>	<a href="#">Implementation Progress</a>	Final
Flowering Plants	Sneed pincushion cactus ( <i>Coryphantha sneedii</i> var. <i>sneedii</i> )		Endangered	New Mexico Ecological Services Field Office	<a href="#">Sneed/Lee Pincushion Cactus (2 spp.)</a>	<a href="#">Implementation Progress</a>	Final

**APPENDIX B4:**  
**New Mexico Department of Game and Fish,  
County, Federal and State Species Status for  
Doña Ana County**





# Biota Information System of New Mexico



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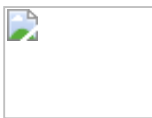



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## Report County Federal/State Species Status for Dona Ana

49 species returned.

Taxonomic Group	# Species	Taxonomic Group	# Species
Reptiles	4	Molluscs	1
Birds	26	Crustaceans	1
Mammals	17		








[Export to Excel](#)

Species ID	SpeciesLink	Common Name	Scientific Name	Habitat Map	Photo	Status
050025	<a href="#">Pale Townsend's Big-eared Bat</a>	Pale Townsend's Big-eared Bat	Corynorhinus townsendii	Yes		Federal: FWS Species of Concern (no longer maintained) State NM: Sensitive taxa (informal)
050032	<a href="#">Southwestern Little Brown Myotis</a>	Southwestern Little Brown Myotis	Myotis occultus	Yes	no photo	State NM: Sensitive taxa (informal)
050047	<a href="#">Fringed Myotis</a>	Fringed Myotis	Myotis thysanodes	Yes	no photo	State NM: Sensitive taxa (informal)
050059	<a href="#">Long-legged Myotis</a>	Long-legged Myotis	Myotis volans	Yes		State NM: Sensitive taxa (informal)
050085	<a href="#">Western Red Bat</a>	Western Red Bat	Lasiurus blossevillii	Yes	no photo	Federal: FWS Species of Concern (no longer maintained) State NM: Sensitive taxa (informal)
050093	<a href="#">Western Small-footed Myotis</a>	Western Small-footed Myotis	Myotis ciliolabrum	Yes		State NM: Sensitive taxa (informal)
050095	<a href="#">Spotted Bat</a>	Spotted Bat	Euderma maculatum	Yes		State NM: Threatened
050103	<a href="#">Yuma Myotis</a>	Yuma Myotis	Myotis yumanensis	Yes		State NM: Sensitive taxa (informal)
			Nyctinomops			State NM: Sensitive taxa



050037	<b>Big Free-tailed Bat</b>	Big Free-tailed Bat	macrotis	Yes	no photo	(informal)
050240	<b>Red Fox</b>	Red Fox	Vulpes vulpes			State NM: Sensitive taxa (informal)
050735	<b>Common Hog-nosed Skunk</b>	Common Hog-nosed Skunk	Conepatus leuconotus	Yes		State NM: Sensitive taxa (informal)
050747	<b>Western Spotted Skunk</b>	Western Spotted Skunk	Spilogale gracilis	Yes	no photo	State NM: Sensitive taxa (informal)
050670	<b>Ringtail</b>	Ringtail	Bassariscus astutus			State NM: Sensitive taxa (informal)
050146	<b>Organ Mountains Colorado Chipmunk</b>	Organ Mountains Colorado Chipmunk	Tamias quadrivittatus australis	Yes		Federal: FWS Species of Concern (no longer maintained) State NM: Threatened
050200	<b>Black-tailed Prairie Dog</b>	Black-tailed Prairie Dog	Cynomys ludovicianus ludovicianus			Federal: FWS Species of Concern (no longer maintained) State NM: Sensitive taxa (informal)
050270	<b>Desert Pocket Gopher</b>	Desert Pocket Gopher	Geomys arenarius arenarius		no photo	Federal: FWS Species of Concern (no longer maintained) State NM: Sensitive taxa (informal)
050496	<b>Pecos River Muskrat</b>	Pecos River Muskrat	Ondatra zibethicus ripensis	Yes	no photo	Federal: FWS Species of Concern (no longer maintained) State NM: Sensitive taxa (informal)
041400	<b>Brown Pelican</b>	Brown Pelican	Pelecanus occidentalis	Yes		State NM: Endangered
040040	<b>Common Black Hawk</b>	Common Black Hawk	Buteogallus anthracinus	Yes		Federal: FWS Species of Concern (no longer maintained) State NM: Threatened
040370	<b>Bald Eagle</b>	Bald Eagle	Haliaeetus leucocephalus	Yes		State NM: Threatened
040610	<b>Northern Goshawk</b>	Northern Goshawk	Accipiter gentilis			Federal: FWS Species of Concern (no longer maintained) State NM: Sensitive taxa (informal)
040380	<b>Aplomado Falcon</b>	Aplomado Falcon	Falco femoralis	Yes		Federal: Endangered State NM: Endangered
040384	<b>Peregrine Falcon</b>	Peregrine Falcon	Falco peregrinus	Yes		Federal: FWS Species of Concern (no longer maintained) State NM: Threatened

040385	<b>Arctic Peregrine Falcon</b>	Arctic Peregrine Falcon	Falco peregrinus tundrius	Yes	no photo	Federal: FWS Species of Concern (no longer maintained) State NM: Threatened
041500	<b>Mountain Plover</b>	Mountain Plover	Charadrius montanus	Yes		State NM: Sensitive taxa (informal)
042050	<b>Black Tern</b>	Black Tern	Chlidonias niger			Federal: FWS Species of Concern (no longer maintained)
042070	<b>Least Tern</b>	Least Tern	Sternula antillarum	Yes		Federal: Endangered State NM: Endangered
040195	<b>Neotropic Cormorant</b>	Neotropic Cormorant	Phalacrocorax brasilianus	Yes		State NM: Threatened
040690	<b>Common Ground-dove</b>	Common Ground-dove	Columbina passerina	Yes		State NM: Endangered
040250	<b>Yellow-billed Cuckoo (western pop)</b>	Yellow-billed Cuckoo (western pop)	Coccyzus americanus occidentalis			Federal: Threatened State NM: Sensitive taxa (informal)
041320	<b>Burrowing Owl</b>	Burrowing Owl	Athene cucularia	Yes		Federal: FWS Species of Concern (no longer maintained)
041375	<b>Mexican Spotted Owl</b>	Mexican Spotted Owl	Strix occidentalis lucida	Yes		Federal: Critical Hab. Designated (NM) Federal: Threatened State NM: Sensitive taxa (informal)
041235	<b>Buff-collared Nightjar</b>	Buff-collared Nightjar	Antrostomus ridgwayi	Yes	no photo	State NM: Endangered
040905	<b>Broad-billed Hummingbird</b>	Broad-billed Hummingbird	Cyananthus latirostris	Yes		State NM: Threatened
040925	<b>Costa's Hummingbird</b>	Costa's Hummingbird	Calypte costae	Yes		State NM: Threatened
040950	<b>Violet-crowned Hummingbird</b>	Violet-crowned Hummingbird	Amazilia violiceps	Yes		State NM: Threatened
040521	<b>Southwestern Willow Flycatcher</b>	Southwestern Willow Flycatcher	Empidonax traillii extimus	Yes		Federal: Critical Hab. Designated (NM) Federal: Endangered State NM: Endangered
041750	<b>Loggerhead Shrike</b>	Loggerhead Shrike	Lanius ludovicianus			State NM: Sensitive taxa

						(informal)
042190	<b>Bell's Vireo</b>	Bell's Vireo	Vireo bellii			Federal: FWS Species of Concern (no longer maintained) State NM: Threatened
042200	<b>Gray Vireo</b>	Gray Vireo	Vireo vicinior	Yes		State NM: Threatened
041475	<b>Sprague's Pipit</b>	Sprague's Pipit	Anthus spragueii	Yes	no photo	Federal: Candidate
041785	<b>Baird's Sparrow</b>	Baird's Sparrow	Ammodramus bairdii	Yes		Federal: FWS Species of Concern (no longer maintained) State NM: Threatened
040125	<b>Varied Bunting</b>	Varied Bunting	Passerina versicolor			State NM: Threatened
030135	<b>Reticulate Gila Monster</b>	Reticulate Gila Monster	Heloderma suspectum suspectum	Yes		State NM: Endangered
030046	<b>Bleached Earless Lizard</b>	Bleached Earless Lizard	Holbrookia maculata ruthveni	Yes		State NM: Sensitive taxa (informal)
030056	<b>Southwestern Fence Lizard</b>	Southwestern Fence Lizard	Sceloporus cowlesi	Yes		State NM: Sensitive taxa (informal)
030511	<b>Little White Whiptail</b>	Little White Whiptail	Aspidoscelis inornata gypsi	Yes	no photo	State NM: Sensitive taxa (informal)
060370	<b>Dona Ana Talussnail</b>	Dona Ana Talussnail	Sonorella todseni	Yes	no photo	Federal: FWS Species of Concern (no longer maintained) State NM: Threatened
070060	<b>Moore's Fairy Shrimp</b>	Moore's Fairy Shrimp	Streptocephalus moorei	Yes	no photo	State NM: Sensitive taxa (informal)

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## **APPENDIX B5:**

# **New Mexico Rare Plant Technical Council, List of New Mexico Rare Plants for Doña Ana County**





# New Mexico Rare Plants

[Home](#)  
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[Contacts](#)

[Rare Plant List](#)  
[County List](#)  
[Agency Status](#)  
[Photo List](#)

[About the List](#)  
[History of Changes](#)  
[Species Considered, but dropped](#)

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## Results of County Search

DOÑA ANA	
Scientific name	County-NM
<a href="#"><i>Agastache cana</i></a>	Doña Ana, Grant, Luna, Sierra
<a href="#"><i>Agastache pringlei</i> var. <i>verticillata</i></a>	Doña Ana
<a href="#"><i>Astragalus castetteri</i></a>	Doña Ana, Sierra
<a href="#"><i>Boechera zephyra</i></a>	Doña Ana, Eddy, Otero
<a href="#"><i>Castilleja organorum</i></a>	Doña Ana
<a href="#"><i>Draba standleyi</i></a>	Doña Ana, Otero, Sierra, Socorro
<a href="#"><i>Escobaria organensis</i></a>	Doña Ana
<a href="#"><i>Escobaria sandbergii</i></a>	Doña Ana, Sierra
<a href="#"><i>Escobaria sneedii</i> var. <i>sneedii</i></a>	Doña Ana
<a href="#"><i>Escobaria villardii</i></a>	Doña Ana, Otero
<a href="#"><i>Hexalectris arizonica</i></a>	Doña Ana, Hidalgo, Otero, Sierra
<a href="#"><i>Hymenoxys vaseyi</i></a>	Doña Ana, Sierra
<a href="#"><i>Oenothera organensis</i></a>	Doña Ana
<a href="#"><i>Opuntia arenaria</i></a>	Doña Ana, Luna, Socorro
<a href="#"><i>Peniocereus greggii</i> var. <i>greggii</i></a>	Doña Ana, Grant, Hidalgo, Luna
<a href="#"><i>Penstemon alamosensis</i></a>	Doña Ana, Lincoln, Otero
<a href="#"><i>Perityle cernua</i></a>	Doña Ana
<a href="#"><i>Perityle staurophylla</i> var. <i>staurophylla</i></a>	Doña Ana, Otero, Sierra
<a href="#"><i>Polygala rimulicola</i> var. <i>mescalerorum</i></a>	Doña Ana
<a href="#"><i>Salvia summa</i></a>	Chaves, Doña Ana, Eddy
<a href="#"><i>Scrophularia laevis</i></a>	Doña Ana
<a href="#"><i>Silene plankii</i></a>	Bernalillo, Doña Ana, Sandoval, Sierra, Socorro, Torrance

Photo credits in header *Peniocereus greggii* var. *greggii* © T. Todsén,  
*Lepidospartum burgessii* © M. Howard, *Argemone pleiacantha* ssp. *pinnatisecta* © R. Sivinski  
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**APPENDIX B6:**  
**List of Birds Protected by the Migratory Bird  
Treaty Act**





# FEDERAL REGISTER

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Vol. 78

Friday,

No. 212

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Part III

Department of the Interior

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Fish and Wildlife Service

50 CFR Parts 10 and 21

General Provisions; Revised List of Migratory Birds; Final Rule

**DEPARTMENT OF THE INTERIOR****Fish and Wildlife Service****50 CFR Parts 10 and 21**

[Docket No. FWS-R9-MB-2010-0088, FF09M21200-134-FXMB1231099BPP0]

RIN 1018-AX48

**General Provisions; Revised List of Migratory Birds**

**AGENCY:** Fish and Wildlife Service, Interior.

**ACTION:** Final rule.

**SUMMARY:** We, the U.S. Fish and Wildlife Service, revise the List of Migratory Birds by both adding and removing species. Reasons for the changes to the list include adding species based on new taxonomy and new evidence of occurrence in the United States or U.S. territories, removing species no longer known to occur within the United States, and changing names to conform to accepted use. The net increase of 19 species (23 added and 4 removed) brings the total number of species protected by the Migratory Bird Treaty Act (MBTA) to 1,026. We regulate most aspects of the taking, possession, transportation, sale, purchase, barter, exportation, and importation of migratory birds. An accurate and up-to-date list of species protected by the MBTA is essential for public notification and regulatory purposes.

**DATES:** This rule is effective December 2, 2013.

**FOR FURTHER INFORMATION CONTACT:** George Allen at 703-358-1825.

**SUPPLEMENTARY INFORMATION:**

**Background****What statutory authority does the service have for this rulemaking?**

We have statutory authority and responsibility for enforcing the Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703-712), the Fish and Wildlife Improvement Act of 1978 (16 U.S.C. 7421), and the Fish and Wildlife Act of 1956 (16 U.S.C. 742a-j). The MBTA implements Conventions between the United States and four neighboring countries for the protection of migratory birds, as follows:

(1) Canada: Convention between the United States and Great Britain [on behalf of Canada] for the Protection of Migratory Birds, August 16, 1916, 39 Stat. 1702 (T.S. No. 628);

(2) Mexico: Convention between the United States and Mexico for the Protection of Migratory Birds and Game

Mammals, February 7, 1936, 50 Stat. 1311 (T.S. No. 912);

(3) Japan: Convention between the Government of the United States of America and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction, and Their Environment, March 4, 1972, 25 U.S.T. 3329 (T.I.A.S. No. 7990); and

(4) Russia: Convention between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment (Russia), November 19, 1976, 29 U.S.T. 4647 (T.I.A.S. No. 9073).

**What is the purpose of this rulemaking?**

Our purpose is to inform the public of the species protected by the MBTA and its implementing regulations. These regulations are found in Title 50, Code of Federal Regulations (CFR), Parts 10, 20, and 21. We regulate most aspects of the taking, possession, transportation, sale, purchase, barter, exportation, and importation of migratory birds. An accurate and up-to-date list of species protected by the MBTA is essential for regulatory purposes.

**Why is this amendment of the list of migratory birds necessary?**

The amendment is needed to: (1) Add five species previously overlooked from a family protected under the MBTA; (2) correct the spelling of six species on the alphabetized list; (3) correct the spelling of three species on the taxonomic list; (4) add 11 species based on new distributional records documenting their natural occurrence in the United States since April 2007; (5) add one species from a family now protected under the MBTA as a result of taxonomic changes; (6) add six species newly recognized as a result of recent taxonomic changes; (7) remove four species not known to occur within the boundaries of the United States or its territories as a result of recent taxonomic changes; (8) change the common (English) names of nine species to conform with accepted use; and (9) change the scientific names of 36 species to conform to accepted use.

The List of Migratory Birds (50 CFR 10.13) was last revised on March 1, 2010 (75 FR 9282). These amendments were necessitated by three published supplements to the 7th (1998) edition of the American Ornithologists' Union's (AOU's) *Check-list of North American birds* (AOU 2008, AOU 2009, and AOU 2010).

In addition, we correct the legal authorities citations at 50 CFR 10.13(a).

We also make a small change to a definition in 50 CFR 21.3. We update

the definition of "raptor" to also include the Order Accipitiformes, corresponding to recent taxonomic changes reflected in the List of Migratory Birds.

**What scientific authorities are used to amend the list of migratory birds?**

Although bird names (common and scientific) are relatively stable, staying current with standardized use is necessary to avoid confusion in communications. In making our determinations, we primarily relied on the American Ornithologists' Union's *Check-list of North American birds* (AOU 1998), as amended (AOU 1999, 2000, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, and 2010), on matters of taxonomy, nomenclature, and the sequence of species and other higher taxonomic categories (orders, families, subfamilies) for species that occur in North America. The AOU Checklist contains all bird species that have occurred in North America from the Arctic through Panama, including the West Indies and the Hawaiian Islands, and includes distributional information for each species, which specifies whether the species is known to occur in the United States. For the 39 species that occur outside the geographic area covered by the *Check-list* (28 that occur in the Pacific island territories and 11 listed in the Japanese and/or Russian conventions that have not occurred in the AOU area), we relied primarily on Clements (2007). Although we primarily rely on the above checklists, when informed taxonomic opinion is inconsistent or controversial, we evaluate available published and unpublished information and come to our own conclusion regarding the validity of taxa.

**What criteria are used to identify individual species protected by the MBTA?**

A species qualifies for protection under the MBTA by meeting one or more of the following four criteria:

(1) It is covered by the Canadian Convention of 1916, as amended in 1996, by virtue of meeting the following three criteria: (a) It belongs to a family or group of species named in the Canadian Convention, as amended; (b) specimens, photographs, videotape recordings, or audiotape recordings provide convincing evidence of natural occurrence in the United States or its territories; and (c) the documentation of such records has been recognized by the AOU or other competent scientific authorities.

(2) It is covered by the Mexican Convention of 1936, as amended in

1972, by virtue of meeting the following three criteria: (a) It belongs to a family or group of species named in the Mexican Convention, as amended; (b) specimens, photographs, videotape recordings, or audiotape recordings provide convincing evidence of natural occurrence in the United States or its territories; and (c) the documentation of such records has been recognized by the AOU or other competent scientific authorities.

(3) It is listed in the annex to the Japanese Convention of 1972, as amended.

(4) It is listed in the appendix to the Russian Convention of 1976.

In accordance with the Migratory Bird Treaty Reform Act of 2004 (MBTRA) (Pub. L. 108-447, 118 Stat. 2809, 3071-72), we include all species native to the United States or its territories, which are those that occur as a result of natural biological or ecological processes (see 70 FR 12710, March 15, 2005). We do not include nonnative species whose occurrences in the United States are solely the result of intentional or unintentional human-assisted introduction(s).

#### How do the changes affect the list of migratory birds?

Several taxonomic changes were made at the Order and Family level by the AOU since our 2010 publication of the list (75 FR 9282, March 1, 2010). These changes affect the inclusion and taxonomic order of species on this list. Specifically, the Orders Phaethontiformes and Suliformes were split from the Pelecaniformes. Phaethontiformes now includes the Family Phaethontidae (tropicbirds); Suliformes now includes the Families Fregatidae (frigatebirds), Sulidae (boobys), Phalacrocoracidae (cormorants), and Anhingidae (anhingas). In addition, the Order Accipitriformes was split from the Falconiformes and now include the Families Cathartidae (vultures), Pandionidae (Osprey), and Accipitridae (hawks and eagles). At the Family level, the Ardeidae (herons and egrets) and Threskiornithidae (ibis and spoonbills) were moved from the Ciconiiformes to the Pelecaniformes Order, the Pandionidae (Osprey) was split from the Accipitridae (hawks and eagles), and the Stercorariidae (jaegers and skuas) was split from the Laridae (gulls, terns, and skimmers). The Polioptilidae (gnatcatchers), Phylloscopidae (*Phylloscopus* warblers), Acrocephalidae (*Acrocephalus* warblers), and Megaluridae (*Locustella* warblers) were split from the Sylviidae, and the Calcariidae (longspurs and

snow buntings) was split from the Emberizidae (buntings and sparrows). The euphonias were put into their own Subfamily (Euphoniinae) and moved from the Thraupidae to the Fringillidae Family. All species within these newly created Families continue to be protected under the MBTA. In addition, the Wrentit was moved from the Timaliidae (babblers) to the Sylviidae and is now in a Family protected by the MBTA.

The amendments (23 additions, 4 removals, and 54 name changes) affect a grand total of 79 species and result in a net addition of 19 species to the List of Migratory Birds, increasing the species total from 1,007 to 1,026. Of the 23 species that we add to the list, 6 were previously covered under the MBTA as subspecies of listed species. These amendments can be logically arranged in the following 9 categories:

(1) Add five species from the family Muscicapidae, a family specifically listed in the 1996 protocol amending the 1916 convention with Canada. The omission of these species on the previous list was an oversight. All are considered accidental or casual in Alaska. The species and relevant AOU publication(s) are:

Mugimaki Flycatcher, *Ficedula mugimaki* (AOU 1987, 1997, 1998);  
Taiga Flycatcher, *Ficedula albicilla* (AOU 1982, 1983, 1998, 2006);  
Dark-sided Flycatcher, *Muscicapa sibirica* (AOU 1982, 1983, 1998, 2004);  
Asian Brown Flycatcher, *Muscicapa dauurica* (AOU 1987, 1989, 1998); and  
Spotted Flycatcher, *Muscicapa striata* (AOU 2004).

(2) Correct the spelling of six scientific names on the alphabetized list:

*Nesofregata fuliginosa* (Polynesian Storm-Petrel), becomes *Nesofregata fuliginosa*;

*Thalasseus maximus* (Royal Tern), becomes *Thalasseus maximus*;

*Thalasseus sandvicensis* (Sandwich Tern), becomes *Thalasseus sandvicensis*;

*Vireo atricapillus* (Black-capped Vireo), becomes *Vireo atricapilla*;

*Phylloscopus sialatrix* (Wood Warbler), becomes *Phylloscopus sibilatrix*; and

*Locustella lanceolata* (Lanceolated Warbler), becomes *Locustella lanceolata*.

(3) Correct the spelling of three scientific names on the taxonomic list:

*Nesofregata fuiginosa* (Polynesian Storm-Petrel), becomes *Nesofregata fuliginosa*;

*Vireo atricapillus* (Black-capped Vireo), becomes *Vireo atricapilla*; and

*Tiaris olivacea* (Yellow-faced Grassquit), becomes *Tiaris olivacea*.

(4) Add 11 species based on review and acceptance by AOU (since April 2007) of new distributional records documenting their occurrence in the United States, Puerto Rico, or the U.S. Virgin Islands. These species belong to families covered by the Canadian and/or Mexican Conventions, and all are considered to be of accidental or casual occurrence. For each species, we list the State in which it has been recorded plus the relevant publication:

Parkinson's Petrel, *Procellaria parkinsoni*—California (AOU 2008);

Swinhoe's Storm-Petrel, *Oceanodroma monorhis*—North Carolina (AOU 2010);

Swallow-tailed Gull, *Creagrurus furcatus*—California (AOU 2008);

Brown Hawk-Owl, *Ninox scutulata*—Alaska (AOU 2009);

White-crested Elaenia, *Elaenia albiceps*—Texas (AOU 2010);

Crowned Slaty Flycatcher, *Empidonomus aurantioatrocristatus*—Louisiana (AOU 2010);

Sinaloa Wren, *Thryothorus sinaloa*—Arizona (AOU 2010);

Pallas's Leaf-Warbler, *Phylloscopus proregulus*—Alaska (AOU 2008);

Sedge Warbler, *Acrocephalus schoenobaenus*—Alaska (AOU 2009);

Rufous-tailed Robin, *Luscinia sibilans*—Alaska (AOU 2010); and

Yellow-browed Bunting, *Emberiza chrysophrys*—Alaska (AOU 2009).

(5) Add one species because of recent taxonomic changes transferring a species in a family formerly not protected by the MBTA (Timaliidae) into a family protected under the MBTA (Sylviidae). We reference the AOU publication supporting the change: Wrentit, *Chamaea fasciata* (AOU 2010).

(6) Add six species because of recent taxonomic changes in which taxa formerly treated as subspecies have been determined to be distinct species. Given that each of these species was formerly treated as subspecies of a listed species, these additions will not change the protective status of any of these taxa, only the names by which they are known. In each case, we reference the AOU publication supporting the change:

Eastern Spot-billed Duck, *Anas zonorhyncha*—formerly considered a subspecies of *Anas poecilorhyncha*, Spot-billed Duck (AOU 2008);

Black Scoter, *Melanitta americana*—formerly treated as a subspecies of *Melanitta nigra*, Common [Black] Scoter (AOU 2009);

Mexican Whip-poor-will, *Caprimulgus arizonae*—formerly treated as a subspecies of *Caprimulgus vociferus*, Whip-poor-will (AOU 2010);

Pacific Wren, *Troglodytes pacificus*—formerly treated as a subspecies of



*Troglodytes troglodytes*, Eurasian [Winter] Wren (AOU 2010); Winter Wren, *Troglodytes hiemalis*—formerly treated as a subspecies of *Troglodytes troglodytes*, Eurasian [Winter] Wren (AOU 2010); and Puerto Rican Oriole, *Icterus portoricensis*—formerly treated as a subspecies of *Icterus dominicensis*, Hispaniolan [Greater Antillean] Oriole (AOU 2010).

(7) Remove four species based on revised taxonomic treatments and distributional evidence confirming that their known geographic ranges lie entirely outside the political boundaries of the United States and its territories. In each case, we reference the AOU publication supporting these changes: Spot-billed Duck, *Anas poecilorhyncha* (AOU 2008); Common [Black] Scoter, *Melanitta nigra* (AOU 2009); Eurasian [Winter] Wren, *Troglodytes troglodytes* (AOU 2010); and Hispaniolan [Greater Antillean] Oriole, *Icterus dominicensis* (AOU 2010).

(8) Revise the common (English) names of nine species to conform to the most recent nomenclatural treatment. These revisions do not change the protective status of any of these taxa, only the names by which they are known. In each case, we reference the published source for the name change: Greater Flamingo, *Phoenicopterus ruber*, becomes American Flamingo (AOU 2008);

Greater Shearwater, *Puffinus gravis*, becomes Great Shearwater (AOU 2010); Whip-poor-will, *Caprimulgus vociferus*, becomes Eastern Whip-poor-will (AOU 2010);

Green Violet-ear, *Colibri thalassinus*, becomes Green Violetear (AOU 2008); Blue Rock Thrush, *Monticola solitarius*, becomes Blue Rock-Thrush (Clements 2007);

Clay-colored Robin, *Turdus grayi*, becomes Clay-colored Thrush (AOU 2008);

White-throated Robin, *Turdus assimilis*, becomes White-throated Thrush (AOU 2008);

Nelson's Sharp-tailed Sparrow, *Ammodramus nelsoni*, becomes Nelson's Sparrow (AOU 2009); and

Saltmarsh Sharp-tailed Sparrow, *Ammodramus caudacutus*, becomes Saltmarsh Sparrow (AOU 2009).

(9) Revise the scientific names of 36 species to conform to the most recent nomenclatural treatment. These revisions do not change the protective status of any of these taxa, only the names by which they are known. In each case, we reference the AOU publication documenting the name change:

*Larus philadelphia* (Bonaparte's Gull) becomes *Chroicocephalus philadelphia* (AOU 2008);

*Larus cirrocephalus* (Gray-hooded Gull) becomes *Chroicocephalus cirrocephalus* (AOU 2008);

*Larus ridibundus* (Black-headed Gull) becomes *Chroicocephalus ridibundus* (AOU 2008);

*Larus minutus* (Little Gull) becomes *Hydrocoloeus minutus* (AOU 2008);

*Larus atricilla* (Laughing Gull) becomes *Leucophaeus atricilla* (AOU 2008);

*Larus pipixcan* (Franklin's Gull) becomes *Leucophaeus pipixcan* (AOU 2008);

*Cyanocorax morio* (Brown Jay) becomes *Psilorhinus morio* (AOU 2010);

*Poecile hudsonica* (Boreal Chickadee) becomes *Poecile hudsonicus* (AOU 2009);

*Poecile cincta* (Gray-headed Chickadee) becomes *Poecile cinctus* (AOU 2009);

*Calcarius mccownii* (McCown's Longspur) becomes *Rhynchophanes mccownii* (AOU 2010);

*Vermivora pinus* (Blue-winged Warbler) becomes *Vermivora cyanoptera* (AOU 2010);

*Vermivora peregrina* (Tennessee Warbler) becomes *Oreothlypis peregrina* (AOU 2010);

*Vermivora celata* (Orange-crowned Warbler) becomes *Oreothlypis celata* (AOU 2010);

*Vermivora ruficapilla* (Nashville Warbler) becomes *Oreothlypis ruficapilla* (AOU 2010);

*Vermivora virginiae* (Virginia's Warbler) becomes *Oreothlypis virginiae* (AOU 2010);

*Vermivora crissalis* (Colima Warbler) becomes *Oreothlypis crissalis* (AOU 2010);

*Vermivora luciae* (Lucy's Warbler) becomes *Oreothlypis luciae* (AOU 2010);

*Parula superciliosa* (Crescent-chested Warbler) becomes *Oreothlypis superciliosa* (AOU 2010);

*Seiurus noveboracensis* (Northern Waterthrush) becomes *Parkesia noveboracensis* (AOU 2010);

*Seiurus motacilla* (Louisiana Waterthrush) becomes *Parkesia motacilla* (AOU 2010);

*Pipilo fuscus* (Canyon Towhee) becomes *Melozone fusca* (AOU 2010);

*Pipilo crissalis* (California Towhee) becomes *Melozone crissalis* (AOU 2010);

*Pipilo aberti* (Abert's Towhee) becomes *Melozone aberti* (AOU 2010);

*Aimophila carpalis* (Rufous-winged Sparrow) becomes *Peucaea carpalis* (AOU 2010);

*Aimophila botterii* (Botteri's Sparrow) becomes *Peucaea botterii* (AOU 2010);

*Aimophila cassinii* (Cassin's Sparrow) becomes *Peucaea cassinii* (AOU 2010);

*Aimophila aestivalis* (Bachman's Sparrow) becomes *Peucaea aestivalis* (AOU 2010);

*Aimophila quinquestriata* (Five-striped Sparrow) becomes *Amphispiza quinquestriata* (AOU 2010);

*Carduelis flammea* (Common Redpoll) becomes *Acanthis flammea* (AOU 2009);

*Carduelis hornemanni* (Hoary Redpoll) becomes *Acanthis hornemanni* (AOU 2009);

*Carduelis spinus* (Eurasian Siskin) becomes *Spinus spinus* (AOU 2009);

*Carduelis pinus* (Pine Siskin) becomes *Spinus pinus* (AOU 2009);

*Carduelis psaltria* (Lesser Goldfinch) becomes *Spinus psaltria* (AOU 2009);

*Carduelis lawrencei* (Lawrence's Goldfinch) becomes *Spinus lawrencei* (AOU 2009);

*Carduelis tristis* (American Goldfinch) becomes *Spinus tristis* (AOU 2009); and

*Carduelis sinica* (Oriental Greenfinch) becomes *Chloris sinica* (AOU 2009).

For ease of comparison, changes are summarized in the following table (numbers reference the categories treated above). Species whose names have been revised (categories 2, 3, 8, and 9) appear in both the left-hand column (old name removed) and right-hand column (new name added), as are species that have been added based on taxonomic splits (category 6) of extralimital species that have been removed (category 7).

Removed (taxonomically)	Added (taxonomically)
Spot-billed Duck, <i>Anas poecilorhyncha</i> (7)	Eastern Spot-billed Duck, <i>Anas zonorhyncha</i> (6).
Common [Black] Scoter, <i>Melanitta nigra</i> (7)	Black Scoter, <i>Melanitta americana</i> (6).
Greater Flamingo, <i>Phoenicopterus ruber</i> (8)	American Flamingo, <i>Phoenicopterus ruber</i> (8). Parkinson's Petrel, <i>Procellaria parkinsoni</i> (4).
Greater Shearwater, <i>Puffinus gravis</i> (8)	Great Shearwater, <i>Puffinus gravis</i> (8).
Polynesian Storm-Petrel, <i>Nesofregata fuliginosa</i> (2)	Polynesian Storm-Petrel, <i>Nesofregatta fuliginosa</i> (2).

Removed (taxonomically)	Added (taxonomically)
Polynesian Storm-Petrel, <i>Nesofregatta fuliginosa</i> (3) .....	Polynesian Storm-Petrel, <i>Nesofregatta fuliginosa</i> (3). Swinhoe's Storm-Petrel, <i>Oceanodroma monorhis</i> (4). Swallow-tailed Gull, <i>Creagrus furcatus</i> (4).
Bonaparte's Gull, <i>Larus philadelphia</i> (9) .....	Bonaparte's Gull, <i>Chroicocephalus philadelphia</i> (9).
Gray-hooded Gull, <i>Larus cirrocephalus</i> (9) .....	Gray-hooded Gull, <i>Chroicocephalus cirrocephalus</i> (9).
Black-headed Gull, <i>Larus ridibundus</i> (9) .....	Black-headed Gull, <i>Chroicocephalus ridibundus</i> (9).
Little Gull, <i>Larus minutus</i> (9) .....	Little Gull, <i>Hydrocoloeus minutus</i> (9).
Laughing Gull, <i>Larus atricilla</i> (9) .....	Laughing Gull, <i>Leucophaeus atricilla</i> (9).
Franklin's Gull, <i>Larus pipixcan</i> (9) .....	Franklin's Gull, <i>Leucophaeus pipixcan</i> (9).
Royal Tern, <i>Thalasseus maximus</i> (2) .....	Royal Tern, <i>Thalasseus maximus</i> (2).
Sandwich Tern, <i>Thalasseus sandvicensis</i> (2) .....	Sandwich Tern, <i>Thalasseus sandvicensis</i> (2).
Whip-poor-will, <i>Caprimulgus vociferus</i> (8) .....	Brown Hawk-Owl, <i>Ninox scutulata</i> (4). Eastern Whip-poor-will, <i>Caprimulgus vociferus</i> (8).
Green Violet-ear, <i>Colibri thalassinus</i> (8) .....	Mexican Whip-poor-will, <i>Caprimulgus arizonae</i> (6). Green Violetear, <i>Colibri thalassinus</i> (8).
Black-capped Vireo, <i>Vireo atricapillus</i> (2, 3) .....	White-crested Elaenia, <i>Elaenia albiceps</i> (4). Crowned Slaty Flycatcher, <i>Empidonomus aurantioatrocristatus</i> (4).
Brown Jay, <i>Cyanocorax morio</i> (9) .....	Black-capped Vireo, <i>Vireo atricapilla</i> (2, 3). Brown Jay, <i>Psilorhinus morio</i> (9).
Boreal Chickadee, <i>Poecile hudsonica</i> (9) .....	Boreal Chickadee, <i>Poecile hudsonicus</i> (9).
Gray-headed Chickadee, <i>Poecile cincta</i> (9) .....	Gray-headed Chickadee, <i>Poecile cinctus</i> (9).
Eurasian [Winter] Wren, <i>Troglodytes troglodytes</i> (7) .....	Sinaloa Wren, <i>Thryothorus sinaloa</i> (4). Pacific Wren, <i>Troglodytes pacificus</i> (6).
Wood Warbler, <i>Phylloscopus sibilatrix</i> (2) .....	Winter Wren, <i>Troglodytes hiemalis</i> (6). Wood Warbler, <i>Phylloscopus sibilatrix</i> (2).
Lanceolated Warbler, <i>Locustella lanceolata</i> (2) .....	Pallas's Leaf-Warbler, <i>Phylloscopus proregulus</i> (4). Lanceolated Warbler, <i>Locustella lanceolata</i> (2).
Blue Rock Thrush, <i>Monticola solitarius</i> (8) .....	Wrentit, <i>Chamaea fasciata</i> (5). Sedge Warbler, <i>Acrocephalus schoenobaenus</i> (4).
Clay-colored Robin, <i>Turdus grayi</i> (8) .....	Mugimaki Flycatcher, <i>Ficedula mugimaki</i> (1). Taiga Flycatcher, <i>Ficedula albicilla</i> (1).
White-throated Robin, <i>Turdus assimilis</i> (8) .....	Dark-sided Flycatcher, <i>Muscicapa sibirica</i> (1).
McCown's Longspur, <i>Calcarius mccownii</i> (9) .....	Asian Brown Flycatcher, <i>Muscicapa dauurica</i> (1).
Blue-winged Warbler, <i>Vermivora pinus</i> (9) .....	Spotted Flycatcher, <i>Muscicapa striata</i> (1).
Tennessee Warbler, <i>Vermivora peregrina</i> (9) .....	Blue Rock-Thrush, <i>Monticola solitarius</i> (8).
Orange-crowned Warbler, <i>Vermivora celata</i> (9) .....	Rufous-tailed Robin, <i>Luscinia sibilans</i> (4).
Nashville Warbler, <i>Vermivora ruficapilla</i> (9) .....	Clay-colored Thrush, <i>Turdus grayi</i> (8).
Virginia's Warbler, <i>Vermivora virginiae</i> (9) .....	White-throated Thrush, <i>Turdus assimilis</i> (8).
Colima Warbler, <i>Vermivora crissalis</i> (9) .....	McCown's Longspur, <i>Rhynchophanes mccownii</i> (9).
Lucy's Warbler, <i>Vermivora luciae</i> (9) .....	Blue-winged Warbler, <i>Vermivora cyanoptera</i> (9).
Crescent-chested Warbler, <i>Parula superciliosa</i> (9) .....	Tennessee Warbler, <i>Oreothlypis peregrina</i> (9).
Northern Waterthrush, <i>Seiurus noveboracensis</i> (9) .....	Orange-crowned Warbler, <i>Oreothlypis celata</i> (9).
Louisiana Waterthrush, <i>Seiurus motacilla</i> (9) .....	Nashville Warbler, <i>Oreothlypis ruficapilla</i> (9).
Yellow-faced Grassquit, <i>Tiaris olivacea</i> (3) .....	Virginia's Warbler, <i>Oreothlypis virginiae</i> (9).
Canyon Towhee, <i>Pipilo fuscus</i> (9) .....	Colima Warbler, <i>Oreothlypis crissalis</i> (9).
California Towhee, <i>Pipilo crissalis</i> (9) .....	Lucy's Warbler, <i>Oreothlypis luciae</i> (9).
Abert's Towhee, <i>Pipilo aberti</i> (9) .....	Crescent-chested Warbler, <i>Oreothlypis superciliosa</i> (9).
Rufous-winged Sparrow, <i>Aimophila carpalis</i> (9) .....	Northern Waterthrush, <i>Parkesia noveboracensis</i> (9).
Botteri's Sparrow, <i>Aimophila botterii</i> (9) .....	Louisiana Waterthrush, <i>Parkesia motacilla</i> (9).
Cassin's Sparrow, <i>Aimophila cassinii</i> (9) .....	Yellow-faced Grassquit, <i>Tiaris olivacea</i> (3).
Bachman's Sparrow, <i>Aimophila aestivalis</i> (9) .....	Canyon Towhee, <i>Melospiza fusca</i> (9).
Five-striped Sparrow, <i>Aimophila quinquestrata</i> (9) .....	California Towhee, <i>Melospiza crissalis</i> (9).
Nelson's Sharp-tailed Sparrow, <i>Ammodramus nelsoni</i> (8) .....	Abert's Towhee, <i>Melospiza aberti</i> (9).
Saltmarsh Sharp-tailed Sparrow, <i>Ammodramus caudacutus</i> (8) .....	Rufous-winged Sparrow, <i>Peucaea carpalis</i> (9).
Hispaniolan [Greater Antillean] Oriole, <i>Icterus dominicensis</i> (7) .....	Botteri's Sparrow, <i>Peucaea botterii</i> (9).
Common Redpoll, <i>Carduelis flammea</i> (9) .....	Cassin's Sparrow, <i>Peucaea cassinii</i> (9).
Hoary Redpoll, <i>Carduelis hornemanni</i> (9) .....	Bachman's Sparrow, <i>Peucaea aestivalis</i> (9).
Eurasian Siskin, <i>Carduelis spinus</i> (9) .....	Five-striped Sparrow, <i>Amphispiza quinquestrata</i> (9).
Pine Siskin, <i>Carduelis pinus</i> (9) .....	Nelson's Sparrow, <i>Ammodramus nelsoni</i> (8).
Lesser Goldfinch, <i>Carduelis psaltria</i> (9) .....	Saltmarsh Sparrow, <i>Ammodramus caudacutus</i> (8).
Lawrence's Goldfinch, <i>Carduelis lawrencei</i> (9) .....	Yellow-browed Bunting, <i>Emberiza chrysophrys</i> (4).
American Goldfinch, <i>Carduelis tristis</i> (9) .....	Puerto Rican Oriole, <i>Icterus portoricensis</i> (6).
Oriental Greenfinch, <i>Carduelis sinica</i> (9) .....	Common Redpoll, <i>Acanthis flammea</i> (9).
	Hoary Redpoll, <i>Acanthis hornemanni</i> (9).
	Eurasian Siskin, <i>Spinus spinus</i> (9).
	Pine Siskin, <i>Spinus pinus</i> (9).
	Lesser Goldfinch, <i>Spinus psaltria</i> (9).
	Lawrence's Goldfinch, <i>Spinus lawrencei</i> (9).
	American Goldfinch, <i>Spinus tristis</i> (9).
	Oriental Greenfinch, <i>Chloris sinica</i> (9).

### How do the changes implemented here differ from those discussed in the proposed rule?

The scientific name of one species spelled erroneously in the proposed rule is corrected to conform to the AOU Check-list (1998) and supplements:

Black-capped Vireo, *Vireo atricapillus* becomes *Vireo atricapilla*.

### How is the list of migratory birds organized?

The species are listed in two formats to suit the needs of different segments of the public: alphabetically in 50 CFR 10.13(c)(1) and taxonomically in 50 CFR 10.13(c)(2). In the alphabetical listing, species are listed by common (English) group names, with the scientific name of each species following the English group name. This format, similar to that used in modern telephone directories, is most useful to members of the lay public. In the taxonomic listing, species are listed in phylogenetic sequence by scientific name, with the English name following the scientific name. To help clarify species relationships, we also list the higher-level taxonomic categories of Order, Family, and Subfamily. This format follows the sequence adopted by the AOU (1998, 2010) and is most useful to ornithologists and other scientists.

### What species are not protected by the Migratory Bird Treaty Act?

The MBTA does not apply to:

(1) Nonnative species introduced into the United States or its territories by means of intentional or unintentional human assistance that belong to families or groups covered by the Canadian, Mexican, or Russian Conventions, in accordance with the MBTRA. See 70 FR 12710 (March 15, 2005) for a partial list of nonnative, human-introduced bird species in this category. Note, though, that native species that are introduced into parts of the United States where they are not native are still protected under the MBTA regardless of where they occur in the United States or its territories.

(2) Nonnative, human-introduced species that belong to families or groups not covered by the Canadian, Mexican, or Russian Conventions, including Tinamidae (tinamous), Cracidae (chachalacas), Megapodiidae (megapodes), Phasianidae (grouse, ptarmigan, and turkeys), Turnicidae (buttonquails), Odontophoridae (New World quail), Pteroclididae (sandgrouse), Psittacidae (parrots), Dicuridae (drongos), Rhamphastidae (toucans), Musophagidae (turacos), Bucerotidae (hornbills), Bucorvidae (ground-hornbills), Pycnonotidae

(bulbuls), Pittidae (pittas), Irenidae (fairy-bluebirds), Timaliidae (babblers), Zosteropidae (white-eyes), Sturnidae (starlings; except as listed in the Japanese Convention), Passeridae (Old World sparrows), Ploceidae (weavers), Estrildidae (estrildid finches), and numerous other families not currently represented in the United States or its territories.

(3) Native species that belong to families or groups represented in the United States, but which are not expressly mentioned by the Canadian, Mexican, or Russian Conventions, including the Megapodiidae (megapodes), Phasianidae (grouse, ptarmigan, and turkeys), Odontophoridae (New World quail), Burhinidae (thick-knees), Glareolidae (pratincoles), Psittacidae (parrots), Todidae (todies), Meliphagidae (honeyeaters), Monarchidae (monarch flycatchers [elepaios]), Zosteropidae (white-eyes), and Coerebidae (bananaquit). It should be noted that this rule supersedes the 70 FR 12710 notice to the extent that they are inconsistent. Specifically, the 1996 amendment to the Canadian Convention included the family Muscipidae (Old World flycatchers). Thus, all members of the Muscipidae family are now included on this list. In addition, the Wrenit is now considered a member of the Sylviidae family rather than the Timaliidae family and is now included on this list.

Partial lists of the species included in categories 2 and 3 are available at <http://www.fws.gov/migratorybirds/RegulationsPolicies/mbta/MBTAProtectedNonprotected.html>.

### Responses to Public Comments

On April 26, 2011, we published in the **Federal Register** (76 FR 23428) a proposed rule to revise the list of migratory birds at 50 CFR 10.13. We solicited public comments on the proposed rule for 90 days, ending on July 25, 2011.

We received 7 comments in response to the proposed rule; 5 were from agencies, and 2 were from private individuals. The following text discusses the substantive comments we received and provides our responses to them.

*Comment:* One individual indicated that Brown Hawk-Owl, and the 10 other species we proposed to add based on new distributional records (Category 4), should not be added because they are either extremely rare vagrants or were moved by humans. The commenter further pointed out that the MBTA loses biological and ecological credibility when species are added that do not

naturally occur in the United States or its territories, and pointed to the Eurasian Kestrel as one example.

*Response:* In 2004, the Migratory Bird Treaty Reform Act (MBTRA; Pub. L. 108-447) amended the MBTA. While the primary purpose of the MBTRA was to eliminate protection for introduced species, it also defined native species as those “occurring in the United States or its territories as a result of natural biological or ecological processes.” Vagrancy is a natural biological process, so these species are protected under the MBTA.

There is credible evidence to support our contention that these species have occurred in the United States as natural vagrants unhindered by human intervention. The AOU and other bird record committees take human intervention into account whenever they evaluate such records. Several of these species, including the Brown Hawk-Owl, have occurred in some of the remotest parts of Alaska, and are most unlikely to have been moved there by humans. Furthermore, multiple records of Eurasian Kestrel have been accepted from Western Alaska, and at scattered locations across North America, by the AOU and other competent scientific authorities.

*Comment:* The Arkansas Game and Fish Commission urged the Service to carefully consider the implications to State regulations when making recommendations, and ensure that they do not occur so frequently as to become burdensome. Specifically, they point out that the split of the order Accipitriformes from the Falconiformes will necessitate a change in State falconry regulations.

*Response:* The Service appreciates the State’s concern regarding changes to Federal regulations that affect States, and we make a concerted effort to work closely with the States through the Flyway Councils. To comply with the intent of the migratory bird treaties and the MBTA, we are obligated to update the list at intervals. However, the List of Migratory Birds has been updated only twice since 1985, which is not frequently enough to stay current with changes in bird taxonomy. Consequently, we intend to update this list on a 5-year cycle to coincide with updates to the Birds of Conservation Concern, thus balancing the frequency of updates with the frequency of changes in bird taxonomy. In this update, taxonomic changes at the Order level did not change which species are protected under the MBTA, as the species within those families were previously protected. Furthermore, this is the first change we have made to the



Falconiformes since the families within that Order were first protected in 1972.

*Comment:* The Indiana Division of Fish and Wildlife (IDFW) was pleased that the Service intends to continue to treat cackling geese as Canada geese, pointing out that hunting management of white-cheeked geese could become more difficult if they were split. The IDFW also pointed out that the Mississippi Flyway Council is trying to simplify hunting regulations for Canada geese, and splitting them into two species for management purposes could cause progress toward simplification to stall.

*Response:* The Service recognizes the management concerns referred to by the commenter. While we appreciate the complexities of white-cheeked goose management, our decision to continue to include the Cackling Goose within the listing for Canada Goose is based on lingering uncertainty regarding their taxonomic relationship. Work is currently being conducted in Alaska and northern Canada to resolve that uncertainty. We will consider new information when it is available, at which time we may reconsider our decision. In any case, regardless of name, goose subspecies identified as Cackling Goose by the AOU are currently protected under the MBTA as Canada Goose.

#### Required Determinations

##### *Regulatory Planning and Review (Executive Order 12866)*

Executive Order (EO) 12866 provides that the Office of Information and Regulatory Affairs (OIRA) in the Office of Management and Budget will review all significant rules. OIRA has determined that this rule is not significant.

EO 13563 reaffirms the principles of EO 12866, while calling for improvements in the nation's regulatory system to promote predictability, to reduce uncertainty, and to use the best, most innovative, and least burdensome tools for achieving regulatory ends. EO 13563 directs agencies to consider regulatory approaches that reduce burdens and maintain flexibility and freedom of choice for the public where these approaches are relevant, feasible, and consistent with regulatory objectives.

EO 13563 emphasizes further that regulations must be based on the best available science and that the rulemaking process must allow for public participation and an open exchange of ideas. We have developed this rule in a manner consistent with these requirements.

