ATLAS NORTH SOLAR PROJECT

PHASE I ENVIRONMENTAL SITE ASSESSMENT

Prepared for:
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and

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September 9, 2022

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September 9, 2022

Ms. Stephanie Lauer
Environmental Permitting Manager
Atlas North, LLC
300 Spectrum Center Drive, Suite 1020
Irvine, California 92618

Subject: **Phase I Environmental Site Assessment Report Submittal – FINAL (S2)**
Atlas North Solar Development
La Paz County, Arizona

Dear Ms. Lauer,

In general accordance with AZTEC's proposal dated May 17, 2022, your email Notice to Proceed issued on May 19, 2022, and subsequent Subject Property addition and Notice to Proceed on July 8, 2022, AZTEC has performed a Phase I Environmental Site Assessment (ESA) for the Atlas North Solar Development located in La Paz County, Arizona (Subject Property). The Subject Property is located both north and south of Interstate 10 between Milepost 58.6 and 62.6, and is mostly comprised of undeveloped native desert land, with the majority of the land owned by the State of Arizona, a portion managed by the Bureau of Land Management (BLM), and a portion managed by the Bureau of Reclamation (BOR). The total estimated area that includes State land, BLM land and BOR land is 7,310 acres. The attached Phase I ESA report presents AZTEC's methodology, findings, opinions, and conclusions regarding the environmental conditions at the Subject Property.

AZTEC appreciates the opportunity to be of service to Atlas North, LLC for this project, in conjunction with the Arizona State Land Department. If you have any questions or comments, please feel free to contact me at 602.290.4774 or email me at ssutherland@aztec.us.

Respectfully,

AZTEC ENGINEERING GROUP,

Brendan A. Leach
Environmental Scientist

Steven P. Sutherland, RG, PG, CEM
Hazardous Materials Group Manager

Distribution: One electronic copy to Addressee
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EXECUTIVE SUMMARY

AZTEC Engineering Group, Inc. (AZTEC) was retained by Atlas North, LLC (ATLAS NORTH) to perform a Phase I Environmental Site Assessment (ESA) for a roughly square-shaped discontiguous portion of land referred to as 'Atlas North' (Subject Property). The Subject Property is located both north and south of Interstate 10 between Milepost 58.6 and 62.6 and is mostly comprised of undeveloped native desert land covering approximately 7,310 acres in area. The majority of the land is managed by the Arizona State Land Department (ASLD), with portions of land managed by the Bureau of Land Management (BLM) and the Bureau of Reclamation (BOR). This Phase I ESA was performed in general accordance with AZTEC's proposal to ATLAS NORTH, dated May 17, 2022, ATLAS NORTH's Notice to Proceed issued on May 19, 2022, and for a subsequent property addition the Notice to Proceed was issues on July 8, 2022.

The primary objective of this Phase I ESA is to identify, to the extent feasible pursuant to the process described in ASTM E1527-13, recognized environmental conditions (RECs), which are defined by the ASTM as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

Historical research, document review, and Subject Property reconnaissance activities were conducted between May 31, 2022 and July 29, 2022. The results of this Phase I ESA are summarized below.

The Subject Property is divided into two areas: the primary largest segment of land north of I-10, and four smaller irregularly shaped segments of land located north and south of I-10 and adjacent to Sore Finger Road. The primary segment of land is nearly totally comprised of native desert land, except for the maintained dirt road Sore Finger Road that crosses the property from the Sore Finger Road overpass and exits the north end of the Subject Property. Approximately at the center point of the Subject Property, another dirt road referred to as Connector Road exits from Sore Finger Road and continues to the northeast corner of the Subject Property, where it too exits the Subject Property. At the intersection of these two roads are corrals, presumably for grazing cattle. The corrals were made of wood fencing and there was an above-ground water storage tank and drinking troughs with water in them. No wells were identified in this location. There were no cattle present. Other miscellaneous debris was observed in this location, but there was no evidence of chemical storage or spills. The eastern edge of the Subject Property also contains another dirt road referred to as 54th Street. This dirt road enters the Subject Property from the southeast quadrant and continues to the northwest. Ultimately this road exits the north end of the Subject Property and connects to Connector Road next to the northeast corner of the Subject Property. Along this road were low-tension powerlines, and one pole-mounted transformer was observed. This transformer and the associated pole appeared to be relatively new and in good shape, and there was no evidence of leakage on the transformer or on the ground beneath the transformer. This transformer would not be anticipated to contain di-electric fluids with polychlorinated biphenyls (PCBs).