##### *Regulatory Flexibility Act (5 U.S.C. 601 et seq.)*

Under the Regulatory Flexibility Act (5 U.S.C. 601 et seq., as amended by the Small Business Regulatory Enforcement Fairness Act (SBREFA) of 1996 (Pub. L. 104–121)), whenever an agency is required to publish a notice of rulemaking for any proposed or final rule, it must prepare and make available for public comment a regulatory flexibility analysis that describes the effect of the rule on small entities (i.e., small businesses, small organizations, and small government jurisdictions). However, no regulatory flexibility analysis is required if the head of an agency certifies the rule does not have a significant economic impact on a substantial number of small entities.

SBREFA amended the Regulatory Flexibility Act to require Federal agencies to provide the statement of the factual basis for certifying that a rule will not have a significant economic impact on a substantial number of small entities. We have examined this rule's potential effects on small entities as required by the Regulatory Flexibility Act, and have determined that this action will not have a significant economic impact on a substantial number of small entities, because we are simply updating the list of migratory bird species protected under the Conventions. Consequently, we certify that because this rule does not have a significant economic effect on a substantial number of small entities, a regulatory flexibility analysis is not required.

This rule is not a major rule under SBREFA (5 U.S.C. 804(2)). It does not have a significant impact on a substantial number of small entities.

a. This rule does not have an annual effect on the economy of \$100 million or more.

b. This rule does not cause a major increase in costs or prices for consumers, individual industries, Federal, State, or local government agencies, or geographic regions.

c. This rule does not have significant adverse effects on competition, employment, investment, productivity, innovation, or the ability of U.S.-based enterprises to compete with foreign-based enterprises.

##### *Unfunded Mandates Reform Act*

In accordance with the Unfunded Mandates Reform Act (2 U.S.C. 1501 et seq.), we have determined the following:

a. This rule does not "significantly or uniquely" affect small governments. A small government agency plan is not required. Actions under the regulation

do not affect small government activities in any significant way.

b. This rule does not produce a Federal mandate of \$100 million or greater in any year; i.e., it is not a "significant regulatory action" under the Unfunded Mandates Reform Act.

##### *Takings*

In accordance with Executive Order 12630, the rule does not have significant takings implications. This rule does not contain a provision for taking of private property. Therefore, a takings implication assessment is not required.

##### *Federalism*

This rule does not have sufficient Federalism effects to warrant preparation of a Federalism summary impact statement under Executive Order 13132. It does not interfere with the States' ability to manage themselves or their funds. No significant economic impacts are expected to result from the updating of the list of migratory bird species.

##### *Civil Justice Reform*

In accordance with Executive Order 12988, the Office of the Solicitor has determined that the rule does not unduly burden the judicial system and meets the requirements of sections 3(a) and 3(b)(2) of the Order.

##### *Paperwork Reduction Act*

We examined this rule under the Paperwork Reduction Act of 1995 (44 U.S.C. 3501 et seq.). There are no new information collection requirements associated with this rule. We do not require any new permits, reports, or recordkeeping in this rule.

##### *National Environmental Policy Act (NEPA)*

Given that the revision of 50 CFR 10.13 is strictly administrative in nature and will have no or minor environmental effects, it is categorically excluded from further NEPA requirements (43 CFR 46.210(i)).

##### *Endangered Species Act (ESA)*

Seventy-four of the species on the List of Migratory Birds are also designated as endangered or threatened in all or some portion of their U.S. range under provisions of the Endangered Species Act of 1973 (16 U.S.C. 1531–44; 50 CFR 17.11). No legal complications arise from the dual listing as the two lists are developed under separate authorities and for different purposes. Because the rule is strictly administrative in nature, it has no effect on threatened or endangered species. It does not require ESA consultation.

### Government-to-Government Relationship With Tribes

In accordance with the President's memorandum of April 29, 1994, "Government-to-Government Relations with Native American Tribal Governments" (59 FR 22951), Executive Order 13175, and 512 DM 2, we have evaluated potential effects on federally recognized Indian tribes and have determined that there are no potential effects. The revisions to existing regulations in this rule are purely administrative in nature and do not interfere with the tribes' ability to manage themselves or their funds or to regulate migratory bird activities on tribal lands.

### Energy Supply, Distribution, or Use (Executive Order 13211)

On May 18, 2001, the President issued Executive Order 13211 addressing regulations that significantly affect energy supply, distribution, and use. Executive Order 13211 requires agencies to prepare Statements of Energy Effects when undertaking certain actions. Because this rule only affects the listing of protected species in the United States, it is not a significant regulatory action under Executive Order 12866, and does not significantly affect energy supplies, distribution, or use. Therefore, this action is not a significant energy action and no Statement of Energy Effects is required.

### References Cited

A complete list of all references cited is available upon request (see **FOR FURTHER INFORMATION CONTACT** above).

### List of Subjects

#### 50 CFR Part 10

Exports, Fish, Imports, Law enforcement, Plants, Transportation, Wildlife.

#### 50 CFR Part 21

Exports, Hunting, Imports, Reporting and recordkeeping requirements, Transportation, Wildlife.

### Regulation Promulgation

For the reasons discussed in the preamble, we amend title 50, chapter I, subchapter B, parts 10 and 21 of the Code of Federal Regulations, as follows:

### PART 10—[AMENDED]

■ 1. The authority citation for part 10 continues to read as follows:

**Authority:** 18 U.S.C. 42; 16 U.S.C. 703–712; 16 U.S.C. 668a–d; 19 U.S.C. 1202; 16 U.S.C. 1531–1543; 16 U.S.C. 1361–1384, 1401–1407; 16 U.S.C. 742a–742j–l; 16 U.S.C. 3371–3378.

■ 2. Revise § 10.13 to read as follows:

### § 10.13 List of Migratory Birds.

(a) *Legal authority for this list.* The legal authorities for this list are the Migratory Bird Treaty Act (MBTA; 16 U.S.C. 703–712), the Fish and Wildlife Improvement Act of 1978 (16 U.S.C. 742l), and the Fish and Wildlife Act of 1956 (16 U.S.C. 742a–742j). The MBTA implements Conventions between the United States and four neighboring countries for the protection of migratory birds, as follows:

(1) *Canada:* Convention between the United States and Great Britain [on behalf of Canada] for the Protection of Migratory Birds, August 16, 1916, 39 Stat. 1702 (T.S. No. 628), as amended;

(2) *Mexico:* Convention between the United States and Mexico for the Protection of Migratory Birds and Game Mammals, February 7, 1936, 50 Stat. 1311 (T.S. No. 912), as amended;

(3) *Japan:* Convention between the Government of the United States of America and the Government of Japan for the Protection of Migratory Birds and Birds in Danger of Extinction, and Their Environment, March 4, 1972, 25 U.S.T. 3329 (T.I.A.S. No. 7990); and

(4) *Russia:* Convention between the United States of America and the Union of Soviet Socialist Republics Concerning the Conservation of Migratory Birds and Their Environment, November 19, 1976, 20 U.S.T. 4647 (T.I.A.S. No. 9073).

(b) *Purpose of this list.* The purpose is to inform the public of the species protected by regulations that enforce the terms of the MBTA. These regulations, found in parts 10, 20, and 21 of this chapter, cover most aspects of the taking, possession, transportation, sale, purchase, barter, exportation, and importation of migratory birds.

(c) *What species are protected as migratory birds?* Species protected as migratory birds are listed in two formats to suit the varying needs of the user: Alphabetically in paragraph (c)(1) of this section and taxonomically in paragraph (c)(2) of this section. Taxonomy and nomenclature generally follow the 7th edition of the American Ornithologists' Union's *Check-list of North American birds* (1998, as amended through 2010). For species not treated by the AOU *Check-list*, we generally follow *The Clements Checklist of Birds of the World* (Clements 2007).

(1) *Alphabetical listing.* Species are listed alphabetically by common (English) group names, with the scientific name of each species following the common name.

ACCENTOR, Siberian, *Prunella montanella*

AKEKEE, *Loxops caeruleirostris*

AKEPA, *Loxops coccineus*

AKIALOA, Greater, *Hemignathus ellisianus*

AKIAPOLAAU, *Hemignathus munroi*

AKIKIKI, *Oreomystis bairdi*

AKOHEKOHE, *Palmeria dolei*

ALAUAHIO, Maui, *Paroreomyza montana*

Oahu, *Paroreomyza maculata*

ALBATROSS, Black-browed,

*Thalassarche melanophris*

Black-footed, *Phoebastria nigripes*

Laysan, *Phoebastria immutabilis*

Light-mantled, *Phoebastria palpebrata*

Short-tailed, *Phoebastria albatrus*

Shy, *Thalassarche cauta*

Wandering, *Diomedea exulans*

Yellow-nosed, *Thalassarche*

*chlororhynchus*

AMAKIHI, Hawaii, *Hemignathus virens*

Kauai, *Hemignathus kauaiensis*

Oahu, *Hemignathus flavus*

ANHINGA, *Anhinga anhinga*

ANI, Groove-billed, *Crotophaga*

*sulcirostris*

Smooth-billed, *Crotophaga ani*

ANIANIAU, *Magnumma parva*

APAPANE, *Himatione sanguinea*

AUKLET, Cassin's, *Ptychoramphus*

*aleuticus*

Crested, *Aethia cristatella*

Least, *Aethia pusilla*

Parakeet, *Aethia psittacula*

Rhinoceros, *Cerorhinca monocerata*

Whiskered, *Aethia pygmaea*

AVOCET, American, *Recurvirostra*

*americana*

BEAN-GOOSE, Taiga, *Anser fabalis*

Tundra, *Anser serrirostris*

BEARDLESS-TYRANNULET, Northern,

*Camptostoma imberbe*

BECARD, Rose-throated, *Pachyramphus*

*aglaiae*

BITTERN, American, *Botaurus*

*lentiginosus*

Black, *Ixobrychus flavicollis*

Least, *Ixobrychus exilis*

Schrenck's, *Ixobrychus eurhythmus*

Yellow, *Ixobrychus sinensis*

BLACK-HAWK, Common, *Buteogallus*

*anthracinus*

BLACKBIRD, Brewer's, *Euphagus*

*cycanocephalus*

Red-winged, *Agelaius phoeniceus*

Rusty, *Euphagus carolinus*

Tawny-shouldered, *Agelaius*

*humeralis*

Tricolored, *Agelaius tricolor*

Yellow-headed, *Xanthocephalus*

*xanthocephalus*

Yellow-shouldered, *Agelaius*

*xanthomus*

BLUEBIRD, Eastern, *Sialia sialis*

Mountain, *Sialia currucoides*

Western, *Sialia mexicana*

BLUETAIL, Red-flanked, *Tarsiger*

*cyanurus*

BLUETHROAT, *Luscinia svecica*

BOBOLINK, *Dolichonyx oryzivorus*

- BOOBY, Blue-footed, *Sula nebouxii*  
Brown, *Sula leucogaster*  
Masked, *Sula dactylatra*  
Red-footed, *Sula sula*
- BRAMBLING, *Fringilla montifringilla*
- BRANT, *Branta bernicla*
- BUFFLEHEAD, *Bucephala albeola*
- BULLFINCH, Eurasian, *Pyrrhula pyrrhula*  
Puerto Rican, *Loxigilla portoricensis*
- BUNTING, Blue, *Cyanocompsa parellina*  
Gray, *Emberiza variabilis*  
Indigo, *Passerina cyanea*  
Little, *Emberiza pusilla*  
Lark, *Calamospiza melanocorys*  
Lazuli, *Passerina amoena*  
McKay's, *Plectrophenax hyperboreus*  
Painted, *Passerina ciris*  
Pallas's, *Emberiza pallasi*  
Pine, *Emberiza leucocephalus*  
Reed, *Emberiza schoeniclus*  
Rustic, *Emberiza rustica*  
Snow, *Plectrophenax nivalis*  
Varied, *Passerina versicolor*  
Yellow-breasted, *Emberiza aureola*  
Yellow-browed, *Emberiza chrysophrys*  
Yellow-throated, *Emberiza elegans*
- BUSHTIT, *Psaltriparus minimus*
- CANVASBACK, *Aythya valisineria*
- CARACARA, Crested, *Caracara cheriway*
- CARDINAL, Northern, *Cardinalis cardinalis*
- CARIB, Green-throated, *Eulampis holosericeus*  
Purple-throated, *Eulampis jugularis*
- CATBIRD, Black, *Melanoptila glabrirostris*  
Gray, *Dumetella carolinensis*
- CHAFFINCH, Common, *Fringilla coelebs*
- CHAT, Yellow-breasted, *Icteria virens*
- CHICKADEE, Black-capped, *Poecile atricapillus*  
Boreal, *Poecile hudsonicus*  
Carolina, *Poecile carolinensis*  
Chestnut-backed, *Poecile rufescens*  
Gray-headed, *Poecile cinctus*  
Mexican, *Poecile sclateri*  
Mountain, *Poecile gambeli*
- CHUCK-WILL'S-WIDOW, *Caprimulgus carolinensis*
- CONDOR, California, *Gymnogyps californianus*
- COOT, American, *Fulica americana*  
Caribbean, *Fulica caribaea*  
Eurasian, *Fulica atra*  
Hawaiian, *Fulica alai*
- CORMORANT, Brandt's, *Phalacrocorax penicillatus*  
Double-crested, *Phalacrocorax auritus*  
Great, *Phalacrocorax carbo*  
Little Pied, *Phalacrocorax melanoleucos*  
Neotropic, *Phalacrocorax brasilianus*  
Pelagic, *Phalacrocorax pelagicus*  
Red-faced, *Phalacrocorax urile*
- COWBIRD, Bronzed, *Molothrus aeneus*  
Brown-headed, *Molothrus ater*  
Shiny, *Molothrus bonariensis*
- CRAKE, Corn, *Crex crex*  
Paint-billed, *Neocrex erythrops*  
Spotless, *Porzana tabuensis*  
Yellow-breasted, *Porzana flaviventer*
- CRANE, Common, *Grus grus*  
Sandhill, *Grus canadensis*  
Whooping, *Grus americana*
- CREEPER, Brown, *Certhia americana*  
Hawaii, *Oreomystis mana*
- CROSSBILL, Red, *Loxia curvirostra*  
White-winged, *Loxia leucoptera*
- CROW, American, *Corvus brachyrhynchos*  
Fish, *Corvus ossifragus*  
Hawaiian, *Corvus hawaiiensis*  
Mariana, *Corvus kubaryi*  
Northwestern, *Corvus caurinus*  
Tamaulipas, *Corvus imparatus*  
White-necked, *Corvus leucognaphalus*
- CUCKOO, Black-billed, *Coccyzus erythrophthalmus*  
Common, *Cuculus canorus*  
Mangrove, *Coccyzus minor*  
Oriental, *Cuculus optatus*  
Yellow-billed, *Coccyzus americanus*
- CURLEW, Bristle-thighed, *Numenius tahitiensis*  
Eskimo, *Numenius borealis*  
Eurasian, *Numenius arquata*  
Far Eastern, *Numenius madagascariensis*  
Little, *Numenius minutus*  
Long-billed, *Numenius americanus*
- DICKCISSEL, *Spiza americana*
- DIPPER, American, *Cinclus mexicanus*
- DOTTEREL, Eurasian, *Charadrius morinellus*
- DOVE, Inca, *Columbina inca*  
Mourning, *Zenaida macroura*  
White-tipped, *Leptotila verreauxi*  
White-winged, *Zenaida asiatica*  
Zenaida, *Zenaida aurita*
- DOVEKIE, *Alle alle*
- DOWITCHER, Long-billed, *Limnodromus scolopaceus*  
Short-billed, *Limnodromus griseus*
- DUCK, American Black, *Anas rubripes*  
Eastern Spot-billed, *Anas zonorhyncha*  
Falcated, *Anas falcata*  
Harlequin, *Histrionicus histrionicus*  
Hawaiian, *Anas wyvilliana*  
Laysan, *Anas laysanensis*  
Long-tailed, *Clangula hyemalis*  
Masked, *Nomonyx dominicus*  
Mottled, *Anas fulvigula*  
Muscovy, *Cairina moschata*  
Pacific Black, *Anas superciliosa*  
Ring-necked, *Aythya collaris*  
Ruddy, *Oxyura jamaicensis*  
Tufted, *Aythya fuligula*  
Wood, *Aix sponsa*
- DUNLIN, *Calidris alpina*
- EAGLE, Bald, *Haliaeetus leucocephalus*  
Golden, *Aquila chrysaetos*  
White-tailed, *Haliaeetus albicilla*
- EGRET, Cattle, *Bubulcus ibis*  
Chinese, *Egretta eulophotes*  
Great, *Ardea alba*  
Intermediate, *Mesophoyx intermedia*  
Little, *Egretta garzetta*  
Reddish, *Egretta rufescens*  
Snowy, *Egretta thula*
- EIDER, Common, *Somateria mollissima*  
King, *Somateria spectabilis*  
Spectacled, *Somateria fischeri*  
Steller's, *Polysticta stelleri*
- ELAENIA, Caribbean, *Elaenia martinica*  
Greenish, *Myiopagis viridicata*  
White-crested, *Elaenia albiceps*
- EMERALD, Puerto Rican, *Chlorostilbon maugaeus*
- EUPHONIA, Antillean, *Euphonia musica*
- FALCON, Aplomado, *Falco femoralis*  
Peregrine, *Falco peregrinus*  
Prairie, *Falco mexicanus*  
Red-footed, *Falco vespertinus*
- FIELDFARE, *Turdus pilaris*
- FINCH, Cassin's, *Carpodacus cassinii*  
House, *Carpodacus mexicanus*  
Laysan, *Telespiza cantans*  
Nihoa, *Telespiza ultima*  
Purple, *Carpodacus purpureus*
- FLAMINGO, American, *Phoenicopterus ruber*
- FLICKER, Gilded, *Colaptes chrysoides*  
Northern, *Colaptes auratus*
- FLYCATCHER, Acadian, *Empidonax virescens*  
Alder, *Empidonax alnorum*  
Ash-throated, *Myiarchus cinerascens*  
Asian Brown, *Muscicapa dauurica*  
Brown-crested, *Myiarchus tyrannulus*  
Buff-breasted, *Empidonax fulvifrons*  
Cordilleran, *Empidonax occidentalis*  
Crowned Slaty, *Empidonax aurantioatrocristatus*  
Dark-sided, *Muscicapa sibirica*  
Dusky, *Empidonax oberholseri*  
Dusky-capped, *Myiarchus tuberculifer*  
Fork-tailed, *Tyrannus savana*  
Gray, *Empidonax wrightii*  
Gray-streaked, *Muscicapa griseisticta*  
Great Crested, *Myiarchus crinitus*  
Hammond's, *Empidonax hammondii*  
La Sagra's, *Myiarchus sagrae*  
Least, *Empidonax minimus*  
Mugimaki, *Ficedula mugimaki*  
Narcissus, *Ficedula narcissina*  
Nutting's, *Myiarchus nuttingi*  
Olive-sided, *Contopus cooperi*  
Pacific-slope, *Empidonax difficilis*  
Piratic, *Legatus leucophalus*  
Puerto Rican, *Myiarchus antillarum*  
Scissor-tailed, *Tyrannus forficatus*  
Social, *Myiozetetes similis*  
Spotted, *Muscicapa striata*  
Sulphur-bellied, *Myiodynastes luteiventris*  
Taiga, *Ficedula albicilla*  
Tufted, *Mitrephanes phaeocercus*  
Variegated, *Empidonax varius*  
Vermilion, *Pyrocephalus rubinus*



- Willow, *Empidonax traillii*  
 Yellow-bellied, *Empidonax flaviventris*  
 FOREST-FALCON, Collared, *Micrastur semitorquatus*  
 FRIGATEBIRD, Great, *Fregata minor*  
 Lesser, *Fregata ariel*  
 Magnificent, *Fregata magnificens*  
 FROG-HAWK, Gray, *Accipiter soloensis*  
 FRUIT-DOVE, Crimson-crowned,  
*Ptilinopus porphyraceus*  
 Many-colored, *Ptilinopus perousii*  
 Mariana, *Ptilinopus roseicapilla*  
 FULMAR, Northern, *Fulmarus glacialis*  
 GADWALL, *Anas strepera*  
 GALLINULE, Azure, *Porphyrio flavirostris*  
 Purple, *Porphyrio martinica*  
 GANNET, Northern, *Morus bassanus*  
 GARGANEY, *Anas querquedula*  
 GNATCATCHER, Black-capped,  
*Polioptila nigriceps*  
 Black-tailed, *Polioptila melanura*  
 Blue-gray, *Polioptila caerulea*  
 California, *Polioptila californica*  
 GODWIT, Bar-tailed, *Limosa lapponica*  
 Black-tailed, *Limosa limosa*  
 Hudsonian, *Limosa haemastica*  
 Marbled, *Limosa fedoa*  
 GOLDEN-PLOVER, American, *Pluvialis dominica*  
 European, *Pluvialis apricaria*  
 Pacific, *Pluvialis fulva*  
 GOLDENEYE, Barrow's, *Bucephala islandica*  
 Common, *Bucephala clangula*  
 GOLDFINCH, American, *Spinus tristis*  
 Lawrence's, *Spinus lawrencei*  
 Lesser, *Spinus psaltria*  
 GOOSE, Barnacle, *Branta leucopsis*  
 Canada, *Branta canadensis* (including  
 Cackling Goose, *Branta hutchinsii*)  
 Emperor, *Chen canagica*  
 Greater White-fronted, *Anser albifrons*  
 Hawaiian, *Branta sandvicensis*  
 Lesser White-fronted, *Anser erythropus*  
 Ross's, *Chen rossii*  
 Snow, *Chen caerulescens*  
 GOSHAWK, Northern, *Accipiter gentilis*  
 GRACKLE, Boat-tailed, *Quiscalus major*  
 Common, *Quiscalus quiscula*  
 Great-tailed, *Quiscalus mexicanus*  
 Greater Antillean, *Quiscalus niger*  
 GRASSHOPPER-WARBLER,  
 Middendorff's, *Locustella ochotensis*  
 GRASSQUIT, Black-faced, *Tiaris bicolor*  
 Yellow-faced, *Tiaris olivaceus*  
 GREBE, Clark's, *Aechmophorus clarkii*  
 Eared, *Podiceps nigricollis*  
 Horned, *Podiceps auritus*  
 Least, *Tachybaptus dominicus*  
 Pied-billed, *Podilymbus podiceps*  
 Red-necked, *Podiceps grisegena*  
 Western, *Aechmophorus occidentalis*  
 GREENFINCH, Oriental, *Chloris sinica*  
 GREENSHANK, Common, *Tringa nebularia*  
 Nordmann's, *Tringa guttifer*  
 GROSBEAK, Black-headed, *Pheucticus melanocephalus*  
 Blue, *Passerina caerulea*  
 Crimson-collared, *Rhodothraupis celaeno*  
 Evening, *Coccothraustes vespertinus*  
 Pine, *Pinicola enucleator*  
 Rose-breasted, *Pheucticus ludovicianus*  
 Yellow, *Pheucticus chrysopleps*  
 GROUND-DOVE, Common, *Columbina passerina*  
 Friendly, *Gallicolumba stairi*  
 Ruddy, *Columbina talpacoti*  
 White-throated, *Gallicolumba xanthonura*  
 GUILLEMOT, Black, *Cephus grylle*  
 Pigeon, *Cephus columba*  
 GULL, Belcher's, *Larus belcheri*  
 Black-headed, *Chroicocephalus ridibundus*  
 Black-tailed, *Larus crassirostris*  
 Bonaparte's, *Chroicocephalus philadelphia*  
 California, *Larus californicus*  
 Franklin's, *Leucophaeus pipixcan*  
 Glaucous, *Larus hyperboreus*  
 Glaucous-winged, *Larus glaucescens*  
 Gray-hooded, *Chroicocephalus cirrocephalus*  
 Great Black-backed, *Larus marinus*  
 Heermann's, *Larus heermanni*  
 Herring, *Larus argentatus*  
 Iceland, *Larus glaucooides*  
 Ivory, *Pagophila eburnea*  
 Kelp, *Larus dominicanus*  
 Laughing, *Leucophaeus atricilla*  
 Lesser Black-backed, *Larus fuscus*  
 Little, *Hydrocoloeus minutus*  
 Mew, *Larus canus*  
 Ring-billed, *Larus delawarensis*  
 Ross's, *Rhodostethia rosea*  
 Sabine's, *Xema sabini*  
 Slaty-backed, *Larus schistisagus*  
 Swallow-tailed, *Creagrus furcatus*  
 Thayer's, *Larus thayeri*  
 Western, *Larus occidentalis*  
 Yellow-footed, *Larus livens*  
 Yellow-legged, *Larus michahellis*  
 GYRFALCON, *Falco rusticolus*  
 HARRIER, Northern, *Circus cyaneus*  
 HAWFINCH, *Coccothraustes coccothraustes*  
 HAWK, Broad-winged, *Buteo platypterus*  
 Cooper's, *Accipiter cooperii*  
 Crane, *Geranoospiza caerulescens*  
 Ferruginous, *Buteo regalis*  
 Gray, *Buteo nitidus*  
 Harris's, *Parabuteo unicinctus*  
 Hawaiian, *Buteo solitarius*  
 Red-shouldered, *Buteo lineatus*  
 Red-tailed, *Buteo jamaicensis*  
 Roadside, *Buteo magnirostris*  
 Rough-legged, *Buteo lagopus*  
 Sharp-shinned, *Accipiter striatus*  
 Short-tailed, *Buteo brachyurus*  
 Swainson's, *Buteo swainsoni*  
 White-tailed, *Buteo albicaudatus*  
 Zone-tailed, *Buteo albonotatus*  
 HAWK-CUCKOO, Hodgson's, *Cuculus fugax*  
 HAWK-OWL, Brown, *Ninox scutulata*  
 HERON, Gray, *Ardea cinerea*  
 Great Blue, *Ardea herodias*  
 Green, *Butorides virescens*  
 Little Blue, *Egretta caerulea*  
 Tricolored, *Egretta tricolor*  
 HOBBY, Eurasian, *Falco subbuteo*  
 HOOPOE, Eurasian, *Upupa epops*  
 HOUSE-MARTIN, Common, *Delichon urbicum*  
 HUMMINGBIRD, Allen's, *Selasphorus sasin*  
 Anna's, *Calypte anna*  
 Antillean Crested, *Orthorhyncus cristatus*  
 Berylline, *Amazilia beryllina*  
 Black-chinned, *Archilochus alexandri*  
 Blue-throated, *Lampornis clemenciae*  
 Broad-billed, *Cyanthus latirostris*  
 Broad-tailed, *Selasphorus platycercus*  
 Buff-bellied, *Amazilia yucatanensis*  
 Bumblebee, *Atthis heloisa*  
 Calliope, *Stellula calliope*  
 Cinnamon, *Amazilia rutila*  
 Costa's, *Calypte costae*  
 Lucifer, *Calothorax lucifer*  
 Magnificent, *Eugenes fulgens*  
 Ruby-throated, *Archilochus colubris*  
 Rufous, *Selasphorus rufus*  
 Violet-crowned, *Amazilia violiceps*  
 White-eared, *Hylocharis leucotis*  
 Xantus's, *Hylocharis xantusii*  
 IBIS, Glossy, *Plegadis falcinellus*  
 Scarlet, *Eudocimus ruber*  
 White, *Eudocimus albus*  
 White-faced, *Plegadis chihi*  
 IIWI, *Vestiaria coccinea*  
 IMPERIAL-PIGEON, Pacific, *Ducula pacifica*  
 JABIRU, *Jabiru myacteria*  
 JACANA, Northern, *Jacana spinosa*  
 JAEGER, Long-tailed, *Stercorarius longicaudus*  
 Parasitic, *Stercorarius parasiticus*  
 Pomarine, *Stercorarius pomarinus*  
 JAY, Blue, *Cyanocitta cristata*  
 Brown, *Psilorhinus morio*  
 Gray, *Perisoreus canadensis*  
 Green, *Cyanocorax yncas*  
 Mexican, *Aphelocoma ultramarina*  
 Pinyon, *Gymnorhinus cyanocephalus*  
 Steller's, *Cyanocitta stelleri*  
 JUNCO, Dark-eyed, *Junco hyemalis*  
 Yellow-eyed, *Junco phaeonotus*  
 KAKAWAHIE, *Paroreomyza flammea*  
 KAMAO, *Myadestes myadestinus*  
 KESTREL, American, *Falco sparverius*  
 Eurasian, *Falco tinnunculus*  
 KILLDEER, *Charadrius vociferus*  
 KINGBIRD, Cassin's, *Tyrannus vociferans*  
 Couch's, *Tyrannus couchii*  
 Eastern, *Tyrannus tyrannus*  
 Gray, *Tyrannus dominicensis*  
 Loggerhead, *Tyrannus caudifasciatus*

- Thick-billed, *Tyrannus crassirostris*  
Tropical, *Tyrannus melancholicus*  
Western, *Tyrannus verticalis*  
KINGFISHER, Belted, *Megasceryle alcyon*  
Collared, *Todirhamphus chloris*  
Green, *Chloroceryle americana*  
Micronesian, *Todirhamphus cinnamominus*  
Ringed, *Megasceryle torquata*  
KINGLET, Golden-crowned, *Regulus satrapa*  
Ruby-crowned, *Regulus calendula*  
KISKADEE, Great, *Pitangus sulphuratus*  
KITE, Black, *Milvus migrans*  
Hook-billed, *Chondrohierax uncinatus*  
Mississippi, *Ictinia mississippiensis*  
Snail, *Rostrhamus sociabilis*  
Swallow-tailed, *Elanoides forficatus*  
White-tailed, *Elanus leucurus*  
KITTIWAKE, Black-legged, *Rissa tridactyla*  
Red-legged, *Rissa brevirostris*  
KNOT, Great, *Calidris tenuirostris*  
Red, *Calidris canutus*  
LAPWING, Northern, *Vanellus vanellus*  
LARK, Horned, *Eremophila alpestris*  
Sky, *Alauda arvensis*  
LEAF-WARBLER, Pallas's, *Phylloscopus proregulus*  
LIMPKIN, *Aramus guarauna*  
LIZARD-CUCKOO, Puerto Rican, *Coccyzus vieilloti*  
LONGSPUR, Chestnut-collared, *Calcarius ornatus*  
Lapland, *Calcarius lapponicus*  
McCown's, *Rhynchophanes mccownii*  
Smith's, *Calcarius pictus*  
LOON, Arctic, *Gavia arctica*  
Common, *Gavia immer*  
Pacific, *Gavia pacifica*  
Red-throated, *Gavia stellata*  
Yellow-billed, *Gavia adamsii*  
MAGPIE, Black-billed, *Pica hudsonia*  
Yellow-billed, *Pica nuttalli*  
MALLARD, *Anas platyrhynchos*  
MANGO, Antillean, *Anthracothorax dominicus*  
Green, *Anthracothorax viridis*  
Green-breasted, *Anthracothorax prevostii*  
MARTIN, Brown-chested, *Progne tapera*  
Caribbean, *Progne dominicensis*  
Cuban, *Progne cryptoleuca*  
Gray-breasted, *Progne chalybea*  
Purple, *Progne subis*  
Southern, *Progne elegans*  
MEADOWLARK, Eastern, *Sturnella magna*  
Western, *Sturnella neglecta*  
MERGANSER, Common, *Mergus merganser*  
Hooded, *Lophodytes cucullatus*  
Red-breasted, *Mergus serrator*  
MERLIN, *Falco columbarius*  
MILLERBIRD, *Acrocephalus familiaris*  
MOCKINGBIRD, Bahama, *Mimus gundlachii*  
Blue, *Melanotis caerulescens*  
Northern, *Mimus polyglottos*  
MOORHEN, Common, *Gallinula chloropus*  
MURRE, Common, *Uria aalge*  
Thick-billed, *Uria lomvia*  
MURRELET, Ancient, *Synthliboramphus antiquus*  
Craveri's, *Synthliboramphus craveri*  
Kittlitz's, *Brachyramphus brevirostris*  
Long-billed, *Brachyramphus perdix*  
Marbled, *Brachyramphus marmoratus*  
Xantus's, *Synthliboramphus hypoleucus*  
NEEDLETAIL, White-throated, *Hirundapus caudacutus*  
NIGHT-HERON, Black-crowned, *Nycticorax nycticorax*  
Japanese, *Gorsachius goisagi*  
Malayan, *Gorsachius melanolophus*  
Yellow-crowned, *Nyctanassa violacea*  
NIGHTHAWK, Antillean, *Chordeiles gundlachii*  
Common, *Chordeiles minor*  
Lesser, *Chordeiles acutipennis*  
NIGHTINGALE-THRUSH, Black-headed, *Catharus mexicanus*  
Orange-billed, *Catharus aurantirostris*  
NIGHTJAR, Buff-collared, *Caprimulgus ridgwayi*  
Gray, *Caprimulgus indicus*  
Puerto Rican, *Caprimulgus noctitherus*  
NODDY, Black, *Anous minutus*  
Blue-gray, *Procelsterna cerulea*  
Brown, *Anous stolidus*  
NUKUPUU, *Hemignathus lucidus*  
NUTCRACKER, Clark's, *Nucifraga columbiana*  
NUTHATCH, Brown-headed, *Sitta pusilla*  
Pygmy, *Sitta pygmaea*  
Red-breasted, *Sitta canadensis*  
White-breasted, *Sitta carolinensis*  
OLOMAO, *Myadestes lanaiensis*  
OMAO, *Myadestes obscurus*  
ORIOLE, Altamira, *Icterus gularis*  
Audubon's, *Icterus graduacauda*  
Baltimore, *Icterus galbula*  
Black-vented, *Icterus wagleri*  
Bullock's, *Icterus bullockii*  
Hooded, *Icterus cucullatus*  
Orchard, *Icterus spurius*  
Puerto Rican, *Icterus portoricensis*  
Scott's, *Icterus parisorum*  
Streak-backed, *Icterus pustulatus*  
OSPREY, *Pandion haliaetus*  
OU, *Psittirostra psittacea*  
OVENBIRD, *Seiurus aurocapilla*  
OWL, Barn, *Tyto alba*  
Barred, *Strix varia*  
Boreal, *Aegolius funereus*  
Burrowing, *Athene cucularia*  
Elf, *Micrathene whitneyi*  
Flammulated, *Otus flammeolus*  
Great Gray, *Strix nebulosa*  
Great Horned, *Bubo virginianus*  
Long-eared, *Asio otus*  
Mottled, *Ciccaba virgata*  
Northern Hawk, *Surnia ulula*  
Northern Saw-whet, *Aegolius acadicus*  
Short-eared, *Asio flammeus*  
Snowy, *Bubo scandiacus*  
Spotted, *Strix occidentalis*  
Stygian, *Asio stygius*  
OYSTERCATCHER, American, *Haematopus palliatus*  
Black, *Haematopus bachmani*  
Eurasian, *Haematopus ostralegus*  
PALILA, *Loxioides bailleui*  
PALM-SWIFT, Antillean, *Tachornis phoenicobia*  
PARROTBILL, Maui, *Pseudonestor xanthophrys*  
PARULA, Northern, *Parula americana*  
Tropical, *Parula pitiayumi*  
PAURAUQUE, Common, *Nyctidromus albigollis*  
PELICAN, American White, *Pelecanus erythrorhynchos*  
Brown, *Pelecanus occidentalis*  
PETREL, Bermuda, *Pterodroma cahow*  
Black-capped, *Pterodroma hasitata*  
Black-winged, *Pterodroma nigripennis*  
Bonin, *Pterodroma hypoleuca*  
Bulwer's, *Bulweria bulwerii*  
Cook's, *Pterodroma cookii*  
Gould's, *Pterodroma leucoptera*  
Great-winged, *Pterodroma macroptera*  
Hawaiian, *Pterodroma sandwichensis*  
Herald, *Pterodroma arminjoniana*  
Jouanin's, *Bulweria fallax*  
Juan Fernandez, *Pterodroma externa*  
Kermadec, *Pterodroma neglecta*  
Mottled, *Pterodroma inexpectata*  
Murphy's, *Pterodroma ultima*  
Parkinson's, *Procellaria parkinsoni*  
Phoenix, *Pterodroma alba*  
Stejneger's, *Pterodroma longirostris*  
Tahiti, *Pterodroma rostrata*  
White-necked, *Pterodroma cervicalis*  
PEWEE, Cuban, *Contopus caribaeus*  
Greater, *Contopus pertinax*  
Hispaniolan, *Contopus hispaniolensis*  
Lesser Antillean, *Contopus latirostris*  
PHAINOPEPLA, *Phainopepla nitens*  
PHALAROPE, Red, *Phalaropus fulicarius*  
Red-necked, *Phalaropus lobatus*  
Wilson's, *Phalaropus tricolor*  
PHOEBE, Black, *Sayornis nigricans*  
Eastern, *Sayornis phoebe*  
Say's, *Sayornis saya*  
PIGEON, Band-tailed, *Patagioenas fasciata*  
Plain, *Patagioenas inornata*  
Red-billed, *Patagioenas flavirostris*  
Scaly-naped, *Patagioenas squamosa*  
White-crowned, *Patagioenas leucocephala*  
PINTAIL, Northern, *Anas acuta*  
White-cheeked, *Anas bahamensis*  
PIPIT, American, *Anthus rubescens*  
Olive-backed, *Anthus hodgsoni*  
Pechora, *Anthus gustavi*

- Red-throated, *Anthus cervinus*  
 Sprague's, *Anthus spragueii*  
 Tree, *Anthus trivialis*
- PLOVER, Black-bellied, *Pluvialis squatarola*  
 Collared, *Charadrius collaris*  
 Common Ringed, *Charadrius hiaticula*  
 Little Ringed, *Charadrius dubius*  
 Mountain, *Charadrius montanus*  
 Piping, *Charadrius melodus*  
 Semipalmated, *Charadrius semipalmatus*  
 Snowy, *Charadrius alexandrinus*  
 Wilson's, *Charadrius wilsonia*
- POCHARD, Baer's, *Aythya baeri*  
 Common, *Aythya ferina*
- POND-HERON, Chinese, *Ardeola bacchus*
- POORWILL, Common, *Phalaenoptilus nuttallii*
- POO-ULI, *Melamprosops phaeosoma*
- PUAIOHI, *Myadestes palmeri*
- PUFFIN, Atlantic, *Fratercula arctica*  
 Horned, *Fratercula corniculata*  
 Tufted, *Fratercula cirrhata*
- PYGMY-OWL, Ferruginous, *Glaucidium brasilianum*  
 Northern, *Glaucidium gnoma*
- PYRRHULOXIA, *Cardinalis sinuatus*
- QUAIL-DOVE, Bridled, *Geotrygon mystacea*  
 Key West, *Geotrygon chrysis*  
 Ruddy, *Geotrygon montana*
- QUETZEL, Eared, *Euptilotis neoxenus*
- RAIL, Black, *Laterallus jamaicensis*  
 Buff-banded, *Gallirallus philippensis*  
 Clapper, *Rallus longirostris*  
 Guam, *Gallirallus owstoni*  
 King, *Rallus elegans*  
 Spotted, *Pardirallus maculatus*  
 Virginia, *Rallus limicola*  
 Yellow, *Coturnicops noveboracensis*
- RAVEN, Chihuahuan, *Corvus cryptoleucus*  
 Common, *Corvus corax*
- RAZORBILL, *Alca torda*
- REDHEAD, *Aythya americana*
- REDPOLL, Common, *Acanthis flammea*  
 Hoary, *Acanthis hornemanni*
- REDSHANK, Spotted, *Tringa erythropus*
- REDSTART, American, *Setophaga ruticilla*  
 Painted, *Myioborus pictus*  
 Slate-throated, *Myioborus miniatus*
- REED-WARBLER, Nightingale, *Acrocephalus luscini*
- REEF-EGRET, Pacific, *Egretta sacra*
- REEF-HERON, Western, *Egretta gularis*
- ROADRUNNER, Greater, *Geococcyx californianus*
- ROBIN, American, *Turdus migratorius*  
 Rufous-backed, *Turdus rufopalliatus*  
 Rufous-tailed, *Luscinia sibilans*  
 Siberian Blue, *Luscinia cyane*
- ROCK-THRUSH, Blue, *Monticola solitarius*
- ROSEFINCH, Common, *Carpodacus erythrinus*
- ROSY-FINCH, Black, *Leucosticte atrata*  
 Brown-capped, *Leucosticte australis*  
 Gray-crowned, *Leucosticte tephrocotis*
- RUBYTHROAT, Siberian, *Luscinia calliope*
- RUFF, *Philomachus pugnax*
- SANDERLING, *Calidris alba*
- SANDPIPER, Baird's, *Calidris bairdii*  
 Broad-billed, *Limicola falcinellus*  
 Buff-breasted, *Tryngites subruficollis*  
 Common, *Actitis hypoleucos*  
 Curlew, *Calidris ferruginea*  
 Green, *Tringa ochropus*  
 Least, *Calidris minutilla*  
 Marsh, *Tringa stagnatilis*  
 Pectoral, *Calidris melanotos*  
 Purple, *Calidris maritima*  
 Rock, *Calidris ptilocnemis*  
 Semipalmated, *Calidris pusilla*  
 Sharp-tailed, *Calidris acuminata*  
 Solitary, *Tringa solitaria*  
 Spoon-billed, *Eurynorhynchus pygmeus*  
 Spotted, *Actitis macularius*  
 Stilt, *Calidris himantopus*  
 Terek, *Xenus cinereus*  
 Upland, *Bartramia longicauda*  
 Western, *Calidris mauri*  
 White-rumped, *Calidris fuscicollis*  
 Wood, *Tringa glareola*
- SAND-PLOVER, Greater, *Charadrius leschenaultii*  
 Lesser, *Charadrius mongolus*
- SAPSUCKER, Red-breasted, *Sphyrapicus ruber*  
 Red-naped, *Sphyrapicus nuchalis*  
 Williamson's, *Sphyrapicus thyroideus*  
 Yellow-bellied, *Sphyrapicus varius*
- SCAUP, Greater, *Aythya marila*  
 Lesser, *Aythya affinis*
- SCOPS-OWL, Oriental, *Otus sunia*
- SCOTER, Black, *Melanitta americana*  
 Surf, *Melanitta perspicillata*  
 White-winged, *Melanitta fusca*
- SCREECH-OWL, Eastern, *Megascops asio*  
 Puerto Rican, *Megascops nudipes*  
 Western, *Megascops kennicottii*  
 Whiskered, *Megascops trichopsis*
- SCRUB-JAY, Florida, *Aphelocoma coerulescens*  
 Island, *Aphelocoma insularis*  
 Western, *Aphelocoma californica*
- SEA-EAGLE, Steller's, *Haliaeetus pelagicus*
- SEEDEATER, White-collared, *Sporophila torqueola*
- SHEARWATER, Audubon's, *Puffinus lherminieri*  
 Black-vented, *Puffinus opisthomelas*  
 Buller's, *Puffinus bulleri*  
 Cape Verde, *Calonectris edwardsii*  
 Christmas, *Puffinus nativitatis*  
 Cory's, *Calonectris diomedea*  
 Flesh-footed, *Puffinus carneipes*  
 Great, *Puffinus gravis*  
 Little, *Puffinus assimilis*  
 Manx, *Puffinus puffinus*  
 Pink-footed, *Puffinus creatopus*
- Short-tailed, *Puffinus tenuirostris*  
 Sooty, *Puffinus griseus*  
 Streaked, *Calonectris leucomelas*  
 Townsend's, *Puffinus auricularis*  
 Wedge-tailed, *Puffinus pacificus*
- SHOVELER, Northern, *Anas clypeata*
- SHRIKE, Brown, *Lanius cristatus*  
 Loggerhead, *Lanius ludovicianus*  
 Northern, *Lanius excubitor*
- SILKY-FLYCATCHER, Gray, *Ptilogonys cinereus*
- SISKIN, Eurasian, *Spinus spinus*  
 Pine, *Spinus pinus*
- SKIMMER, Black, *Rynchops niger*
- SKUA, Great, *Stercorarius skua*  
 South Polar, *Stercorarius maccormicki*
- SMEW, *Mergellus albellus*
- SNIPE, Common, *Gallinago gallinago*  
 Jack, *Lymnocyptes minimus*  
 Pin-tailed, *Gallinago stenura*  
 Swinhoe's, *Gallinago megala*  
 Wilson's, *Gallinago delicata*
- SOLITAIRE, Townsend's, *Myadestes townsendi*
- SORA, *Porzana carolina*
- SPARROW, American Tree, *Spizella arborea*  
 Bachman's, *Peucaea aestivalis*  
 Baird's, *Ammodramus bairdii*  
 Black-chinned, *Spizella atrogularis*  
 Black-throated, *Amphispiza bilineata*  
 Botteri's, *Peucaea botterii*  
 Brewer's, *Spizella breweri*  
 Cassin's, *Peucaea cassinii*  
 Chipping, *Spizella passerina*  
 Clay-colored, *Spizella pallida*  
 Field, *Spizella pusilla*  
 Five-striped, *Amphispiza quinquestrata*  
 Fox, *Passerella iliaca*  
 Golden-crowned, *Zonotrichia atricapilla*  
 Grasshopper, *Ammodramus savannarum*  
 Harris's, *Zonotrichia querula*  
 Henslow's, *Ammodramus henslowii*  
 Lark, *Chondestes grammacus*  
 Le Conte's, *Ammodramus leconteii*  
 Lincoln's, *Melospiza lincolni*  
 Nelson's, *Ammodramus nelsoni*  
 Olive, *Arremonops rufivirgatus*  
 Rufous-crowned, *Aimophila ruficeps*  
 Rufous-winged, *Peucaea carpalis*  
 Sage, *Amphispiza belli*  
 Saltmarsh, *Ammodramus caudacutus*  
 Savannah, *Passerculus sandwichensis*  
 Seaside, *Ammodramus maritimus*  
 Song, *Melospiza melodia*  
 Swamp, *Melospiza georgiana*  
 Vesper, *Poocetes gramineus*  
 White-crowned, *Zonotrichia leucophrys*  
 White-throated, *Zonotrichia albicollis*  
 Worthen's, *Spizella wortheni*
- SPARROWHAWK, Japanese, *Accipiter gularis*
- SPINDALIS, Puerto Rican, *Spindalis portoricensis*



- Western, *Spindalis zena*  
 SPOONBILL, Roseate, *Platalea ajaja*  
 STARLING, Chestnut-cheeked, *Sturnus philippensis*  
 White-cheeked, *Sturnus cineraceus*  
 STARTHROAT, Plain-capped, *Heliomaster constantii*  
 STILT, Black-necked, *Himantopus mexicanus*  
 Black-winged, *Himantopus himantopus*  
 STINT, Little, *Calidris minuta*  
 Long-toed, *Calidris subminuta*  
 Red-necked, *Calidris ruficollis*  
 Temminck's, *Calidris temminckii*  
 STONECHAT, *Saxicola torquatus*  
 STORK, Wood, *Mycteria americana*  
 STORM-PETREL, Ashy, *Oceanodroma homochroa*  
 Band-rumped, *Oceanodroma castro*  
 Black, *Oceanodroma melania*  
 Black-bellied, *Fregetta tropica*  
 Fork-tailed, *Oceanodroma furcata*  
 Leach's, *Oceanodroma leucorhoa*  
 Least, *Oceanodroma microsoma*  
 Matsudaira's, *Oceanodroma matsudairae*  
 Polynesian, *Nesofregetta fuliginosa*  
 Ringed, *Oceanodroma hornbyi*  
 Swinhoe's, *Oceanodroma monorhis*  
 Tristram's, *Oceanodroma tristrami*  
 Wedge-rumped, *Oceanodroma tethys*  
 White-faced, *Pelagodroma marina*  
 White-bellied, *Fregetta grallaria*  
 Wilson's, *Oceanites oceanicus*  
 SURFBIRD, *Aphriza virgata*  
 SWALLOW, Bahama, *Tachycineta cyaneoviridis*  
 Bank, *Riparia riparia*  
 Barn, *Hirundo rustica*  
 Cave, *Petrochelidon fulva*  
 Cliff, *Petrochelidon pyrrhonota*  
 Mangrove, *Tachycineta albilinea*  
 Northern Rough-winged, *Stelgidopteryx serripennis*  
 Tree, *Tachycineta bicolor*  
 Violet-green, *Tachycineta thalassina*  
 SWAMPHEN, Purple, *Porphyrio porphyrio*  
 SWAN, Trumpeter, *Cygnus buccinator*  
 Tundra, *Cygnus columbianus*  
 Whooper, *Cygnus cygnus*  
 SWIFT, Alpine, *Apus melba*  
 Black, *Cypseloides niger*  
 Chimney, *Chaetura pelagica*  
 Common, *Apus apus*  
 Fork-tailed, *Apus pacificus*  
 Short-tailed, *Chaetura brachyura*  
 Vaux's, *Chaetura vauxi*  
 White-collared, *Streptoprocne zonaris*  
 White-throated, *Aeronautes saxatalis*  
 SWIFTLET, Mariana, *Aerodramus bartschi*  
 White-rumped, *Aerodramus spodiopygius*  
 TANAGER, Flame-colored, *Piranga bidentata*  
 Hepatic, *Piranga flava*  
 Puerto Rican, *Nesospingus speculiferus*  
 Scarlet, *Piranga olivacea*  
 Summer, *Piranga rubra*  
 Western, *Piranga ludoviciana*  
 TATTLER, Gray-tailed, *Tringa brevipes*  
 Wandering, *Tringa incana*  
 TEAL, Baikal, *Anas formosa*  
 Blue-winged, *Anas discors*  
 Cinnamon, *Anas cyanoptera*  
 Green-winged, *Anas crecca*  
 TERN, Aleutian, *Onychoprion aleuticus*  
 Arctic, *Sterna paradisaea*  
 Black, *Chlidonias niger*  
 Black-naped, *Sterna sumatrana*  
 Bridled, *Onychoprion anaethetus*  
 Caspian, *Hydroprogne caspia*  
 Common, *Sterna hirundo*  
 Elegant, *Thalasseus elegans*  
 Forster's, *Sterna forsteri*  
 Gray-backed, *Onychoprion lunatus*  
 Great Crested, *Thalasseus bergii*  
 Gull-billed, *Gelochelidon nilotica*  
 Large-billed, *Phaetusa simplex*  
 Least, *Sternula antillarum*  
 Little, *Sternula albifrons*  
 Roseate, *Sterna dougallii*  
 Royal, *Thalasseus maximus*  
 Sandwich, *Thalasseus sandvicensis*  
 Sooty, *Onychoprion fuscatus*  
 Whiskered, *Chlidonias hybrida*  
 White, *Gygis alba*  
 White-winged, *Chlidonias leucopterus*  
 THRASHER, Bendire's, *Toxostoma bendirei*  
 Brown, *Toxostoma rufum*  
 California, *Toxostoma redivivum*  
 Crissal, *Toxostoma crissale*  
 Curve-billed, *Toxostoma curvirostre*  
 Le Conte's, *Toxostoma lecontei*  
 Long-billed, *Toxostoma longirostre*  
 Pearly-eyed, *Margarops fuscatus*  
 Sage, *Oreoscoptes montanus*  
 THRUSH, Aztec, *Ridgwayia pinicola*  
 Bicknell's, *Catharus bicknelli*  
 Clay-colored, *Turdus grayi*  
 Dusky, *Turdus naumanni*  
 Eyebrowed, *Turdus obscurus*  
 Gray-cheeked, *Catharus minimus*  
 Hermit, *Catharus guttatus*  
 Red-legged, *Turdus plumbeus*  
 Swainson's, *Catharus ustulatus*  
 Varied, *Ixoreus naevius*  
 White-throated, *Turdus assimilis*  
 Wood, *Hylocichla mustelina*  
 TITMOUSE, Black-crested, *Baeolophus atricristatus*  
 Bridled, *Baeolophus wollweberi*  
 Juniper, *Baeolophus ridgwayi*  
 Oak, *Baeolophus inornatus*  
 Tufted, *Baeolophus bicolor*  
 TITYRA, Masked, *Tityra semifasciata*  
 TOWHEE, Abert's, *Melospiza aberti*  
 California, *Melospiza crissalis*  
 Canyon, *Melospiza fusca*  
 Eastern, *Pipilo erythrophthalmus*  
 Green-tailed, *Pipilo chlorurus*  
 Spotted, *Pipilo maculatus*  
 TROGON, Elegant, *Trogon elegans*  
 TROPICBIRD, Red-billed, *Phaethon aethereus*  
 Red-tailed, *Phaethon rubricauda*  
 White-tailed, *Phaethon lepturus*  
 TURNSTONE, Black, *Arenaria melanocephala*  
 Ruddy, *Arenaria interpres*  
 TURTLE-DOVE, Oriental, *Streptopelia orientalis*  
 VEERY, *Catharus fuscescens*  
 VERDIN, *Auriparus flaviceps*  
 VIOLETEAR, Green, *Colibri thalassinus*  
 VIREO, Bell's, *Vireo bellii*  
 Black-capped, *Vireo atricapilla*  
 Black-whiskered, *Vireo altiloquus*  
 Blue-headed, *Vireo solitarius*  
 Cassin's, *Vireo cassinii*  
 Gray, *Vireo vicinior*  
 Hutton's, *Vireo huttoni*  
 Philadelphia, *Vireo philadelphicus*  
 Plumbeous, *Vireo plumbeus*  
 Puerto Rican, *Vireo latimeri*  
 Red-eyed, *Vireo olivaceus*  
 Thick-billed, *Vireo crassirostris*  
 Warbling, *Vireo gilvus*  
 White-eyed, *Vireo griseus*  
 Yellow-green, *Vireo flavoviridis*  
 Yellow-throated, *Vireo flavifrons*  
 Yucatan, *Vireo magister*  
 VULTURE, Black, *Coragyps atratus*  
 Turkey, *Cathartes aura*  
 WAGTAIL, Citrine, *Motacilla citreola*  
 Eastern Yellow, *Motacilla tschutschensis*  
 Gray, *Motacilla cinerea*  
 White, *Motacilla alba*  
 WARBLER, Adelaide's, *Dendroica adelaidae*  
 Arctic, *Phylloscopus borealis*  
 Bachman's, *Vermivora bachmanii*  
 Bay-breasted, *Dendroica castanea*  
 Black-and-white, *Mniotilta varia*  
 Black-throated Blue, *Dendroica caerulescens*  
 Black-throated Gray, *Dendroica nigrescens*  
 Black-throated Green, *Dendroica virens*  
 Blackburnian, *Dendroica fusca*  
 Blackpoll, *Dendroica striata*  
 Blue-winged, *Vermivora cyanoptera*  
 Canada, *Wilsonia canadensis*  
 Cape May, *Dendroica tigrina*  
 Cerulean, *Dendroica cerulea*  
 Chestnut-sided, *Dendroica pennsylvanica*  
 Colima, *Oreothlypis crissalis*  
 Connecticut, *Oporornis agilis*  
 Crescent-chested, *Oreothlypis superciliosa*  
 Dusky, *Phylloscopus fuscatus*  
 Elfin-woods, *Dendroica angelae*  
 Fan-tailed, *Euthlypis lachrymosa*  
 Golden-cheeked, *Dendroica chrysoparia*  
 Golden-crowned, *Basileuterus culicivorus*  
 Golden-winged, *Vermivora chrysoptera*

- Grace's, *Dendroica graciae*  
 Hermit, *Dendroica occidentalis*  
 Hooded, *Wilsonia citrina*  
 Kentucky, *Oporornis formosus*  
 Kirtland's, *Dendroica kirtlandii*  
 Lanceolated, *Locustella lanceolata*  
 Lucy's, *Oreothlypis luciae*  
 MacGillivray's, *Oporornis tolmiei*  
 Magnolia, *Dendroica magnolia*  
 Mourning, *Oporornis philadelphia*  
 Nashville, *Oreothlypis ruficapilla*  
 Olive, *Peucedramus taeniatus*  
 Orange-crowned, *Oreothlypis celata*  
 Palm, *Dendroica palmarum*  
 Pine, *Dendroica pinus*  
 Prairie, *Dendroica discolor*  
 Prothonotary, *Protonotaria citrea*  
 Red-faced, *Cardellina rubrifrons*  
 Rufous-capped, *Basileuterus rufifrons*  
 Sedge, *Acrocephalus schoenobaenus*  
 Swainson's, *Limnithlypis swainsonii*  
 Tennessee, *Oreothlypis peregrina*  
 Townsend's, *Dendroica townsendi*  
 Virginia's, *Oreothlypis virginiae*  
 Willow, *Phylloscopus trochilus*  
 Wilson's, *Wilsonia pusilla*  
 Wood, *Phylloscopus sibilatrix*  
 Worm-eating, *Helmitheros vermivorum*  
 Yellow, *Dendroica petechia*  
 Yellow-browed, *Phylloscopus inornatus*  
 Yellow-rumped, *Dendroica coronata*  
 Yellow-throated, *Dendroica dominica*  
 WATERTHRUSH, Louisiana, *Parkesia motacilla*  
 Northern, *Parkesia noveboracensis*  
 WAXWING, Bohemian, *Bombycilla garrulus*  
 Cedar, *Bombycilla cedrorum*  
 WHEATEAR, Northern, *Oenanthe oenanthe*  
 WHIMBREL, *Numenius phaeopus*  
 WHIP-POOR-WILL, Eastern, *Caprimulgus vociferus*  
 Mexican, *Caprimulgus arizonae*  
 WHISTLING-DUCK, Black-bellied, *Dendrocygna autumnalis*  
 Fulvous, *Dendrocygna bicolor*  
 West Indian, *Dendrocygna arborea*  
 WHITETHROAT, Lesser, *Sylvia curruca*  
 WIGEON, American, *Anas americana*  
 Eurasian, *Anas penelope*  
 WILLET, *Tringa semipalmata*  
 WOOD-PEWEE, Eastern, *Contopus virens*  
 Western, *Contopus sordidulus*  
 WOODCOCK, American, *Scolopax minor*  
 Eurasian, *Scolopax rusticola*  
 WOODPECKER, Acorn, *Melanerpes formicivorus*  
 American Three-toed, *Picoides dorsalis*  
 Arizona, *Picoides arizonae*  
 Black-backed, *Picoides arcticus*  
 Downy, *Picoides pubescens*  
 Gila, *Melanerpes uropygialis*  
 Golden-fronted, *Melanerpes aurifrons*  
 Great Spotted, *Dendrocopos major*  
 Hairy, *Picoides villosus*  
 Ivory-billed, *Campephilus principalis*  
 Ladder-backed, *Picoides scalaris*  
 Lewis's, *Melanerpes lewis*  
 Nuttall's, *Picoides nuttallii*  
 Pileated, *Dryocopus pileatus*  
 Puerto Rican, *Melanerpes portoricensis*  
 Red-bellied, *Melanerpes carolinus*  
 Red-cockaded, *Picoides borealis*  
 Red-headed, *Melanerpes erythrocephalus*  
 White-headed, *Picoides albolarvatus*  
 WOODSTAR, Bahama, *Calliphlox evelynae*  
 WREN, Bewick's *Thryomanes bewickii*  
 Cactus, *Campylorhynchus brunneicapillus*  
 Canyon, *Catherpes mexicanus*  
 Carolina, *Thryothorus ludovicianus*  
 House, *Troglodytes aedon*  
 Marsh, *Cistothorus palustris*  
 Pacific, *Troglodytes pacificus*  
 Rock, *Salpinctes obsoletus*  
 Sedge, *Cistothorus platensis*  
 Sinaloa, *Thryothorus sinaloa*  
 Winter, *Troglodytes hiemalis*  
 WRENTIT, *Chamaea fasciata*  
 WRYNECK, Eurasian, *Jynx torquilla*  
 YELLOWLEGS, Greater, *Tringa melanoleuca*  
 Lesser, *Tringa flavipes*  
 YELLOWTHROAT, Common, *Geothlypis trichas*  
 Gray-crowned, *Geothlypis poliocephala*  
 (2) *Taxonomic listing.* Species are listed in phylogenetic sequence by scientific name, with the common (English) name following the scientific name. To help clarify species relationships, we also list the higher-level taxonomic categories of Order, Family, and Subfamily.  
 Order ANSERIFORMES  
 Family ANATIDAE  
 Subfamily DENDROCYGNINAE  
*Dendrocygna autumnalis*, Black-bellied Whistling-Duck  
*Dendrocygna arborea*, West Indian Whistling-Duck  
*Dendrocygna bicolor*, Fulvous Whistling-Duck  
 Subfamily ANSERINAE  
*Anser fabalis*, Taiga Bean-Goose  
*Anser serrirostris*, Tundra Bean-Goose  
*Anser albifrons*, Greater White-fronted Goose  
*Anser erythropus*, Lesser White-fronted Goose  
*Chen canagica*, Emperor Goose  
*Chen caerulescens*, Snow Goose  
*Chen rossii*, Ross's Goose  
*Branta bernicla*, Brant  
*Branta leucopsis*, Barnacle Goose  
*Branta canadensis*, Canada Goose (including *Branta hutchinsii*, Cackling Goose)  
*Branta sandvicensis*, Hawaiian Goose  
*Cygnus buccinator*, Trumpeter Swan  
*Cygnus columbianus*, Tundra Swan  
*Cygnus cygnus*, Whooper Swan  
 Subfamily ANATINAE  
*Cairina moschata*, Muscovy Duck  
*Aix sponsa*, Wood Duck  
*Anas strepera*, Gadwall  
*Anas falcata*, Falcated Duck  
*Anas penelope*, Eurasian Wigeon  
*Anas americana*, American Wigeon  
*Anas rubripes*, American Black Duck  
*Anas platyrhynchos*, Mallard  
*Anas fulvigula*, Mottled Duck  
*Anas wyvilliana*, Hawaiian Duck  
*Anas laysanensis*, Laysan Duck  
*Anas zonorhyncha*, Eastern Spot-billed Duck  
*Anas superciliosa*, Pacific Black Duck  
*Anas discors*, Blue-winged Teal  
*Anas cyanoptera*, Cinnamon Teal  
*Anas clypeata*, Northern Shoveler  
*Anas bahamensis*, White-cheeked Pintail  
*Anas acuta*, Northern Pintail  
*Anas querquedula*, Garganey  
*Anas formosa*, Baikal Teal  
*Anas crecca*, Green-winged Teal  
*Aythya valisineria*, Canvasback  
*Aythya americana*, Redhead  
*Aythya ferina*, Common Pochard  
*Aythya baeri*, Baer's Pochard  
*Aythya collaris*, Ring-necked Duck  
*Aythya fuligula*, Tufted Duck  
*Aythya marila*, Greater Scaup  
*Aythya affinis*, Lesser Scaup  
*Polysticta stelleri*, Steller's Eider  
*Somateria fischeri*, Spectacled Eider  
*Somateria spectabilis*, King Eider  
*Somateria mollissima*, Common Eider  
*Histrionicus histrionicus*, Harlequin Duck  
*Melanitta perspicillata*, Surf Scoter  
*Melanitta fusca*, White-winged Scoter  
*Melanitta americana*, Black Scoter  
*Clangula hyemalis*, Long-tailed Duck  
*Bucephala albeola*, Bufflehead  
*Bucephala clangula*, Common Goldeneye  
*Bucephala islandica*, Barrow's Goldeneye  
*Mergellus albellus*, Smew  
*Lophodytes cucullatus*, Hooded Merganser  
*Mergus merganser*, Common Merganser  
*Mergus serrator*, Red-breasted Merganser  
*Nomonyx dominicus*, Masked Duck  
*Oxyura jamaicensis*, Ruddy Duck  
 Order GAVIIFORMES  
 Family GAVIIDAE  
*Gavia stellata*, Red-throated Loon  
*Gavia arctica*, Arctic Loon  
*Gavia pacifica*, Pacific Loon  
*Gavia immer*, Common Loon  
*Gavia adamsii*, Yellow-billed Loon  
 Order PODICIPEDIFORMES  
 Family PODICIPEDIDAE

- Tachybaptus dominicus*, Least Grebe  
*Podilymbus podiceps*, Pied-billed Grebe  
*Podiceps auritus*, Horned Grebe  
*Podiceps grisegena*, Red-necked Grebe  
*Podiceps nigricollis*, Eared Grebe  
*Aechmophorus occidentalis*, Western Grebe  
*Aechmophorus clarkii*, Clark's Grebe  
Order PHOENICOPTERIFORMES  
Family PHOENICOPTERIDAE  
*Phoenicopterus ruber*, American Flamingo  
Order PROCELLARIIFORMES  
Family DIOMEDEIDAE  
*Thalassarche chlororhynchos*, Yellow-nosed Albatross  
*Thalassarche cauta*, Shy Albatross  
*Thalassarche melanophris*, Black-browed Albatross  
*Phoebastria palpebrata*, Light-mantled Albatross  
*Diomedea exulans*, Wandering Albatross  
*Phoebastria immutabilis*, Laysan Albatross  
*Phoebastria nigripes*, Black-footed Albatross  
*Phoebastria albatrus*, Short-tailed Albatross  
Family PROCELLARIIDAE  
*Fulmarus glacialis*, Northern Fulmar  
*Pterodroma macroptera*, Great-winged Petrel  
*Pterodroma neglecta*, Kermadec Petrel  
*Pterodroma arminjoniana*, Herald Petrel  
*Pterodroma ultima*, Murphy's Petrel  
*Pterodroma inexpectata*, Mottled Petrel  
*Pterodroma cahow*, Bermuda Petrel  
*Pterodroma hasitata*, Black-capped Petrel  
*Pterodroma externa*, Juan Fernandez Petrel  
*Pterodroma sandwichensis*, Hawaiian Petrel  
*Pterodroma cervicalis*, White-necked Petrel  
*Pterodroma hypoleuca*, Bonin Petrel  
*Pterodroma nigripennis*, Black-winged Petrel  
*Pterodroma cookii*, Cook's Petrel  
*Pterodroma longirostris*, Stejneger's Petrel  
*Pterodroma alba*, Phoenix Petrel  
*Pterodroma leucoptera*, Gould's Petrel  
*Pterodroma rostrata*, Tahiti Petrel  
*Bulweria bulwerii*, Bulwer's Petrel  
*Bulweria fallax*, Jouanin's Petrel  
*Procellaria parkinsoni*, Parkinson's Petrel  
*Calonectris leucomelas*, Streaked Shearwater  
*Calonectris diomedea*, Cory's Shearwater  
*Calonectris edwardsii*, Cape Verde Shearwater  
*Puffinus creatopus*, Pink-footed Shearwater  
*Puffinus carneipes*, Flesh-footed Shearwater  
*Puffinus gravis*, Great Shearwater  
*Puffinus pacificus*, Wedge-tailed Shearwater  
*Puffinus bulleri*, Buller's Shearwater  
*Puffinus griseus*, Sooty Shearwater  
*Puffinus tenuirostris*, Short-tailed Shearwater  
*Puffinus nativitatis*, Christmas Shearwater  
*Puffinus puffinus*, Manx Shearwater  
*Puffinus auricularis*, Townsend's Shearwater  
*Puffinus opisthomelas*, Black-vented Shearwater  
*Puffinus lherminieri*, Audubon's Shearwater  
*Puffinus assimilis*, Little Shearwater  
Family HYDROBATIDAE  
*Oceanites oceanicus*, Wilson's Storm-Petrel  
*Pelagodroma marina*, White-faced Storm-Petrel  
*Fregetta tropica*, Black-bellied Storm-Petrel  
*Fregetta grallaria*, White-bellied Storm-Petrel  
*Nesofregetta fuliginosa*, Polynesian Storm-Petrel  
*Oceanodroma furcata*, Fork-tailed Storm-Petrel  
*Oceanodroma hornbyi*, Ringed Storm-Petrel  
*Oceanodroma monorhis*, Swinhoe's Storm-Petrel  
*Oceanodroma leucorhoa*, Leach's Storm-Petrel  
*Oceanodroma homochroa*, Ashy Storm-Petrel  
*Oceanodroma castro*, Band-rumped Storm-Petrel  
*Oceanodroma tethys*, Wedge-rumped Storm-Petrel  
*Oceanodroma matsudairae*, Matsudaira's Storm-Petrel  
*Oceanodroma melania*, Black Storm-Petrel  
*Oceanodroma tristrami*, Tristram's Storm-Petrel  
*Oceanodroma microsoma*, Least Storm-Petrel  
Order PHAETHONTIFORMES  
Family PHAETHONTIDAE  
*Phaethon lepturus*, White-tailed Tropicbird  
*Phaethon aethereus*, Red-billed Tropicbird  
*Phaethon rubricauda*, Red-tailed Tropicbird  
Order CICONIIFORMES  
Family CICONIIDAE  
*Jabiru mycteria*, Jabiru  
*Mycteria americana*, Wood Stork  
Order SULIFORMES  
Family FREGATIDAE  
*Fregata magnificens*, Magnificent Frigatebird  
*Fregata minor*, Great Frigatebird  
*Fregata ariel*, Lesser Frigatebird  
Family SULIDAE  
*Sula dactylatra*, Masked Booby  
*Sula nebouxii*, Blue-footed Booby  
*Sula leucogaster*, Brown Booby  
*Sula sula*, Red-footed Booby  
*Morus bassanus*, Northern Gannet  
Family PHALACROCORACIDAE  
*Phalacrocorax penicillatus*, Brandt's Cormorant  
*Phalacrocorax brasilianus*, Neotropic Cormorant  
*Phalacrocorax auritus*, Double-crested Cormorant  
*Phalacrocorax carbo*, Great Cormorant  
*Phalacrocorax urile*, Red-faced Cormorant  
*Phalacrocorax pelagicus*, Pelagic Cormorant  
*Phalacrocorax melanoleucos*, Little Pied Cormorant  
Family ANHINGIDAE  
*Anhinga anhinga*, Anhinga  
Order PELECANIFORMES  
Family PELECANIDAE  
*Pelecanus erythrorhynchos*, American White Pelican  
*Pelecanus occidentalis*, Brown Pelican  
Family ARDEIDAE  
*Botaurus lentiginosus*, American Bittern  
*Ixobrychus sinensis*, Yellow Bittern  
*Ixobrychus exilis*, Least Bittern  
*Ixobrychus eurhythmus*, Schrenck's Bittern  
*Ixobrychus flavicollis*, Black Bittern  
*Ardea herodias*, Great Blue Heron  
*Ardea cinerea*, Gray Heron  
*Ardea alba*, Great Egret  
*Mesophoyx intermedia*, Intermediate Egret  
*Egretta eulophotes*, Chinese Egret  
*Egretta garzetta*, Little Egret  
*Egretta sacra*, Pacific Reef-Egret  
*Egretta gularis*, Western Reef-Heron  
*Egretta thula*, Snowy Egret  
*Egretta caerulea*, Little Blue Heron  
*Egretta tricolor*, Tricolored Heron  
*Egretta rufescens*, Reddish Egret  
*Bubulcus ibis*, Cattle Egret  
*Ardeola bacchus*, Chinese Pond-Heron  
*Butorides virescens*, Green Heron  
*Nycticorax nycticorax*, Black-crowned Night-Heron  
*Nyctanassa violacea*, Yellow-crowned Night-Heron  
*Gorsachius goesagi*, Japanese Night-Heron  
*Gorsachius melanolophus*, Malayan Night-Heron  
Family THRESKIORNITHIDAE  
Subfamily THRESKIORNITHINAE  
*Eudocimus albus*, White Ibis  
*Eudocimus ruber*, Scarlet Ibis  
*Plegadis falcinellus*, Glossy Ibis  
*Plegadis chihi*, White-faced Ibis



- Subfamily PLATALEINAE  
*Platalea ajaja*, Roseate Spoonbill
- Order ACCIPITRIFORMES  
 Family CATHARTIDAE  
*Coragyps atratus*, Black Vulture  
*Cathartes aura*, Turkey Vulture  
*Gymnogyps californianus*, California Condor
- Family PANDIONIDAE  
*Pandion haliaetus*, Osprey
- Family ACCIPITRIDAE  
*Chondrohierax uncinatus*, Hook-billed Kite  
*Elanoides forficatus*, Swallow-tailed Kite  
*Elanus leucurus*, White-tailed Kite  
*Rostrhamus sociabilis*, Snail Kite  
*Ictinia mississippiensis*, Mississippi Kite  
*Milvus migrans*, Black Kite  
*Haliaeetus leucocephalus*, Bald Eagle  
*Haliaeetus albicilla*, White-tailed Eagle  
*Haliaeetus pelagicus*, Steller's Sea-Eagle  
*Circus cyaneus*, Northern Harrier  
*Accipiter soloensis*, Gray Frog-Hawk  
*Accipiter gularis*, Japanese Sparrowhawk  
*Accipiter striatus*, Sharp-shinned Hawk  
*Accipiter cooperii*, Cooper's Hawk  
*Accipiter gentilis*, Northern Goshawk  
*Geranospiza caerulescens*, Crane Hawk  
*Buteogallus anthracinus*, Common Black-Hawk  
*Parabuteo unicinctus*, Harris's Hawk  
*Buteo magnirostris*, Roadside Hawk  
*Buteo lineatus*, Red-shouldered Hawk  
*Buteo platypterus*, Broad-winged Hawk  
*Buteo nitidus*, Gray Hawk  
*Buteo brachyurus*, Short-tailed Hawk  
*Buteo swainsoni*, Swainson's Hawk  
*Buteo albicaudatus*, White-tailed Hawk  
*Buteo albonotatus*, Zone-tailed Hawk  
*Buteo solitarius*, Hawaiian Hawk  
*Buteo jamaicensis*, Red-tailed Hawk  
*Buteo regalis*, Ferruginous Hawk  
*Buteo lagopus*, Rough-legged Hawk  
*Aquila chrysaetos*, Golden Eagle
- Order FALCONIFORMES  
 Family FALCONIDAE  
 Subfamily MICRASTURINAE  
*Micrastur semitorquatus*, Collared Forest-Falcon
- Subfamily CARACARINAE  
*Caracara cheriway*, Crested Caracara
- Subfamily FALCONINAE  
*Falco tinnunculus*, Eurasian Kestrel  
*Falco sparverius*, American Kestrel  
*Falco vespertinus*, Red-footed Falcon  
*Falco columbarius*, Merlin  
*Falco subbuteo*, Eurasian Hobby  
*Falco femoralis*, Aplomado Falcon  
*Falco rusticolus*, Gyrfalcon  
*Falco peregrinus*, Peregrine Falcon
- Falco mexicanus*, Prairie Falcon
- Order GRUIFORMES  
 Family RALLIDAE  
*Coturnicops noveboracensis*, Yellow Rail  
*Laterallus jamaicensis*, Black Rail  
*Gallirallus philippensis*, Buff-banded Rail  
*Gallirallus owstoni*, Guam Rail  
*Crex crex*, Corn Crake  
*Rallus longirostris*, Clapper Rail  
*Rallus elegans*, King Rail  
*Rallus limicola*, Virginia Rail  
*Porzana carolina*, Sora  
*Porzana tabuensis*, Spotless Crake  
*Porzana flaviventer*, Yellow-breasted Crake  
*Neocrex erythrops*, Paint-billed Crake  
*Pardirallus maculatus*, Spotted Rail  
*Porphyrio porphyrio*, Purple Swamphen  
*Porphyrio martinica*, Purple Gallinule  
*Porphyrio flavirostris*, Azure Gallinule  
*Gallinula chloropus*, Common Moorhen  
*Fulica atra*, Eurasian Coot  
*Fulica alai*, Hawaiian Coot  
*Fulica americana*, American Coot  
*Fulica caribaea*, Caribbean Coot
- Family ARAMIDAE  
*Aramus guarana*, Limpkin
- Family GRUIDAE  
*Grus canadensis*, Sandhill Crane  
*Grus grus*, Common Crane  
*Grus americana*, Whooping Crane
- Order CHARADRIIFORMES  
 Family CHARADRIIDAE  
 Subfamily VANELLINAE  
*Vanellus vanellus*, Northern Lapwing
- Subfamily CHARADRIINAE  
*Pluvialis squatarola*, Black-bellied Plover  
*Pluvialis apricaria*, European Golden-Plover  
*Pluvialis dominica*, American Golden-Plover  
*Pluvialis fulva*, Pacific Golden-Plover  
*Charadrius mongolus*, Lesser Sand-Plover  
*Charadrius leschenaultii*, Greater Sand-Plover  
*Charadrius collaris*, Collared Plover  
*Charadrius alexandrinus*, Snowy Plover  
*Charadrius wilsonia*, Wilson's Plover  
*Charadrius hiaticula*, Common Ringed Plover  
*Charadrius semipalmatus*, Semipalmated Plover  
*Charadrius melodus*, Piping Plover  
*Charadrius dubius*, Little Ringed Plover  
*Charadrius vociferus*, Killdeer  
*Charadrius montanus*, Mountain Plover  
*Charadrius morinellus*, Eurasian Dotterel
- Family HAEMATOPODIDAE  
*Haematopus ostralegus*, Eurasian Oystercatcher  
*Haematopus palliatus*, American Oystercatcher  
*Haematopus bachmani*, Black Oystercatcher
- Family RECURVIROSTRIDAE  
*Himantopus himantopus*, Black-winged Stilt  
*Himantopus mexicanus*, Black-necked Stilt  
*Recurvirostra americana*, American Avocet
- Family JACANIDAE  
*Jacana spinosa*, Northern Jacana
- Family SCOLOPACIDAE  
 Subfamily SCOLOPAGINAE  
*Xenus cinereus*, Terek Sandpiper  
*Actitis hypoleucos*, Common Sandpiper  
*Actitis macularius*, Spotted Sandpiper  
*Tringa ochropus*, Green Sandpiper  
*Tringa solitaria*, Solitary Sandpiper  
*Tringa brevipes*, Gray-tailed Tattler  
*Tringa incana*, Wandering Tattler  
*Tringa erythropus*, Spotted Redshank  
*Tringa melanoleuca*, Greater Yellowlegs  
*Tringa nebularia*, Common Greenshank  
*Tringa guttifer*, Nordmann's Greenshank  
*Tringa semipalmata*, Willet  
*Tringa flavipes*, Lesser Yellowlegs  
*Tringa stagnatilis*, Marsh Sandpiper  
*Tringa glareola*, Wood Sandpiper  
*Bartramia longicauda*, Upland Sandpiper  
*Numenius minutus*, Little Curlew  
*Numenius borealis*, Eskimo Curlew  
*Numenius phaeopus*, Whimbrel  
*Numenius tahitiensis*, Bristle-thighed Curlew  
*Numenius madagascariensis*, Far Eastern Curlew  
*Numenius arquata*, Eurasian Curlew  
*Numenius americanus*, Long-billed Curlew  
*Limosa limosa*, Black-tailed Godwit  
*Limosa haemastica*, Hudsonian Godwit  
*Limosa lapponica*, Bar-tailed Godwit  
*Limosa fedoa*, Marbled Godwit  
*Arenaria interpres*, Ruddy Turnstone  
*Arenaria melanocephala*, Black Turnstone  
*Aphriza virgata*, Surfbird  
*Calidris tenuirostris*, Great Knot  
*Calidris canutus*, Red Knot  
*Calidris alba*, Sanderling  
*Calidris pusilla*, Semipalmated Sandpiper  
*Calidris mauri*, Western Sandpiper  
*Calidris ruficollis*, Red-necked Stint  
*Calidris minuta*, Little Stint  
*Calidris temminckii*, Temminck's Stint  
*Calidris subminuta*, Long-toed Stint  
*Calidris minutilla*, Least Sandpiper  
*Calidris fuscicollis*, White-rumped

- Sandpiper  
*Calidris bairdii*, Baird's Sandpiper  
*Calidris melanotos*, Pectoral Sandpiper  
*Calidris acuminata*, Sharp-tailed Sandpiper  
*Calidris maritima*, Purple Sandpiper  
*Calidris ptilocnemis*, Rock Sandpiper  
*Calidris alpina*, Dunlin  
*Calidris ferruginea*, Curlew Sandpiper  
*Calidris himantopus*, Stilt Sandpiper  
*Eurynorhynchus pygmeus*, Spoon-billed Sandpiper  
*Limicola falcinellus*, Broad-billed Sandpiper  
*Tryngites subruficollis*, Buff-breasted Sandpiper  
*Philomachus pugnax*, Ruff  
*Limnodromus griseus*, Short-billed Dowitcher  
*Limnodromus scolopaceus*, Long-billed Dowitcher  
*Lymnocyptes minimus*, Jack Snipe  
*Gallinago delicata*, Wilson's Snipe  
*Gallinago gallinago*, Common Snipe  
*Gallinago stenura*, Pin-tailed Snipe  
*Gallinago megala*, Swinhoe's Snipe  
*Scolopax rusticola*, Eurasian Woodcock  
*Scolopax minor*, American Woodcock
- Subfamily PHALAROPODINAE  
*Phalaropus tricolor*, Wilson's Phalarope  
*Phalaropus lobatus*, Red-necked Phalarope  
*Phalaropus fulicarius*, Red Phalarope
- Family LARIDAE  
Subfamily LARINAE  
*Creagrus furcatus*, Swallow-tailed Gull  
*Rissa tridactyla*, Black-legged Kittiwake  
*Rissa brevirostris*, Red-legged Kittiwake  
*Pagophila eburnea*, Ivory Gull  
*Xema sabini*, Sabine's Gull  
*Chroicocephalus philadelphia*, Bonaparte's Gull  
*Chroicocephalus cirrocephalus*, Gray-hooded Gull  
*Chroicocephalus ridibundus*, Black-headed Gull  
*Hydrocoloeus minutus*, Little Gull  
*Rhodostethia rosea*, Ross's Gull  
*Leucophaeus atricilla*, Laughing Gull  
*Leucophaeus pipixcan*, Franklin's Gull  
*Larus belcheri*, Belcher's Gull  
*Larus crassirostris*, Black-tailed Gull  
*Larus heermanni*, Heermann's Gull  
*Larus canus*, Mew Gull  
*Larus delawarensis*, Ring-billed Gull  
*Larus occidentalis*, Western Gull  
*Larus livens*, Yellow-footed Gull  
*Larus californicus*, California Gull  
*Larus argentatus*, Herring Gull  
*Larus michahellis*, Yellow-legged Gull  
*Larus thayeri*, Thayer's Gull  
*Larus glaucoides*, Iceland Gull
- Larus fuscus*, Lesser Black-backed Gull  
*Larus schistisagus*, Slaty-backed Gull  
*Larus glaucescens*, Glaucous-winged Gull  
*Larus hyperboreus*, Glaucous Gull  
*Larus marinus*, Great Black-backed Gull  
*Larus dominicanus*, Kelp Gull
- Subfamily STERNINAE  
*Anous stolidus*, Brown Noddy  
*Anous minutus*, Black Noddy  
*Procelsterna cerulea*, Blue-gray Noddy  
*Gygis alba*, White Tern  
*Onychoprion fuscatus*, Sooty Tern  
*Onychoprion lunatus*, Gray-backed Tern  
*Onychoprion anaethetus*, Bridled Tern  
*Onychoprion aleuticus*, Aleutian Tern  
*Sternula albifrons*, Little Tern  
*Sternula antillarum*, Least Tern  
*Phaetusa simplex*, Large-billed Tern  
*Gelochelidon nilotica*, Gull-billed Tern  
*Hydroprogne caspia*, Caspian Tern  
*Chlidonias niger*, Black Tern  
*Chlidonias leucopterus*, White-winged Tern  
*Chlidonias hybridus*, Whiskered Tern  
*Sterna dougallii*, Roseate Tern  
*Sterna sumatrana*, Black-naped Tern  
*Sterna hirundo*, Common Tern  
*Sterna paradisaea*, Arctic Tern  
*Sterna forsteri*, Forster's Tern  
*Thalasseus maximus*, Royal Tern  
*Thalasseus bergii*, Great Crested Tern  
*Thalasseus sandvicensis*, Sandwich Tern  
*Thalasseus elegans*, Elegant Tern
- Subfamily RYNCHOPINAE  
*Rynchops niger*, Black Skimmer
- Family STERCORARIIDAE  
*Stercorarius skua*, Great Skua  
*Stercorarius maccormicki*, South Polar Skua  
*Stercorarius pomarinus*, Pomarine Jaeger  
*Stercorarius parasiticus*, Parasitic Jaeger  
*Stercorarius longicaudus*, Long-tailed Jaeger
- Family ALCIDAE  
*Alle alle*, Dovekie  
*Uria aalge*, Common Murre  
*Uria lomvia*, Thick-billed Murre  
*Alca torda*, Razorbill  
*Cepphus grylle*, Black Guillemot  
*Cepphus columba*, Pigeon Guillemot  
*Brachyramphus perdix*, Long-billed Murrelet  
*Brachyramphus marmoratus*, Marbled Murrelet  
*Brachyramphus brevirostris*, Kittlitz's Murrelet  
*Synthliboramphus hypoleucus*, Xantus's Murrelet  
*Synthliboramphus craveri*, Craveri's Murrelet
- Murrelet  
*Synthliboramphus antiquus*, Ancient Murrelet  
*Ptychoramphus aleuticus*, Cassin's Auklet  
*Aethia psittacula*, Parakeet Auklet  
*Aethia pusilla*, Least Auklet  
*Aethia pygmaea*, Whiskered Auklet  
*Aethia cristatella*, Crested Auklet  
*Cerorhinca monocerata*, Rhinoceros Auklet  
*Fratercula arctica*, Atlantic Puffin  
*Fratercula corniculata*, Horned Puffin  
*Fratercula cirrhata*, Tufted Puffin
- Order COLUMBIFORMES  
Family COLUMBIDAE  
*Patagioenas squamosa*, Scaly-naped Pigeon  
*Patagioenas leucocephala*, White-crowned Pigeon  
*Patagioenas flavirostris*, Red-billed Pigeon  
*Patagioenas inornata*, Plain Pigeon  
*Patagioenas fasciata*, Band-tailed Pigeon  
*Streptopelia orientalis*, Oriental Turtle-Dove  
*Zenaida asiatica*, White-winged Dove  
*Zenaida aurita*, Zenaida Dove  
*Zenaida macroura*, Mourning Dove  
*Columbina inca*, Inca Dove  
*Columbina passerina*, Common Ground-Dove  
*Columbina talpacoti*, Ruddy Ground-Dove  
*Leptotila verreauxi*, White-tipped Dove  
*Geotrygon chrysia*, Key West Quail-Dove  
*Geotrygon mystacea*, Bridled Quail-Dove  
*Geotrygon montana*, Ruddy Quail-Dove  
*Gallicolumba xanthonura*, White-throated Ground-Dove  
*Gallicolumba stairi*, Friendly Ground-Dove  
*Ptilinopus perousii*, Many-colored Fruit-Dove  
*Ptilinopus porphyraceus*, Crimson-crowned Fruit-Dove  
*Ptilinopus roseicapilla*, Mariana Fruit-Dove  
*Ducula pacifica*, Pacific Imperial-Pigeon
- Order CUCULIFORMES  
Family CUCULIDAE  
Subfamily CUCULINAE  
*Cuculus fugax*, Hodgson's Hawk-Cuckoo  
*Cuculus canorus*, Common Cuckoo  
*Cuculus optatus*, Oriental Cuckoo  
*Coccyzus americanus*, Yellow-billed Cuckoo  
*Coccyzus minor*, Mangrove Cuckoo  
*Coccyzus erythrophthalmus*, Black-billed Cuckoo  
*Coccyzus vieilloti*, Puerto Rican Lizard-Cuckoo

Subfamily NEOMORPHINAE	<i>Streptoprocne zonaris</i> , White-collared Swift	<i>Atthis heloisa</i> , Bumblebee Hummingbird
<i>Geococcyx californianus</i> , Greater Roadrunner	Subfamily CHAETURINAE	<i>Selasphorus platycercus</i> , Broad-tailed Hummingbird
Subfamily CROTOPHAGINAE	<i>Chaetura pelagica</i> , Chimney Swift	<i>Selasphorus rufus</i> , Rufous Hummingbird
<i>Crotophaga ani</i> , Smooth-billed Ani	<i>Chaetura vauxi</i> , Vaux's Swift	<i>Selasphorus sasin</i> , Allen's Hummingbird
<i>Crotophaga sulcirostris</i> , Groove-billed Ani	<i>Chaetura brachyura</i> , Short-tailed Swift	Hummingbird
Order STRIGIFORMES	<i>Hirundapus caudacutus</i> , White-throated Needletail	Order TROGONIFORMES
Family TYTONIDAE	<i>Aerodramus spodiopygius</i> , White-rumped Swiftlet	Family TROGONIDAE
<i>Tyto alba</i> , Barn Owl	<i>Aerodramus bartschi</i> , Mariana Swiftlet	Subfamily TROGONINAE
Family STRIGIDAE	Subfamily APODINAE	<i>Trogon elegans</i> , Elegant Trogon
<i>Otus flammeolus</i> , Flammulated Owl	<i>Apus apus</i> , Common Swift	<i>Euptilotis neoxenus</i> , Eared Quetzal
<i>Otus sunia</i> , Oriental Scops-Owl	<i>Apus pacificus</i> , Fork-tailed Swift	Order UPUPIFORMES
<i>Megascops kennicottii</i> , Western Screech-Owl	<i>Apus melba</i> , Alpine Swift	Family UPUIDAE
<i>Megascops asio</i> , Eastern Screech-Owl	<i>Aeronautes saxatalis</i> , White-throated Swift	<i>Upupa epops</i> , Eurasian Hoopoe
<i>Megascops trichopsis</i> , Whiskered Screech-Owl	<i>Tachornis phoenicobia</i> , Antillean Palm-Swift	Order CORACIIFORMES
<i>Megascops nudipes</i> , Puerto Rican Screech-Owl	Family TROCHILIDAE	Family ALCEDINIDAE
<i>Bubo virginianus</i> , Great Horned Owl	Subfamily TROCHILINAE	Subfamily HALCYONINAE
<i>Bubo scandiacus</i> , Snowy Owl	<i>Colibri thalassinus</i> , Green Violetear	<i>Todirhamphus cinnamominus</i> , Micronesia Kingfisher
<i>Surnia ulula</i> , Northern Hawk Owl	<i>Anthracothonax prevostii</i> , Green-breasted Mango	<i>Todirhamphus chloris</i> , Collared Kingfisher
<i>Glaucidium gnoma</i> , Northern Pygmy-Owl	<i>Anthracothonax dominicus</i> , Antillean Mango	Subfamily CERYLINAE
<i>Glaucidium brasilianum</i> , Ferruginous Pygmy-Owl	<i>Anthracothonax viridis</i> , Green Mango	<i>Megaceryle torquata</i> , Ringed Kingfisher
<i>Micrathene whitneyi</i> , Elf Owl	<i>Eulampis jugularis</i> , Purple-throated Carib	<i>Megaceryle alcyon</i> , Belted Kingfisher
<i>Athene cunicularia</i> , Burrowing Owl	<i>Eulampis holosericeus</i> , Green-throated Carib	<i>Chloroceryle americana</i> , Green Kingfisher
<i>Ciccaba virgata</i> , Mottled Owl	<i>Orthorhyncus cristatus</i> , Antillean Crested Hummingbird	Order PICIFORMES
<i>Strix occidentalis</i> , Spotted Owl	<i>Chlorostilbon maugaeus</i> , Puerto Rican Emerald	Family PICIDAE
<i>Strix varia</i> , Barred Owl	<i>Cyananthus latirostris</i> , Broad-billed Hummingbird	Subfamily JYNGINAE
<i>Strix nebulosa</i> , Great Gray Owl	<i>Hylocharis leucotis</i> , White-eared Hummingbird	<i>Jynx torquilla</i> , Eurasian Wryneck
<i>Asio otus</i> , Long-eared Owl	<i>Hylocharis xantusii</i> , Xantus's Hummingbird	Subfamily PICINAE
<i>Asio stygius</i> , Stygian Owl	<i>Amazilia beryllina</i> , Berylline Hummingbird	<i>Melanerpes lewis</i> , Lewis's Woodpecker
<i>Asio flammeus</i> , Short-eared Owl	<i>Amazilia yucatanensis</i> , Buff-bellied Hummingbird	<i>Melanerpes portoricensis</i> , Puerto Rican Woodpecker
<i>Aegolius funereus</i> , Boreal Owl	<i>Amazilia rutila</i> , Cinnamon Hummingbird	<i>Melanerpes erythrocephalus</i> , Red-headed Woodpecker
<i>Aegolius acadicus</i> , Northern Saw-whet Owl	<i>Amazilia violiceps</i> , Violet-crowned Hummingbird	<i>Melanerpes formicivorus</i> , Acorn Woodpecker
<i>Ninox scutulata</i> , Brown Hawk-Owl	<i>Lampornis clemenciae</i> , Blue-throated Hummingbird	<i>Melanerpes uropygialis</i> , Gila Woodpecker
Order CAPRIMULGIFORMES	<i>Eugenes fulgens</i> , Magnificent Hummingbird	<i>Melanerpes aurifrons</i> , Golden-fronted Woodpecker
Family CAPRIMULGIDAE	<i>Helioaster constantii</i> , Plain-capped Starthroat	<i>Melanerpes carolinus</i> , Red-bellied Woodpecker
Subfamily CHORDEILINAE	<i>Calliphlox evelynae</i> , Bahama Woodstar	<i>Sphyrapicus thyroideus</i> , Williamson's Sapsucker
<i>Chordeiles acutipennis</i> , Lesser Nighthawk	<i>Calothorax lucifer</i> , Lucifer Hummingbird	<i>Sphyrapicus varius</i> , Yellow-bellied Sapsucker
<i>Chordeiles minor</i> , Common Nighthawk	<i>Archilochus colubris</i> , Ruby-throated Hummingbird	<i>Sphyrapicus nuchalis</i> , Red-naped Sapsucker
<i>Chordeiles gundlachi</i> , Antillean Nighthawk	<i>Archilochus alexandri</i> , Black-chinned Hummingbird	<i>Sphyrapicus ruber</i> , Red-breasted Sapsucker
Subfamily CAPRIMULGINAE	<i>Calypte anna</i> , Anna's Hummingbird	<i>Dendrocopos major</i> , Great Spotted Woodpecker
<i>Nyctidromus albicollis</i> , Common Pauraque	<i>Calypte costae</i> , Costa's Hummingbird	<i>Picoides scalaris</i> , Ladder-backed Woodpecker
<i>Phalaenoptilus nuttallii</i> , Common Poorwill	<i>Stellula calliope</i> , Calliope Hummingbird	<i>Picoides nuttallii</i> , Nuttall's Woodpecker
<i>Caprimulgus carolinensis</i> , Chuck-will's-widow		<i>Picoides pubescens</i> , Downy Woodpecker
<i>Caprimulgus ridgwayi</i> , Buff-collared Nightjar		<i>Picoides villosus</i> , Hairy Woodpecker
<i>Caprimulgus vociferus</i> , Eastern Whip-poor-will		<i>Picoides arizonae</i> , Arizona Woodpecker
<i>Caprimulgus arizonae</i> , Mexican Whip-poor-will		<i>Picoides borealis</i> , Red-cockaded Woodpecker
<i>Caprimulgus noctitherus</i> , Puerto Rican Nightjar		
<i>Caprimulgus indicus</i> , Gray Nightjar		
Order APODIFORMES		
Family APODIDAE		
Subfamily CYPSELOIDINAE		
<i>Cypseloides niger</i> , Black Swift		