Near the southeast corner of the Subject Property was a large, depressed area. Vegetation was thicker in this depressed area, but there were no other features associated with it or other evidence of environmental concern. In discussions with Mr. Ed Green of the Arizona Department of Transportation (ADOT), who has worked with ADOT for over 50 years, he stated that there are a series of depressions like these along I-10 in the vicinity, and they were borrow pits associated with the original construction of I-10. No other features were noted in the primary segment of land.

The smaller segments of land that comprise the Subject Property near Sore Finger Road were divided by Sore Finger Road, I-10, and the Hayden-Rhodes Aqueduct (also known as the Central Arizona Project [CAP]

canal) that generally trends northwest to southeast across the Subject Property. These additional properties were also comprised of undeveloped native desert land, although the southeast quadrant contained another depressed area. Also in this area was a drinking water well (next to Sore Finger Road and I-10) that appeared to be active (owned by the ASLD). This well is powered by overhead powerlines that originate north of I-10 and cross the primary Subject Property. One of the power poles next to the well had two pole-mounted transformers. The transformers were in good shape with no evidence of leakage and no staining was observed on the ground beneath the transformers. In this vicinity of the well is a livestock drinking water trough that was full of water. Research associated with this well indicated that the well supplies water to the adjacent drinking water trough, as well as the drinking water above-ground storage tank located at the previously mentioned corrals near the center of the Subject Property. The northwest quadrant of land was located between I-10 and the CAP canal, and in this area were a series of low levees perpendicular to I-10. Discussions with Ed Green with ADOT indicated that these low levees were present to control sheet flow and flooding issues associated with I-10, and pre-date construction of the adjacent CAP canal.

In summary, no tanks, chemical containers, odors, stained soil, or other indicators of environmental concern were noted associated with any portion of the Subject Property.

For the adjacent properties, they too were also comprised primarily of native desert land, with a livestock pond located near the northeast corner of the Subject Property (it was dry), two communication towers located near the southeast corner of the Subject Property (located within small, fenced compounds), and I-10, Sore Finger Road, and the CAP canal crossing through the southern portions of the Subject Property.

In summary, no tanks, chemical containers, odors, stained soil, or other indicators of environmental concerns were noted associated with any portion of the Subject Property or the adjacent properties.

Historical records reviewed by AZTEC indicated that circa 1951 the Subject Property and adjacent properties were comprised of undeveloped native desert land, with significant changes not occurring until circa 1978 when I-10 was constructed (as was the Sore Finger Road overpass). The CAP canal was subsequently completed circa 1985, and there have been no other significant changes to present day. Review of the User and Owner questionnaires did not indicate the presence of known environmental concerns associated with the Subject Property or adjacent properties.

Based on a review of the environmental databases, no records were identified on or around the Subject Property that would be expected to be an environmental concern relative to the Subject Property.

Conclusions and Recommendations

AZTEC has completed a Phase I Environmental Site Assessment for the Subject Property in material conformance with the scope and limitations of ASTM Practice E1527-13. **No RECs, Controlled RECs (CRECs), Historical RECs (HRECs), or *De minimis* conditions were identified associated with the Subject Property or adjacent properties.** No additional assessment is recommended.