- Picoides albolarvatus*, White-headed Woodpecker  
*Picoides dorsalis*, American Three-toed Woodpecker  
*Picoides arcticus*, Black-backed Woodpecker  
*Colaptes auratus*, Northern Flicker  
*Colaptes chrysoides*, Gilded Flicker  
*Dryocopus pileatus*, Pileated Woodpecker  
*Campephilus principalis*, Ivory-billed Woodpecker  
Order PASSERIFORMES  
Family TYRANNIDAE  
Subfamily ELAENINAE  
*Camptostoma imberbe*, Northern Beardless-Tyrannulet  
*Myiopagis viridicata*, Greenish Elaenia  
*Elaenia martinica*, Caribbean Elaenia  
*Elaenia albiceps*, White-crested Eleania  
Subfamily FLUVICOLINAE  
*Mitrephanes phaeocercus*, Tufted Flycatcher  
*Contopus cooperi*, Olive-sided Flycatcher  
*Contopus pertinax*, Greater Pewee  
*Contopus sordidulus*, Western Wood-Pewee  
*Contopus virens*, Eastern Wood-Pewee  
*Contopus caribaeus*, Cuban Pewee  
*Contopus hispaniolensis*, Hispaniolan Pewee  
*Contopus latirostris*, Lesser Antillean Pewee  
*Empidonax flaviventris*, Yellow-bellied Flycatcher  
*Empidonax virescens*, Acadian Flycatcher  
*Empidonax alnorum*, Alder Flycatcher  
*Empidonax traillii*, Willow Flycatcher  
*Empidonax minimus*, Least Flycatcher  
*Empidonax hammondi*, Hammond's Flycatcher  
*Empidonax wrightii*, Gray Flycatcher  
*Empidonax oberholseri*, Dusky Flycatcher  
*Empidonax difficilis*, Pacific-slope Flycatcher  
*Empidonax occidentalis*, Cordilleran Flycatcher  
*Empidonax fulvifrons*, Buff-breasted Flycatcher  
*Sayornis nigricans*, Black Phoebe  
*Sayornis phoebe*, Eastern Phoebe  
*Sayornis saya*, Say's Phoebe  
*Pyrocephalus rubinus*, Vermilion Flycatcher  
Subfamily TYRANNINAE  
*Myiarchus tuberculifer*, Dusky-capped Flycatcher  
*Myiarchus cinerascens*, Ash-throated Flycatcher  
*Myiarchus nuttingi*, Nutting's Flycatcher  
*Myiarchus crinitus*, Great Crested Flycatcher  
*Myiarchus tyrannulus*, Brown-crested Flycatcher  
*Myiarchus sagrae*, La Sagra's Flycatcher  
*Myiarchus antillarum*, Puerto Rican Flycatcher  
*Pitangus sulphuratus*, Great Kiskadee Flycatcher  
*Myiozetetes similis*, Social Flycatcher  
*Myiodynastes luteiventris*, Sulphur-bellied Flycatcher  
*Legatus leucophalus*, Piratic Flycatcher  
*Empidonomus varius*, Variegated Flycatcher  
*Empidonomus aurantioatrocristatus*, Crowned Slaty Flycatcher  
*Tyrannus melancholicus*, Tropical Kingbird  
*Tyrannus couchii*, Couch's Kingbird  
*Tyrannus vociferans*, Cassin's Kingbird  
*Tyrannus crassirostris*, Thick-billed Kingbird  
*Tyrannus verticalis*, Western Kingbird  
*Tyrannus tyrannus*, Eastern Kingbird  
*Tyrannus dominicensis*, Gray Kingbird  
*Tyrannus caudifasciatus*, Loggerhead Kingbird  
*Tyrannus forficatus*, Scissor-tailed Flycatcher  
*Tyrannus savana*, Fork-tailed Flycatcher  
*Pachyrhamphus aglaiae*, Rose-throated Becard  
*Tityra semifasciata*, Masked Tityra  
Family LANIIDAE  
*Lanius cristatus*, Brown Shrike  
*Lanius ludovicianus*, Loggerhead Shrike  
*Lanius excubitor*, Northern Shrike  
Family VIREONIDAE  
*Vireo griseus*, White-eyed Vireo  
*Vireo crassirostris*, Thick-billed Vireo  
*Vireo latimeri*, Puerto Rican Vireo  
*Vireo bellii*, Bell's Vireo  
*Vireo atricapilla*, Black-capped Vireo  
*Vireo vicinior*, Gray Vireo  
*Vireo flavifrons*, Yellow-throated Vireo  
*Vireo plumbeus*, Plumbeous Vireo  
*Vireo cassinii*, Cassin's Vireo  
*Vireo solitarius*, Blue-headed Vireo  
*Vireo huttoni*, Hutton's Vireo  
*Vireo gilvus*, Warbling Vireo  
*Vireo philadelphicus*, Philadelphia Vireo  
*Vireo olivaceus*, Red-eyed Vireo  
*Vireo flavoviridis*, Yellow-green Vireo  
*Vireo altiloquus*, Black-whiskered Vireo  
*Vireo magister*, Yucatan Vireo  
Family CORVIDAE  
*Perisoreus canadensis*, Gray Jay  
*Psilorhinus morio*, Brown Jay  
*Cyanocorax yncas*, Green Jay  
*Gymnorhinus cyanocephalus*, Pinyon Jay  
*Cyanocitta stelleri*, Steller's Jay  
*Cyanocitta cristata*, Blue Jay  
*Aphelocoma coerulescens*, Florida Scrub-Jay  
*Aphelocoma insularis*, Island Scrub-Jay  
*Aphelocoma californica*, Western Scrub-Jay  
*Aphelocoma ultramarina*, Mexican Jay  
*Nucifraga columbiana*, Clark's Nutcracker  
*Pica hudsonia*, Black-billed Magpie  
*Pica nuttalli*, Yellow-billed Magpie  
*Corvus kubaryi*, Mariana Crow  
*Corvus brachyrhynchos*, American Crow  
*Corvus caurinus*, Northwestern Crow  
*Corvus leucognathus*, White-necked Crow  
*Corvus imparatus*, Tamaulipas Crow  
*Corvus ossifragus*, Fish Crow  
*Corvus hawaiiensis*, Hawaiian Crow  
*Corvus cryptoleucus*, Chihuahuan Raven  
*Corvus corax*, Common Raven  
Family ALAUDIDAE  
*Alauda arvensis*, Sky Lark  
*Eremophila alpestris*, Horned Lark  
Family HIRUNDINIDAE  
Subfamily HIRUNDININAE  
*Progne subis*, Purple Martin  
*Progne cryptoleuca*, Cuban Martin  
*Progne dominicensis*, Caribbean Martin  
*Progne chalybea*, Gray-breasted Martin  
*Progne elegans*, Southern Martin  
*Progne tapera*, Brown-chested Martin  
*Tachycineta bicolor*, Tree Swallow  
*Tachycineta albilinea*, Mangrove Swallow  
*Tachycineta thalassina*, Violet-green Swallow  
*Tachycineta cyaneoviridis*, Bahama Swallow  
*Stelgidopteryx serripennis*, Northern Rough-winged Swallow  
*Riparia riparia*, Bank Swallow  
*Petrochelidon pyrrhonota*, Cliff Swallow  
*Petrochelidon fulva*, Cave Swallow  
*Hirundo rustica*, Barn Swallow  
*Delichon urbicum*, Common House-Martin  
Family PARIDAE  
*Poecile carolinensis*, Carolina Chickadee  
*Poecile atricapillus*, Black-capped Chickadee  
*Poecile gambeli*, Mountain Chickadee  
*Poecile sclateri*, Mexican Chickadee  
*Poecile rufescens*, Chestnut-backed Chickadee  
*Poecile hudsonicus*, Boreal Chickadee  
*Poecile cinctus*, Gray-headed Chickadee  
*Baeolophus wollweberi*, Bridled Titmouse

- Baeolophus inornatus*, Oak Titmouse  
*Baeolophus ridgwayi*, Juniper Titmouse  
*Baeolophus bicolor*, Tufted Titmouse  
*Baeolophus atricristatus*, Black-crested Titmouse  
Family REMIZIDAE  
*Auriparus flaviceps*, Verdin  
Family AEGITHALIDAE  
*Psaltriparus minimus*, Bushtit  
Family SITTIDAE  
Subfamily SITTINAE  
*Sitta canadensis*, Red-breasted Nuthatch  
*Sitta carolinensis*, White-breasted Nuthatch  
*Sitta pygmaea*, Pygmy Nuthatch  
*Sitta pusilla*, Brown-headed Nuthatch  
Family CERTHIIDAE  
Subfamily CERTHIINAE  
*Certhia americana*, Brown Creeper  
Family TROGLODYTIDAE  
*Campylorhynchus brunneicapillus*, Cactus Wren  
*Salpinctes obsoletus*, Rock Wren  
*Catherpes mexicanus*, Canyon Wren  
*Thryothorus sinaloa*, Sinaloa Wren  
*Thryothorus ludovicianus*, Carolina Wren  
*Thryomanes bewickii*, Bewick's Wren  
*Troglodytes aedon*, House Wren  
*Troglodytes pacificus*, Pacific Wren  
*Troglodytes hiemalis*, Winter Wren  
*Cistothorus platensis*, Sedge Wren  
*Cistothorus palustris*, Marsh Wren  
Family POLIOPTILIDAE  
*Polioptila caerulea*, Blue-gray Gnatcatcher  
*Polioptila californica*, California Gnatcatcher  
*Polioptila melanura*, Black-tailed Gnatcatcher  
*Polioptila nigriceps*, Black-capped Gnatcatcher  
Family CINCLIDAE  
*Cinclus mexicanus*, American Dipper  
Family REGULIDAE  
*Regulus satrapa*, Golden-crowned Kinglet  
*Regulus calendula*, Ruby-crowned Kinglet  
Family PHYLLOSCOPIDAE  
*Phylloscopus trochilus*, Willow Warbler  
*Phylloscopus sibilatrix*, Wood Warbler  
*Phylloscopus fuscatus*, Dusky Warbler  
*Phylloscopus proregulus*, Pallas's Leaf-Warbler  
*Phylloscopus inornatus*, Yellow-browed Warbler  
*Phylloscopus borealis*, Arctic Warbler  
Family SYLVIIDAE  
*Sylvia curruca*, Lesser Whitethroat  
*Chamaea fasciata*, Wrentit  
Family ACROCEPHALIDAE  
*Acrocephalus luscini*, Nightingale Reed-Warbler  
*Acrocephalus familiaris*, Millerbird  
*Acrocephalus schoenobaenus*, Sedge Warbler  
Family MEGALURIDAE  
*Locustella ochotensis*, Middendorff's Grasshopper-Warbler  
*Locustella lanceolata*, Lanceolated Warbler  
Family MUSCICAPIDAE  
*Ficedula narcissina*, Narcissus Flycatcher  
*Ficedula mugimaki*, Mugimaki Flycatcher  
*Ficedula albicilla*, Taiga Flycatcher  
*Muscicapa sibirica*, Dark-sided Flycatcher  
*Muscicapa griseisticta*, Gray-streaked Flycatcher  
*Muscicapa dauurica*, Asian Brown Flycatcher  
*Muscicapa striata*, Spotted Flycatcher  
Family TURDIDAE  
*Monticola solitarius*, Blue Rock-Thrush  
*Luscinia sibilans*, Rufous-tailed Robin  
*Luscinia calliope*, Siberian Rubythroat  
*Luscinia svecica*, Bluethroat  
*Luscinia cyane*, Siberian Blue Robin  
*Tarsiger cyanurus*, Red-flanked Bluetail  
*Oenanthe oenanthe*, Northern Wheatear  
*Saxicola torquatus*, Stonechat  
*Sialia sialis*, Eastern Bluebird  
*Sialia mexicana*, Western Bluebird  
*Sialia currucoides*, Mountain Bluebird  
*Myadestes townsendi*, Townsend's Solitaire  
*Myadestes myadestinus*, Kamao  
*Myadestes lanaiensis*, Olomao  
*Myadestes obscurus*, Omao  
*Myadestes palmeri*, Puaiohi  
*Catharus aurantirostris*, Orange-billed Nightingale-Thrush  
*Catharus mexicanus*, Black-headed Nightingale-Thrush  
*Catharus fuscescens*, Veery  
*Catharus minimus*, Gray-cheeked Thrush  
*Catharus bicknelli*, Bicknell's Thrush  
*Catharus ustulatus*, Swainson's Thrush  
*Catharus guttatus*, Hermit Thrush  
*Hylocichla mustelina*, Wood Thrush  
*Turdus obscurus*, Eyebrowed Thrush  
*Turdus naumanni*, Dusky Thrush  
*Turdus pilaris*, Fieldfare  
*Turdus grayi*, Clay-colored Thrush  
*Turdus assimilis*, White-throated Thrush  
*Turdus rufopalliat*, Rufous-backed Robin  
*Turdus migratorius*, American Robin  
*Turdus plumbeus*, Red-legged Thrush  
*Ixoreus naevius*, Varied Thrush  
*Ridgwayia pinicola*, Aztec Thrush  
Family MIMIDAE  
*Dumetella carolinensis*, Gray Catbird  
*Melanoptila glabrirostris*, Black Catbird  
*Mimus polyglottos*, Northern Mockingbird  
*Mimus gundlachi*, Bahama Mockingbird  
*Oreoscoptes montanus*, Sage Thrasher  
*Toxostoma rufum*, Brown Thrasher  
*Toxostoma longirostre*, Long-billed Thrasher  
*Toxostoma bendirei*, Bendire's Thrasher  
*Toxostoma curvirostre*, Curve-billed Thrasher  
*Toxostoma redivivum*, California Thrasher  
*Toxostoma crissale*, Crissal Thrasher  
*Toxostoma lecontei*, Le Conte's Thrasher  
*Melanotis caerulescens*, Blue Mockingbird  
*Margarops fuscatus*, Pearly-eyed Thrasher  
Family STURNIDAE  
*Sturnus philippensis*, Chestnut-cheeked Starling  
*Sturnus cineraceus*, White-cheeked Starling  
Family PRUNELLIDAE  
*Prunella montanella*, Siberian Accentor  
Family MOTACILLIDAE  
*Motacilla tschutschensis*, Eastern Yellow Wagtail  
*Motacilla citreola*, Citrine Wagtail  
*Motacilla cinerea*, Gray Wagtail  
*Motacilla alba*, White Wagtail  
*Anthus trivialis*, Tree Pipit  
*Anthus hodgsoni*, Olive-backed Pipit  
*Anthus gustavi*, Pechora Pipit  
*Anthus cervinus*, Red-throated Pipit  
*Anthus rubescens*, American Pipit  
*Anthus spragueii*, Sprague's Pipit  
Family BOMBYCILLIDAE  
*Bombycilla garrulus*, Bohemian Waxwing  
*Bombycilla cedrorum*, Cedar Waxwing  
Family Ptilogonatidae  
*Ptilogonys cinereus*, Gray Silky-flycatcher  
*Phainopepla nitens*, Phainopepla  
Family PEUCEDRAMIDAE  
*Peucedramus taeniatus*, Olive Warbler  
Family CALCARIIDAE  
*Calcarius lapponicus*, Lapland Longspur  
*Calcarius ornatus*, Chestnut-collared Longspur  
*Calcarius pictus*, Smith's Longspur  
*Rhynchophanes mccownii*, McCown's Longspur  
*Plectrophenax nivalis*, Snow Bunting  
*Plectrophenax hyperboreus*, McKay's Bunting  
Family PARULIDAE  
*Vermivora bachmanii*, Bachman's Warbler  
*Vermivora cyanoptera*, Blue-winged

- Warbler  
*Vermivora chrysoptera*, Golden-winged Warbler  
*Oreothlypis peregrina*, Tennessee Warbler  
*Oreothlypis celata*, Orange-crowned Warbler  
*Oreothlypis ruficapilla*, Nashville Warbler  
*Oreothlypis virginiae*, Virginia's Warbler  
*Oreothlypis crissalis*, Colima Warbler  
*Oreothlypis luciae*, Lucy's Warbler  
*Oreothlypis superciliosa*, Crescent-chested Warbler  
*Parula americana*, Northern Parula  
*Parula pitiayumi*, Tropical Parula  
*Dendroica petechia*, Yellow Warbler  
*Dendroica pensylvanica*, Chestnut-sided Warbler  
*Dendroica magnolia*, Magnolia Warbler  
*Dendroica tigrina*, Cape May Warbler  
*Dendroica caerulescens*, Black-throated Blue Warbler  
*Dendroica coronata*, Yellow-rumped Warbler  
*Dendroica nigrescens*, Black-throated Gray Warbler  
*Dendroica chrysoparia*, Golden-cheeked Warbler  
*Dendroica virens*, Black-throated Green Warbler  
*Dendroica townsendi*, Townsend's Warbler  
*Dendroica occidentalis*, Hermit Warbler  
*Dendroica fusca*, Blackburnian Warbler  
*Dendroica dominica*, Yellow-throated Warbler  
*Dendroica graciae*, Grace's Warbler  
*Dendroica adelaidae*, Adelaide's Warbler  
*Dendroica pinus*, Pine Warbler  
*Dendroica kirtlandii*, Kirtland's Warbler  
*Dendroica discolor*, Prairie Warbler  
*Dendroica palmarum*, Palm Warbler  
*Dendroica castanea*, Bay-breasted Warbler  
*Dendroica striata*, Blackpoll Warbler  
*Dendroica cerulea*, Cerulean Warbler  
*Dendroica angela*, Elf-woods Warbler  
*Mniotilta varia*, Black-and-white Warbler  
*Setophaga ruticilla*, American Redstart  
*Protonotaria citrea*, Prothonotary Warbler  
*Helmitheros vermivorum*, Worm-eating Warbler  
*Limnithlypis swainsonii*, Swainson's Warbler  
*Seiurus aurocapilla*, Ovenbird  
*Parkesia noveboracensis*, Northern Waterthrush  
*Parkesia motacilla*, Louisiana Waterthrush  
*Waterthrush*  
*Oporornis formosus*, Kentucky Warbler  
*Oporornis agilis*, Connecticut Warbler  
*Oporornis philadelphia*, Mourning Warbler  
*Oporornis tolmiei*, MacGillivray's Warbler  
*Geothlypis trichas*, Common Yellowthroat  
*Geothlypis poliocephala*, Gray-crowned Yellowthroat  
*Wilsonia citrina*, Hooded Warbler  
*Wilsonia pusilla*, Wilson's Warbler  
*Wilsonia canadensis*, Canada Warbler  
*Cardellina rubrifrons*, Red-faced Warbler  
*Myioborus pictus*, Painted Redstart  
*Myioborus miniatus*, Slate-throated Redstart  
*Euthlypis lachrymosa*, Fan-tailed Warbler  
*Basileuterus culicivorus*, Golden-crowned Warbler  
*Basileuterus rufifrons*, Rufous-capped Warbler  
*Icteria virens*, Yellow-breasted Chat  
Family THRAUPIDAE  
*Nesospingus speculiferus*, Puerto Rican Tanager  
*Spindalis zena*, Western Spindalis  
*Spindalis portoricensis*, Puerto Rican Spindalis  
Family EMBERIZIDAE  
*Sporophila torqueola*, White-collared Seedeater  
*Tiaris olivaceus*, Yellow-faced Grassquit  
*Tiaris bicolor*, Black-faced Grassquit  
*Loxigilla portoricensis*, Puerto Rican Bullfinch  
*Arremonops rufivirgatus*, Olive Sparrow  
*Pipilo chlorurus*, Green-tailed Towhee  
*Pipilo maculatus*, Spotted Towhee  
*Pipilo erythrophthalmus*, Eastern Towhee  
*Aimophila ruficeps*, Rufous-crowned Sparrow  
*Melospiza fusca*, Canyon Towhee  
*Melospiza crissalis*, California Towhee  
*Melospiza aberti*, Abert's Towhee  
*Peucaea carpalis*, Rufous-winged Sparrow  
*Peucaea botterii*, Botteri's Sparrow  
*Peucaea cassinii*, Cassin's Sparrow  
*Peucaea aestivalis*, Bachman's Sparrow  
*Spizella arborea*, American Tree Sparrow  
*Spizella passerina*, Chipping Sparrow  
*Spizella pallida*, Clay-colored Sparrow  
*Spizella breweri*, Brewer's Sparrow  
*Spizella pusilla*, Field Sparrow  
*Spizella wortheni*, Worthen's Sparrow  
*Spizella atrogularis*, Black-chinned Sparrow  
*Poocetes gramineus*, Vesper Sparrow  
*Chondestes grammacus*, Lark Sparrow  
*Amphispiza quinquestrata*, Five-striped Sparrow  
*Amphispiza bilineata*, Black-throated Sparrow  
*Amphispiza belli*, Sage Sparrow  
*Calamospiza melanocorys*, Lark Bunting  
*Passerculus sandwichensis*, Savannah Sparrow  
*Ammodramus savannarum*, Grasshopper Sparrow  
*Ammodramus bairdii*, Baird's Sparrow  
*Ammodramus henslowii*, Henslow's Sparrow  
*Ammodramus leconteii*, Le Conte's Sparrow  
*Ammodramus nelsoni*, Nelson's Sparrow  
*Ammodramus caudacutus*, Saltmarsh Sparrow  
*Ammodramus maritimus*, Seaside Sparrow  
*Passerella iliaca*, Fox Sparrow  
*Melospiza melodia*, Song Sparrow  
*Melospiza lincolni*, Lincoln's Sparrow  
*Melospiza georgiana*, Swamp Sparrow  
*Zonotrichia albicollis*, White-throated Sparrow  
*Zonotrichia querula*, Harris's Sparrow  
*Zonotrichia leucophrys*, White-crowned Sparrow  
*Zonotrichia atricapilla*, Golden-crowned Sparrow  
*Junco hyemalis*, Dark-eyed Junco  
*Junco phaeonotus*, Yellow-eyed Junco  
*Emberiza leucocephalus*, Pine Bunting  
*Emberiza chrysophrys*, Yellow-browed Bunting  
*Emberiza pusilla*, Little Bunting  
*Emberiza rustica*, Rustic Bunting  
*Emberiza elegans*, Yellow-throated Bunting  
*Emberiza aureola*, Yellow-breasted Bunting  
*Emberiza variabilis*, Gray Bunting  
*Emberiza pallasi*, Pallas's Bunting  
*Emberiza schoeniclus*, Reed Bunting  
Family CARDINALIDAE  
*Piranga flava*, Hepatic Tanager  
*Piranga rubra*, Summer Tanager  
*Piranga olivacea*, Scarlet Tanager  
*Piranga ludoviciana*, Western Tanager  
*Piranga bidentata*, Flame-colored Tanager  
*Rhodothraupis celaeno*, Crimson-collared Grosbeak  
*Cardinalis cardinalis*, Northern Cardinal  
*Cardinalis sinuatus*, Pyrrhuloxia  
*Pheucticus chrysopheplus*, Yellow Grosbeak  
*Pheucticus ludovicianus*, Rose-breasted Grosbeak  
*Pheucticus melanocephalus*, Black-headed Grosbeak



*Cyanocompsa parellina*, Blue Bunting  
*Passerina caerulea*, Blue Grosbeak  
*Passerina amoena*, Lazuli Bunting  
*Passerina cyanea*, Indigo Bunting  
*Passerina versicolor*, Varied Bunting  
*Passerina ciris*, Painted Bunting  
*Spiza americana*, Dickcissel  
Family ICTERIDAE  
*Dolichonyx oryzivorus*, Bobolink  
*Agelaius phoeniceus*, Red-winged Blackbird  
*Agelaius tricolor*, Tricolored Blackbird  
*Agelaius humeralis*, Tawny-shouldered Blackbird  
*Agelaius xanthomus*, Yellow-shouldered Blackbird  
*Sturnella magna*, Eastern Meadowlark  
*Sturnella neglecta*, Western Meadowlark  
*Xanthocephalus xanthocephalus*, Yellow-headed Blackbird  
*Euphagus carolinus*, Rusty Blackbird  
*Euphagus cyanocephalus*, Brewer's Blackbird  
*Quiscalus quiscula*, Common Grackle  
*Quiscalus major*, Boat-tailed Grackle  
*Quiscalus mexicanus*, Great-tailed Grackle  
*Quiscalus niger*, Greater Antillean Grackle  
*Molothrus bonariensis*, Shiny Cowbird  
*Molothrus aeneus*, Bronzed Cowbird  
*Molothrus ater*, Brown-headed Cowbird  
*Icterus portoricensis*, Puerto Rican Oriole  
*Icterus wagleri*, Black-vented Oriole  
*Icterus spurius*, Orchard Oriole  
*Icterus cucullatus*, Hooded Oriole  
*Icterus pustulatus*, Streak-backed Oriole  
*Icterus bullockii*, Bullock's Oriole  
*Icterus gularis*, Altamira Oriole

*Icterus graduacauda*, Audubon's Oriole  
*Icterus galbula*, Baltimore Oriole  
*Icterus parisorum*, Scott's Oriole  
Family FRINGILLIDAE  
Subfamily FRINGILLINAE  
*Fringilla coelebs*, Common Chaffinch  
*Fringilla montifringilla*, Brambling  
Subfamily EUPHONIINAE  
*Euphonia musica*, Antillean Euphonia  
Subfamily CARDUELINAE  
*Leucosticte tephrocotis*, Gray-crowned Rosy-Finch  
*Leucosticte atrata*, Black Rosy-Finch  
*Leucosticte australis*, Brown-capped Rosy-Finch  
*Pinicola enucleator*, Pine Grosbeak  
*Carpodacus erythrinus*, Common Rosefinch  
*Carpodacus purpureus*, Purple Finch  
*Carpodacus cassinii*, Cassin's Finch  
*Carpodacus mexicanus*, House Finch  
*Loxia curvirostra*, Red Crossbill  
*Loxia leucoptera*, White-winged Crossbill  
*Acanthis flammea*, Common Redpoll  
*Acanthis hornemanni*, Hoary Redpoll  
*Spinus pinus*, Eurasian Siskin  
*Spinus pinus*, Pine Siskin  
*Spinus psaltria*, Lesser Goldfinch  
*Spinus lawrencei*, Lawrence's Goldfinch  
*Spinus tristis*, American Goldfinch  
*Chloris sinica*, Oriental Greenfinch  
*Pyrrhula pyrrhula*, Eurasian Bullfinch  
*Coccothraustes vespertinus*, Evening Grosbeak  
*Coccothraustes coccothraustes*, Hawfinch  
Subfamily DREPANIDINAE  
*Telespiza cantans*, Laysan Finch  
*Telespiza ultima*, Nihoa Finch  
*Psittirostra psittacea*, Ou  
*Loxioides bailleui*, Palila  
*Pseudonestor xanthophrys*, Maui

Parrotbill  
*Hemignathus virens*, Hawaii Amakihi  
*Hemignathus flavus*, Oahu Amakihi  
*Hemignathus kauaiensis*, Kauai Amakihi  
*Hemignathus ellisianus*, Greater Akialoa  
*Hemignathus lucidus*, Nukupuu  
*Hemignathus munroi*, Akiapolaau  
*Magnuma parva*, Anianiau  
*Oreomystis bairdi*, Akikiki  
*Oreomystis mana*, Hawaii Creeper  
*Paroreomyza maculata*, Oahu Alauahio  
*Paroreomyza flammea*, Kakawahie  
*Paroreomyza montana*, Maui Alauahio  
*Loxops caeruleirostris*, Akekee  
*Loxops coccineus*, Akepa  
*Vestiaria coccinea*, Iiwi  
*Palmeria dolei*, Akohekohe  
*Himatione sanguinea*, Apapane  
*Melamprosops phaeosoma*, Poo-uli

#### PART 21—[AMENDED]

- 3. Revise the authority citation for part 21 to read as follows:

**Authority:** Pub. L. 65–186, 40 Stat. 755 (1918) (16 U.S.C. 703–712), as amended.

#### § 21.3 [Amended]

- 4. In § 21.3, amend the definition of “Raptor” by adding the words “the Order Accipitriformes,” immediately before the words “the Order Falconiformes” and adding a comma after “Falconiformes”.

Dated: September 17, 2013.

**Michael J. Bean,**

*Acting Principal Deputy Assistant Secretary for Fish and Wildlife and Parks.*

[FR Doc. 2013–26061 Filed 10–31–13; 8:45 am]

**BILLING CODE 4310–55–P**

**APPENDIX B7:**  
**Resumés**



**Nicole M. Harings, Ph.D.**  
Wildlife Biologist

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**Education:**

Ph.D.—Biology, Statistics, New Mexico State University, Las Cruces, New Mexico, 2012  
M.S.—Biology, Aquatic Ecology, Ethology, Eastern New Mexico University, Portales, New Mexico, 2008  
B.S.—Biology, Dance, University of Wisconsin- Stevens Point, Stevens Point, Wisconsin, 2005

**Employment History:**

2010 –Present     Souder, Miller & Associates, Las Cruces, NM  
2012 –Present     New Mexico Cooperative Fish and Wildlife Research Unit, New Mexico State University, Las Cruces, NM  
2007 –2012        Aquatics Lab, New Mexico State University, Las Cruces, NM  
2007                Wildlife Plus, Lingo, NM  
2004                Wisconsin Cooperative Fisheries Research Unit, University of Wisconsin Stevens Point, Stevens Point, WI  
2003 –2004        Point Dance Ensemble, Stevens Point, WI  
1999 –2005        Turning Point Dance Academy, Stevens Point, WI

**Professional Affiliations/Organizations:**

American Society of Ichthyology and Herpetology (ASIH)/Copeia 2009–present  
The Wildlife Society NMSU Chapter 2009–present  
American Fisheries Society NMSU Chapter 2009–present  
Graduate Student Council, Activities Coordinator, 2008–2010  
Graduate Student Organization, Fish and Wildlife Sciences President 2008–2009  
The Honor Society of Phi Kappa Phi 2008–present  
The Nature Conservancy 2007–present  
Wildlife Conservation Society 2006–present

**Technical Training:**

- National Conservation Training Center, Population Viability Analysis IV: Modeling Occupancy for Conservation (U.S. Fish and Wildlife Service)
- Institutional Animal Care and Use Committee (IACUC) Assurance of Actual Training 2-Hour Short Course (New Mexico State University)
- Defensive Driving 4-Hour Short Course (National Safety Council, NMSU/Environmental Health and Safety)

**Areas of Specialty:**

- Amphibian Ecology/Field Methods
- Aquatic Ecology
- Project Management



## Experience:

### Investigation

Dr. Harings' research weighs heavily in the conservation of ecosystems, biodiversity and sustaining natural resources. Specifically, she studies biodiversity indicators such as amphibians and reptiles (including behavior, life history, and response to environmental changes).

Dr. Harings' post-doctoral research focused on species richness of reptiles and their habitat associations within the Holloman Air Force Base. Current population estimates of detected species will be determined using occupancy modeling and methods will be established for long-term reptile surveys.

Dr. Harings' doctoral research focused on the conditions of climate change; environmental variables such as ultraviolet-radiation (UVR) that are interacting with other factors that can alter the composition of ecosystems depending on the adaptability of the organisms (anurans) present. She studied variable interactions (UVR, pH, salinity, and temperature) on the New Mexico Spadefoot toad (*Spea multiplicata*) and the Couch's Spadefoot toad (*Scaphiopus couchii*) in the laboratory and conducted field surveys on five desert toad species in the field for occupancy modeling. She also measured covariates in the field (Jornada Long-term Experimental Range) including water quality parameters, vegetation surveys, and soil surveys to determine species distribution relative to environmental variables. Dr. Harings also works as team leader, managing six employees in order to successfully accomplish the required research tasks.

Aquatic ecology is of particular interest to Dr. Harings, since water is a shared and limited resource where anurans spend much of their lifecycle. The intentions of her research are to discern the causes of species decline, determine species thresholds, and communicate with local communities to determine the most necessary and reasonable strategies to initiate habitat restoration and create a healthy coexistence between humans and wildlife.

Dr. Harings received a Master's degree from Eastern New Mexico University, Portales, NM studying behavioral and morphological ontogeny (developmental changes) of the tadpole shrimp *Triops longicaudatus*. Strong skills in laboratory techniques were acquired. While working as a field technician for Wildlife Plus, she gained experience handling and identifying small mammals and reptiles. Dr. Harings learned to set-up Sherman, funnel and pitfall traps, as well as operate and maintain four-wheelers to travel among sites and move arrays.

While working for the Wisconsin Cooperative Fisheries Research Unit at the University of Wisconsin Stevens Point, she gained field experience researching frogs, which entailed SCUBA diving to observe tadpoles foraging behavior on submerged fallen trees along riparian areas with mostly undeveloped shorelines. She became familiar with conducting surveys and learned to operate a 25hp V-hull, flat-bottom boat.

### Permitting and Government Agency Interaction

As part of her personal duties as a researcher, Dr. Harings attends the Joint Annual meetings of the Arizona and New Mexico chapters of the Wildlife Society (TWS) and the American Fisheries Society (AFS), where she has made contacts and communicates with researchers and employees of the New Mexico Department of Game and Fish (NMDGF) and the U.S. Fish and Wildlife Service, along with

other researchers with similar goals and interests. Dr. Harings currently holds a permit of authorization from the NMDGF for taking protected wildlife for scientific and/or education purposes (e.g., reptiles).

**Publications/Technical Presentations:**

E.A.L. Salas, V.A. Seamster, N.M. Harings, K.G. Boykin, G. Alvarez, C. A. Caldwell, K.W. Dixon, R. McCollough, and E. Muldavin (in prep). Projected future bioclimatic-envelope suitability for Species of Concern (reptiles and amphibians) in South Central U.S. *Herpetological Conservation Biology*, submit by end of July 2016

G. Alvarez, E.A.L. Salas, N.M. Harings and K.G. Boykin (in prep), Analysis of the *Aspidoscelis tessellata* complex pattern classes and the distribution of *Aspidoscelis dixonii*'s progenitor species for purposes of mapping and determining the conservation needs of a vulnerable group of lizards, *Journal TBA*, submit by September 2016.

Harings, N., K. G. Boykin, and L. Oligschlaeger (2014) *Reptile occurrence and habitat associations on Holloman Air Force Base*. *Herpetological Conservation and Biology*. July 2014, Vol. 9, No. 1, pp. 57-66.

Harings, N. and W. J. Boeing (2014) *Desert Anuran Occurrence and Detection in Artificial Breeding Habitats*. *Herpetologica*: June 2014, Vol. 70, No. 2, pp. 123-134.

Bennett, J., W. Boeing, and N. Harings. *Growth response of Ambystoma maculatum to salinity and temperature gradients*. NMSU. Las Cruces, NM. Submitted July 2015.

Harings, N., W. Boeing, and R. Steiner. *Response of Spea multiplicata and Scaphiopus couchii to a pH gradient and UV-B radiation*. Dissertation. NMSU. Las Cruces, NM. Submitted 2015.

Harings, N. and M. Bozek. *Behavioral observations and dietary analysis of tadpoles and frogs to determine the utilization of submerged riparian trees on Lake Katherine in Minocqua, Wisconsin*. 2004. (Publication in prep).

Harings, N. and M.M.F. Lutnesky. *The influence of larval Culex spp. (Diptera: Culicidae) on behavior and growth rate of the tadpole shrimp Triops longicaudatus (Notostraca: Triopsidae)*. Poster presentation at the 54<sup>th</sup> annual Southwestern Association of Naturalists Conference. Stephenville, TX. 20 April 2007. Oral presentation at the ENMU, Student Research Conference. Portales, NM. 10 April 2007.

Harings, N. and M.M.F. Lutnesky. *The influence of Culiseta spp. (Diptera: Culicidae) on behavior and growth of Triops longicaudatus (Notostraca: Triopsidae)*. Oral presentation at the 77<sup>th</sup> annual Rocky Mountain Conference for Entomologists. Colorado Springs, CO. 30 July–3 August 2006.

Harings, N. and M. Bozek. *Behavioral observations and dietary analysis of tadpoles and frogs to determine the utilization of submerged riparian trees on Lake Katherine in Minocqua, Wisconsin*. Oral presentation at the Midwest Fish and Wildlife Conference. Indianapolis, IN. 13 December 2004.

Harings, N. *Odonata larvae present in Wyoming*. Poster presentation at the Annual Research Symposium, UWSP. Stevens Point, WI. 2002.

Appendix E10  
US Fish & Wildlife Service  
Correspondence







July 14, 2016

#6324631

Mr. George D. Dennis III, Ph.D.  
United States Department of the Interior  
Fish and Wildlife Service  
New Mexico Ecological Services Field Office  
2105 Osuna Road NE  
Albuquerque, NM 87113  
(505) 761-4781  
(505) 346-2542 (Fax)  
[nmesfo@fws.gov](mailto:nmesfo@fws.gov)  
*ec: george\_dennis@fws.gov*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Dennis:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well to be located in the northeast section of the High Valley service area. The extent of the work is shown on the attached Figure 2.
- Replacement of the existing booster station as shown on the attached Figure 2.
- Rehabilitation of the existing water storage tank as shown on the attached Figure 2.
- Rehabilitation of the existing water supply well as shown on the attached Figure 2.
- Installation of new water distribution and service lines as shown on the attached Figure 2.

Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be

*Mr. George D. Dennis*

*July 14, 2016*

*Page 2*

completed below ground and in existing improved rights of way or existing developed water system sites.

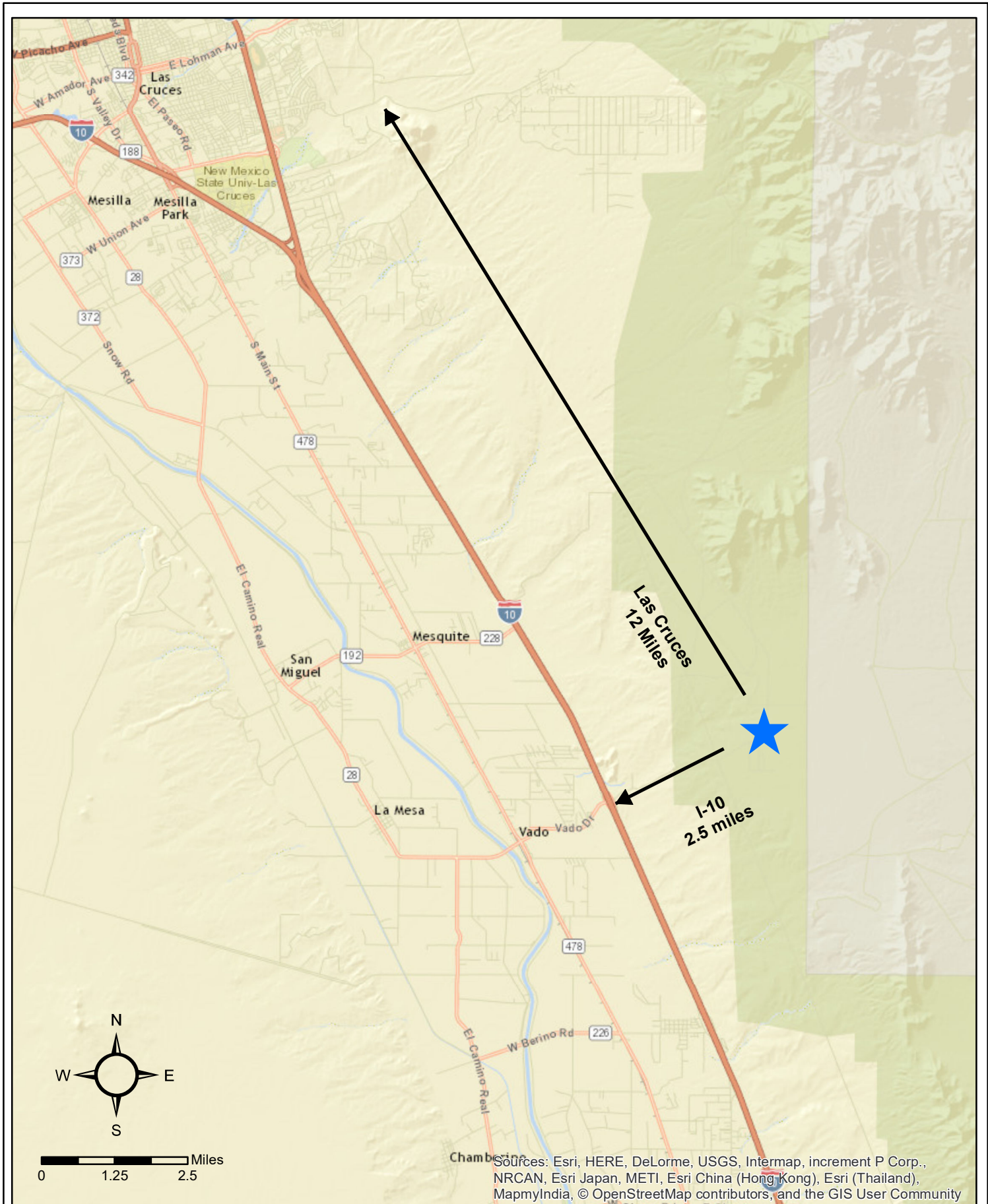
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326



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Date Saved:  
6/30/2016

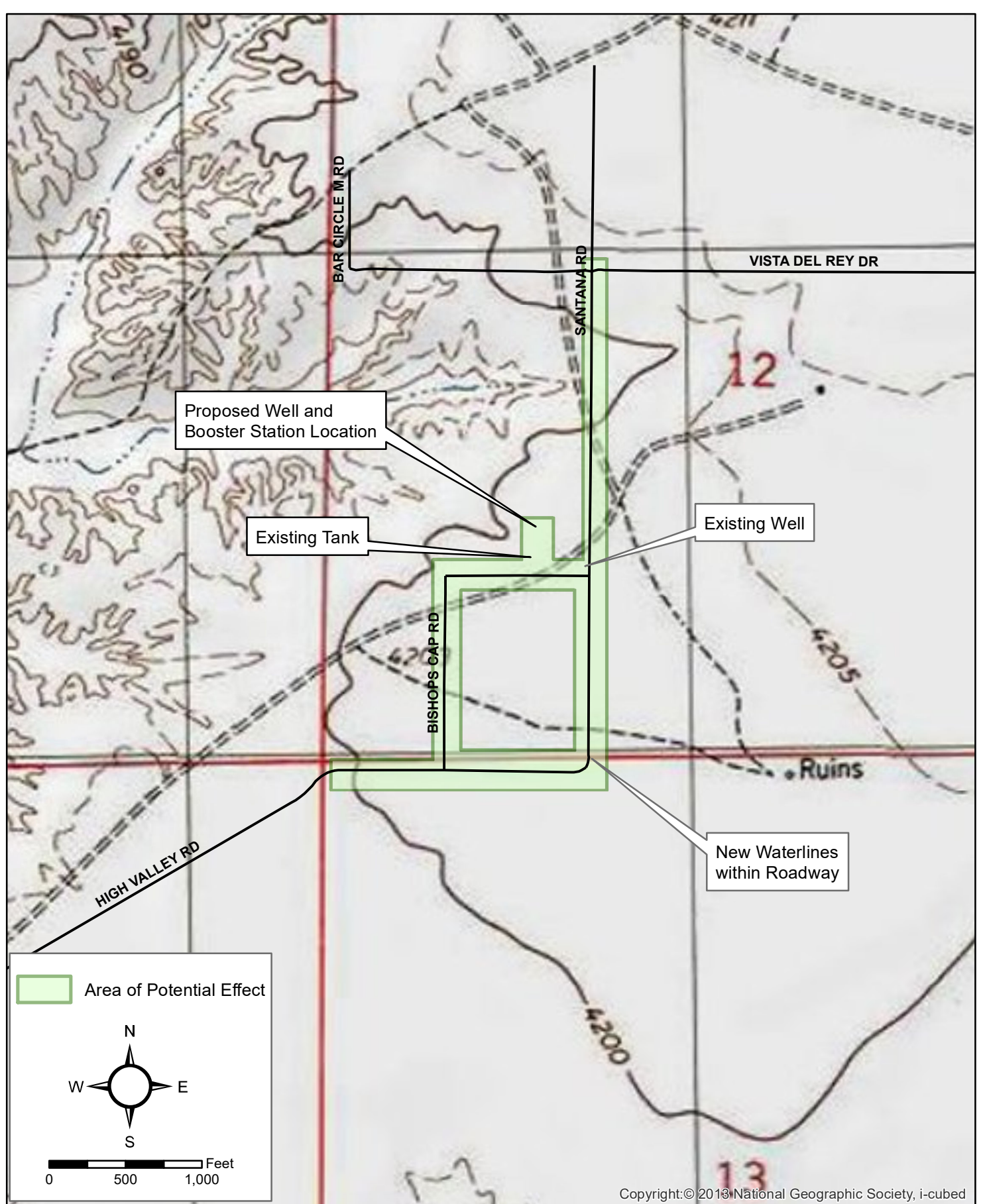


401 North Seventeenth Street, Suite 4  
Las Cruces, New Mexico 88005-8131  
(575) 647-0799 / 647-0680 (Fax)  
www.soudermiller.com  
Serving the Southwest & Rocky Mountains

Vicinity Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 1





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 www.soudermiller.com  
 Serving the Southwest & Rocky Mountains

US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2

## Alfredo Holguin

---

**From:** Dennis, George <george\_dennis@fws.gov>  
**Sent:** Friday, August 5, 2016 8:39 AM  
**To:** Alfredo Holguin  
**Subject:** Re: High Valley MDWCA - Request for Consultation

Dear Mr. Holguin:

Thank you for your inquiry about potential fish and wildlife impacts of your project. In New Mexico you can now obtain an official letter on Federal trust resources from the U.S. Fish and Wildlife Service (Service) via our Information, Planning, and Conservation System (IPAC).

You can access IPAC through our office website at <http://www.fws.gov/southwest/es/newmexico/IPAC.cfm>

On this page there are instructions on how to use IPAC [http://www.fws.gov/southwest/es/newmexico/documents/IPAC\\_Help.pdf](http://www.fws.gov/southwest/es/newmexico/documents/IPAC_Help.pdf) and conservation measures for several project types (right side of the page).

On the "Tasks" page of IPAC make sure you select the "Request an Official Species List" button to get an official letter.

If you make a no-effect determination for all species listed in your letter then no further consultation with the Service is necessary. Your official letter and determination table are your documentation of your environmental review.

If you determine that your project may adversely affect a federally listed species you can submit a request for further review by the Service or help with your review electronically at [nmesfo@fws.gov](mailto:nmesfo@fws.gov).

Regards,  
George Dennis

George D. Dennis III, Ph.D.  
Collaborative Conservation Services and Administration Branch Chief  
New Mexico Ecological Services Field Office  
U.S. Fish and Wildlife Service  
2105 Osuna Rd NE  
Albuquerque, NM 87113  
505-761-4754  
[george\\_dennis@fws.gov](mailto:george_dennis@fws.gov)

On Thu, Aug 4, 2016 at 10:16 AM, Alfredo Holguin <[alfredo.holguin@soudermiller.com](mailto:alfredo.holguin@soudermiller.com)> wrote:

George D. Dennis III, Ph.D.,

Please find attached a follow-up request for consultation regarding a proposed water system improvement project to be completed by High Valley MDWCA in Doña Ana County, New Mexico. We have not received a reply to the original request submitted July 15, 2016. Please respond at your earliest convenience or let us know if you have any questions and require additional information.

Thank you,

---



J. Alfredo Holguin, E.I.

*Staff Civil Designer*

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX PST CAPM (CS-0000051), TX Surveying Firm (10162200), WY Surveying Firm (S-1704)



## **Souder, Miller & Associates**

Engineering ♦ Environmental ♦ Surveying

401 N. Seventeenth Street, Suite 4

Las Cruces, NM 88005

[www.soudermiller.com](http://www.soudermiller.com)

(575) 647-0799 (office)

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*Statement on Viruses and Harmful Software: While the message and attachment(s) have been scanned with anti-virus software, SMA does not guarantee that this message or any attachment(s) is free of computer viruses or other harmful software. SMA does not accept liability for any damages caused by any computer virus or other harmful software transmitted herewith.*







# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
New Mexico Ecological Services Field Office  
2105 OSUNA ROAD NE  
ALBUQUERQUE, NM 87113  
PHONE: (505)346-2525 FAX: (505)346-2542  
URL: [www.fws.gov/southwest/es/NewMexico/](http://www.fws.gov/southwest/es/NewMexico/);  
[www.fws.gov/southwest/es/ES\\_Lists\\_Main2.html](http://www.fws.gov/southwest/es/ES_Lists_Main2.html)

Consultation Code: 02ENNM00-2016-SLI-0714

August 05, 2016

Event Code: 02ENNM00-2016-E-00756

Project Name: High Valley MDWCA Water System Improvements

Subject: List of threatened and endangered species that may occur in your proposed project location, and/or may be affected by your proposed project

To Whom It May Concern:

Thank you for your recent request for information on federally listed species and important wildlife habitats that may occur in your project area. The U.S. Fish and Wildlife Service (Service) has responsibility for certain species of New Mexico wildlife under the Endangered Species Act (ESA) of 1973 as amended (16 USC 1531 et seq.), the Migratory Bird Treaty Act (MBTA) as amended (16 USC 701-715), and the Bald and Golden Eagle Protection Act (BGEPA) as amended (16 USC 668-668c). We are providing the following guidance to assist you in determining which federally imperiled species may or may not occur within your project area and to recommend some conservation measures that can be included in your project design.

## **FEDERALLY-LISTED SPECIES AND DESIGNATED CRITICAL HABITAT**

Attached is a list of endangered, threatened, and proposed species that may occur in your project area. Your project area may not necessarily include all or any of these species. Under the ESA, it is the responsibility of the Federal action agency or its designated representative to determine if a proposed action "may affect" endangered, threatened, or proposed species, or designated critical habitat, and if so, to consult with the Service further. Similarly, it is the responsibility of the Federal action agency or project proponent, not the Service, to make "no effect" determinations. If you determine that your proposed action will have "no effect" on threatened or endangered species or their respective critical habitat, you do not need to seek concurrence with the Service. Nevertheless, it is a violation of Federal law to harm or harass any federally-listed threatened or endangered fish or wildlife species without the appropriate permit.

If you determine that your proposed action may affect federally-listed species, consultation with the Service will be necessary. Through the consultation process, we will analyze information

contained in a biological assessment that you provide. If your proposed action is associated with Federal funding or permitting, consultation will occur with the Federal agency under section 7(a)(2) of the ESA. Otherwise, an incidental take permit pursuant to section 10(a)(1)(B) of the ESA (also known as a habitat conservation plan) is necessary to harm or harass federally listed threatened or endangered fish or wildlife species. In either case, there is no mechanism for authorizing incidental take "after-the-fact." For more information regarding formal consultation and HCPs, please see the Service's Consultation Handbook and Habitat Conservation Plans at [www.fws.gov/endangered/esa-library/index.html#consultations](http://www.fws.gov/endangered/esa-library/index.html#consultations).

The scope of federally listed species compliance not only includes direct effects, but also any interrelated or interdependent project activities (e.g., equipment staging areas, offsite borrow material areas, or utility relocations) and any indirect or cumulative effects that may occur in the action area. The action area includes all areas to be affected, not merely the immediate area involved in the action. Large projects may have effects outside the immediate area to species not listed here that should be addressed. If your action area has suitable habitat for any of the attached species, we recommend that species-specific surveys be conducted during the flowering season for plants and at the appropriate time for wildlife to evaluate any possible project-related impacts.

### **Candidate Species and Other Sensitive Species**

A list of candidate and other sensitive species in your area is also attached. Candidate species and other sensitive species are species that have no legal protection under the ESA, although we recommend that candidate and other sensitive species be included in your surveys and considered for planning purposes. The Service monitors the status of these species. If significant declines occur, these species could potentially be listed. Therefore, actions that may contribute to their decline should be avoided.

Lists of sensitive species including State-listed endangered and threatened species are compiled by New Mexico state agencies. These lists, along with species information, can be found at the following websites:

Biota Information System of New Mexico (BISON-M): [www.bison-m.org](http://www.bison-m.org)

New Mexico State Forestry. The New Mexico Endangered Plant Program:  
[www.emnrd.state.nm.us/SFD/ForestMgt/Endangered.html](http://www.emnrd.state.nm.us/SFD/ForestMgt/Endangered.html)

New Mexico Rare Plant Technical Council, New Mexico Rare Plants: [nmrareplants.unm.edu](http://nmrareplants.unm.edu)

Natural Heritage New Mexico, online species database: [nhnm.unm.edu](http://nhnm.unm.edu)

### **WETLANDS AND FLOODPLAINS**

Under Executive Orders 11988 and 11990, Federal agencies are required to minimize the destruction, loss, or degradation of wetlands and floodplains, and preserve and enhance their natural and beneficial values. These habitats should be conserved through avoidance, or mitigated to ensure that there would be no net loss of wetlands function and value.



We encourage you to use the National Wetland Inventory (NWI) maps in conjunction with ground-truthing to identify wetlands occurring in your project area. The Service's NWI program website, [www.fws.gov/wetlands/Data/Mapper.html](http://www.fws.gov/wetlands/Data/Mapper.html) integrates digital map data with other resource information. We also recommend you contact the U.S. Army Corps of Engineers for permitting requirements under section 404 of the Clean Water Act if your proposed action could impact floodplains or wetlands.

## **MIGRATORY BIRDS**

The MBTA prohibits the taking of migratory birds, nests, and eggs, except as permitted by the Service's Migratory Bird Office. To minimize the likelihood of adverse impacts to migratory birds, we recommend construction activities occur outside the general bird nesting season from March through August, or that areas proposed for construction during the nesting season be surveyed, and when occupied, avoided until the young have fledged.

We recommend review of Birds of Conservation Concern at website [www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html](http://www.fws.gov/migratorybirds/CurrentBirdIssues/Management/BCC.html) to fully evaluate the effects to the birds at your site. This list identifies birds that are potentially threatened by disturbance and construction.

## **BALD AND GOLDEN EAGLES**

The bald eagle (*Haliaeetus leucocephalus*) was delisted under the ESA on August 9, 2007. Both the bald eagle and golden eagle (*Aquila chrysaetos*) are still protected under the MBTA and BGEPA. The BGEPA affords both eagles protection in addition to that provided by the MBTA, in particular, by making it unlawful to "disturb" eagles. Under the BGEPA, the Service may issue limited permits to incidentally "take" eagles (e.g., injury, interfering with normal breeding, feeding, or sheltering behavior nest abandonment). For information on bald and golden eagle management guidelines, we recommend you review information provided at [www.fws.gov/midwest/eagle/guidelines/bgepa.html](http://www.fws.gov/midwest/eagle/guidelines/bgepa.html).

On our web site [www.fws.gov/southwest/es/NewMexico/SBC\\_intro.cfm](http://www.fws.gov/southwest/es/NewMexico/SBC_intro.cfm), we have included conservation measures that can minimize impacts to federally listed and other sensitive species. These include measures for communication towers, power line safety for raptors, road and highway improvements, spring developments and livestock watering facilities, wastewater facilities, and trenching operations.

We also suggest you contact the New Mexico Department of Game and Fish, and the New Mexico Energy, Minerals, and Natural Resources Department, Forestry Division for information regarding State fish, wildlife, and plants.

Thank you for your concern for endangered and threatened species and New Mexico's wildlife habitats. We appreciate your efforts to identify and avoid impacts to listed and sensitive species in your project area. For further consultation on your proposed activity, please call 505-346-2525 or email [nmesfo@fws.gov](mailto:nmesfo@fws.gov) and reference your Service Consultation Tracking Number.

Attachment





United States Department of Interior  
Fish and Wildlife Service

Project name: High Valley MDWCA Water System Improvements

## Official Species List

### Provided by:

New Mexico Ecological Services Field Office

2105 OSUNA ROAD NE

ALBUQUERQUE, NM 87113

(505) 346-2525

<http://www.fws.gov/southwest/es/NewMexico/>

[http://www.fws.gov/southwest/es/ES\\_Lists\\_Main2.html](http://www.fws.gov/southwest/es/ES_Lists_Main2.html)

**Consultation Code:** 02ENNM00-2016-SLI-0714

**Event Code:** 02ENNM00-2016-E-00756

**Project Type:** WATER SUPPLY / DELIVERY

**Project Name:** High Valley MDWCA Water System Improvements

**Project Description:** Improvements to the High Valley MDWCA water system located in Vado, NM will include rehabilitation of their existing water storage tank, water supply well and boosters station. Work will also include the installation of a new water supply well and replacement of the system's aging distribution lines with new 6" water mains.

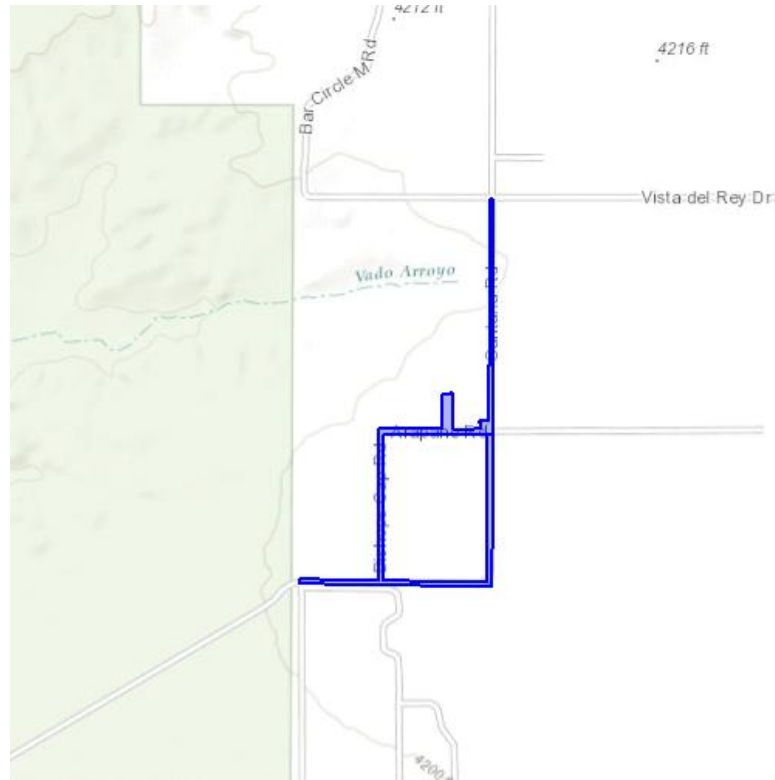
**Please Note:** The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior  
Fish and Wildlife Service

Project name: High Valley MDWCA Water System Improvements

### Project Location Map:



**Project Coordinates:** MULTIPOLYGON (((-106.593142748 32.1442364150001, -106.593223214 32.1442386860001, -106.593223219 32.1442364150001, -106.596117318 32.1442364150001, -106.596111953 32.1408047830001, -106.593231261 32.1407934280001, -106.593223219 32.1442364150001, -106.593142748 32.1442364150001, -106.593062282 32.1442341440001, -106.593089104 32.140684413, -106.598405242 32.1407457340001, -106.598405242 32.140841122, -106.59625411 32.1408047830001, -106.596248746 32.144359052, -106.594483852 32.144359052, -106.594499946 32.1451902540001, -106.594175398 32.1451993380001, -106.594191492 32.1443522390001, -106.593427062 32.144359052, -106.593432426 32.144547549, -106.593196392 32.144552091, -106.593150795 32.149757187, -106.593081057 32.149757187, -106.593064964 32.1442364150001, -106.593142748 32.1442364150001))))

**Project Counties:** Dona Ana, NM





United States Department of Interior  
Fish and Wildlife Service

Project name: High Valley MDWCA Water System Improvements

## Endangered Species Act Species List

There are a total of 4 threatened or endangered species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Least tern ( <i>Sterna antillarum</i> ) Population: interior pop.	Endangered		
northern aplomado falcon ( <i>Falco femoralis septentrionalis</i> ) Population: U.S.A (AZ, NM)	Experimental Population, Non-Essential		
Yellow-Billed Cuckoo ( <i>Coccyzus americanus</i> ) Population: Western U.S. DPS	Threatened	Proposed	
Flowering Plants			
Sneed Pincushion cactus ( <i>Coryphantha sneedii</i> var. <i>sneedii</i> )	Endangered		



United States Department of Interior  
Fish and Wildlife Service

Project name: High Valley MDWCA Water System Improvements

## **Critical habitats that lie within your project area**

There are no critical habitats within your project area.

Appendix E11  
New Mexico Department of  
Game & Fish Correspondence





July 14, 2016

#6324631

Mr. Matt Wunder, Ph.D  
New Mexico Department of Game and Fish  
Conservation Services Division  
P.O. Box 25112  
Santa Fe, NM 87504  
(505) 476-8101  
(505) 476-8123 (fax)  
*matthew.wunder@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Wunder:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well to be located in the northeast section of the High Valley service area. The extent of the work is shown on the attached Figure 2.
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- Rehabilitation of the existing water storage tank as shown on the attached Figure 2.
- Rehabilitation of the existing water supply well as shown on the attached Figure 2.
- Installation of new water distribution and service lines as shown on the attached Figure 2.

Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.



*Mr. Matt Wunder*

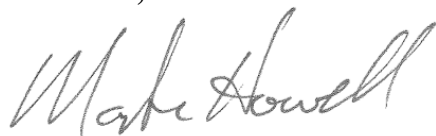
*July 14, 2016*

*Page 2*

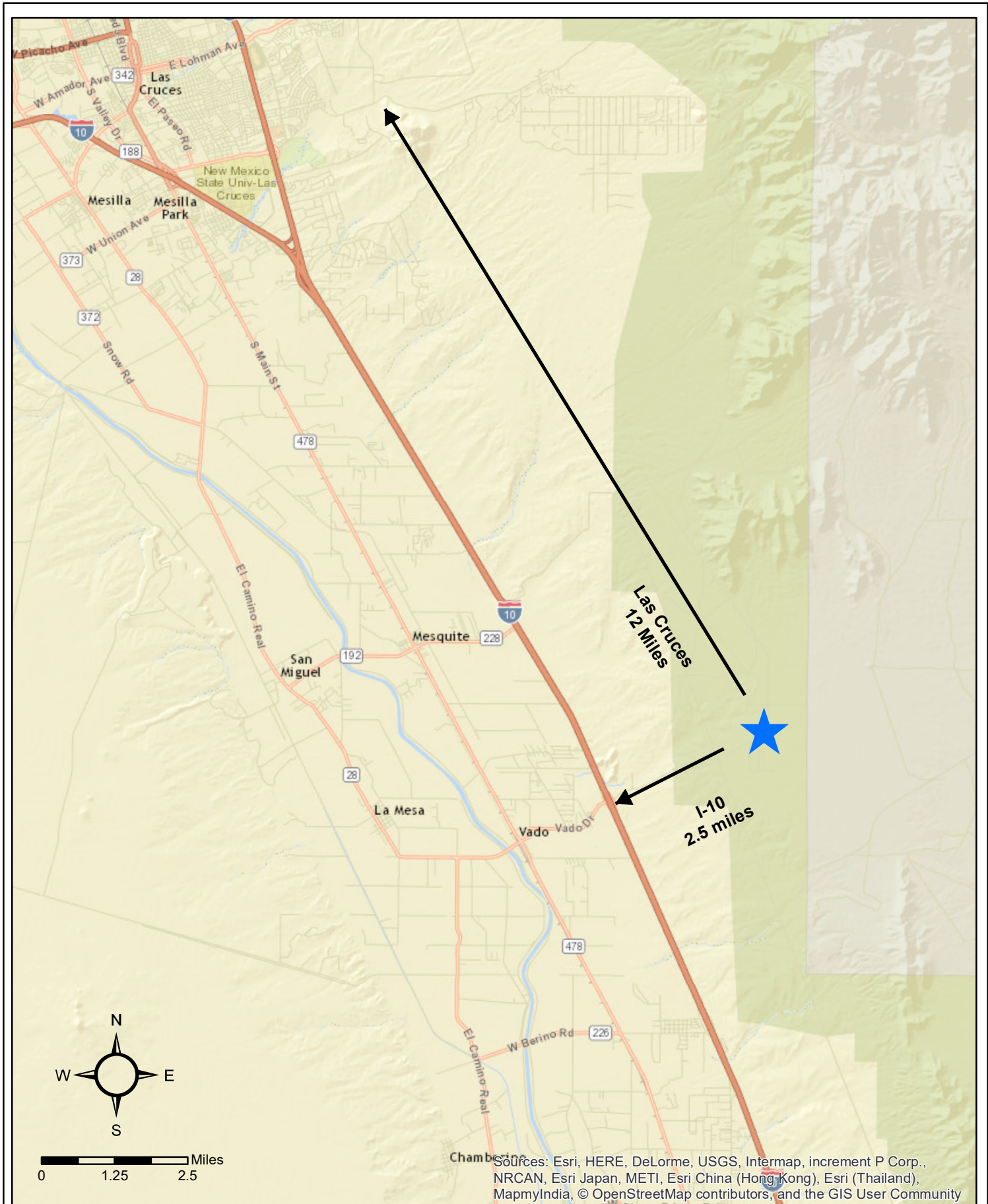
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com).

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
[marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)  
Extension: 1326



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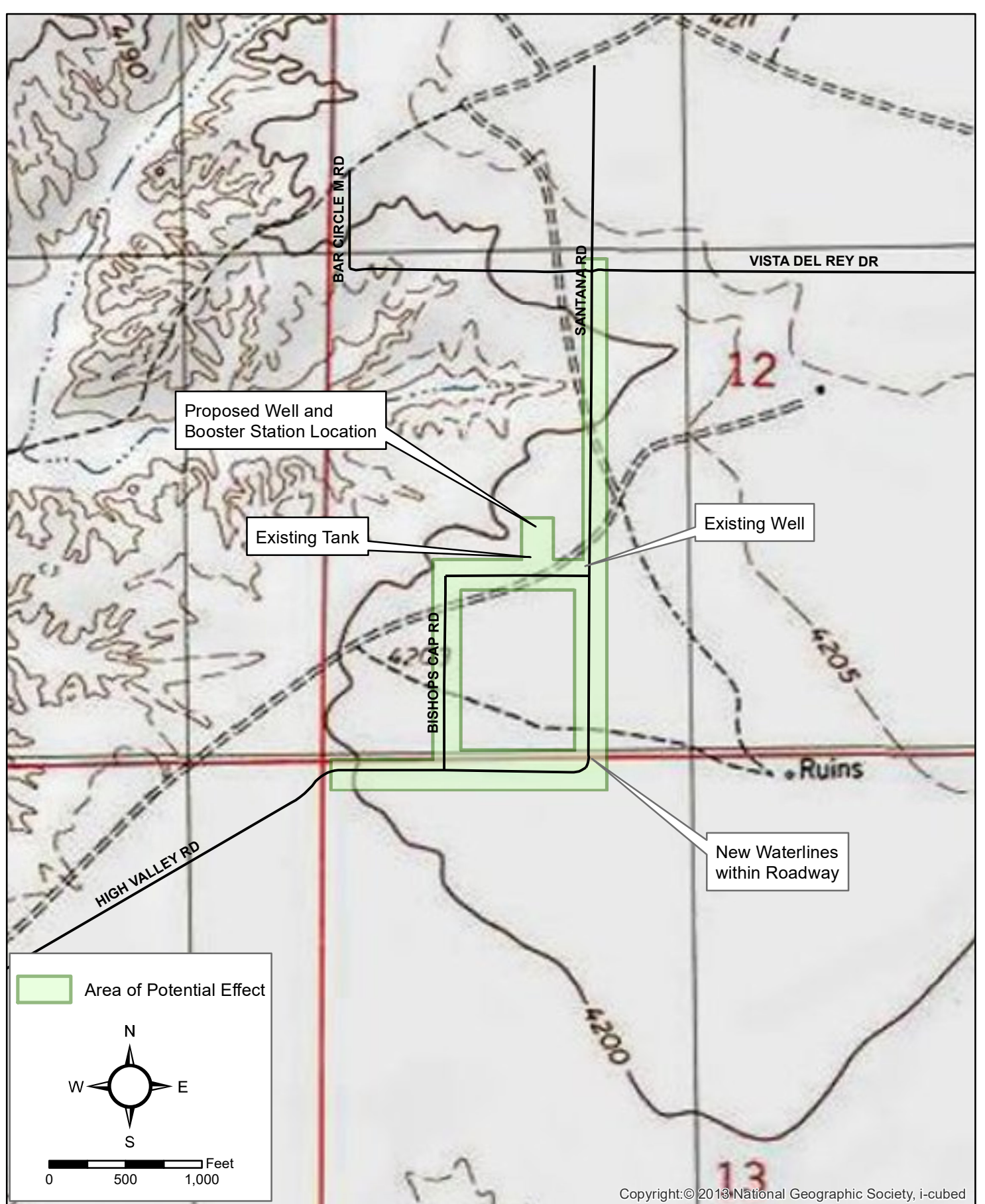
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Vicinity Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 1



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Vado, New Mexico

Figure 2



GOVERNOR  
Susana Martinez



DIRECTOR AND SECRETARY  
TO THE COMMISSION  
Alexandra Sandoval

DEPUTY DIRECTOR  
Donald L. Jaramillo

## STATE OF NEW MEXICO DEPARTMENT OF GAME & FISH

One Wildlife Way, Santa Fe, NM 87507  
Post Office Box 25112, Santa Fe, NM 87504  
Tel: (505) 476-8000 | Fax: (505) 476-8123  
For information call: (888) 248-6866

[www.wildlife.state.nm.us](http://www.wildlife.state.nm.us)

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Las Cruces

**BOB RICKLEFS**  
Cimarron

**ELIZABETH A. RYAN**  
Roswell

**THOMAS "DICK" SALOPEK**  
Las Cruces

---

July 20, 2016

Marty Howell  
Senior Engineer  
Souder, Miller & Associates  
401 North Seventeenth Street, Suite 4  
Las Cruces, NM 88005-8131

***RE: High Valley MDWCA water system improvements; NMDGF No. 17218***

Dear Marty Howell,

The Department of Game and Fish (Department) has reviewed your request for information regarding the above referenced project, and provides the following recommendations to minimize or eliminate impacts to wildlife.

Open trenches and ditches can trap small mammals, amphibians and reptiles and can cause injury to large mammals. Periods of highest activity for many of these species include night time, summer months and wet weather.

- To minimize the amount of open trenches at any given time, keep trenching and back-filling crews close together. Use concurrent trenching and backfilling if possible.
- Trench during the cooler months (October – March). However, there may be exceptions (e.g., critical wintering areas) which need to be assessed on a site-specific basis.
- Avoid leaving trenches open overnight. Where trenches cannot be back-filled immediately, escape ramps should be constructed at least every 90 meters. Escape ramps can be short lateral trenches sloping to the surface or wooden planks extending to the surface. The slope should be less than 45 degrees (100%). Trenches that have been left open overnight, especially where endangered species occur, should be inspected and animals removed prior to back-filling.

With implementation of these recommendations during construction, the Department believes that this project as proposed is unlikely to adversely affect wildlife or wildlife habitats.

For your convenience, we have enclosed a copy of New Mexico Wildlife of Concern for Doña Ana County. Species accounts, habitat associations and county species lists can be accessed from the Department's Biota Information System of New Mexico (BISON-M) electronic database at [bison-m.org](http://bison-m.org). The Department recommends that you contact the U.S. Fish and Wildlife Service for current listings of federally listed species.



Thank you for the opportunity to review and comment on your project. If you have any questions, please contact me at [malia.volke@state.nm.us](mailto:malia.volke@state.nm.us) or 505-476-8160.

Sincerely,

A handwritten signature in blue ink that reads "Malia Volke". The signature is written in a cursive, flowing style.

Malia Volke, Ph.D., Aquatic/Riparian Habitat Specialist  
Ecological and Environmental Planning Division

Enc.: 1

cc: USFWS NMES Field Office  
Daniel Lusk, NMDGF Southwest Regional Habitat Biologist



## Biota Information System of New Mexico



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### Report County TES Table for

**Dona Ana**

## NEW MEXICO WILDLIFE OF CONCERN

For complete up-dated information on federal-listed species, including plants, see the US Fish & Wildlife Service website at <http://ecos.fws.gov/ipac/wizard/chooseLocation!prepare.action>. For information on state-listed plants, contact the NM Energy, Minerals and Natural Resources Department, Division of Forestry, or go to <http://nmrareplants.unm.edu/>. If your project is on Bureau of Land Management, contact the local BLM Field Office for information on species of particular concern. If your project is on a National Forest, contact the Forest Supervisor's office for species information. E = Endangered; T = Threatened; s = sensitive; SOC = Species of Concern; C = Candidate; Exp = Experimental non-essential population; P = Proposed

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Common Name	Scientific Name	NMGF	US FWS	Critical Habitat
<a href="#">Spotted Bat</a>	<i>Euderma maculatum</i>	T		
<a href="#">Organ Mtns. Colorado Chipmunk</a>	<i>Tamias quadrivittatus australis</i>	T		
<a href="#">Brown Pelican</a>	<i>Pelecanus occidentalis</i>	E		
<a href="#">Common Black Hawk</a>	<i>Buteogallus anthracinus</i>	T		
<a href="#">Bald Eagle</a>	<i>Haliaeetus leucocephalus</i>	T		
<a href="#">Aplomado Falcon</a>	<i>Falco femoralis</i>	E	E	
<a href="#">Peregrine Falcon</a>	<i>Falco peregrinus</i>	T		
<a href="#">Arctic Peregrine Falcon</a>	<i>Falco peregrinus tundrius</i>	T		
<a href="#">Least Tern</a>	<i>Sternula antillarum</i>	E	E	
<a href="#">Neotropic Cormorant</a>	<i>Phalacrocorax brasilianus</i>	T		
<a href="#">Common Ground-dove</a>	<i>Columbina passerina</i>	E		
<a href="#">Yellow-billed Cuckoo (western pop)</a>	<i>Coccyzus americanus occidentalis</i>		T	
<a href="#">Mexican Spotted Owl</a>	<i>Strix occidentalis lucida</i>		T	Y
<a href="#">Buff-collared Nightjar</a>	<i>Antrostomus ridgwayi</i>	E		
<a href="#">Broad-billed Hummingbird</a>	<i>Cyananthus latirostris</i>	T		
<a href="#">Costa's Hummingbird</a>	<i>Calypte costae</i>	T		
<a href="#">Violet-crowned Hummingbird</a>	<i>Amazilia violiceps</i>	T		
<a href="#">Southwestern Willow Flycatcher</a>	<i>Empidonax traillii extimus</i>	E	E	Y
<a href="#">Bell's Vireo</a>	<i>Vireo bellii</i>	T		

<b>Gray Vireo</b>	Vireo vicinior	T		
<b>Sprague's Pipit</b>	Anthus spragueii		C	
<b>Baird's Sparrow</b>	Ammodramus bairdii	T		
<b>Varied Bunting</b>	Passerina versicolor	T		
<b>Reticulate Gila Monster</b>	Heloderma suspectum suspectum	E		
<b>Dona Ana Talussnail</b>	Sonorella todseni	T		

---

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Appendix E12  
N.M. Energy Minerals & Natural Resources  
Department Forestry Division  
Correspondence







July 14, 2016

#6324631

Ms. Daniela Roth, Botany Program Coordinator  
N.M. Energy, Minerals & Natural Resources Dept.  
Forestry Division  
P.O. Box 1948  
Santa Fe, NM 87504-1948  
(505) 476-3387  
(505) 476-3361 (fax)  
*daniela.roth@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Roth:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well to be located in the northeast section of the High Valley service area. The extent of the work is shown on the attached Figure 2.
- Replacement of the existing booster station as shown on the attached Figure 2.
- Rehabilitation of the existing water storage tank as shown on the attached Figure 2.
- Rehabilitation of the existing water supply well as shown on the attached Figure 2.
- Installation of new water distribution and service lines as shown on the attached Figure 2.

Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.

*Ms. Daniela Roth*

*July 14, 2016*

*Page 2*

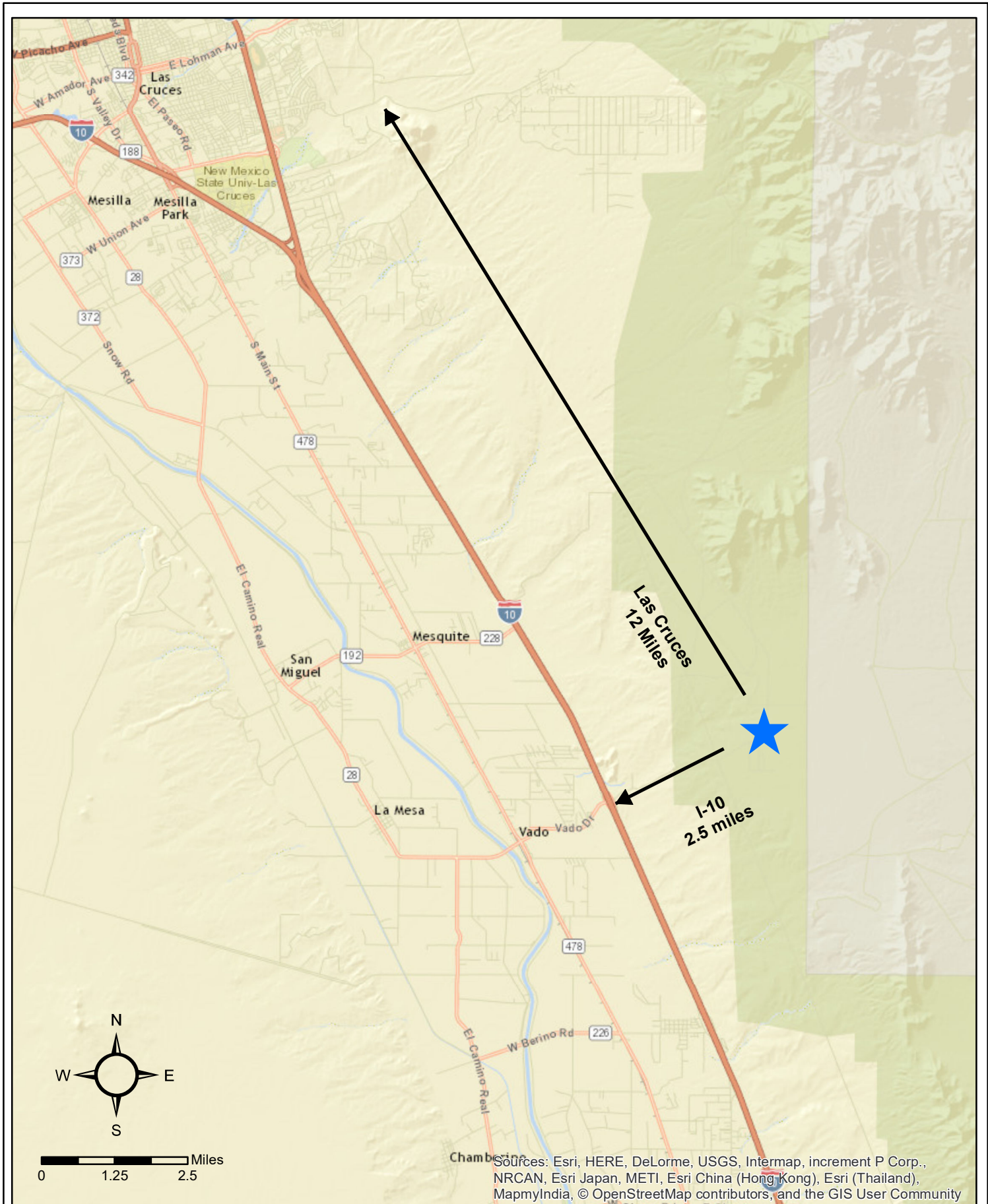
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com).

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
[marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)  
Extension: 1326



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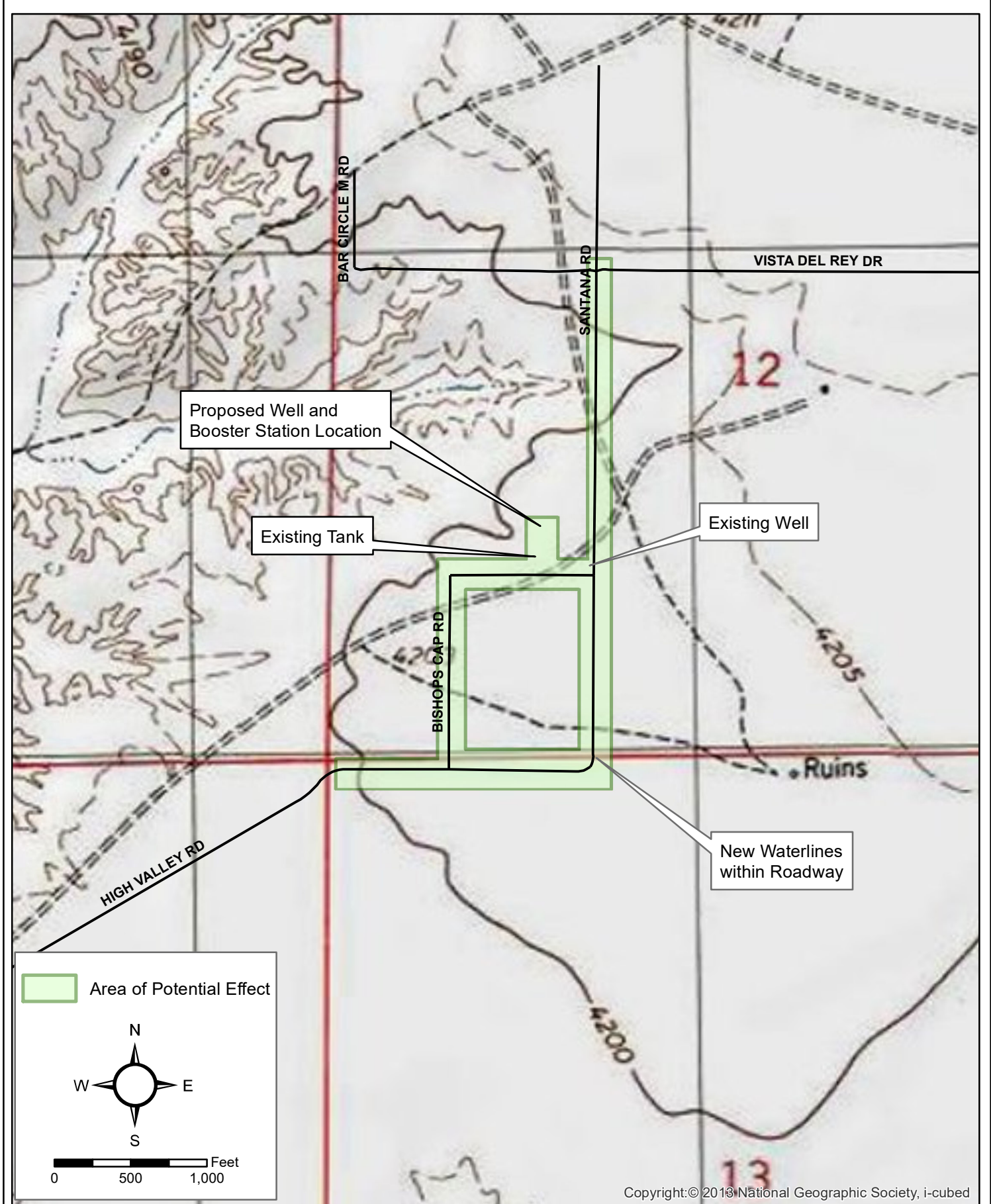


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Vicinity Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 1





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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2



## Alfredo Holguin

---

**From:** Roth, Daniela, EMNRD <Daniela.Roth@state.nm.us>  
**Sent:** Friday, August 5, 2016 3:15 PM  
**To:** Alfredo Holguin  
**Subject:** RE: High Valley MDWCA - Request for Consultation

Dear Alfredo Holguin:

Thank you for providing me with the opportunity to review and comment on the water system improvements for the High Mutual Domestic Water Consumers Association. The NM Forestry Division does not have any information on the occurrence of state listed endangered plant species in the vicinity of the project location. However, there are several state listed plants in Dona Ana County with the potential to occur in the project area, based on the information provided. These include sand pricklypear (*Opuntia arenaria*) and the night-blooming cereus (*Peniocereus greggii* var. *greggii*). The presence of habitat for these state listed plants should be evaluated in the project area. If habitat exist, I recommend clearance surveys to document the potential presence of these species in the project area. If any plants are located, they should be avoided during construction, or impacts should be minimized and properly mitigated.

Please let me know if I can be of further help.

Sincerely,

**Daniela Roth**

Botany Program Coordinator  
EMNRD – Forestry Division  
1220 S. Saint Francis Drive  
Santa Fe, NM 87505  
505-476-3347

<http://www.emnrd.state.nm.us/SFD/>

---

**From:** Alfredo Holguin [mailto:alfredo.holguin@soudermiller.com]  
**Sent:** Wednesday, August 3, 2016 12:12 PM  
**To:** Roth, Daniela, EMNRD <Daniela.Roth@state.nm.us>  
**Subject:** High Valley MDWCA - Request for Consultation

Ms. Daniela Roth, Botany Program Coordinator,

Please find attached a request for consultation regarding a proposed water system improvement project to be completed by High Valley MDWCA in Doña Ana County, New Mexico. Please let us know if you have any questions or require any further information.

Thank you,

---

Appendix E13  
New Mexico Environment  
Department Correspondence





July 14, 2016

#6324631

Mr. Morgan Nelson, Environmental Impact Review Coordinator  
New Mexico Environment Department  
PO Box 5469  
Santa Fe, NM 87502-5469  
(505) 827-0419  
Fax (505) 827-2836  
*morgan.nelson@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Nelson:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.

*Mr. Morgan Nelson*

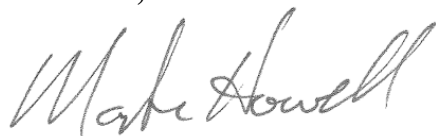
*July 14, 2016*

*Page 2*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
*marty.howell@soudermiller.com*  
Extension: 1326





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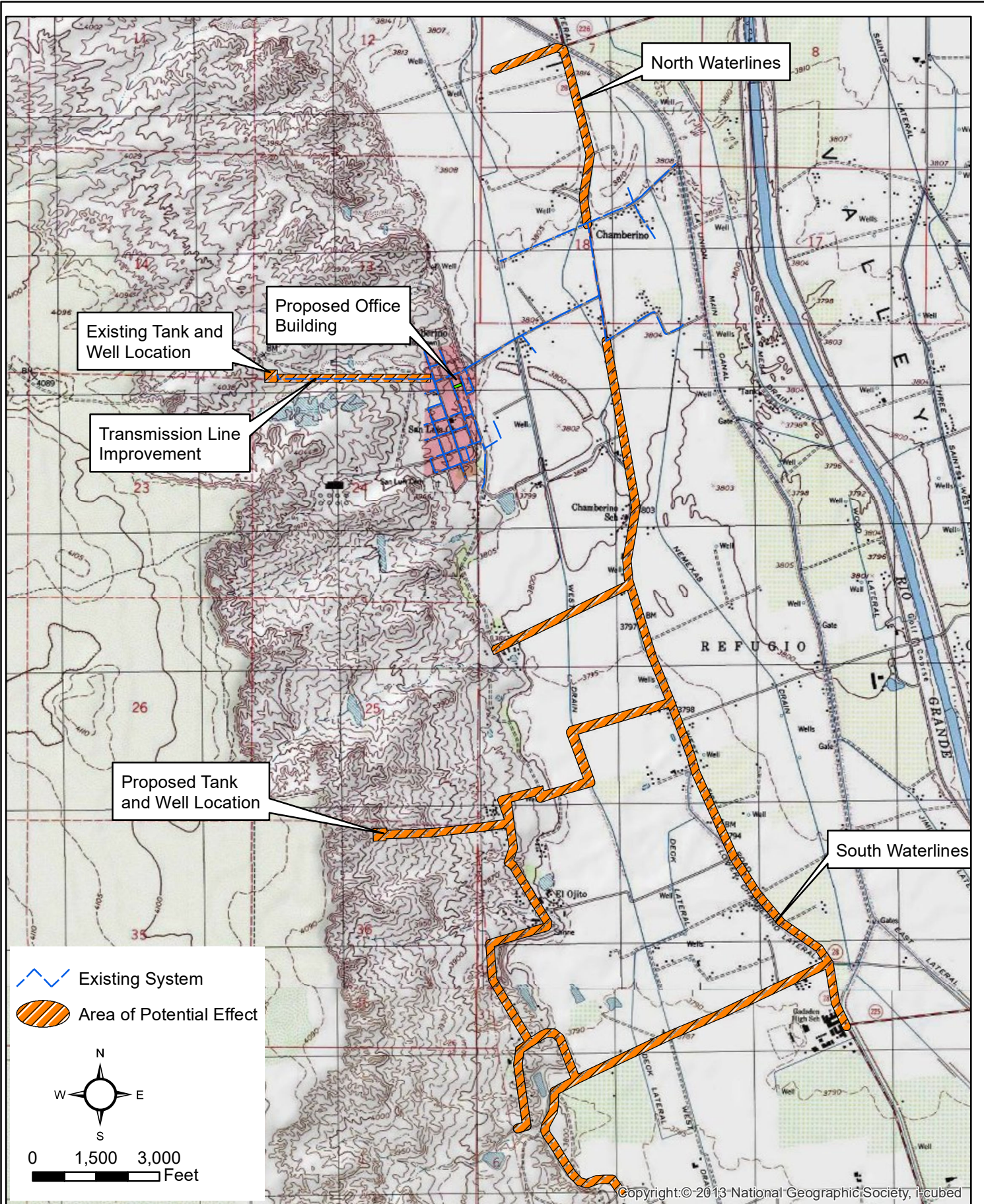


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Chamberino MDWC&SA Preliminary Engineering Report  
Chamberino, New Mexico

Figure 1





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USGS Topographic Map  
Chamberino MDWC&SA Preliminary Engineering Report  
Chamberino, New Mexico

Figure 2





August 3, 2016

#6324631

Mr. Thomas Skibitski, Environmental Impact Review Coordinator  
New Mexico Environment Department  
PO Box 5469  
Santa Fe, NM 87502-5469  
(505) 827-0419  
Fax (505) 827-2836  
*thomas.skibitski@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Nelson:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Mr. Thomas Skibitski*

*August 3, 2016*

*Page 2*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

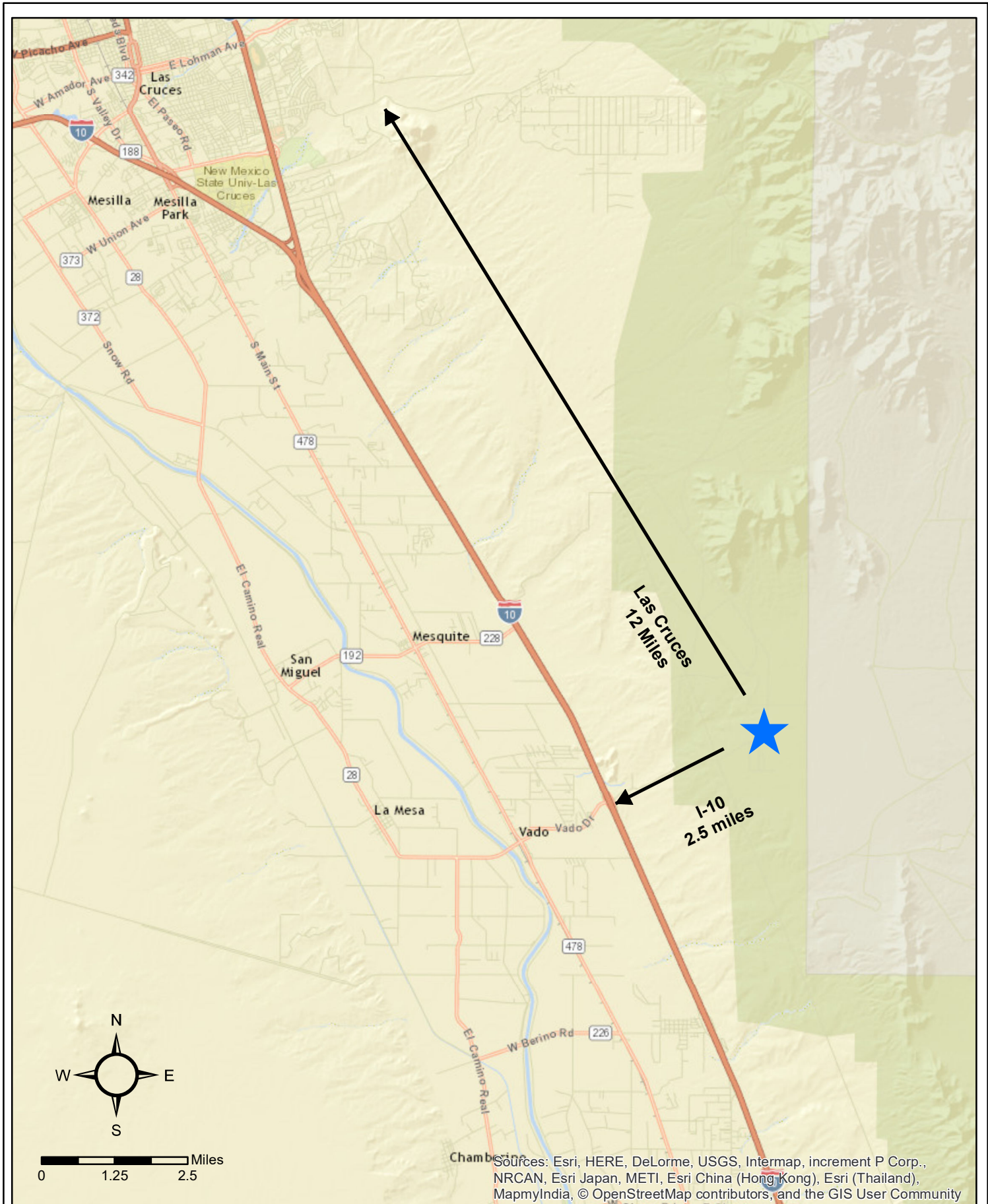
Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
*marty.howell@soudermiller.com*  
Extension: 1326





Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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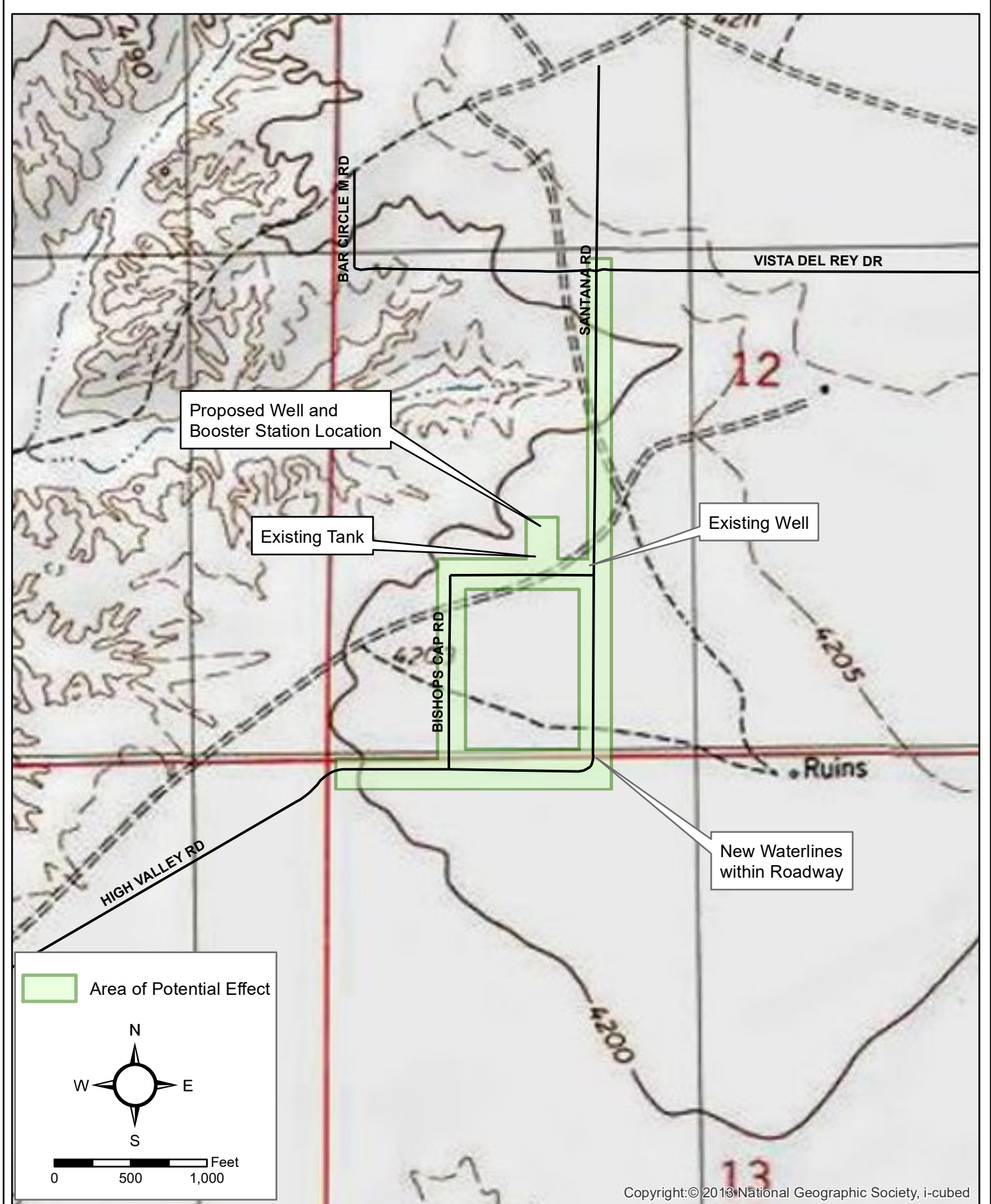
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 Vado, New Mexico

Figure 1



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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2





*State of New Mexico*  
**ENVIRONMENT DEPARTMENT**

**Office of the Secretary**

SUSANA MARTINEZ  
Governor  
JOHN A. SANCHEZ  
Lieutenant Governor

121 Tijeras Avenue NE, Suite 1000  
Albuquerque, NM 87102-3400  
Telephone (505) 222-9500 Fax (505) 222-9510  
www.nmenv.state.nm.us



RYAN FLYNN  
Cabinet Secretary  
BUTCH TONGATE  
Deputy Secretary

September 28, 2016

Mr. Marty Howell  
Senior Engineer II  
Miller Engineers, Inc. D/B/A  
Souder, Miller & Associates  
401 North Seventeenth Street, Suite 4  
Las Cruces, NM 88005-8131

Email: [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)

RE: Water System Improvements, High Valley Mutual Domestic Water Consumers  
Association of Dona Ana County, NM  
NMED EIR #5383

Mr. Howell:

Your letter regarding the above named project was received by the New Mexico Environment Department (NMED) and comments were provided by the Air Quality, Drinking Water, Ground Water Quality, Solid Waste, and Surface Water Quality Bureaus.

The project includes installation of a new water supply well; replacement of the existing booster station; rehabilitation of the existing water storage tank; rehabilitation of the existing water supply well; and, installation of new water distribution and service lines.

**Air Quality**

The Air Quality Bureau (AQB) provides comment that this area of Doña Ana County is currently in attainment for all of the New Mexico and National Ambient Air Quality Standards; however the AQB has recorded exceedances of the standard for particulate matter (PM<sub>10</sub>) in the past.

A Natural Events Action Plan (NEAP) for Doña Ana County has been prepared and approved by the U.S. Environmental Protection Agency. As part of the NEAP, Doña Ana County adopted a dust control ordinance (Ordinance # 194-2000). In accordance with this ordinance, appropriate dust control measures need to be outlined and approved by the county for any soil disturbing activities and should also be addressed in the environmental documentation.