1. Introduction

1.1 Introduction

AZTEC Engineering Group, Inc. (AZTEC) was retained by Atlas North, LLC (ATLAS NORTH), to perform a Phase I Environmental Site Assessment (ESA) for a roughly square-shaped discontiguous portion of land referred to as 'Atlas North' (Subject Property). As depicted on Figure 1, the Subject Property is located both north and south of Interstate 10 (I-10) between Milepost (MP) 58.6 and 62.6 and is mostly comprised of undeveloped native desert land covering approximately 7,310 acres in area. The Subject Property consists primarily of native desert land, with the majority of the land managed by the Arizona State Land Department (ASLD), and portions of land managed by the Bureau of Land Management (BLM) and the Bureau of Reclamation (BOR). Most of the Subject Property has never had parcel numbers assigned by La Paz County, but some portions of the Subject Property near I-10 are located within assigned parcels, including Assessor Parcel Numbers (APNs) 303-41-007, 303-76-001B, 303-84-001, 303-84-002, 303-85-001, 303-86-001, and 303-86-002. These assigned parcels all show ownership by Arizona State entities. This Phase I ESA was performed in general accordance with AZTEC's proposal to ATLAS NORTH, dated May 17, 2022, ATLAS NORTH's Notice to Proceed via email issued on May 19, 2022, and for a subsequent property addition the Notice to Proceed was issues on July 8, 2022.

1.2 Purpose

The purpose of this Phase I ESA is to identify recognized environmental conditions (RECs) at the Subject Property in accordance with ASTM "*Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process E1527-13*". The term recognized environmental condition is defined by ASTM as "the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment."

As defined in ASTM E1527-13, *de minimis* conditions are not considered RECs. A *de minimis* condition is defined as "*a condition that generally does not present a threat to the human health or the environment and that generally would not be the subject of an enforcement action if brought to the attention of appropriate governmental agencies*."

Identification of RECs falls into three categories: existing RECs (as defined above); Historical RECs (HRECs); and/or Controlled RECs (CRECs):

- HREC – A HREC is defined as "*a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations [AULs], institutional controls, or engineering controls)*".

- CREC – A CREC is defined as a "*recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the*

implementation of required controls (for example, property use restrictions, activity and use limitations [AULs], institutional controls, or engineering controls)".

This report is made pursuant to the United States Environmental Protection Agency All Appropriate Inquiry (AAI) ruling into the prior ownership and uses of the Subject Property, consistent with good commercial and customary practices appropriate to a commercial purchaser or fee owner of real property, and is intended to permit the user to satisfy one of the requirements to qualify for landowner liability protection. The report was formatted for reading ease and does not follow the suggested ASTM format; however, it does include all components required to satisfy the ASTM standard.

1.3 Scope of Services

The scope of services for this project included the following:

1.3.1 Subject Property Reconnaissance

A reconnaissance survey of the Subject Property and surrounding areas to evaluate for environmental concerns associated with present conditions. The primary reconnaissance was completed on June 16, 2022, and the reconnaissance of lands later added to the Subject Property was completed on July 9, 2022. A photographic log of the reconnaissance activities is presented in Appendix A.

1.3.2 Records Review

- A review of the compliance history of the Subject Property, and of certain adjacent properties, as identified by the regulatory agency database summary and report (Appendix B).
- The historical use and development of the Subject Property and surrounding area was evaluated by reviewing one or more of the following standard historical sources, when reasonably available and useful:
  - Historical aerial photographs from reasonably available from public sources (Appendix C)
  - United States Geological Survey (USGS) topographic maps
  - Fire insurance maps (not searched for this Subject Property)
  - Historic city directories (not searched for this Subject Property)
  - 50-Year Chain of Title & Environmental Lien Search (not searched for this Subject Property)
  - Zoning and land use records, and other records (Appendix D)
  - User & Interview Questionnaires (Appendix E)
- A review of records reasonably available from appropriate federal, state, and local regulatory agencies for documented soil and/or groundwater contamination investigations (if applicable) conducted at the Subject Property and the vicinity, as defined by the ASTM standard.
- A review of information regarding the physical setting of the Subject Property (Appendix D), including:
  - The current USGS 7.-minute topographic map
  - Geology information reported by ERIS (Appendix D) and published by the Arizona Geologic Survey (AZGS, 2000)