This project will temporarily impact air quality as a result of fugitive dust and equipment exhaust emissions generated during construction and will impact air quality in the area. However, with the appropriate dust control measures in place, the increased levels should be minimal. Areas disturbed by the construction activities, within and adjacent to the project area should be reclaimed to avoid long-term problems with erosion and fugitive dust.

The proposed project plan calls for the installation of new water distribution and service lines. If the existing infrastructure is disturbed, all activities must conform to the Bureau's Asbestos Management Rule, 20.2.78 NMAC. For more information about the Asbestos Management Program call 1-800-224-7009 or (505) 476-4330. Questions may also be submitted by e-mail to [nmenv-asbestos@state.nm.us](mailto:nmenv-asbestos@state.nm.us).

All asphalt, concrete, quarrying, crushing and screening facilities contracted in conjunction with the proposed project must have current and proper air quality permits. For more information on air quality permitting and modeling requirements, please refer to 20.2.72 NMAC. Potential emissions from any diesel generator sets should be calculated assuming continuous operation to determine whether a construction permit is required in accordance with 20.2.72.200.A (1) NMAC.

The project, as proposed, is not anticipated to result in nonattainment of the New Mexico or National Ambient Air Quality Standards or contribute negatively to air quality on a long-term basis.

### **Drinking Water Bureau**

The Drinking Water Bureau provides comment that there are no contaminant sources evident within 1,000 feet of the proposed well site. Properly executed, this project should improve the sustainability of the water system.

The design standard for the well is ANSI/AWWA A-100, which requires a 50 foot annular seal. The proposed design will be examined for conformance to ANSI/AWWA A-100. Direct and indirect additives need to meet ANSI/NSF Standard 60 and ANSI/NSF Standard 61 respectively. The procedures at <https://www.env.nm.gov/dwb/watersystemmodificationdesignconstruction.htm> should be reviewed prior to submitting an application for review. Incomplete applications and applications that are not submitted in electronic format will not be reviewed. Paper submittals will not be returned.

### **Groundwater Quality**

Ground Water Quality Bureau (GWQB) staff reviewed the above-referenced project focusing specifically on the potential to affect groundwater resources in the area.

Implementation of the project will involve the use of heavy equipment, thereby leading to a possibility of contaminant releases (e.g., fuel, hydraulic fluid, etc.) associated with equipment malfunctions. The GWQB advises all parties involved in the project to be aware of notification requirements for accidental discharges contained in 20.6.2.1203 NMAC. Compliance with the



notification and response requirements will further ensure the protection of groundwater quality in the vicinity of the project.

A copy of the Water Quality Control Commission Regulations, 20.6.2 NMAC, is available at <http://www.nmcpr.state.nm.us/nmac/parts/title20/20.006.0002.htm>.

### **Solid Waste**

The Solid Waste Bureau provides comment that any excavated solid waste, including any special waste such as regulated asbestos waste, must be properly managed, containerized, transported and disposed in accordance with the New Mexico Solid Waste Rules 20.9.2 – 20.9.10 NMAC. Upon discovery of any single area requiring excavation of more than 120 cubic yards of solid waste, excavation shall cease and a Waste Excavation Plan in accordance with 20.9.2.10(A)(15) NMAC shall be prepared and submitted to the SWB for review and approval prior to continuing with excavation operations.

Excavation or maintenance activities sometimes results in the knowing or inadvertent generation of regulated asbestos waste as there is the potential to excavate or otherwise impact asbestos cement pipes (sewer, water, or conduit). Suspect pipes, fragments or soils contaminated with related fragments or fines shall be sampled and analyzed by Polarized Light Microscopy ("PLM") to determine if the material contains greater than one percent (1%) asbestos. If so, the pipes, fragments, and/or contaminated soils require management as regulated asbestos waste, in accordance with the New Mexico Solid Waste Rules, 20.9.2-10 NMAC, including proper containerization, labeling, manifesting, transport by an approved commercial hauler, and disposal at a permitted solid waste facility.

### **Surface Water Quality**

The project is primarily for drinking water, though there are considerations for storm water protection during construction and with ongoing operations of the water supply system. It is unclear if the large volume of water to be produced and stored; 200,000 gallons, is intended to meet a growing population in the area. As part of the overall infrastructure improvements, it is suggested that the wastewater treatment systems be evaluated as well to meet the increase of volume presented by this water system.

The U.S.EPA requires NPDES permit coverage for storm water discharges from construction projects (common plans of development) that will result in the disturbance (or re-disturbance) of one or more acres (most recent updates effective as of February 16, 2012) including expansions, of total land area.

The NPDES Storm Water permit requires that a Storm Water Pollution Prevention Plan (SWPPP) be prepared for the site and that appropriate Best Management Practices (BMPs) be installed and maintained both during construction and after construction to prevent, to the extent practicable, pollutants (primarily sediment, oil & grease and construction materials from construction sites) in storm water runoff from entering waters of the U.S. This permit also requires that permanent stabilization measures (revegetation, paving, etc.) and permanent storm water management measures (storm water detention/retention structures, velocity dissipation

devices, etc.) be implemented post construction to minimize, in the long term, pollutants in storm water runoff from entering these waters.

You should also be aware that EPA requires all “operators” (see **Federal Register/Vol. 63, No. 128/Monday, July 6, 1998** pg 36509) obtain NPDES permit coverage for construction projects. Generally, this means that at least two parties will require permit coverage. The owner/developer of this construction project who has operational control over project specifications and the general contractor who has day-to-day operational control of those activities at the site, which are necessary to ensure compliance with the storm water pollution plan and other permit conditions, and possibly other “operators” will require appropriate NPDES permit coverage for this project.

If construction activity or disturbances were to take place in a river, including the river banks and wetlands a 404 dredge and fill permit issued by the US Army Corps of Engineers would be required. Additionally a state Water Quality Certification would be required under Section 401 for activities regulated under Section 404 of the Federal Clean Water Act by the U.S. Army Corps of Engineers (USACE). The NMED has issued conditional certification to use Nationwide Permits in ephemeral surface water (<http://www.nmenv.state.nm.us/swqb/WPS/NMEDSection401WQCEphemeralBlanketNWP2007.pdf>). A project-specific Section 401 Water Quality Certification is required for activities regulated under an Individual Section 404 permit, or for discharges regulated by Nationwide Permits to intermittent and perennial surface water, or wetlands defined in 20.6.4.7 NMAC; and Outstanding National Resource Waters (ONRW) designated in 20.6.4.9 NMAC.

If you have any questions please contact me at (505) 222-9552 or by email at [thomas.skibitski@state.nm.us](mailto:thomas.skibitski@state.nm.us)

Sincerely,



Thomas Skibitski

Environmental Impact Review Coordinator  
NMED File Number: EIR # 5383

Email: [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)



Appendix E14  
New Mexico Office of the  
State Engineer Correspondence





July 14, 2016

#6324631

Mr. Tom Blaine, P.E., State Engineer  
PO Box 25102  
Santa Fe, NM 87504-5102  
*Phone: 505-827-6091*  
*Fax: 505-827-3806*  
*tom.blaine@state.nm.us*  
*ec: rolf.schmidt@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Blaine:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well.
- Replacement of the existing booster station with a new building and higher efficiency pumps.
- Rehabilitation of the existing water storage tank.
- Rehabilitation of the existing well.
- Installation of new water distribution and service.

Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.



*Mr. Tom Blaine*

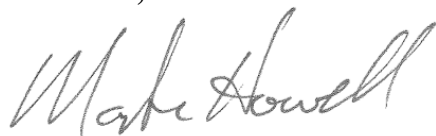
*July 14, 2016*

*Page 2*

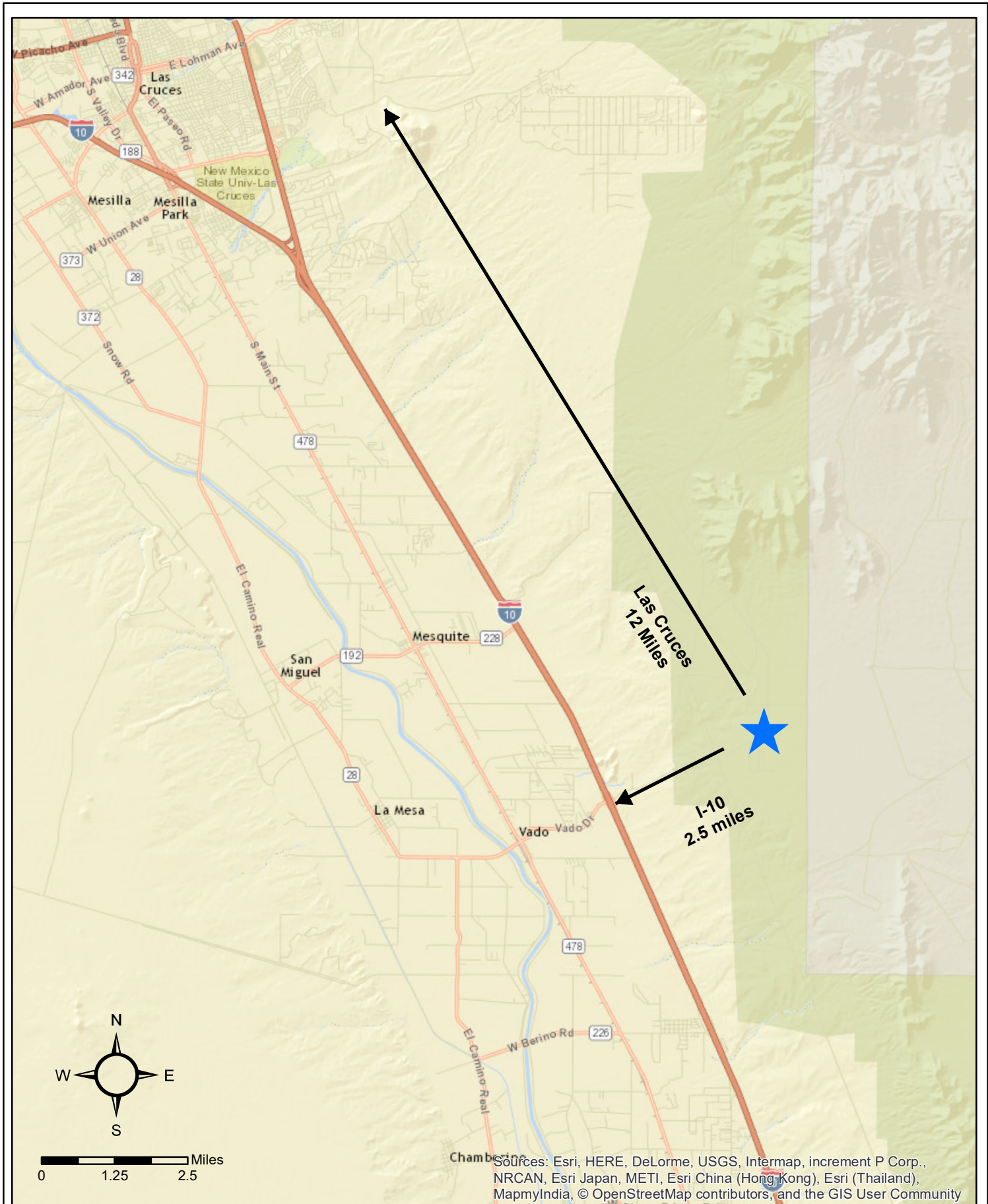
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
*marty.howell@soudermiller.com*  
Extension: 1326



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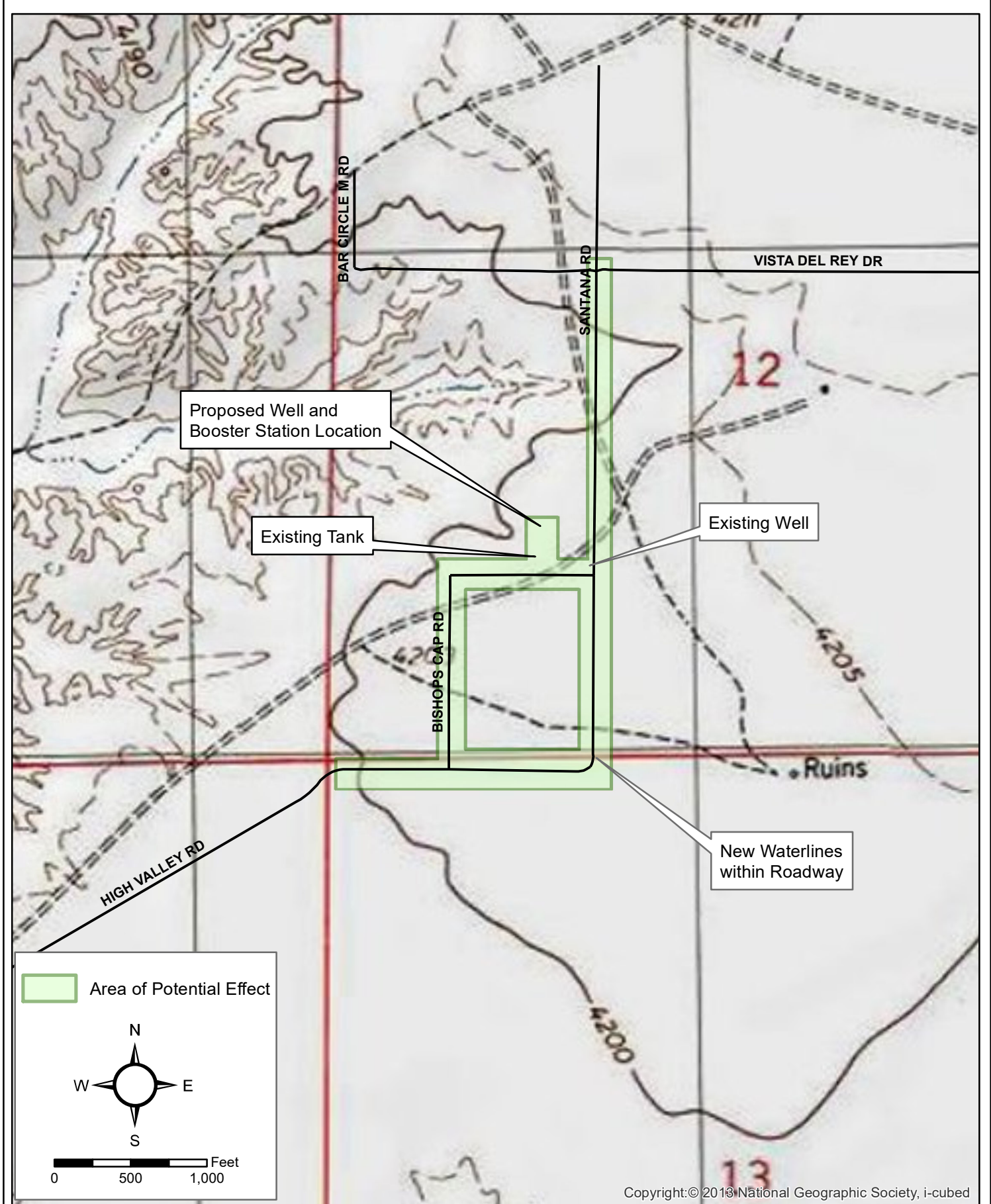
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Vicinity Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 1



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Vado, New Mexico

Figure 2





September 7, 2016

#6324631

Ms. Andrea Mendoza, District Supervisor  
1680 Hickory Loop – Suite J  
Las Cruces, NM 88005-6598  
Phone: 575-524-6161  
*andrea.mendoza@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Mendoza:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.



*Ms. Andrea Mendoza*

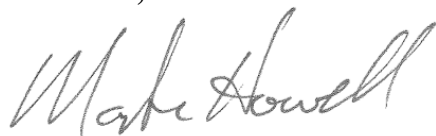
*September 7, 2016*

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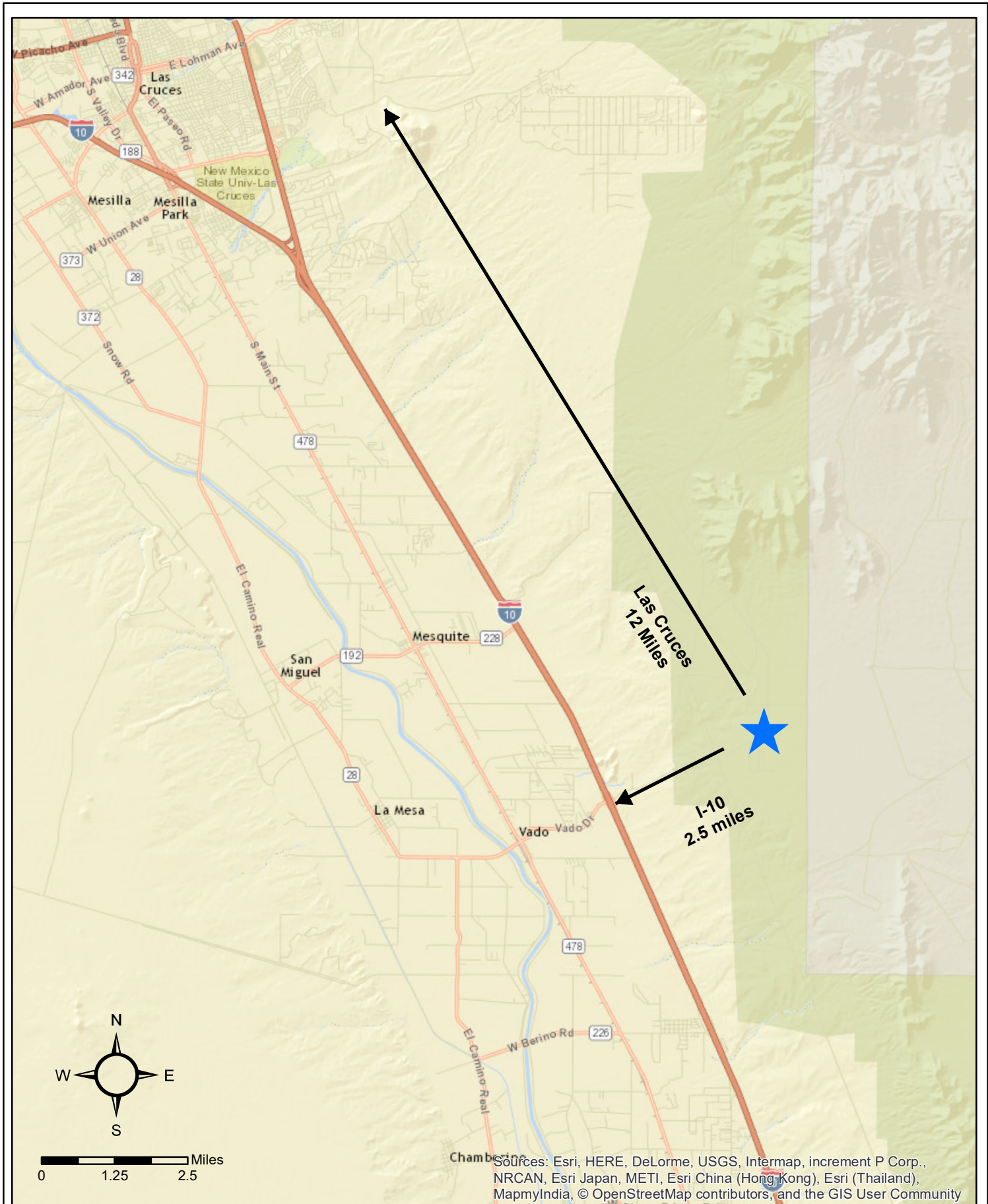
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
*marty.howell@soudermiller.com*  
Extension: 1326



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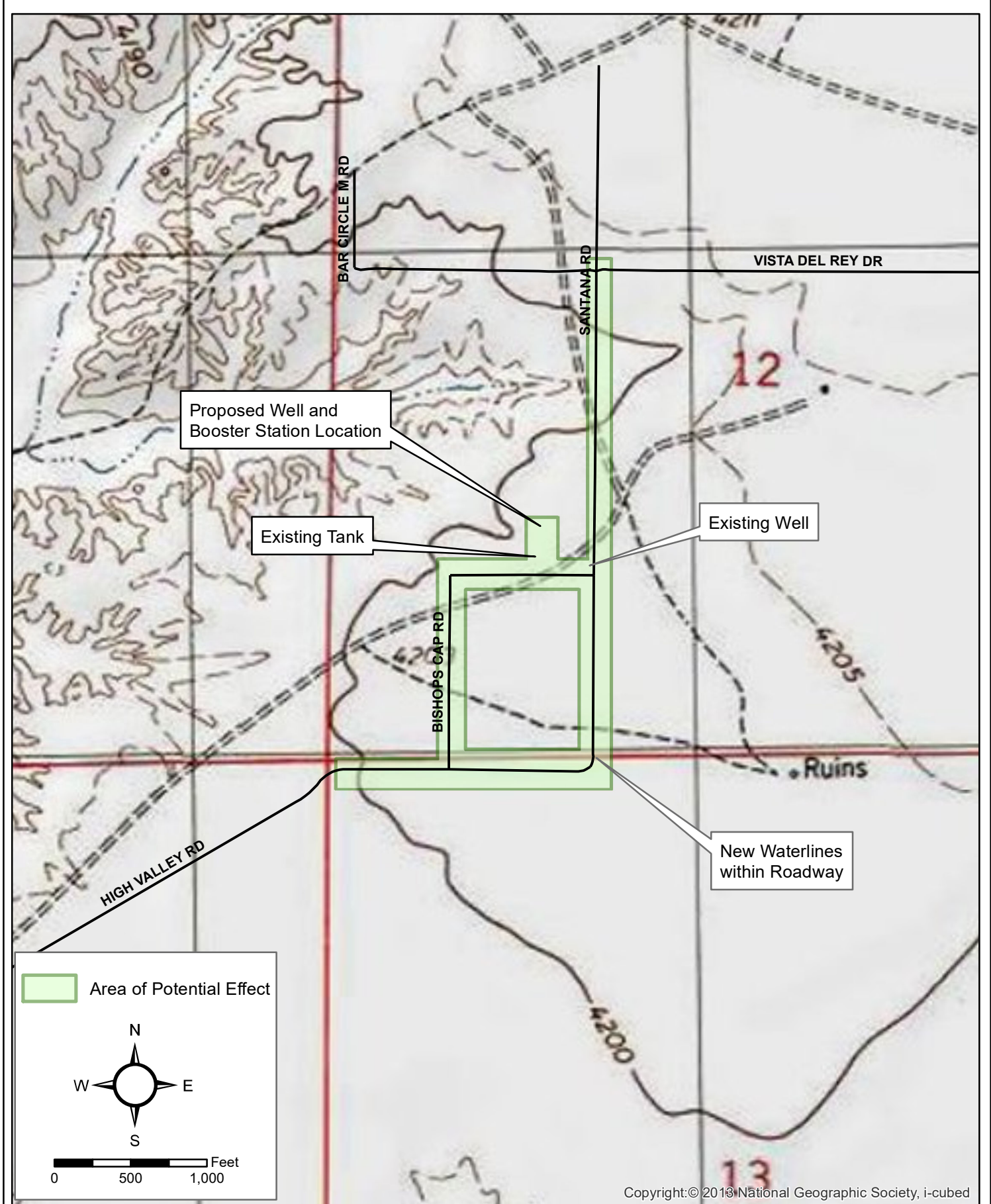
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 Vado, New Mexico

Figure 2



## Alfredo Holguin

---

**From:** Mendoza, Andrea J., OSE <andrea.mendoza@state.nm.us>  
**Sent:** Monday, September 12, 2016 1:22 PM  
**To:** Alfredo Holguin  
**Subject:** RE: High Valley MDWCA - Request for Consultation

Mr. Holguin,

Thank you for your request to the Office of the State Engineer for review of the proposed water system improvement project by High Valley MDWCA in Doña Ana County, New Mexico.

The OSE's primary concern regarding information on the proposed project is that the High Valley MDWCA have approved permits from the OSE District IV Office for drilling of the proposed new well and for rehabilitation of the old wells. We also require that all wells are metered and readings reported, and that the use of water from the wells remain within the conditions of the High Valley MDWCA's water right.

Please let me know if you have any questions,  
Andrea Mendoza

---

**From:** Alfredo Holguin [mailto:alfredo.holguin@soudermiller.com]  
**Sent:** Wednesday, September 07, 2016 12:10 PM  
**To:** Mendoza, Andrea J., OSE  
**Cc:** Marty Howell  
**Subject:** High Valley MDWCA - Request for Consultation

Ms. Mendoza,

Please find attached a request for consultation regarding a proposed water system improvement project to be completed by High Valley MDWCA in Doña Ana County, New Mexico. We are sending this to you because we have been informed that the new policy for the environmental review is to consult with the local district. We had previously sent a request to Mr. Tom Blaine and have not received a response. Please let us know if you have any questions or require any further information.

Thank you,



J. Alfredo Holguin, E.I.  
*Staff Civil Designer*

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX PST CAPM (CS-0000051), TX Surveying Firm (10162200), WY Surveying Firm (S-1704)



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Las Cruces, NM 88005

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(575) 647-0799 (office)



Appendix E15  
Interstate Stream  
Commission Correspondence





July 14, 2016

#6324631

Ms. Deborah Dixon, P.E.  
Interstate Stream Commission  
407 Galisteo Street  
Bataan Memorial Building  
P.O. Box 25102  
Santa Fe, NM 87504-5102

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Ms. Dixon:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

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*Ms. Deborah Dixon*

*July 14, 2016*

*Page 2*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com).

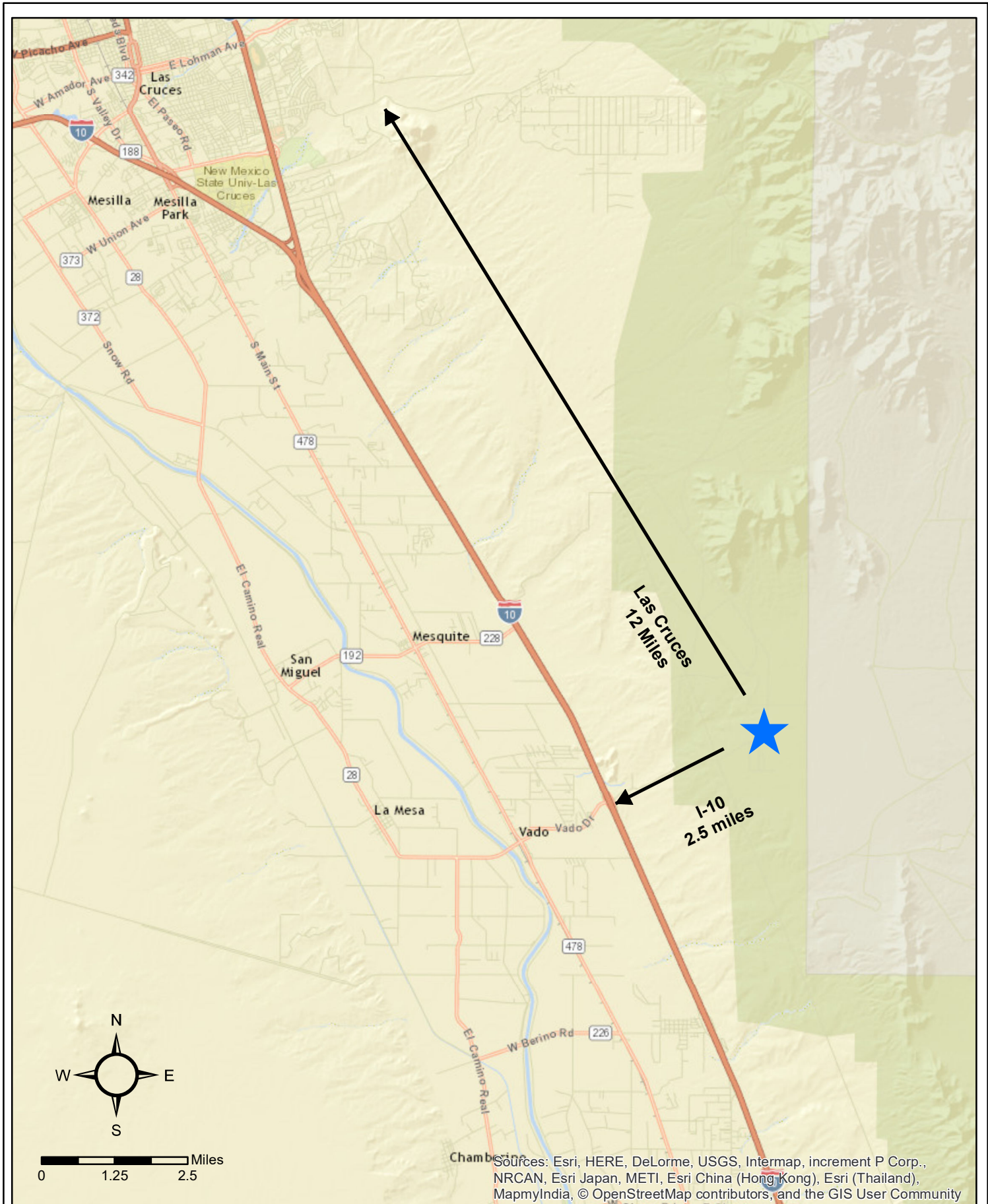
Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
[marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)  
Extension: 1326





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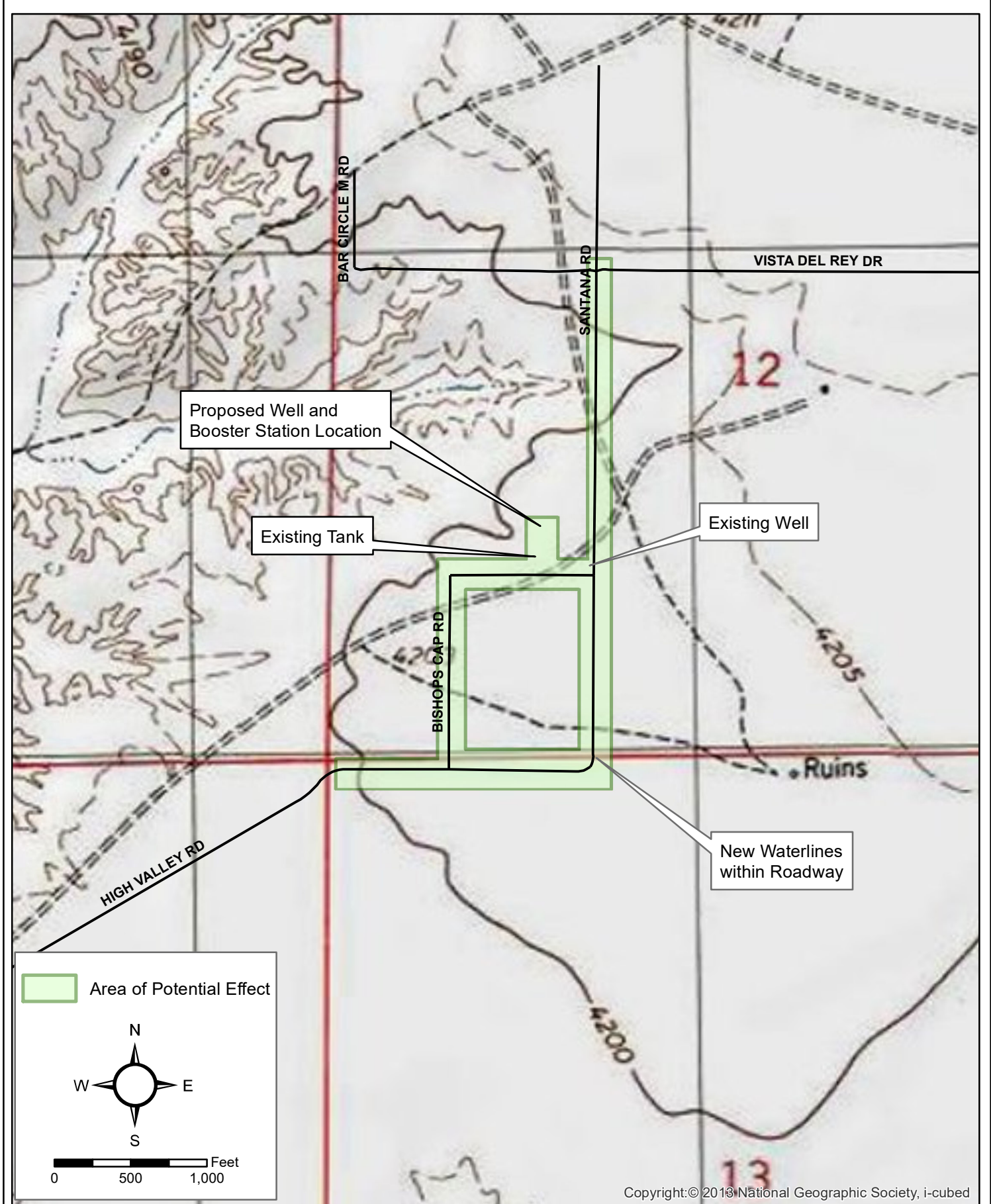


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Figure 1





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Figure 2

## Marty Howell

---

**From:** Schmidt, Rolf I., OSE <rolf.schmidt@state.nm.us>  
**Sent:** Thursday, August 04, 2016 9:40 AM  
**To:** Marty Howell  
**Cc:** Mendoza, Andrea J., OSE  
**Subject:** FW: Proposed High Valley MDWCA Project  
**Attachments:** Scanned from a Xerox multifunction device.pdf

Good Morning Marty:

The ISC Rio Grande Basin Bureau has reviewed your request for information regarding the proposed High Valley MDWCA Project.

The ISC's primary concern regarding information on the proposed project is that the High Valley MDWCA have approved permits from the OSE District IV Office for drilling of the proposed new well and for rehabilitation of the existing well (as needed), that the well use is metered and reported, and that the use of water from the wells remains within the bounds of the MDWCAs water rights.

I have cc'd Andrea Mendoza, OSE District IV Manager, in that regard.

Thanks,

Rolf

ISC Rio Grande Basin Manager

Appendix E16  
Elephant Butte Irrigation District  
Correspondence







July 14, 2016

#6324631

Mr. Zach Libbin  
Elephant Butte Irrigation District  
530 South Melendres Street  
Las Cruces, NM 88005  
(575) 526-6671  
(575) 541-5716 (fax)  
zlibbin@ebid-nm.org

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Libbin:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.



*Mr. Zach Libbin*

*July 14, 2016*

*Page 2*

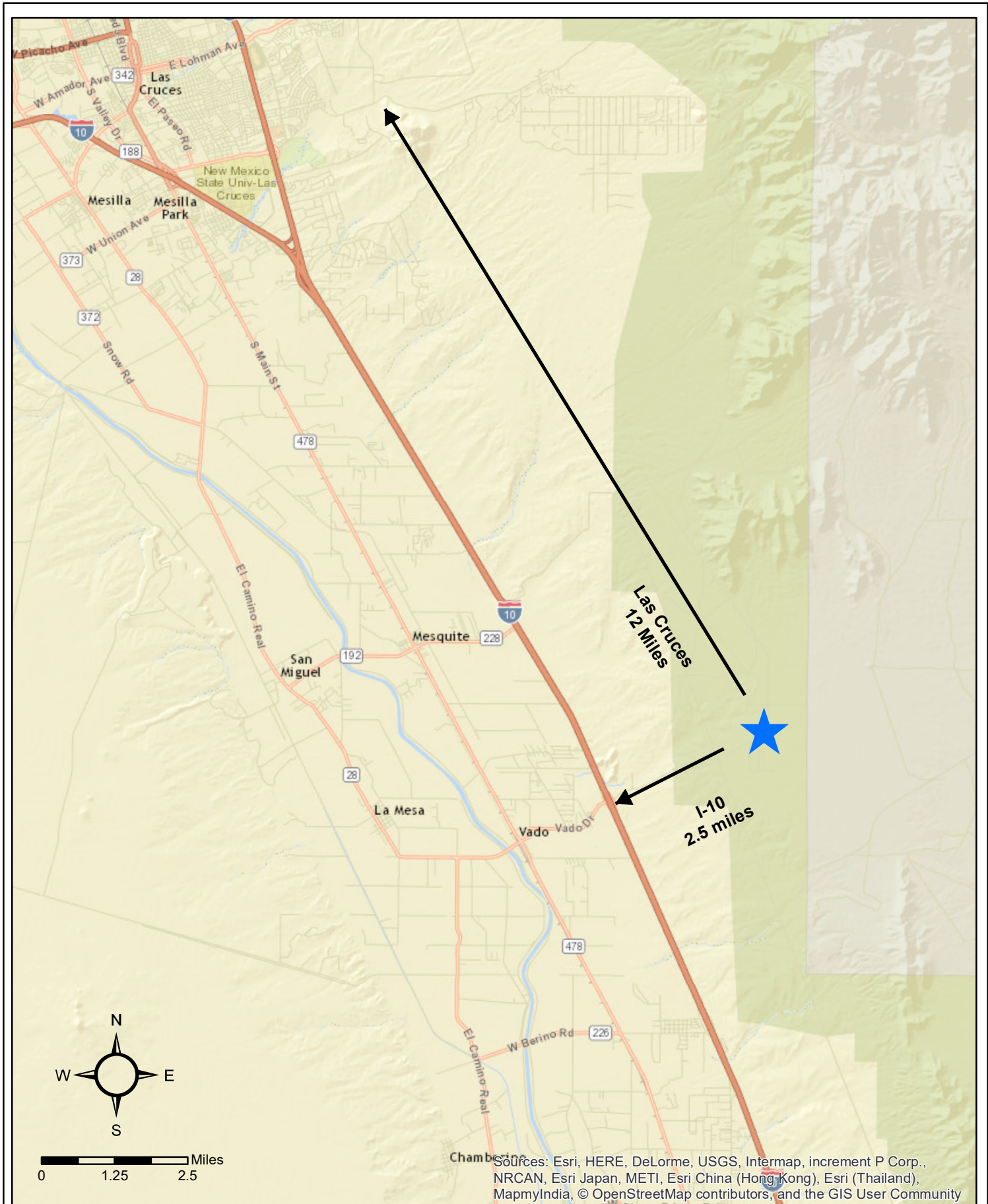
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com).

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer II  
[marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)  
Extension: 1326



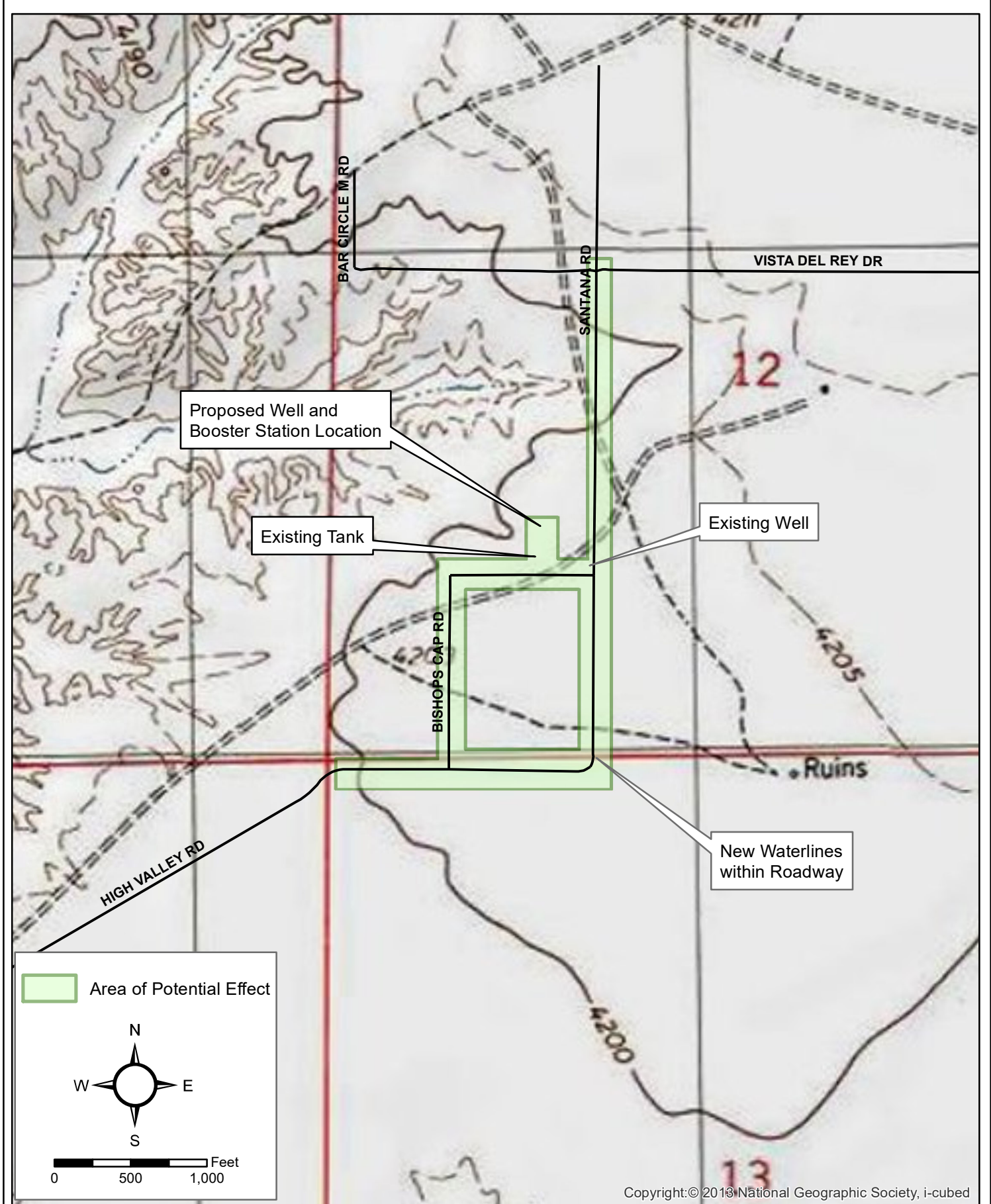
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Figure 1



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Figure 2



Appendix E17  
EPA Source Water Protection  
Branch Correspondence







July 14, 2016

#6324631

Mr. Miguel Moreno  
U.S. Environmental Protection Agency  
Source Water Protection Branch Groundwater Section  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733  
(214) 665-6580  
(214) 665-6490 (fax)  
*moreno.miguel@epa.gov*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Moreno:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Mr. Miguel Moreno*

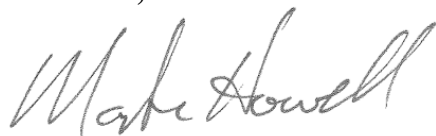
*July 14, 2016*

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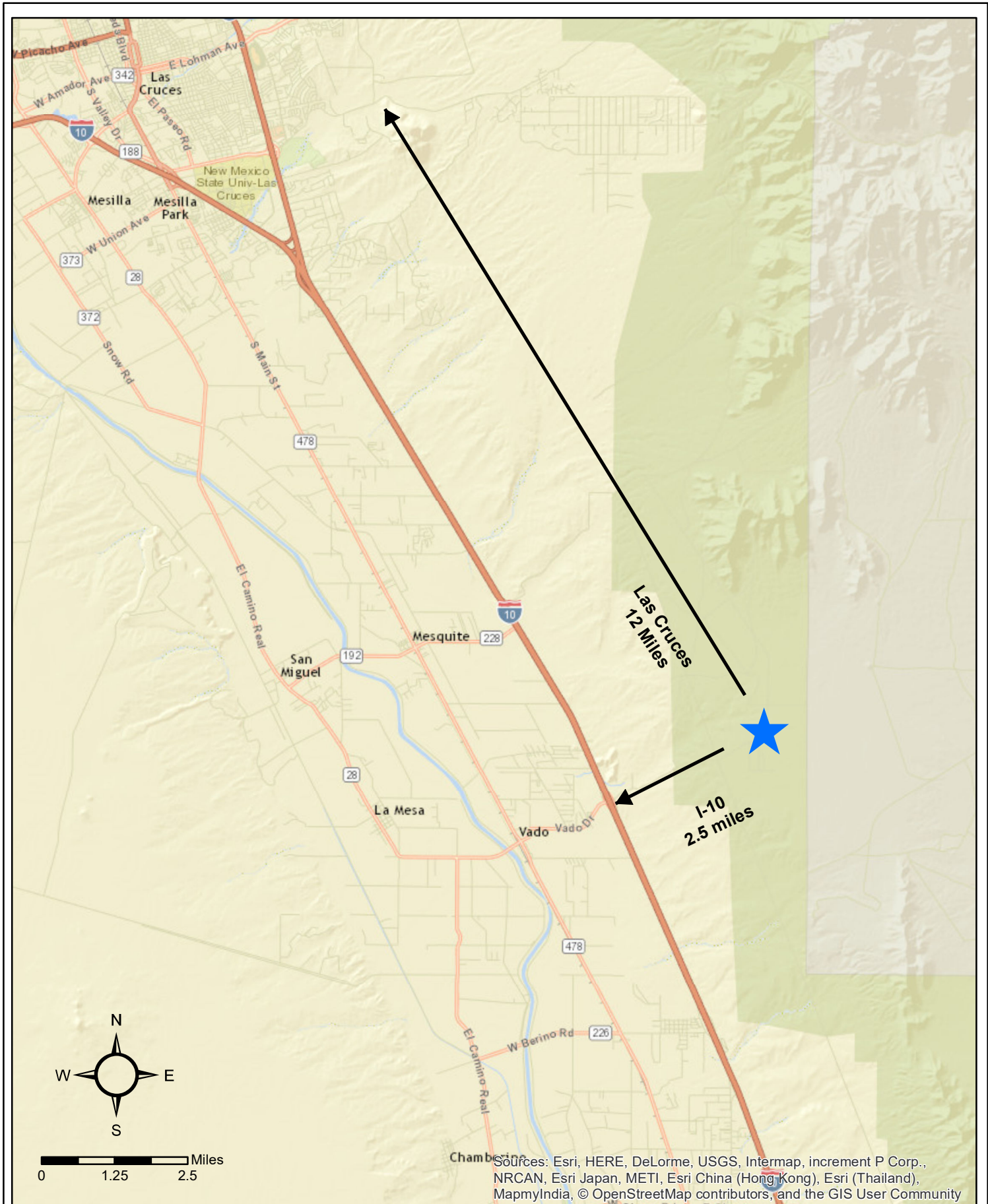
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**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

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Marty Howell  
Senior Engineer II  
*marty.howell@soudermiller.com*  
Extension: 1326



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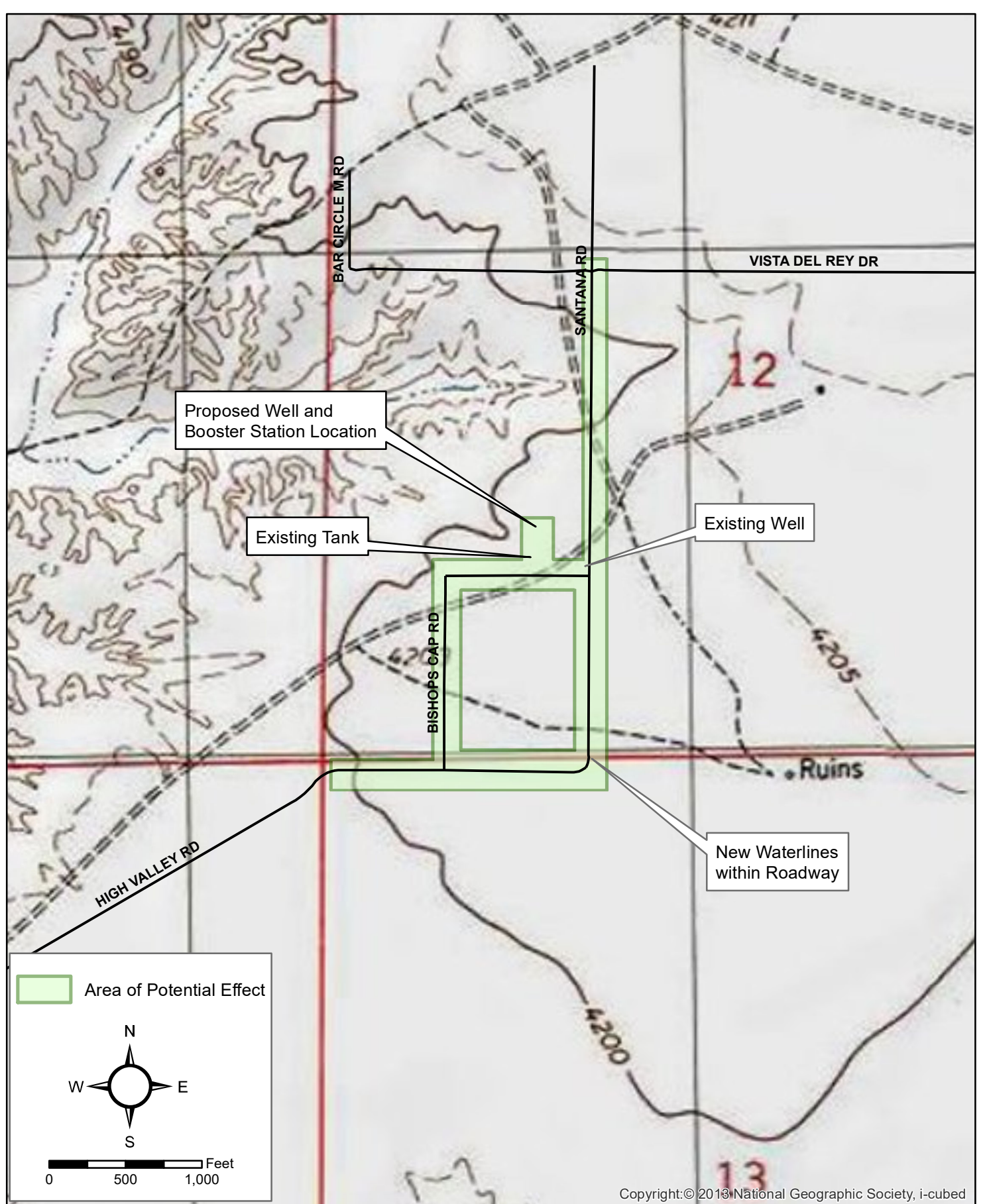
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 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2

## Alfredo Holguin

---

**From:** Moreno, Miguel <Moreno.Miguel@epa.gov>  
**Sent:** Friday, August 5, 2016 3:25 PM  
**To:** Alfredo Holguin  
**Cc:** david.torres@state.nm.us; Ngo, Kim  
**Subject:** RE: High Valley MDWCA - Request for Consultation  
**Attachments:** SWP Screen Capture High Valley.JPG

**Follow Up Flag:** Follow up  
**Flag Status:** Completed

**Categories:** High Valley MDWCA

Mr. Holguin,

I apologize for the late reply. I looked through my inbox and was not able to find the original request submitted on July 15, 2016. Did you send it through email or US Postal Service?

In the state of New Mexico, the Source Water Protection Program is delegated to the New Mexico Environment Department. The program is managed by Mr. David Torres. I listed his contact information below and he is also cc'ed on this email. I also included a screen capture of our new online tool, DWMAPS (<https://epamap37.epa.gov/dwmaps/>). It shows the watershed for the proposed project and possible sources of contamination in the area. It also marks an .25 mile area around the well where septic systems and other potential sources of contamination could cause a problem. I encourage you to use the mapping tool find more information about the area and visit the EPA Source Water Protection website at <https://www.epa.gov/sourcewaterprotection>. Thank you for your time.

David Torres  
Source Water Specialist  
505-841-5306  
[David.torres@state.nm.us](mailto:David.torres@state.nm.us)

Best Regards,

Miguel A. Moreno  
Physical Scientist  
US EPA Region 6 (6WQ-SD)  
El Paso Border Office  
4050 Rio Bravo, STE 100., El Paso, TX 79902  
(915) 533-7273 ext. 240 (5-5240)  
[moreno.miguel@epa.gov](mailto:moreno.miguel@epa.gov)

---

**From:** Alfredo Holguin [<mailto:alfredo.holguin@soudermiller.com>]  
**Sent:** Thursday, August 04, 2016 10:39 AM  
**To:** Moreno, Miguel <Moreno.Miguel@epa.gov>  
**Subject:** High Valley MDWCA - Request for Consultation

Mr. Miguel Moreno,

Please find attached a follow-up request for consultation regarding a proposed water system improvement project to be completed by High Valley MDWCA in Doña Ana County, New Mexico. We have not received a reply to the original request submitted July 15, 2016. Please respond at your earliest convenience or let us know if you have any questions and require additional information.

Thank you,



J. Alfredo Holguin, E.I.  
Staff Civil Designer

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX PST CAPM (CS-0000051), TX Surveying Firm (10162200), WY Surveying Firm (S-1704)



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Appendix E18  
US Census Web Site Information





DP03

## SELECTED ECONOMIC CHARACTERISTICS

## 2010-2014 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	ZCTA5 88072			
	Estimate	Margin of Error	Percent	Percent Margin of Error
<b>EMPLOYMENT STATUS</b>				
Population 16 years and over	1,627	+/-571	1,627	(X)
In labor force	1,077	+/-421	66.2%	+/-10.9
Civilian labor force	1,077	+/-421	66.2%	+/-10.9
Employed	903	+/-383	55.5%	+/-11.8
Unemployed	174	+/-99	10.7%	+/-5.3
Armed Forces	0	+/-12	0.0%	+/-2.0
Not in labor force	550	+/-255	33.8%	+/-10.9
Civilian labor force	1,077	+/-421	1,077	(X)
Percent Unemployed	(X)	(X)	16.2%	+/-8.3
<b>Females 16 years and over</b>				
In labor force	449	+/-233	56.8%	+/-14.9
Civilian labor force	449	+/-233	56.8%	+/-14.9
Employed	358	+/-218	45.3%	+/-19.2
<b>Own children under 6 years</b>				
All parents in family in labor force	112	+/-96	47.9%	+/-35.6
<b>Own children 6 to 17 years</b>				
All parents in family in labor force	403	+/-258	77.4%	+/-21.4
<b>COMMUTING TO WORK</b>				
Workers 16 years and over	888	+/-384	888	(X)
Car, truck, or van -- drove alone	615	+/-321	69.3%	+/-18.4
Car, truck, or van -- carpooled	128	+/-135	14.4%	+/-13.9
Public transportation (excluding taxicab)	0	+/-12	0.0%	+/-3.6
Walked	72	+/-90	8.1%	+/-9.3
Other means	0	+/-12	0.0%	+/-3.6
Worked at home	73	+/-50	8.2%	+/-6.3
Mean travel time to work (minutes)	20.5	+/-4.0	(X)	(X)
<b>OCCUPATION</b>				
Civilian employed population 16 years and over	903	+/-383	903	(X)

Subject	ZCTA5 88072			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Management, business, science, and arts occupations	176	+/-131	19.5%	+/-10.7
Service occupations	163	+/-90	18.1%	+/-10.5
Sales and office occupations	133	+/-100	14.7%	+/-7.8
Natural resources, construction, and maintenance occupations	264	+/-154	29.2%	+/-10.5
Production, transportation, and material moving occupations	167	+/-135	18.5%	+/-13.6
<b>INDUSTRY</b>				
Civilian employed population 16 years and over	903	+/-383	903	(X)
Agriculture, forestry, fishing and hunting, and mining	162	+/-118	17.9%	+/-11.2
Construction	32	+/-39	3.5%	+/-4.1
Manufacturing	141	+/-131	15.6%	+/-12.2
Wholesale trade	24	+/-40	2.7%	+/-4.1
Retail trade	58	+/-58	6.4%	+/-6.1
Transportation and warehousing, and utilities	41	+/-51	4.5%	+/-5.9
Information	0	+/-12	0.0%	+/-3.5
Finance and insurance, and real estate and rental and leasing	39	+/-48	4.3%	+/-5.0
Professional, scientific, and management, and administrative and waste management services	28	+/-47	3.1%	+/-4.9
Educational services, and health care and social assistance	160	+/-134	17.7%	+/-11.2
Arts, entertainment, and recreation, and accommodation and food services	163	+/-105	18.1%	+/-10.3
Other services, except public administration	0	+/-12	0.0%	+/-3.5
Public administration	55	+/-74	6.1%	+/-8.3
<b>CLASS OF WORKER</b>				
Civilian employed population 16 years and over	903	+/-383	903	(X)
Private wage and salary workers	758	+/-347	83.9%	+/-10.5
Government workers	102	+/-89	11.3%	+/-9.3
Self-employed in own not incorporated business workers	43	+/-51	4.8%	+/-5.4
Unpaid family workers	0	+/-12	0.0%	+/-3.5
<b>INCOME AND BENEFITS (IN 2014 INFLATION-ADJUSTED DOLLARS)</b>				
Total households	626	+/-168	626	(X)
Less than \$10,000	60	+/-58	9.6%	+/-9.1
\$10,000 to \$14,999	110	+/-75	17.6%	+/-11.3
\$15,000 to \$24,999	152	+/-75	24.3%	+/-11.7
\$25,000 to \$34,999	30	+/-47	4.8%	+/-7.2
\$35,000 to \$49,999	94	+/-88	15.0%	+/-12.5
\$50,000 to \$74,999	93	+/-60	14.9%	+/-8.8
\$75,000 to \$99,999	28	+/-38	4.5%	+/-6.0
\$100,000 to \$149,999	37	+/-44	5.9%	+/-6.5
\$150,000 to \$199,999	22	+/-25	3.5%	+/-4.0
\$200,000 or more	0	+/-12	0.0%	+/-5.1
Median household income (dollars)	24,500	+/-18,646	(X)	(X)
Mean household income (dollars)	40,084	+/-10,123	(X)	(X)
<b>With earnings</b>				
Mean earnings (dollars)	37,055	+/-10,712	(X)	(X)
<b>With Social Security</b>				
Mean Social Security income (dollars)	14,313	+/-5,846	(X)	(X)
<b>With retirement income</b>				
Mean retirement income (dollars)	17,664	+/-8,169	(X)	(X)
<b>With Supplemental Security Income</b>				
Mean Supplemental Security Income (dollars)	7,510	+/-2,229	(X)	(X)
With cash public assistance income	17	+/-19	2.7%	+/-3.2



Subject	ZCTA5 88072			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Mean cash public assistance income (dollars)	3,129	+/-1,395	(X)	(X)
With Food Stamp/SNAP benefits in the past 12 months	214	+/-87	34.2%	+/-13.8
Families	544	+/-171	544	(X)
Less than \$10,000	66	+/-58	12.1%	+/-11.4
\$10,000 to \$14,999	96	+/-72	17.6%	+/-12.3
\$15,000 to \$24,999	106	+/-86	19.5%	+/-14.5
\$25,000 to \$34,999	60	+/-67	11.0%	+/-10.9
\$35,000 to \$49,999	64	+/-62	11.8%	+/-10.7
\$50,000 to \$74,999	65	+/-62	11.9%	+/-10.2
\$75,000 to \$99,999	28	+/-38	5.1%	+/-6.9
\$100,000 to \$149,999	37	+/-44	6.8%	+/-7.5
\$150,000 to \$199,999	22	+/-25	4.0%	+/-4.6
\$200,000 or more	0	+/-12	0.0%	+/-5.8
Median family income (dollars)	25,333	+/-12,271	(X)	(X)
Mean family income (dollars)	40,083	+/-11,274	(X)	(X)
Per capita income (dollars)	11,225	+/-3,248	(X)	(X)
Nonfamily households	82	+/-63	82	(X)
Median nonfamily income (dollars)	15,909	+/-48,567	(X)	(X)
Mean nonfamily income (dollars)	29,332	+/-20,898	(X)	(X)
Median earnings for workers (dollars)	13,998	+/-2,795	(X)	(X)
Median earnings for male full-time, year-round workers (dollars)	23,463	+/-9,840	(X)	(X)
Median earnings for female full-time, year-round workers (dollars)	15,592	+/-2,794	(X)	(X)
<b>HEALTH INSURANCE COVERAGE</b>				
Civilian noninstitutionalized population	2,346	+/-774	2,346	(X)
With health insurance coverage	1,353	+/-469	57.7%	+/-11.9
With private health insurance	336	+/-170	14.3%	+/-6.9
With public coverage	1,111	+/-440	47.4%	+/-11.1
No health insurance coverage	993	+/-477	42.3%	+/-11.9
Civilian noninstitutionalized population under 18 years	794	+/-314	794	(X)
No health insurance coverage	127	+/-108	16.0%	+/-12.2
Civilian noninstitutionalized population 18 to 64 years	1,187	+/-451	1,187	(X)
In labor force:	912	+/-365	912	(X)
Employed:	745	+/-327	745	(X)
With health insurance coverage	351	+/-256	47.1%	+/-22.8
With private health insurance	207	+/-131	27.8%	+/-14.4
With public coverage	144	+/-170	19.3%	+/-18.0
No health insurance coverage	394	+/-202	52.9%	+/-22.8
Unemployed:	167	+/-101	167	(X)
With health insurance coverage	0	+/-12	0.0%	+/-17.6
With private health insurance	0	+/-12	0.0%	+/-17.6
With public coverage	0	+/-12	0.0%	+/-17.6
No health insurance coverage	167	+/-101	100.0%	+/-17.6
Not in labor force:	275	+/-166	275	(X)
With health insurance coverage	95	+/-78	34.5%	+/-21.8
With private health insurance	0	+/-12	0.0%	+/-11.1
With public coverage	95	+/-78	34.5%	+/-21.8
No health insurance coverage	180	+/-126	65.5%	+/-21.8

Subject	ZCTA5 88072			
	Estimate	Margin of Error	Percent	Percent Margin of Error
PERCENTAGE OF FAMILIES AND PEOPLE WHOSE INCOME IN THE PAST 12 MONTHS IS BELOW THE POVERTY LEVEL				
All families	(X)	(X)	45.8%	+/-16.7
With related children under 18 years	(X)	(X)	63.4%	+/-20.3
With related children under 5 years only	(X)	(X)	51.2%	+/-51.2
Married couple families	(X)	(X)	35.8%	+/-20.4
With related children under 18 years	(X)	(X)	58.1%	+/-29.3
With related children under 5 years only	(X)	(X)	100.0%	+/-64.7
Families with female householder, no husband present	(X)	(X)	84.5%	+/-19.0
With related children under 18 years	(X)	(X)	91.1%	+/-15.2
With related children under 5 years only	(X)	(X)	-	**
All people	(X)	(X)	51.9%	+/-17.4
Under 18 years	(X)	(X)	69.5%	+/-20.9
Related children under 18 years	(X)	(X)	69.5%	+/-20.9
Related children under 5 years	(X)	(X)	78.5%	+/-32.6
Related children 5 to 17 years	(X)	(X)	66.6%	+/-25.4
18 years and over	(X)	(X)	42.8%	+/-17.3
18 to 64 years	(X)	(X)	51.4%	+/-20.0
65 years and over	(X)	(X)	15.1%	+/-16.1
People in families	(X)	(X)	54.2%	+/-18.3
Unrelated individuals 15 years and over	(X)	(X)	22.4%	+/-24.2

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

Workers include members of the Armed Forces and civilians who were at work last week.

Occupation codes are 4-digit codes and are based on Standard Occupational Classification 2010.

Industry codes are 4-digit codes and are based on the North American Industry Classification System (NAICS). The Census industry codes for 2013 and later years are based on the 2012 revision of the NAICS. To allow for the creation of 2010-2014 tables, industry data in the multiyear files (2010-2014) were recoded to 2013 Census industry codes. We recommend using caution when comparing data coded using 2013 Census industry codes with data coded using Census industry codes prior to 2013. For more information on the Census industry code changes, please visit our website at <http://www.census.gov/people/io/methodology/>.

Logical coverage edits applying a rules-based assignment of Medicaid, Medicare and military health coverage were added as of 2009 -- please see [http://www.census.gov/hhes/www/hlthins/publications/coverage\\_edits\\_final.pdf](http://www.census.gov/hhes/www/hlthins/publications/coverage_edits_final.pdf) for more details. The corresponding 2008 data table in American FactFinder does not incorporate these edits and is therefore not comparable to this table in 2009, 2010, 2011, or 2012. Select geographies of 2008 data comparable to the 2009, 2010, 2011, and 2012 tables are accessible at <http://www.census.gov/hhes/www/hlthins/data/acs/2008/re-run.html>.

The health insurance coverage category names were modified in 2010. See ACS Health Insurance Definitions for a list of the insurance type definitions.

While the 2010-2014 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

#### Explanation of Symbols:

1. An '\*\*\*' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '\*\*\*' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '\*\*\*\*\*' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.





S1501 EDUCATIONAL ATTAINMENT

2010-2014 American Community Survey 5-Year Estimates

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Subject	ZCTA5 88072				
	Total		Male		Female
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
Population 18 to 24 years	268	+/-178	126	+/-117	142
Less than high school graduate	45.5%	+/-26.6	77.8%	+/-36.4	16.9%
High school graduate (includes equivalency)	20.9%	+/-23.8	0.0%	+/-22.5	39.4%
Some college or associate's degree	33.6%	+/-14.0	22.2%	+/-36.4	43.7%
Bachelor's degree or higher	0.0%	+/-11.4	0.0%	+/-22.5	0.0%
Population 25 years and over	1,284	+/-465	663	+/-254	621
Less than 9th grade	35.4%	+/-14.2	35.1%	+/-20.5	35.7%
9th to 12th grade, no diploma	20.9%	+/-8.6	23.1%	+/-14.1	18.5%
High school graduate (includes equivalency)	26.2%	+/-10.2	27.6%	+/-14.9	24.6%
Some college, no degree	4.0%	+/-4.3	1.5%	+/-2.4	6.6%
Associate's degree	5.1%	+/-3.6	7.1%	+/-5.8	3.1%
Bachelor's degree	7.6%	+/-4.9	5.6%	+/-5.2	9.8%
Graduate or professional degree	0.8%	+/-1.2	0.0%	+/-4.8	1.6%
Percent high school graduate or higher	43.7%	+/-12.3	41.8%	+/-18.3	45.7%
Percent bachelor's degree or higher	8.4%	+/-5.2	5.6%	+/-5.2	11.4%
Population 25 to 34 years	358	+/-219	128	+/-101	230
High school graduate or higher	40.5%	+/-22.7	18.0%	+/-29.2	53.0%
Bachelor's degree or higher	17.0%	+/-13.8	0.0%	+/-22.2	26.5%
Population 35 to 44 years	229	+/-148	83	+/-68	146
High school graduate or higher	40.2%	+/-21.6	61.4%	+/-49.7	28.1%
Bachelor's degree or higher	0.0%	+/-13.2	0.0%	+/-31.3	0.0%
Population 45 to 64 years	332	+/-149	201	+/-109	131
High school graduate or higher	51.2%	+/-27.1	60.2%	+/-29.9	37.4%
Bachelor's degree or higher	4.2%	+/-6.5	7.0%	+/-10.2	0.0%
Population 65 years and over	365	+/-226	251	+/-169	114
High school graduate or higher	42.2%	+/-28.7	32.7%	+/-25.8	63.2%
Bachelor's degree or higher	9.0%	+/-10.7	9.2%	+/-11.2	8.8%

Subject	ZCTA5 88072				
	Total		Male		Female
	Estimate	Margin of Error	Estimate	Margin of Error	Estimate
POVERTY RATE FOR THE POPULATION 25 YEARS AND OVER FOR WHOM POVERTY STATUS IS DETERMINED BY EDUCATIONAL ATTAINMENT					
Less than high school graduate	49.7%	+/-23.7	42.2%	+/-28.1	58.2%
High school graduate (includes equivalency)	40.8%	+/-21.0	37.7%	+/-29.8	44.4%
Some college or associate's degree	27.4%	+/-36.8	0.0%	+/-39.3	53.3%
Bachelor's degree or higher	30.6%	+/-40.1	0.0%	+/-48.8	46.5%
MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)					
Population 25 years and over with earnings	14,714	+/-3,457	15,257	+/-9,609	13,814
Less than high school graduate	13,710	+/-2,025	13,576	+/-2,743	14,006
High school graduate (includes equivalency)	15,543	+/-13,032	16,848	+/-20,081	10,921
Some college or associate's degree	45,219	+/-42,061	46,620	+/-17,229	9,609
Bachelor's degree	-	**	-	**	-
Graduate or professional degree	-	**	-	**	-
PERCENT IMPUTED					
Educational attainment	5.1%	(X)	(X)	(X)	(X)

Subject	ZCTA5 88072
	Female
	Margin of Error
Population 18 to 24 years	+/-129
Less than high school graduate	+/-28.4
High school graduate (includes equivalency)	+/-26.6
Some college or associate's degree	+/-22.7
Bachelor's degree or higher	+/-20.3
Population 25 years and over	+/-266
Less than 9th grade	+/-13.9
9th to 12th grade, no diploma	+/-11.5
High school graduate (includes equivalency)	+/-11.6
Some college, no degree	+/-8.7
Associate's degree	+/-3.9
Bachelor's degree	+/-8.8
Graduate or professional degree	+/-2.5
Percent high school graduate or higher	+/-14.0
Percent bachelor's degree or higher	+/-8.6
Population 25 to 34 years	+/-167
High school graduate or higher	+/-27.7
Bachelor's degree or higher	+/-19.1
Population 35 to 44 years	+/-107
High school graduate or higher	+/-32.3
Bachelor's degree or higher	+/-19.8
Population 45 to 64 years	+/-82
High school graduate or higher	+/-34.2
Bachelor's degree or higher	+/-21.7
Population 65 years and over	+/-75
High school graduate or higher	+/-36.7
Bachelor's degree or higher	+/-13.1
POVERTY RATE FOR THE POPULATION 25 YEARS AND OVER FOR WHOM POVERTY STATUS IS DETERMINED BY EDUCATIONAL ATTAINMENT	
Less than high school graduate	+/-27.4
High school graduate (includes equivalency)	+/-32.1
Some college or associate's degree	+/-53.3
Bachelor's degree or higher	+/-51.3
MEDIAN EARNINGS IN THE PAST 12 MONTHS (IN 2014 INFLATION-ADJUSTED DOLLARS)	
Population 25 years and over with earnings	+/-5,130
Less than high school graduate	+/-5,208
High school graduate (includes equivalency)	+/-10,244
Some college or associate's degree	+/-47,102
Bachelor's degree	**
Graduate or professional degree	**
PERCENT IMPUTED	
Educational attainment	(X)

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Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2010-2014 American Community Survey 5-Year Estimates

#### Explanation of Symbols:

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DP-1

Profile of General Population and Housing Characteristics: 2010

2010 Demographic Profile Data

NOTE: For more information on confidentiality protection, nonsampling error, and definitions, see <http://www.census.gov/prod/cen2010/doc/dpsf.pdf>.

## Geography: ZCTA5 88072

Subject	Number	Percent
<b>SEX AND AGE</b>		
Total population	2,501	100.0
Under 5 years	248	9.9
5 to 9 years	266	10.6
10 to 14 years	231	9.2
15 to 19 years	232	9.3
20 to 24 years	201	8.0
25 to 29 years	154	6.2
30 to 34 years	160	6.4
35 to 39 years	146	5.8
40 to 44 years	151	6.0
45 to 49 years	147	5.9
50 to 54 years	136	5.4
55 to 59 years	140	5.6
60 to 64 years	95	3.8
65 to 69 years	83	3.3
70 to 74 years	57	2.3
75 to 79 years	25	1.0
80 to 84 years	15	0.6
85 years and over	14	0.6
Median age (years)	27.6	( X )
16 years and over	1,699	67.9
18 years and over	1,598	63.9
21 years and over	1,462	58.5
62 years and over	247	9.9
65 years and over	194	7.8
<b>Male population</b>		
Under 5 years	135	5.4
5 to 9 years	145	5.8
10 to 14 years	112	4.5
15 to 19 years	113	4.5
20 to 24 years	101	4.0
25 to 29 years	82	3.3
30 to 34 years	89	3.6
35 to 39 years	60	2.4
40 to 44 years	64	2.6
45 to 49 years	73	2.9
50 to 54 years	69	2.8
55 to 59 years	63	2.5
60 to 64 years	49	2.0
65 to 69 years	46	1.8
70 to 74 years	28	1.1

Subject	Number	Percent
75 to 79 years	14	0.6
80 to 84 years	8	0.3
85 years and over	8	0.3
Median age (years)	26.7	( X )
16 years and over	848	33.9
18 years and over	789	31.5
21 years and over	722	28.9
62 years and over	130	5.2
65 years and over	104	4.2
Female population	1,242	49.7
Under 5 years	113	4.5
5 to 9 years	121	4.8
10 to 14 years	119	4.8
15 to 19 years	119	4.8
20 to 24 years	100	4.0
25 to 29 years	72	2.9
30 to 34 years	71	2.8
35 to 39 years	86	3.4
40 to 44 years	87	3.5
45 to 49 years	74	3.0
50 to 54 years	67	2.7
55 to 59 years	77	3.1
60 to 64 years	46	1.8
65 to 69 years	37	1.5
70 to 74 years	29	1.2
75 to 79 years	11	0.4
80 to 84 years	7	0.3
85 years and over	6	0.2
Median age (years)	28.6	( X )
16 years and over	851	34.0
18 years and over	809	32.3
21 years and over	740	29.6
62 years and over	117	4.7
65 years and over	90	3.6
<b>RACE</b>		
Total population	2,501	100.0
One Race	2,414	96.5
White	1,435	57.4
Black or African American	22	0.9
American Indian and Alaska Native	23	0.9
Asian	8	0.3
Asian Indian	0	0.0
Chinese	1	0.0
Filipino	2	0.1
Japanese	0	0.0
Korean	0	0.0
Vietnamese	0	0.0
Other Asian [1]	5	0.2
Native Hawaiian and Other Pacific Islander	0	0.0
Native Hawaiian	0	0.0
Guamanian or Chamorro	0	0.0
Samoan	0	0.0
Other Pacific Islander [2]	0	0.0
Some Other Race	926	37.0

Subject	Number	Percent
Two or More Races	87	3.5
White; American Indian and Alaska Native [3]	2	0.1
White; Asian [3]	0	0.0
White; Black or African American [3]	2	0.1
White; Some Other Race [3]	68	2.7
Race alone or in combination with one or more other races: [4]		
White	1,508	60.3
Black or African American	32	1.3
American Indian and Alaska Native	28	1.1
Asian	8	0.3
Native Hawaiian and Other Pacific Islander	4	0.2
Some Other Race	1,009	40.3
HISPANIC OR LATINO		
Total population	2,501	100.0
Hispanic or Latino (of any race)	2,310	92.4
Mexican	2,122	84.8
Puerto Rican	13	0.5
Cuban	0	0.0
Other Hispanic or Latino [5]	175	7.0
Not Hispanic or Latino	191	7.6
HISPANIC OR LATINO AND RACE		
Total population	2,501	100.0
Hispanic or Latino	2,310	92.4
White alone	1,274	50.9
Black or African American alone	10	0.4
American Indian and Alaska Native alone	8	0.3
Asian alone	6	0.2
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	926	37.0
Two or More Races	86	3.4
Not Hispanic or Latino	191	7.6
White alone	161	6.4
Black or African American alone	12	0.5
American Indian and Alaska Native alone	15	0.6
Asian alone	2	0.1
Native Hawaiian and Other Pacific Islander alone	0	0.0
Some Other Race alone	0	0.0
Two or More Races	1	0.0
RELATIONSHIP		
Total population	2,501	100.0
In households	2,501	100.0
Householder	680	27.2
Spouse [6]	402	16.1
Child	958	38.3
Own child under 18 years	682	27.3
Other relatives	386	15.4
Under 18 years	216	8.6
65 years and over	30	1.2
Nonrelatives	75	3.0
Under 18 years	5	0.2
65 years and over	2	0.1
Unmarried partner	54	2.2
In group quarters	0	0.0
Institutionalized population	0	0.0
Male	0	0.0



Subject	Number	Percent
Female	0	0.0
Noninstitutionalized population	0	0.0
Male	0	0.0
Female	0	0.0
HOUSEHOLDS BY TYPE		
Total households	680	100.0
Family households (families) [7]	579	85.1
With own children under 18 years	327	48.1
Husband-wife family	402	59.1
With own children under 18 years	221	32.5
Male householder, no wife present	54	7.9
With own children under 18 years	31	4.6
Female householder, no husband present	123	18.1
With own children under 18 years	75	11.0
Nonfamily households [7]	101	14.9
Householder living alone	89	13.1
Male	52	7.6
65 years and over	20	2.9
Female	37	5.4
65 years and over	17	2.5
Households with individuals under 18 years	409	60.1
Households with individuals 65 years and over	145	21.3
Average household size	3.68	( X )
Average family size [7]	4.02	( X )
HOUSING OCCUPANCY		
Total housing units	735	100.0
Occupied housing units	680	92.5
Vacant housing units	55	7.5
For rent	19	2.6
Rented, not occupied	2	0.3
For sale only	1	0.1
Sold, not occupied	2	0.3
For seasonal, recreational, or occasional use	0	0.0
All other vacants	31	4.2
Homeowner vacancy rate (percent) [8]	0.2	( X )
Rental vacancy rate (percent) [9]	10.5	( X )
HOUSING TENURE		
Occupied housing units	680	100.0
Owner-occupied housing units	520	76.5
Population in owner-occupied housing units	1,892	( X )
Average household size of owner-occupied units	3.64	( X )
Renter-occupied housing units	160	23.5
Population in renter-occupied housing units	609	( X )
Average household size of renter-occupied units	3.81	( X )

X Not applicable.

[1] Other Asian alone, or two or more Asian categories.

[2] Other Pacific Islander alone, or two or more Native Hawaiian and Other Pacific Islander categories.

[3] One of the four most commonly reported multiple-race combinations nationwide in Census 2000.

[4] In combination with one or more of the other races listed. The six numbers may add to more than the total population, and the six percentages may add to more than 100 percent because individuals may report more than one race.

[5] This category is composed of people whose origins are from the Dominican Republic, Spain, and Spanish-speaking Central or South

American countries. It also includes general origin responses such as "Latino" or "Hispanic."

[6] "Spouse" represents spouse of the householder. It does not reflect all spouses in a household. Responses of "same-sex spouse" were edited during processing to "unmarried partner."

[7] "Family households" consist of a householder and one or more other people related to the householder by birth, marriage, or adoption. They do not include same-sex married couples even if the marriage was performed in a state issuing marriage certificates for same-sex couples. Same-sex couple households are included in the family households category if there is at least one additional person related to the householder by birth or adoption. Same-sex couple households with no relatives of the householder present are tabulated in nonfamily households. "Nonfamily households" consist of people living alone and households which do not have any members related to the householder.

[8] The homeowner vacancy rate is the proportion of the homeowner inventory that is vacant "for sale." It is computed by dividing the total number of vacant units "for sale only" by the sum of owner-occupied units, vacant units that are "for sale only," and vacant units that have been sold but not yet occupied; and then multiplying by 100.

[9] The rental vacancy rate is the proportion of the rental inventory that is vacant "for rent." It is computed by dividing the total number of vacant units "for rent" by the sum of the renter-occupied units, vacant units that are "for rent," and vacant units that have been rented but not yet occupied; and then multiplying by 100.

Source: U.S. Census Bureau, 2010 Census.

Appendix E19  
EPA Region VI Office of Planning &  
Coordination Correspondence





July 14, 2016

#6324631

Mr. Robert Houston, Chief  
United States Environmental Protection Agency Region 6  
Office of Planning and Coordination  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733  
(214) 665-7451  
(214) 665-7446 (fax)  
*houston.robert@epa.gov*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Weeks:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well to be located in the northeast section of the High Valley service area. The extent of the work is shown on the attached Figure 2.
- Replacement of the existing booster station as shown on the attached Figure 2.
- Rehabilitation of the existing water storage tank as shown on the attached Figure 2.
- Rehabilitation of the existing water supply well as shown on the attached Figure 2.
- Installation of new water distribution and service lines as shown on the attached Figure 2.

Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system sites.



*Mr. Craig Weeks*

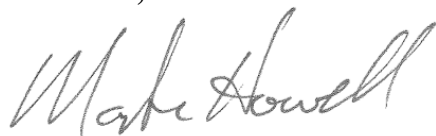
*July 14, 2016*

*Page 2*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

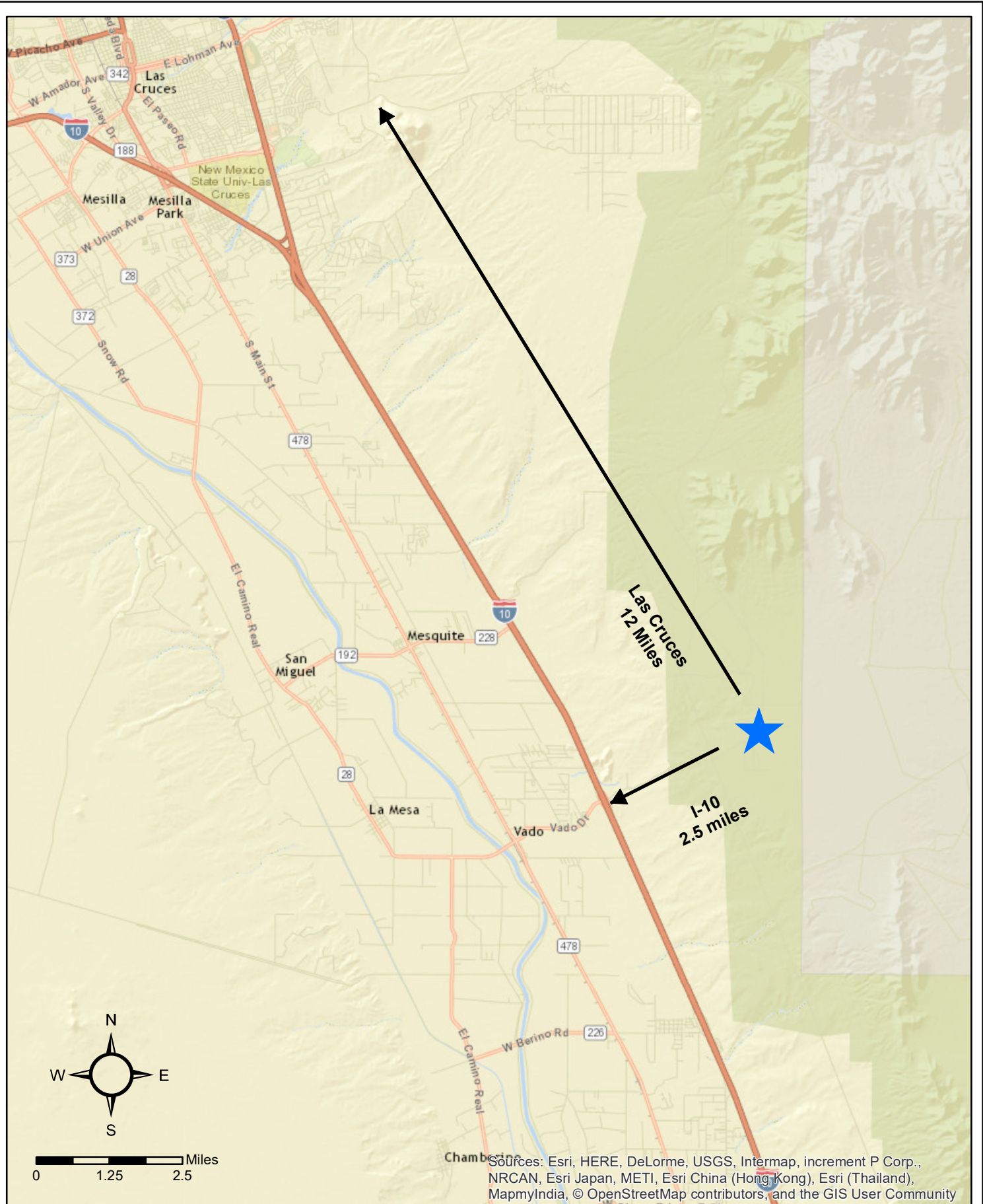
A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell

Senior Engineer II

*marty.howell@soudermiller.com*

Extension: 1326



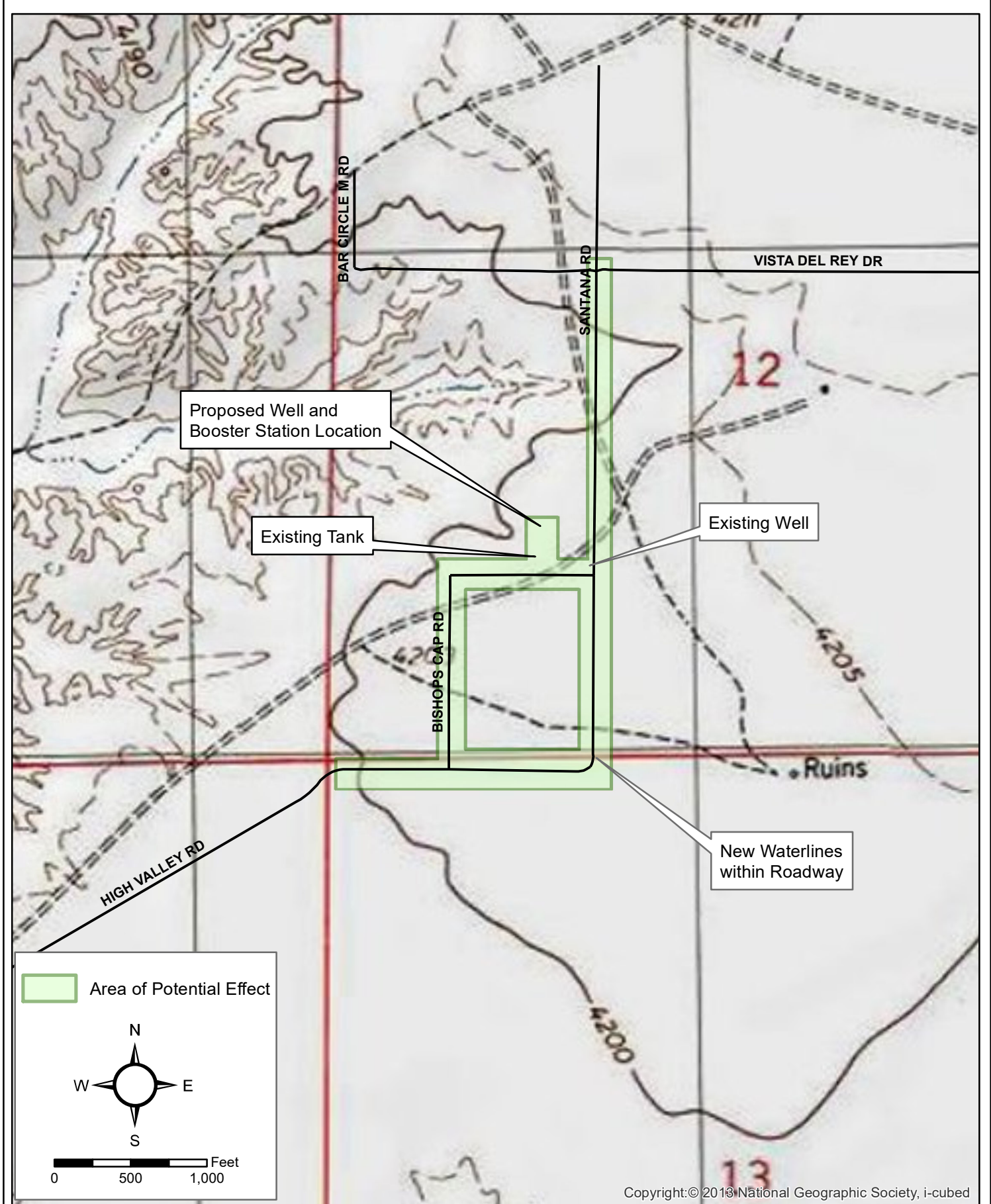
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Vicinity Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 1



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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2





**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY**

REGION 6  
1445 ROSS AVENUE, SUITE 1200  
DALLAS, TX 75202-2733

August 5, 2016

Marty Howell  
Senior Engineer II  
Souder Miller & Associates  
401 N. Seventeenth Street, Suite 4.  
Las Cruces, NM 88005

SUBJECT: Water System Improvements, High Valley Mutual Domestic Water Consumers Association, New Mexico

Dear Mr. Howell

In accordance with your letter dated July 14, 2016, the U.S. Environmental Protection Agency, the Region 6 NEPA office, has no comments to offer on the proposed project based on the information submitted.

We appreciate the opportunity to examine your request for comments. Thank you for your coordination and don't hesitate to contact me at 214-665-8565 or [houston.robert@epa.gov](mailto:houston.robert@epa.gov), if you have questions or concerns regarding this letter.

Sincerely,

A handwritten signature in black ink that reads "Robert Houston".

Robert Houston  
Chief, Special Projects Section



Appendix E20  
Civil Rights Impact Analysis  
Certification Form RD 2006-38



Rural Development  
Environmental Justice (EJ) and Civil Rights Impact Analysis (CRIA)  
Certification

1. Applicant's name and proposed project description: \_\_\_\_\_  
\_\_\_\_\_

2. Rural Development's loan/grant program/guarantee or other Agency action: \_\_\_\_\_  
\_\_\_\_\_

3.  Attach a map of the proposal's area of effect identifying location or EJ populations, location of the proposal, area of impact or

Attach results of EJ analysis from the Environmental Protection Agency's (EPAs) EnviroMapper with proposed project location and impact footprint delineated.

4. Does the applicant's proposal or Agency action directly, indirectly or cumulatively affect the quality and/or level of services provided to the community?

Yes  No  N/A

5. Is the applicant's proposal or Agency action likely to result in a change in the current land use patterns (types of land use, development densities, etc)?

Yes  No  N/A

6. Does a demographic analysis indicate the applicant's proposal or Agency's action may disproportionately affect a significant minority and/or low-income populations?

Yes  No  N/A

If answer is no, skip to item 12. If answer is yes, continue with items 7 through 12.

7. Identify, describe, and provide location of EJ population \_\_\_\_\_  
\_\_\_\_\_

8. If a disproportionate adverse affect is expected to impact an EJ population, identify type/level of public outreach implemented. \_\_\_\_\_  
\_\_\_\_\_

9. Identify disproportionately high and adverse impacts on EJ populations. \_\_\_\_\_  
\_\_\_\_\_

10. Are adverse impacts appreciably more severe or greater in magnitude than the adverse impacts expected on non-minority/low-income populations?

Yes  No  N/A

11. Are alternatives and/or mitigation required to avoid impacts to EJ populations?

Yes  No  N/A

If yes, describe \_\_\_\_\_  
\_\_\_\_\_

12. I certify that I have reviewed the appropriate documentation and have determined that:

- No major EJ or civil rights impact is likely to result if the proposal is implemented.  
 A major EJ or civil rights impact is likely to result if the proposal is implemented.

\_\_\_\_\_  
Name and Title of Certifying Official

\_\_\_\_\_  
Date

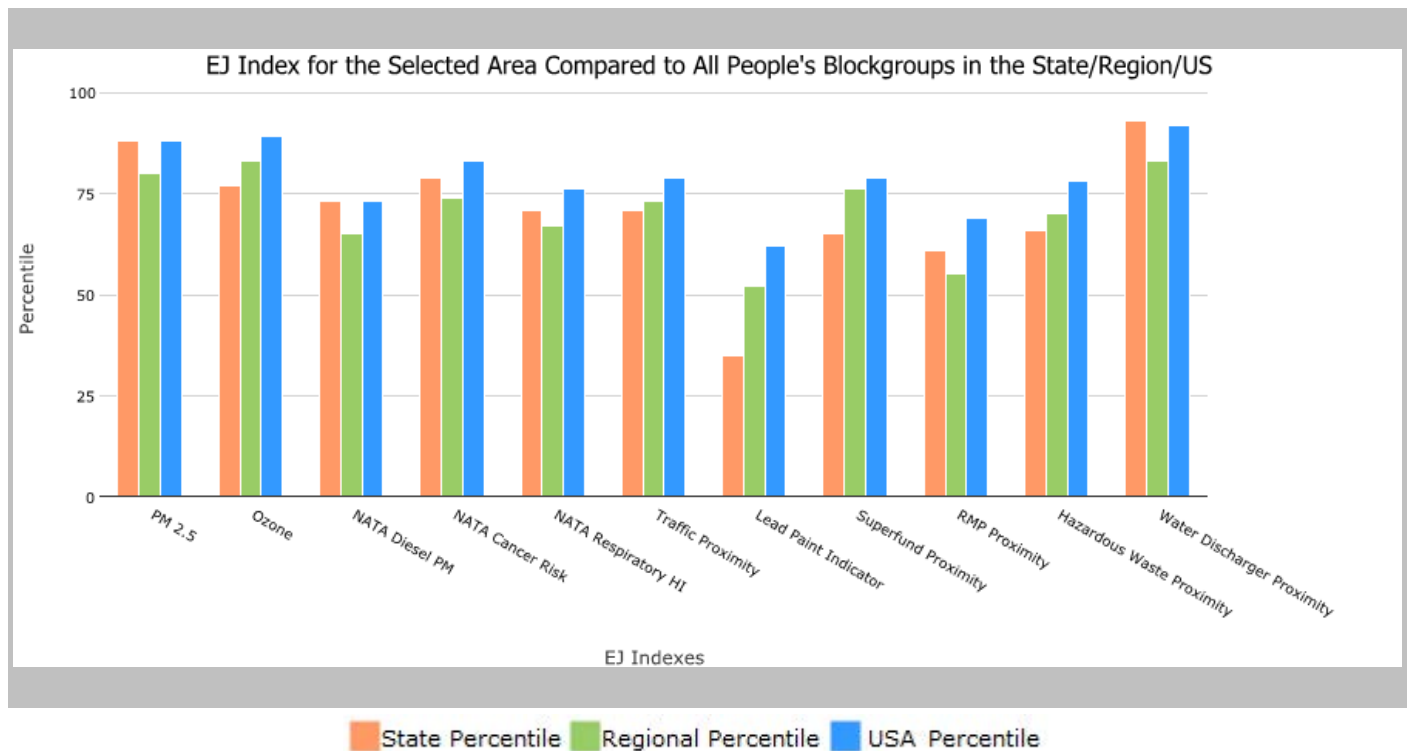
the User Specified Area, NEW MEXICO, EPA Region 6

Approximate Population: 38

Input Area (sq. miles): 0.10

High Valley MDWCA

Selected Variables	State Percentile	EPA Region Percentile	USA Percentile
<b>EJ Indexes</b>			
EJ Index for PM2.5	88	80	88
EJ Index for Ozone	77	83	89
EJ Index for NATA* Diesel PM	73	65	73
EJ Index for NATA* Air Toxics Cancer Risk	79	74	83
EJ Index for NATA* Respiratory Hazard Index	71	67	76
EJ Index for Traffic Proximity and Volume	71	73	79
EJ Index for Lead Paint Indicator	35	52	62
EJ Index for Superfund Proximity	65	76	79
EJ Index for RMP Proximity	61	55	69
EJ Index for Hazardous Waste Proximity	66	70	78
EJ Index for Water Discharger Proximity	93	83	92



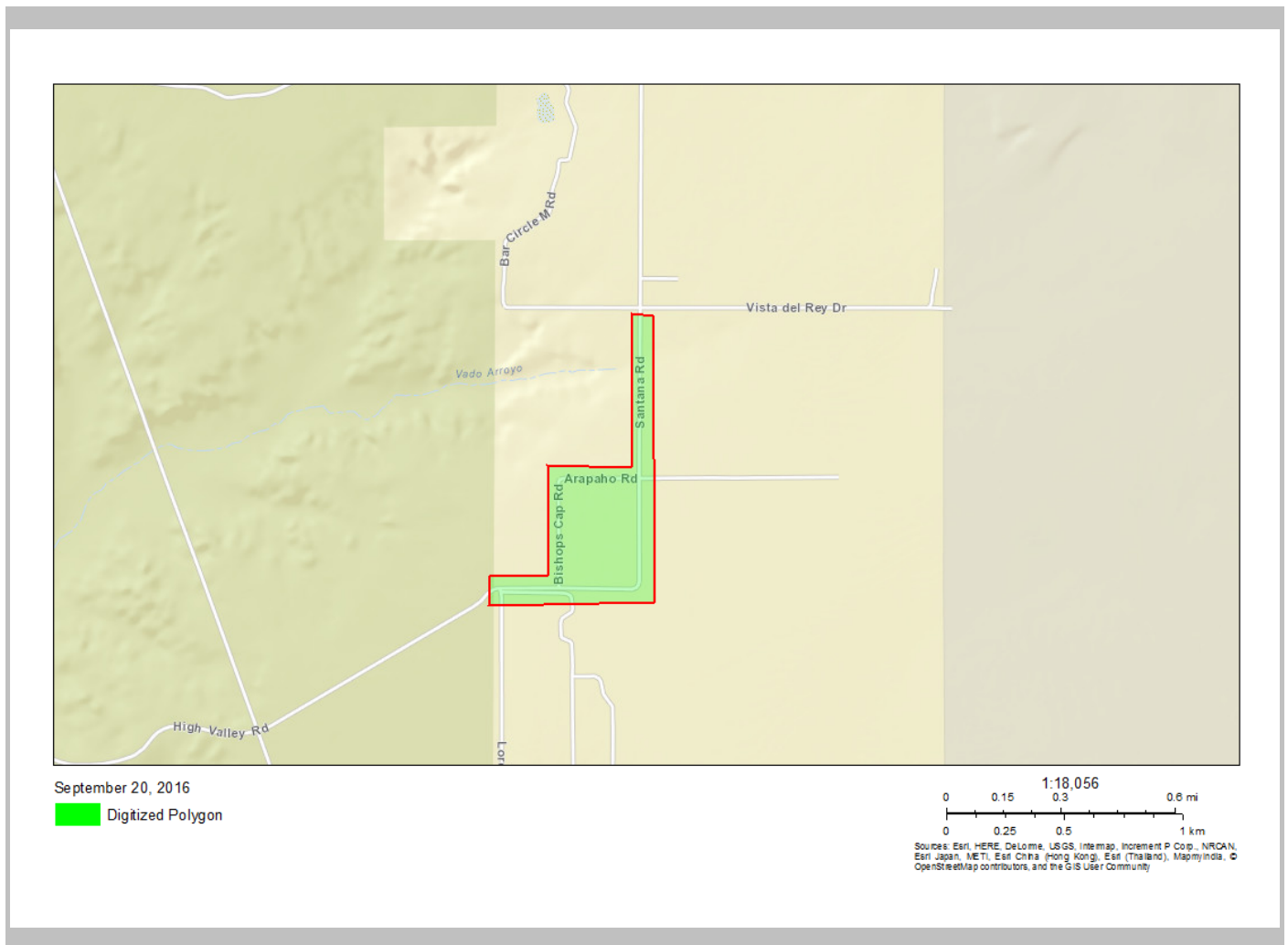
This report shows the values for environmental and demographic indicators and EJSCREEN indexes. It shows environmental and demographic raw data (e.g., the estimated concentration of ozone in the air), and also shows what percentile each raw data value represents. These percentiles provide perspective on how the selected block group or buffer area compares to the entire state, EPA region, or nation. For example, if a given location is at the 95th percentile nationwide, this means that only 5 percent of the US population has a higher block group value than the average person in the location being analyzed. The years for which the data are available, and the methods used, vary across these indicators. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports.

the User Specified Area, NEW MEXICO, EPA Region 6

Approximate Population: 38

Input Area (sq. miles): 0.10

High Valley MDWCA



Sites reporting to EPA	
Superfund NPL	0
Hazardous Waste Treatment, Storage, and Disposal Facilities (TSDF)	0
National Pollutant Discharge Elimination System (NPDES)	0



**EJSCREEN Report (Version 2016)**  
 the User Specified Area, NEW MEXICO, EPA Region 6  
 Approximate Population: 38  
 Input Area (sq. miles): 0.10  
 High Valley MDWCA

Selected Variables	Value	State Avg.	%ile in State	EPA Region Avg.	%ile in EPA Region	USA Avg.	%ile in USA
<b>Environmental Indicators</b>							
Particulate Matter (PM 2.5 in $\mu\text{g}/\text{m}^3$ )	10.4	7.11	98	9.45	78	9.32	75
Ozone (ppb)	55.1	54.8	46	47	87	47.4	87
NATA* Diesel PM ( $\mu\text{g}/\text{m}^3$ )	0.328	0.471	46	0.72	<50th	0.937	<50th
NATA* Cancer Risk (lifetime risk per million)	35	32	60	42	<50th	40	<50th
NATA* Respiratory Hazard Index	0.99	1.4	38	1.8	<50th	1.8	<50th
Traffic Proximity and Volume (daily traffic count/distance to road)	110	290	52	320	54	590	52
Lead Paint Indicator (% Pre-1960 Housing)	0	0.2	17	0.18	18	0.3	10
Superfund Proximity (site count/km distance)	0.04	0.13	41	0.072	51	0.13	35
RMP Proximity (facility count/km distance)	0.049	0.16	29	0.55	6	0.43	8
Hazardous Waste Proximity (facility count/km distance)	0.023	0.091	30	0.075	34	0.072	32
Water Discharger Proximity (facility count/km distance)	0.36	0.15	90	0.41	72	0.31	78
<b>Demographic Indicators</b>							
Demographic Index	83%	52%	92	45%	93	36%	96
Minority Population	94%	60%	91	50%	90	37%	93
Low Income Population	72%	43%	89	39%	90	35%	93
Linguistically Isolated Population	41%	5%	99	6%	98	5%	98
Population With Less Than High School Education	55%	16%	98	17%	97	14%	98
Population Under 5 years of age	23%	7%	99	7%	99	6%	99
Population over 64 years of age	17%	14%	70	12%	79	14%	73

\* The National-Scale Air Toxics Assessment (NATA) is EPA's ongoing, comprehensive evaluation of air toxics in the United States. EPA developed the NATA to prioritize air toxics, emission sources, and locations of interest for further study. It is important to remember that NATA provides broad estimates of health risks over geographic areas of the country, not definitive risks to specific individuals or locations. More information on the NATA analysis can be found at: <https://www.epa.gov/national-air-toxics-assessment>.