- Soil information published by the National Resource and Conservation Service (NRCS, 2018)
- Groundwater information reported by ERIS (Appendix D) and the Arizona Department of Water Resources (ADWR, 2020)

1.3.3 Interviews and Research

The information obtained from both the User of this Phase I ESA (ATLAS NORTH) as well as from the primary landowner (ASLD) has been incorporated into the relevant report sections. Note that the BLM land was surrounded by ASLD property and was determined to be native desert land with no evidence of human interaction identified (i.e., no dirt roads, paths, evidence of development, or trash/debris noted). Other User-provided information has also been incorporated into the report, with information based on the specialized or actual knowledge regarding environmental liens, activity use limitations, relationship of the purchase price to the fair market value and known RECs. In addition, AZTEC contacted selected agencies and municipalities who may have knowledge about the Subject Property and surrounding areas (Table 1-1). Pertinent information is incorporated into the text of this report.

Table 1-1 Persons and Agencies Contacted

Agency/Affiliation	Contact Information	Date Contacted
Arizona Department of Environmental Quality (ADEQ)	http://megasearch.azdeq.gov/megasearch/	6/28/2022
Arizona Department of Water Resources (ADWR)	http://www.azwater.gov/azdwr/	6/28/2022
La Paz County Assessor	http://gis.lapazcountyaz.org/portal/apps/webappviewer/index.html?id=cb17ccc0aed140c88d27002344089041	6/24/2022
User Questionnaire	Stephanie Lauer – Atlas North, LLC	Completed 7/7/2022
Owner Interview	Ray Moore – Arizona State Land Department	Completed 7/29/2022

1.3.4 Report

This report presents the findings, opinions, and conclusions obtained during completion of the above scope of services.

1.4 Qualifications

The environmental site assessment activities described herein were conducted in accordance with generally accepted standards, practices and procedures (expressed or implied) in effect at the time of the project, relative to the All Appropriate Inquiry (as defined under the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) 42 USC Section 9601, et. Seq.). Numerous individuals were contacted for information about the Subject Property and surrounding areas (Table 1-1). Relevant information was also obtained from published sources (referenced in Section 6.0).

The project was completed by an Environmental Professional (EP) or conducted under the supervision or responsible charge of an Environmental Professional. At a minimum, the Environmental Professional was involved in planning the Subject Property reconnaissance and interviews, and reviewed and interpreted the information used in developing the conclusions. Mr. Steven Sutherland, Hazardous Materials Group Manager for AZTEC, was the designated EP for this project, and his resume is included as Appendix F.

We declare that, to the best of our professional knowledge and belief, we meet the definition of *Environmental Professional* as defined in §312.1 of 40CFR Part 312, and we have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the Subject Property. Other persons involved are qualified individuals and have the training and experience necessary to complete their assigned tasks. We have developed and performed the All Appropriate Inquiries in substantial conformance with the standards and practices set forth in 40CFR Part 312.

2. Project and Subject Property Information

2.1 Project Overview

Date of Task Order: May 19, 2022

Work Authorized by: Stephanie Lauer, Atlas North, LLC

Purpose of Phase I ESA:

The purpose of the Phase I ESA is to evaluate the Subject Property for the presence of RECs, including the presence or likely presence of hazardous substances or petroleum products, and for conditions that indicate an existing release, past release, or material threat of a release onto or into structures, air, soil, ground water, or surface water.

Planned Transaction and Proposed Subject Property Use:

This Phase I ESA was prepared for ATLAS NORTH as part of a lease property transaction, with the development of the Subject Property as a utility scale solar development.

2.2 General Subject Property Information

General information regarding the Subject Property is discussed below (see Figures 1 and 2).

Table 2-1 Subject Property Location and Information*

Address	Assessor Number	Current Subject Property Owner	Estimated Size	Use Code
No address assigned	No Assigned Parcel	Arizona State Land Department	5,960 acres	No information Available
No address assigned	No Assigned Parcel	Bureau of Land Management	640 acres	No information Available
No address assigned	No Assigned Parcel	Bureau of Reclamation	125 acres	No information Available
No address assigned	Portion of 303-41-007	Arizona Highway Department	9 acres	No information Available
No address assigned	Portion of 303-76-001B	Arizona Highway Department	9 acres	No information Available
No address assigned	Portion of 303-84-001	State of Arizona	9 acres	No information Available
No address assigned	303-84-002	State of Arizona	404 acres	No information Available

Address	Assessor Number	Current Subject Property Owner	Estimated Size	Use Code
No address assigned	Portion of 303-85-001	State of Arizona	60 acres	No information Available
No address assigned	Portion of 303-86-001	Arizona Highway Department	2 acres	No information Available
No address assigned	Portion of 303-86-002	State of Arizona	92 acres	No information Available

* Information as presented from the La Paz County Assessor.

Table 2-2 Subject Property Utility Connections

Utility Type	Provider
Water	None
Sewage	None
Electric	Arizona Public Service
Gas	El Paso Natural Gas Company

2.3 Subject Property Reconnaissance Information

Date of visit: June 16 and July 9, 2022

Personnel: Steve Sutherland, AZTEC Hazardous Materials Group Manager
Brendan Leach, AZTEC Environmental Scientist

Escorts: None

Methodology: Drove all roads crossing the Subject Property, followed fence lines, evaluated non-native features, and walked portions of the Subject Property north and south of I-10. Observed adjacent properties from the Subject Property and existing roadways. Note that BOR lands were observed through a fence from adjacent property.

Inaccessible Areas: No

Limiting Conditions: None

2.4 Current Subject Property Use

As depicted on Figures 1 and 2, the Subject Property is divided into two areas: the primary largest segment of land north of I-10, and four smaller irregularly shaped segments of land located north and south of I-10 and adjacent to Sore Finger Road. The primary segment of land is nearly totally comprised of native

desert land, except for the maintained dirt road Sore Finger Road that crosses the property from the Sore Finger Road overpass and exits the north end of the Subject Property. Approximately at the center point of the Subject Property, another dirt road referred to as Connector Road exits from Sore Finger Road and continues to the northeast corner of the Subject Property, where it too exits the Subject Property. At the intersection of these two roads are corrals, presumably for grazing cattle. The corrals were made of wood fencing and there was an above-ground water storage tank and drinking troughs with water in them. No wells were identified in this location. There were no cattle present. Other miscellaneous debris was observed in this location, but there was no evidence of chemical storage or spills. The eastern edge of the Subject Property also contains another dirt road referred to as 54th Street. This dirt road enters the Subject Property from the southeast quadrant and continues to the northwest. Ultimately this road exits the north end of the Subject Property and connects to Connector Road next to the northeast corner of the Subject Property. Along this road were low-tension powerlines, and one pole-mounted transformer was observed. This transformer and the associated pole appeared to be relatively new and in good shape, and there was no evidence of leakage on the transformer or on the ground beneath the transformer. This transformer would not be anticipated to contain di-electric fluids with polychlorinated biphenyls (PCBs).

Near the southeast corner of the Subject Property was a large, depressed area (Figure 2). Vegetation was thicker in this depressed area, but there were no other features associated with it or other evidence of environmental concern. In discussions with Mr. Ed Green of the Arizona Department of Transportation (ADOT), who has worked with ADOT for over 50 years, he stated that there are a series of depressions like these along I-10 in the vicinity, and they were borrow pits associated with the original construction of I-10. No other features were noted in the primary segment of land.