For additional information, see: [www.epa.gov/environmentaljustice](http://www.epa.gov/environmentaljustice)

EJSCREEN is a screening tool for pre-decisional use only. It can help identify areas that may warrant additional consideration, analysis, or outreach. It does not provide a basis for decision-making, but it may help identify potential areas of EJ concern. Users should keep in mind that screening tools are subject to substantial uncertainty in their demographic and environmental data, particularly when looking at small geographic areas. Important caveats and uncertainties apply to this screening-level information, so it is essential to understand the limitations on appropriate interpretations and applications of these indicators. Please see EJSCREEN documentation for discussion of these issues before using reports. This screening tool does not provide data on every environmental impact and demographic factor that may be relevant to a particular location. EJSCREEN outputs should be supplemented with additional information and local knowledge before taking any action to address potential EJ concerns.

Appendix E21  
EPA Air Planning  
Section Correspondence





July 14, 2016

#63234631

Mr. Jeffrey Riley  
Air Planning Section  
United States Environmental Protection Agency Region 6, 6 PD-L  
1445 Ross Avenue, Suite 1200  
Dallas, TX 75202-2733  
(214) 665-7247  
(214) 665-7263 (fax)  
[riley.jeffrey@epa.gov](mailto:riley.jeffrey@epa.gov)

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Riley:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

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*Mr. Jeffrey Riley*

*July 14, 2016*

*Page 2*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at the address shown below.

Sincerely,

**MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES**

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

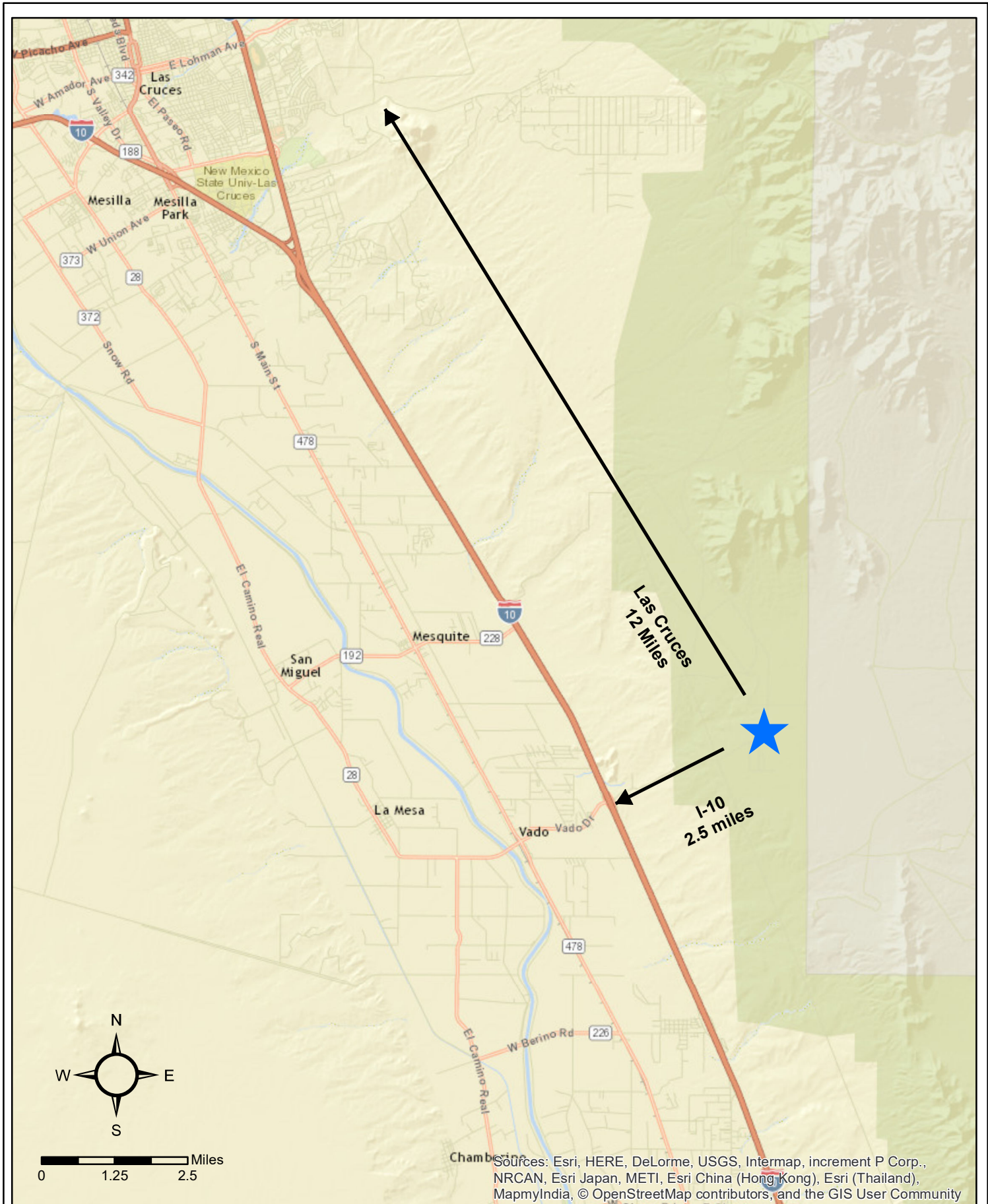
Marty Howell

Senior Engineer II

*marty.howell@soudermiller.com*

Extension: 1326





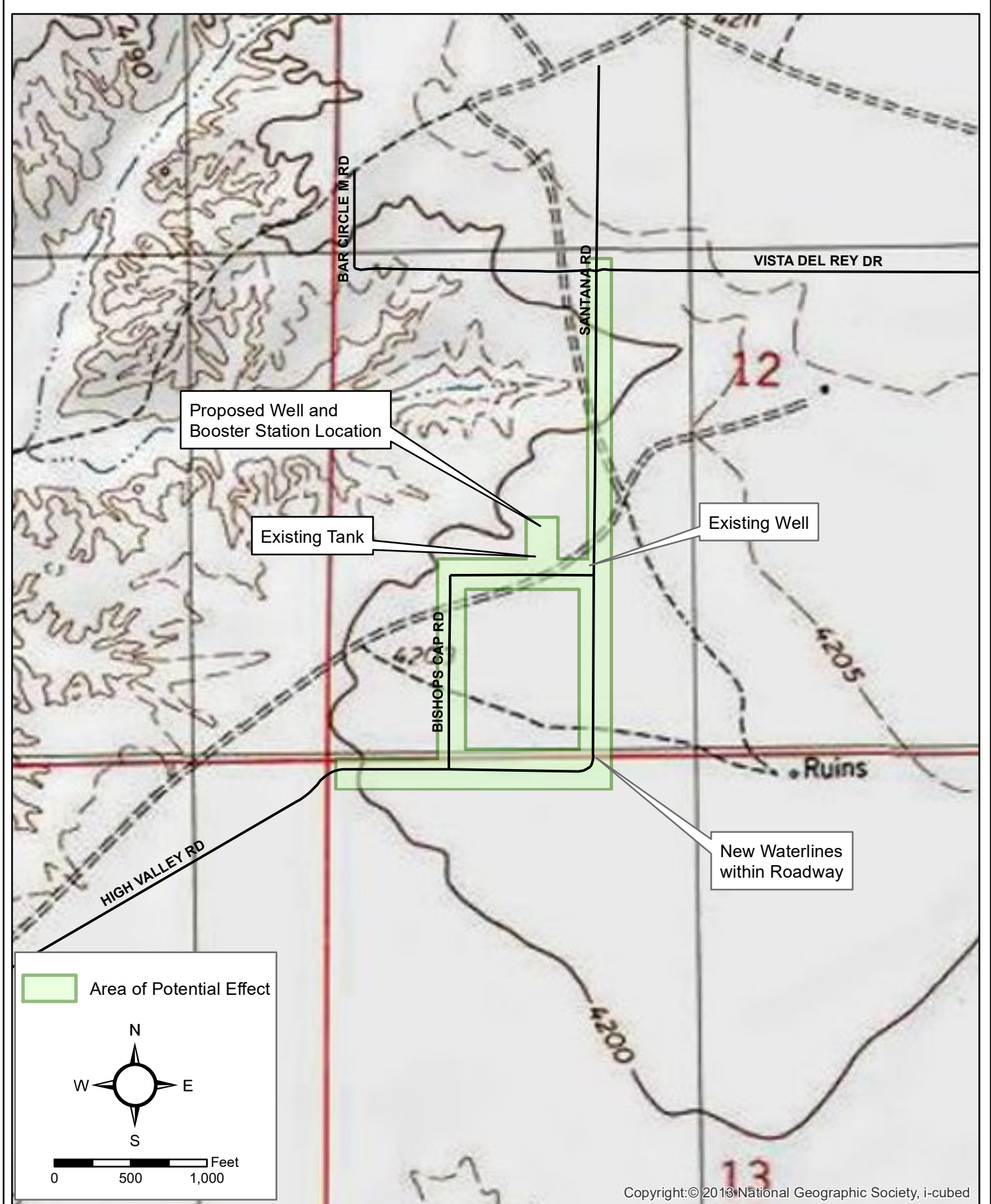
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Vicinity Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 1



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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2



## Alfredo Holguin

---

**From:** Riley, Jeffrey <Riley.Jeffrey@epa.gov>  
**Sent:** Friday, August 5, 2016 8:40 AM  
**To:** Alfredo Holguin  
**Subject:** RE: High Valley MDWCA - Request for Consultation

Good Morning Mr. Holguin,

Thank you for the information on your proposed project. As your documentation has described, this project is intended to improve the water system serving the Colonia of High Valley located in Doña Ana County, New Mexico. The State Implementation Section of EPA's Region 6 office has reviewed the submitted documents. Our review is limited to actions that might impact the air quality of an area. Therefore, the following comments are based on our review of your project compared to the Clean Air Act requirements for general conformity.

Based on the location listed in your letter, the project area is currently in attainment of all National Ambient Air Quality Standards (NAAQS), and as a result, general conformity regulations do not apply and an applicability analysis is not necessary. However, it should be noted that a portion of Doña Ana County (Anthony, NM) is currently classified as moderate nonattainment of the particulate matter/PM10 NAAQS, and the Sunland Park, NM area is vulnerable to being designated as non-attainment for ozone in the next few years.

Because of the air quality concerns of the significant population center near the project area, EPA recommends that best management practices be implemented in order to reduce potential short-term air quality impacts associated with construction activities. Furthermore, construction and waste disposal activities should be conducted in accordance with applicable local, state and federal statutes and regulations.

If you have questions, please don't hesitate to contact me at (214)665-8542.

Jeffrey Riley  
US EPA - Region 6  
State Implementation Section 6MM-AA  
Multimedia Division  
(214)665-8542  
[riley.jeffrey@epa.gov](mailto:riley.jeffrey@epa.gov)

---

**From:** Alfredo Holguin [mailto:[alfredo.holguin@soudermiller.com](mailto:alfredo.holguin@soudermiller.com)]  
**Sent:** Thursday, August 04, 2016 11:26 AM  
**To:** Riley, Jeffrey <Riley.Jeffrey@epa.gov>  
**Subject:** High Valley MDWCA - Request for Consultation

Mr. Jeffrey Riley,

Please find attached a follow-up request for consultation regarding a proposed water system improvement project to be completed by High Valley MDWCA in Doña Ana County, New Mexico. We have not received a reply to the original request submitted July 15, 2016. Please respond at your earliest convenience or let us know if you have any questions and require additional information.

Thank you,

---



J. Alfredo Holguin, E.I.  
Staff Civil Designer

Corporate Registrations: AZ Engineering/Geology/Surveying Firm (14070), SD Surveying Firm (C-7436), TX Engineering Firm (8877), TX Geology Firm (50254), TX PST CAPM (CS-0000051), TX Surveying Firm (10162200), WY Surveying Firm (S-1704)



### **Souder, Miller & Associates**

Engineering ♦ Environmental ♦ Surveying

401 N. Seventeenth Street, Suite 4

Las Cruces, NM 88005

[www.soudermiller.com](http://www.soudermiller.com)

(575) 647-0799 (office)

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Appendix E22  
New Mexico Department of  
Transportation Correspondence





July 14, 2016

#6324631

Mr. Gary Funkhouser  
NMDOT - Environmental Design Division  
P.O. Box 1149  
Santa Fe, NM 87504-1149  
(505) 827-5356  
(505) 827-3243 (fax)  
*gary.funkhouser@state.nm.us*

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

Mr. Funkhouser:

Souder, Miller & Associates (SMA), on behalf of our client High Valley Mutual Domestic Water Consumers Association (High Valley MDWCA), is in the process of performing an environmental assessment pursuant to the National Environmental Policy Act for use of public funding. The proposed project will be located in Doña Ana County, encompassing the Colonia of High Valley, approximately 2.75 miles east of Interstate 10. The service area is directly accessed via County Rd. B19. Funding for the planned project may be obtained from New Mexico Legislative Appropriations (SAP), United States Department of Agriculture (USDA) - Rural Development (RD), Community Development Block Grant (CDBG), New Mexico Colonias Infrastructure Trust Fund (CIF), New Mexico Water Trust Board (WTB) and/or other State and Federal sources.

As part of the overall planning phase of the High Valley MDWCA project SMA is requesting consultation on several phases of improvements, including:

- Construction of a new water supply well to be located in the northeast section of the High Valley service area. The extent of the work is shown on the attached Figure 2.
- Replacement of the existing booster station as shown on the attached Figure 2.
- Rehabilitation of the existing water storage tank as shown on the attached Figure 2.
- Rehabilitation of the existing water supply well as shown on the attached Figure 2.
- Installation of new water distribution and service lines as shown on the attached Figure 2.

SMA is requesting clearance for the project areas as defined above. Projected limits of the study include a portion of Township 25 South, Range 03 East, Section 12 within Doña Ana County. The center of the project area is located at approximately 32° 08' 40" N latitude and 106° 35' 38" W longitude. Please refer to the enclosed maps (Figure 1 and 2) that depict the area of the proposed water system improvements.

All work is to be completed on property owned by High Valley MDWCA, private property or within public rights-of-way. The majority of work (except the well, booster station and fire hydrants) will be completed below ground and in existing improved rights of way or existing developed water system

sites. The overall project area depicted in Figure 3 lies within Zone X (Areas determined to be outside 500-year floodplain).

The following sections provide details on the proposed project with respect to the customary NMDOT checklist:

*1. Purpose and nature of undertaking*

High Valley Mutual Domestic Water Consumers Association proposes to make a variety of water system improvements to their system which provides service in Doña Ana County, including the Colonia of High Valley.

*2. Is the project resulting from a NMDOT project?*

No, the project is not resulting from an NMDOT project.

*3. Funding source*

The funding for the project is yet to be determined but is anticipated to be a compilation of Federal, State and local sources, however no NMDOT funding is anticipated to be utilized.

*4. Land status*

The land required for right-of-way for the project is owned by Doña Ana County and High Valley MDWCA: Some private easements may also be required.

*5. Permitting agencies*

As noted above, Doña Ana County will be involved with the right-of-ways.

*6. County*

The proposed project is located in Doña Ana County.

*7. Highway number*

NA

*8. BOP and EOP*

NA

*9. Side(s) of the road*

NA

*10. Length of the project*

7440 linear feet of waterline replacement in Doña Ana County rights of way.

*11. Township, Range, and Section(s)*

Projected limits of the study include various portions of Township 25 South, Range 03 East Section 12.

*12. USGS 1:24,000 (7.5') Quadrangle map*

The proposed project lies within the Bishop Cap 7.5-minute Quadrangle.

*13. Include the appropriate portion of the USGS 1:24,000 (7.5') Quadrangle map(s)*

The project area is illustrated in the attached Figures 1, 2, and 3.

*14. Site photos*

No site photos are available at this time.

*15. Include your name, company (if applicable), phone #, fax # and email address (if you use one).*

Marty Howell, P.E.

Souder, Miller & Associates

Phone: (575) 647-0799

Fax: (575) 647-0680

Email: marty.howell@soudermiller.com

*Mr. Gary Funkhouser*

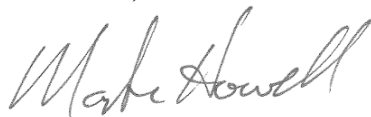
*July 14, 2016*

*Page 3*

SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com).

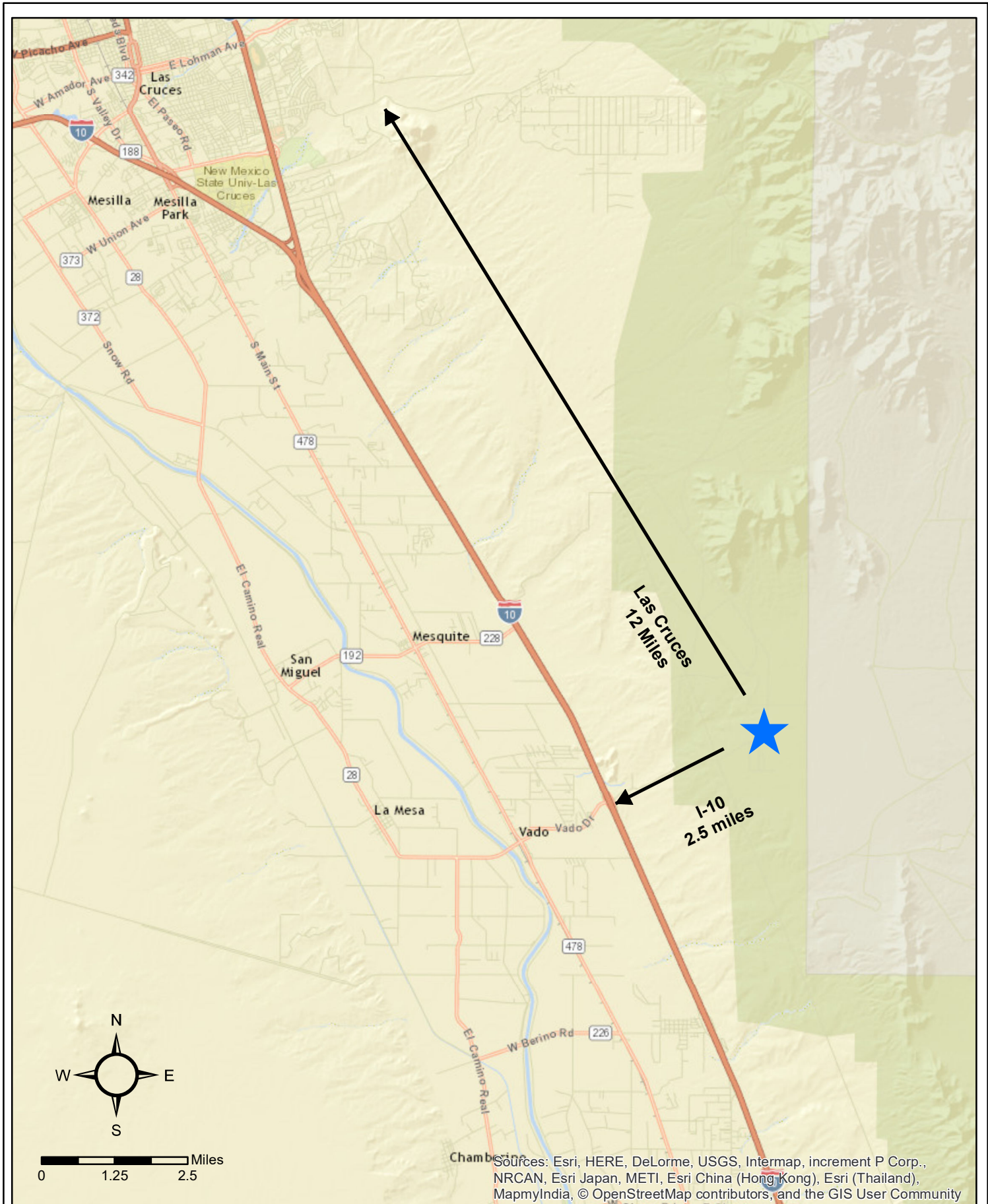
Sincerely,

MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
[marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)  
Extension: 1326





Sources: Esri, HERE, DeLorme, USGS, Intermap, increment P Corp., NRCAN, Esri Japan, METI, Esri China (Hong Kong), Esri (Thailand), MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

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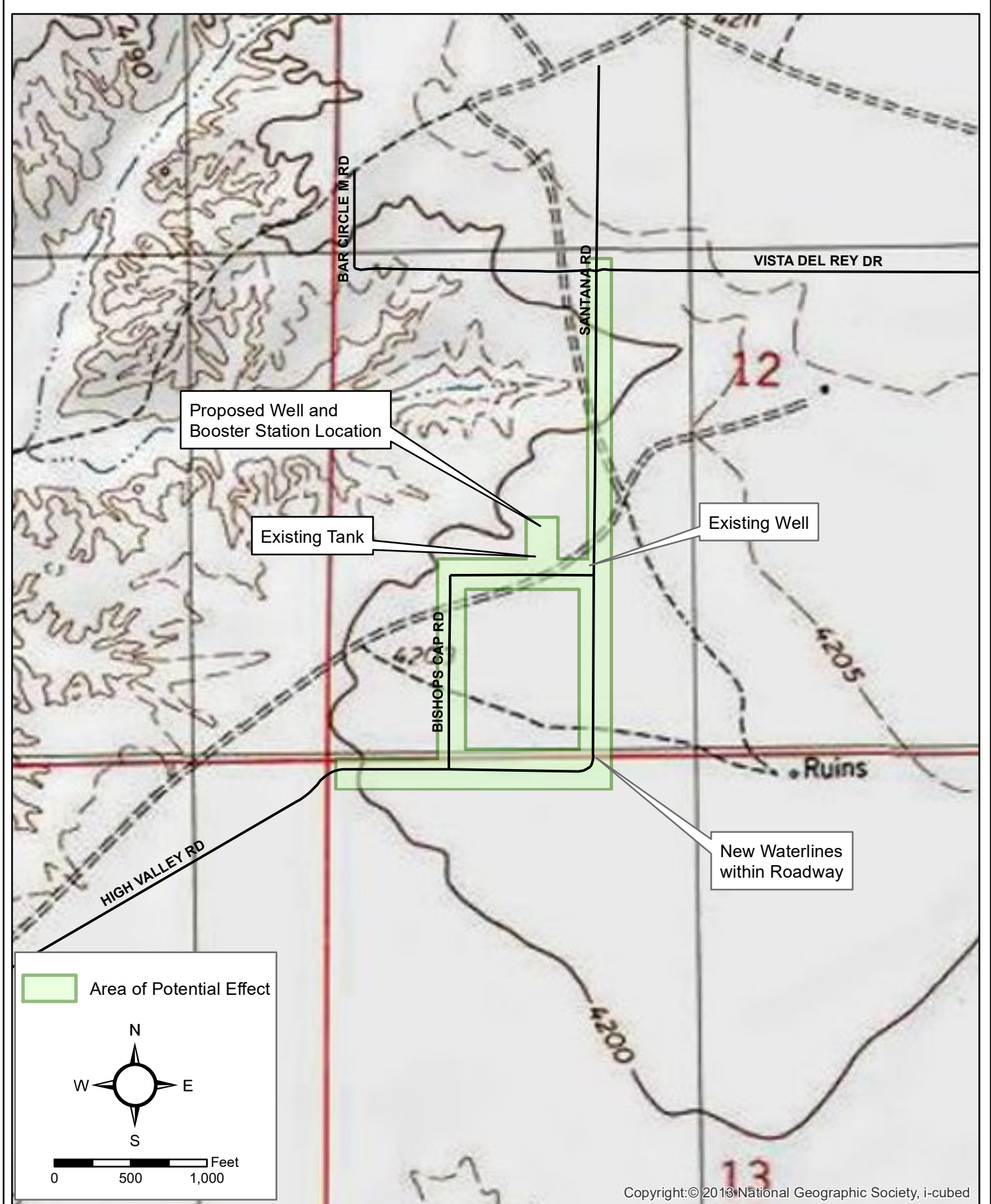
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Vicinity Map  
High Valley MDWCA Preliminary Engineering Report  
Vado, New Mexico

Figure 1



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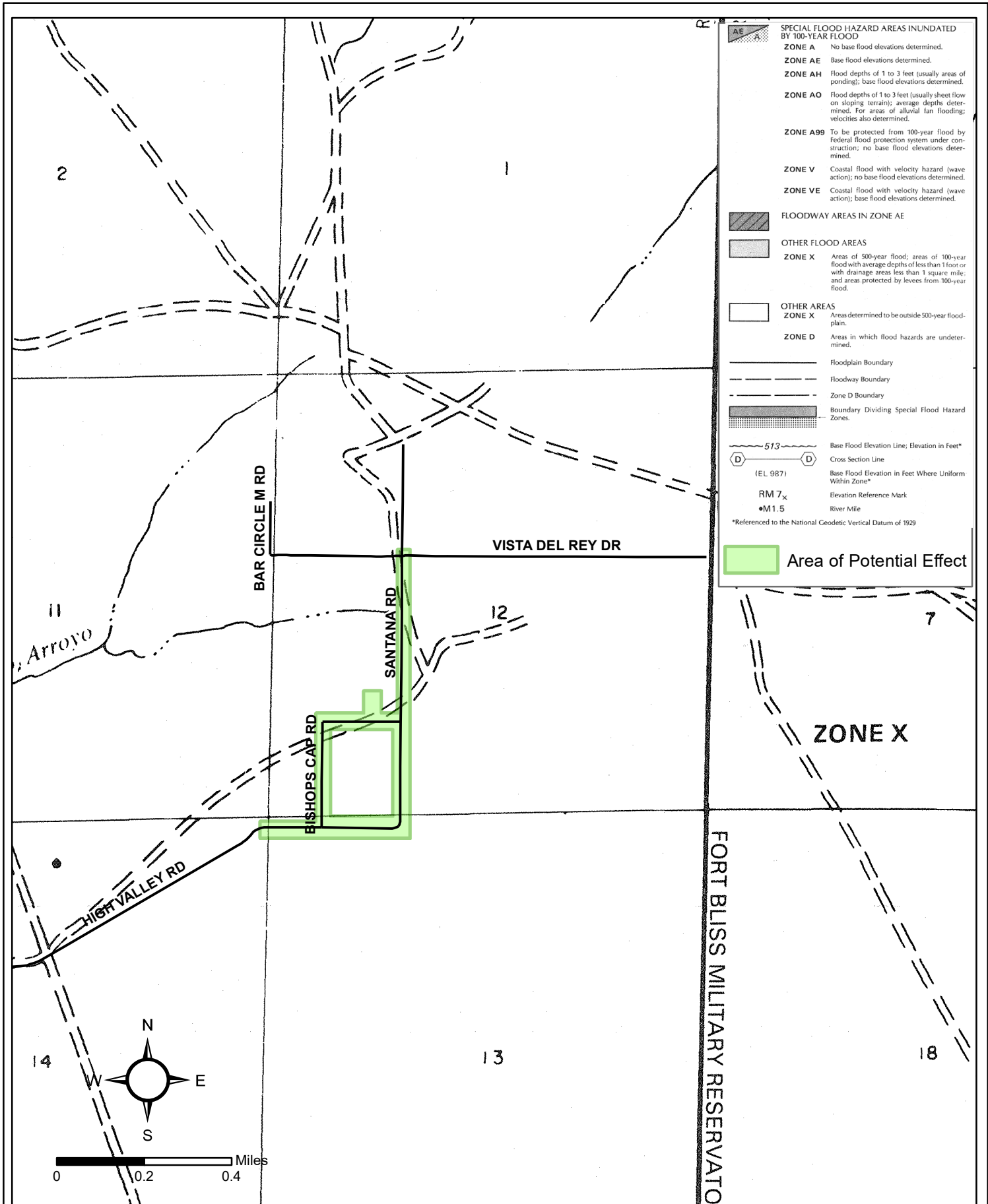
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US Topographic Map  
High Valley MDWCA Preliminary Engineering Report  
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Figure 2





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FEMA FIRM Map of Proposed Service Area (Panel 3503C0800E)  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 3



CULTURAL RESOURCE INVENTORY  
NOT REQUIRED  
NMDOT, ENVIRONMENTAL SECTION

July 14, 2016

324631

REVIEWED  
By Gary Funkhouser at 10:30 am, Oct 06, 2016



Mr. Gary Funkhouser  
NMDOT - Environmental Design Division  
P.O. Box 1149  
Santa Fe, NM 87504-1149  
(505) 827-5356  
(505) 827-3243 (fax)  
gary.funkhouser@state.nm.us

ENVIRONMENTAL SURVEY  
NOT REQUIRED  
NMDOT, ENVIRONMENTAL SECTION

**RE: REQUEST FOR INFORMATION CONCERNING WATER SYSTEM IMPROVEMENTS FOR THE HIGH VALLEY MUTUAL DOMESTIC WATER CONSUMERS ASSOCIATION**

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*9. Side(s) of the road*

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*10. Length of the project*

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*13. Include the appropriate portion of the USGS 1:24,000 (7.5') Quadrangle map(s)*

The project area is illustrated in the attached Figures 1, 2, and 3.

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No site photos are available at this time.

*15. Include your name, company (if applicable), phone #, fax # and email address (if you use one).*

Marty Howell, P.E.

Souder, Miller & Associates

Phone: (575) 647-0799

Fax: (575) 647-0680

Email: [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)

*Mr. Gary Funkhouser*

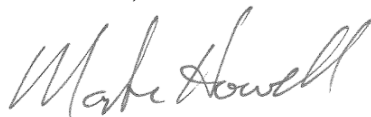
*July 14, 2016*

*Page 3*

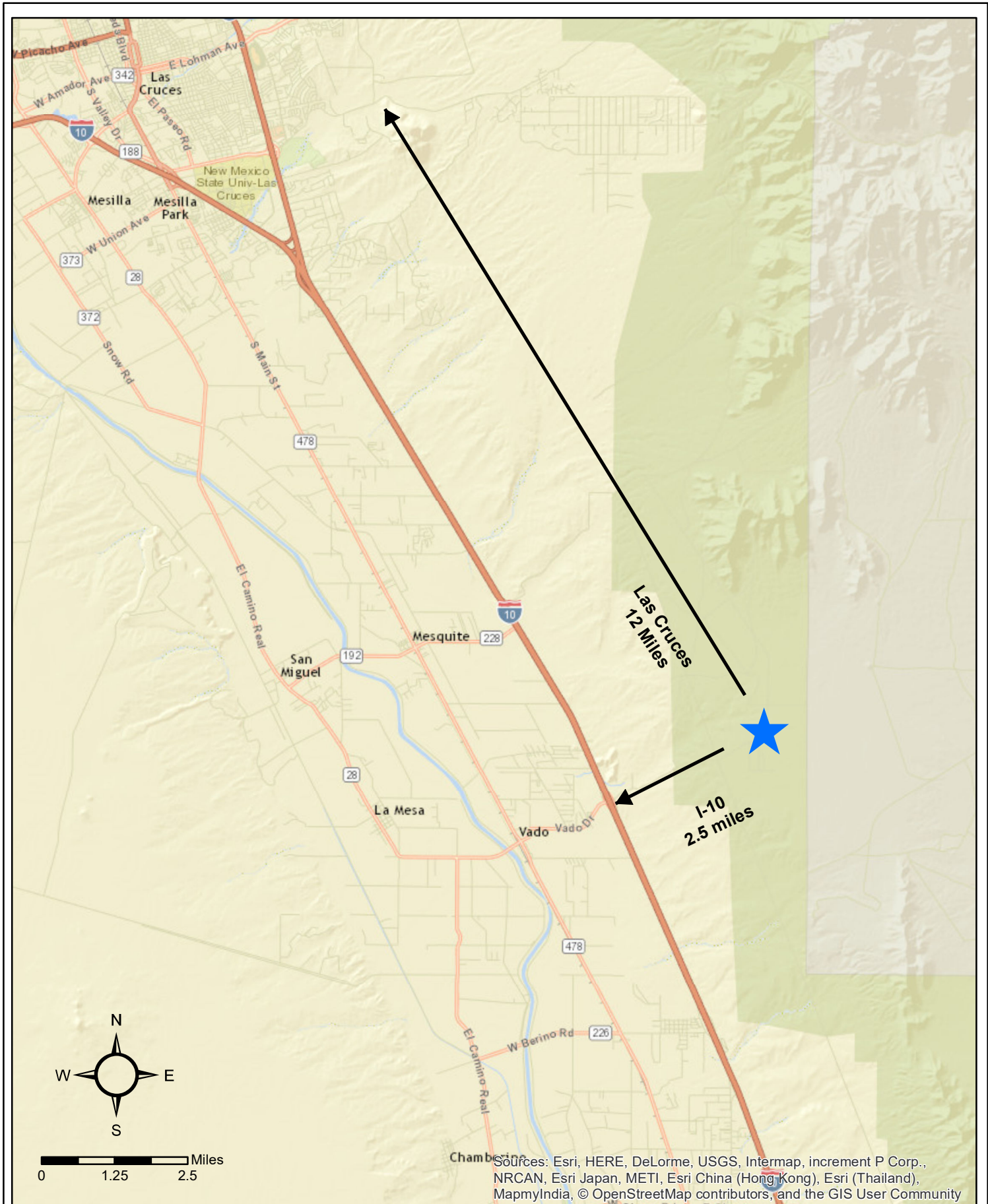
SMA would appreciate any information or feedback to be provided at your earliest possible convenience. If you need any further information or wish to discuss the project, please feel free to contact me by phone at 800-647-0799, or by email at [marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com).

Sincerely,

MILLER ENGINEERS, INC. D/B/A  
SOUDER, MILLER & ASSOCIATES

A handwritten signature in black ink that reads "Marty Howell". The signature is written in a cursive, flowing style.

Marty Howell  
Senior Engineer  
[marty.howell@soudermiller.com](mailto:marty.howell@soudermiller.com)  
Extension: 1326



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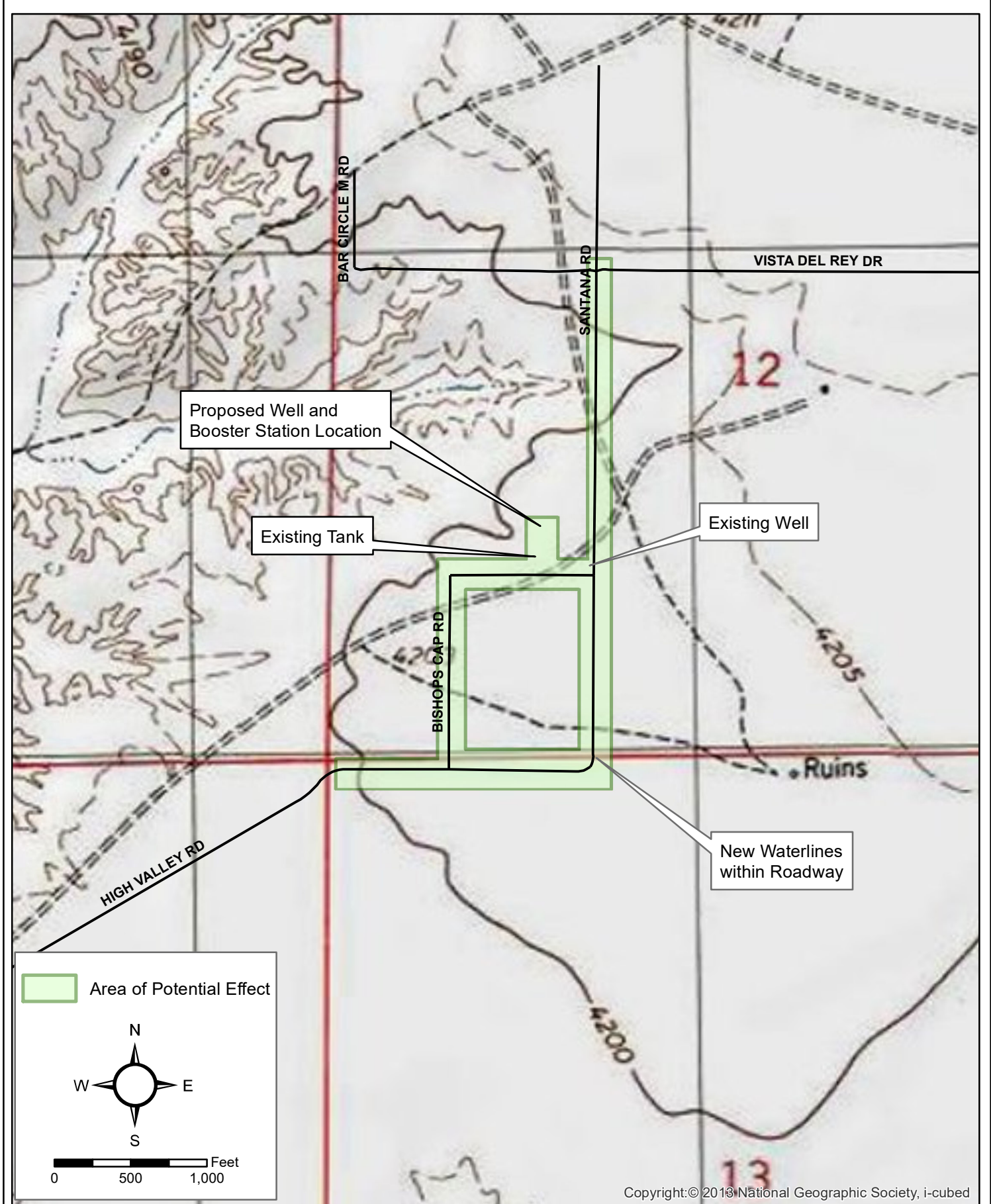


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Vicinity Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 1





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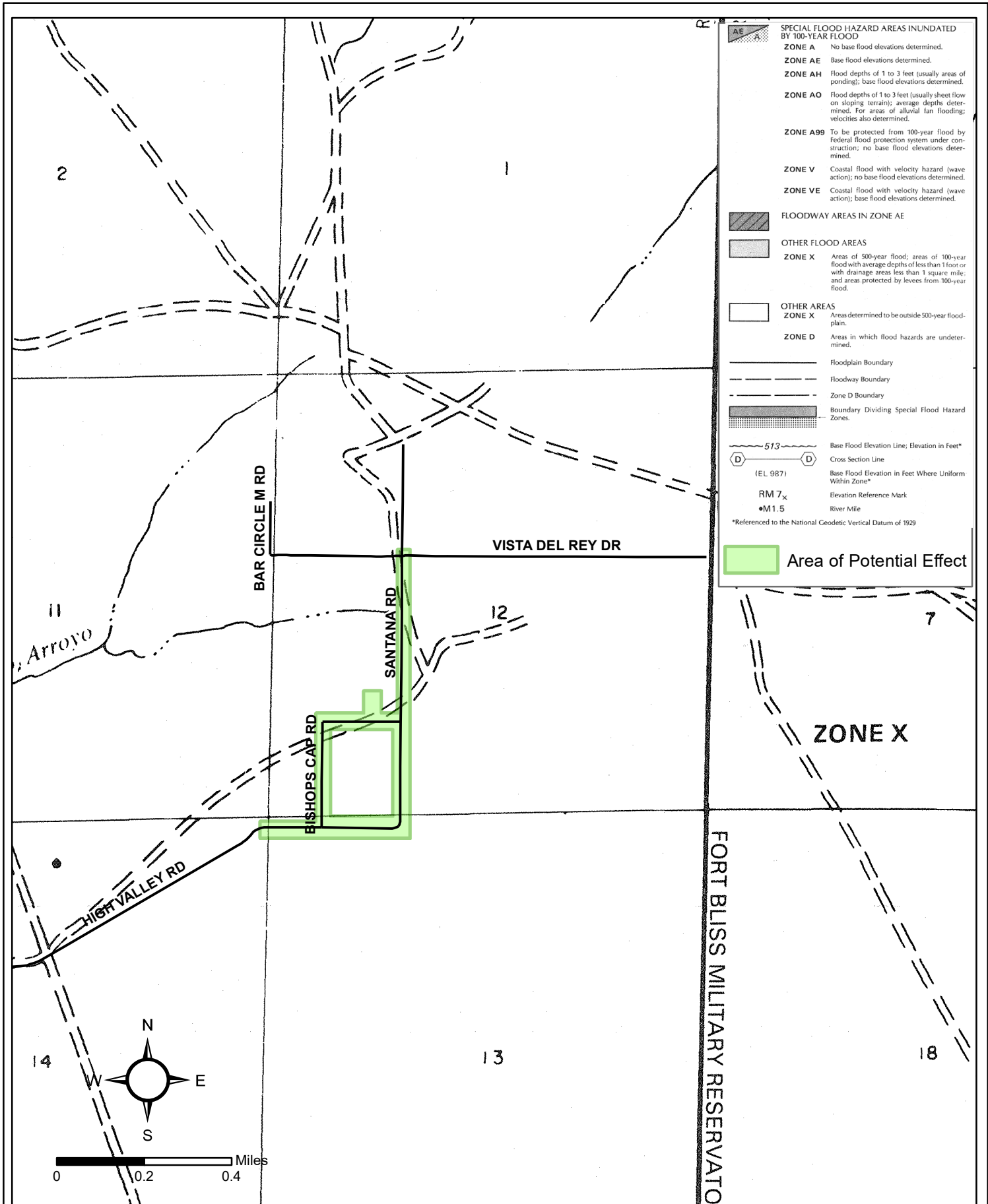


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US Topographic Map  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 2





**SPECIAL FLOOD HAZARD AREAS INUNDATED BY 100-YEAR FLOOD**

- ZONE A** No base flood elevations determined.
- ZONE AE** Base flood elevations determined.
- ZONE AH** Flood depths of 1 to 3 feet (usually areas of ponding); base flood elevations determined.
- ZONE AO** Flood depths of 1 to 3 feet (usually sheet flow on sloping terrain); average depths determined. For areas of alluvial fan flooding; velocities also determined.
- ZONE A99** To be protected from 100-year flood by Federal flood protection system under construction; no base flood elevations determined.
- ZONE V** Coastal flood with velocity hazard (wave action); no base flood elevations determined.
- ZONE VE** Coastal flood with velocity hazard (wave action); base flood elevations determined.

**FLOODWAY AREAS IN ZONE AE**

**OTHER FLOOD AREAS**

- ZONE X** Areas of 500-year flood; areas of 100-year flood with average depths of less than 1 foot or with drainage areas less than 1 square mile; and areas protected by levees from 100-year flood.

**OTHER AREAS**

- ZONE X** Areas determined to be outside 500-year floodplain.
- ZONE D** Areas in which flood hazards are undetermined.

Floodplain Boundary  
 Floodway Boundary  
 Zone D Boundary  
 Boundary Dividing Special Flood Hazard Zones

513  
 Base Flood Elevation Line; Elevation in Feet\*  
 Cross Section Line  
 (EL 987)  
 Base Flood Elevation in Feet Where Uniform Within Zone\*  
 RM 7x Elevation Reference Mark  
 •M1.5 River Mile  
 \*Referenced to the National Geodetic Vertical Datum of 1929

**Area of Potential Effect**

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FEMA FIRM Map of Proposed Service Area (Panel 3503C0800E)  
 High Valley MDWCA Preliminary Engineering Report  
 Vado, New Mexico

Figure 3

Appendix E23  
Print out of Publication



## NOTICE OF PUBLIC MEETING

### AVAILABILITY OF ENVIRONMENTAL INFORMATION DOCUMENT

#### High Valley MDWCA Water System Improvement Project, High Valley, New Mexico

**Purpose:** High Valley MDWCA intends to apply for funding from a variety of State and Federal sources (including, but not limited to, the USDA-RD and Colonias program) to complete improvements to their water system. These improvements may include the installation of a new water distribution system, new service lines and meters, new booster station, installation of an additional water source and the rehabilitation of the existing water source well and steel storage tank. The purpose of this public meeting is to present applicable laws and/regulations, to review the draft environmental information document (EID), which has been made available for download through the Souder, Miller & Associates website at [www.soudermiller.com](http://www.soudermiller.com), seek public comment, identify issues of concern, present the range of alternatives considered, and enlist public participation in development of the project plan.

**Date:** Nov. 3, 2016                      **Time:** 6:00 p.m.

**Place:** High Valley MDWCA, Lords Ranch, 230 High Valley Rd., Vado, NM 88072

**Agenda:** 6:00-6:15 p.m., review project background and purpose; 6:15-6:30 p.m., summary of EID; 6:30-7:00 p.m. public questions, answers and comments.

**NOTICE TO PERSONS WITH DISABILITIES:** If special assistance is required to participate in this public meeting, please contact the Association at least three days prior to the meeting so arrangements can be made.



Appendix E24  
Project Specific Website