As shown on Figure 2, the smaller segments of land that comprise the Subject Property near Sore Finger Road were divided by Sore Finger Road, I-10, and the Hayden-Rhodes Aqueduct (also known as the Central Arizona Project [CAP] canal) that generally trends northwest to southeast across the Subject Property. These additional properties were also comprised of undeveloped native desert land, although the southeast quadrant contained another depressed area. Also in this area was a drinking water well (next to Sore Finger Road and I-10) that appeared to be active. This well is powered by overhead powerlines that originate north of I-10 and cross the primary Subject Property. One of the power poles next to the well had two pole-mounted transformers. The transformers were in good shape with no evidence of leakage and no staining was observed on the ground beneath the transformers. In this vicinity of the well is a livestock drinking water trough that was full of water. Research associated with this well (discussed further in Section 3.1.6 of this report) indicated that the well supplies water to the adjacent drinking water trough, as well as the drinking water above-ground storage tank located at the previously mentioned corrals near the center of the Subject Property. The northwest quadrant of land was located between I-10 and the CAP canal, and in this area were a series of low levees perpendicular to I-10. Discussions with Ed Green with ADOT indicated that these low levees were present to control sheet flow and flooding issues associated with I-10, and pre-date construction of the adjacent CAP canal.

In summary, no tanks, chemical containers, odors, stained soil, or other indicators of environmental concern were noted associated with any portion of the Subject Property. Photographs of the Subject Property and vicinity are provided in Appendix A. General observations required by the ASTM standard practice are summarized in Section 3.2. A glossary of terms is included as Appendix G.

2.5 Current Adjacent Property Use

As depicted on Figure 2, adjacent properties were also comprised primarily of native desert land, with a livestock pond located near the northeast corner of the Subject Property (it was dry), two communication

towers located near the southeast corner of the Subject Property (located within small, fenced compounds), and I-10, Sore Finger Road, and the CAP canal crossing through the southern portions of the Subject Property. No tanks, chemical containers, odors, stained soil, or other indicators of environmental concerns were noted associated with the properties adjacent to the Subject Property.

3. Subject Property Description

3.1 Physical Setting

The following description of the Subject Property is based on field observations and review of relevant information gathered from Google Earth. The center of the Subject Property is located at a general latitude and longitude of 33.6162º North x -113.5064º West in La Paz County, Arizona. The Subject Property location is depicted on Figure 1.

3.1.1 Topography

The topography of the Subject Property is comprised of hilly areas near the north-central and east-central portions of the area, with a relatively flat area in-between with a general southwestern gradient (Appendix C).

3.1.2 Elevation

The elevation at the Subject Property ranges from 1,777 feet above mean sea level (amsl) at the northern hilly area, to 1,456 feet amsl at the corral near the center of the Subject Property, to 1,387 feet amsl at the extreme southwest corner of the Subject Property (Appendix C).

3.1.3 Surficial Soil

Surficial soils located across the Subject Property consist of the Gunsight family–Pinamt Complex (0-15% slopes), Denure-Pahaka-Growler Complex (1-3% slopes), Momoli-Carrizo Family Complex (1-5% slopes), Beeline-Laposa Complex (2-45% slopes), Hyder-Rock Outcrop Complex (5-45% slopes), Dateland-Denure Complex (0-2% slopes), Gunsight Family-Rillito Complex (1-10% slopes), Mohall-Contine Complex (1-5% slopes), Wintersburg-Laveen Complex (0-3% slopes), and the Schenco-Chuichu-Rock Outcrop Complex (3-45% slopes) (NRCS, 2020) (Appendix C). Selected soil descriptions are described in the following paragraphs.

<u>Gunsight family–Pinamt Complex:</u>

Gunsight soils are deep and well drained Typically, they have a light brown very gravelly loam or sandy loam surface layer about 2 inches thick and the subsoil is pink very gravelly loam about 8 inches thick. From 10 to 60 inches, the underlying material is white and pinkish gray very gravelly loam or sandy loam. Gunsight soils occur on old fan terraces with slopes of 0-15%. These soils have lo available water capacity, moderately rapid permeability and are moderately alkaline and strongly calcareous throughout. The profile generally contains more than 50% gravel and cobble and the substratum may be intermittently cemented by calcium carbonate. Runoff is medium and the hazard of erosion is slight.

Pinamt soils are deep and well drained. They typically have light brown very gravelly or very cobbly sandy loam or loam surface layers about 6 inches thick, and yellowish red very gravelly sandy clay loam subsoils about 30 inches thick over very pale brown calcareous very gravelly sandy loam substrata to 60 inches or more. Pinamt soils occur on fan terraces with slopes of 0-20%. Available water capacity is low and permeability is moderately slow. The soils are moderately alkaline throughout and are slightly calcareous in the surface layers. They have a zone of high lime in the lower horizons. Surface runoff is slow to medium and the hazard of erosion is slight.

Denure-Pahaka-Growler Complex:

Danure soils consists of very deep, well drained and somewhat excessively drained soils that formed in alluvium. Denure soils are on alluvial fans, relict basin floors, stream terraces, or fan piedmonts and have slopes of 0-8% with depths of 0-60 inches. Light brown to brown gravelly sandy loam. The soils are slight to moderately alkaline throughout and are slightly calcareous in the surface layers. Surface runoff is somewhat excessively drained; runoff negligible to low; moderately rapid permeability.

Pahaka soils consists of very deep, well drained soils that formed in fan alluvium. Pahaka soils are on fan terraces with slopes ranging from 0-5%. They typically have light yellowish-brown loam, dark yellowish brown from 0-4 inches. From 4 to 46 inches the soil is reddish yellow fine sandy loam. From 46 to 60 inches the soil is pink, strongly cemented gravelly sandy clay loam. The soils are moderately alkaline throughout and are slightly calcareous in the surface layers. Surface runoff is well drained; runoff is slow; moderately rapid permeability above and moderately slow in the buried horizon.

Growler soils consist of very deep, somewhat excessively drained, saline soils formed in fan alluvium from mixed rocks. Growler soils are on fan terraces and have slopes of 0-5%. They typically have light brown extremely gravelly fine sandy loam on the surface layer. From 2-15 inches the soil is light reddish brown, gravelly and fine sandy loam. Between 5 and 26 inches the soil is yellowish red gravelly sandy loam. From 26 to 43 inches, the soil is light brown very gravelly sandy loam. Between 43 and 55 inches, the soil is brown extremely gravelly loamy sand. And between 55 and 60 inches the soil is reddish brown very gravelly sand. The soil is somewhat excessively drained; slow to medium runoff; moderate permeability.

Momoli-Carrizo Family Complex:

Momoli soils consist of very deep, somewhat excessively drained soils formed in fan alluvium and eolian deposits. Momoli soils are on stream terraces and fan terraces and have slopes of 0-15%. From 0 to 26 inches this soil is light brown, very gravelly fine sandy loam. From 34 to 60 inches the soil is light brown very gravelly loamy sand. The soils are somewhat excessively drained; slow to medium runoff; moderately rapid permeability. Runoff is slow to medium, and the hazard of erosion is slight.

Carrizo soils are deep and excessively drained. Typically, they have a brown surface layer about 15 inches thick. From 15 to 60 inches, the underlying material is light grayish brown very gravelly sand. Carrizo soils occur on floodplains and alluvial fans with slopes of 0-5%. These soils have very low available water capacity and very rapid permeability. They are moderately alkaline and calcareous throughout. Runoff is slow and the hazard of erosion is slight.

Beeline-Laposa Complex:

Beeline soils consists of shallow and very shallow, well drained soils that formed in mixed alluvium. Beeline soils are on fan terraces and hillslopes and have slopes of 3-45%. From 0-7 inches the soil is light reddish brown very gravelly sandy loam. From 7-9 inches the soil isa pink sandy loam. Between 9 and 60 inches the soil is a pink weakly cemented sandy conglomerate. Beeline soils have moderately rapid permeability Runoff is slow and the hazard of erosion is slight.

The Laposa soils consist of moderately deep, somewhat excessively drained soils formed in slope alluvium from schist, granite, gneiss, rhyolite and eolian deposits. Laposa soils are on hills and mountains and have slopes of about 10-75%. From 0-32 inches, the soil is yellowish brown extremely gravelly loam. At 32

inches the soil turns into a hard granite. The runoff is rapid; moderate permeability the hazard of erosion is slight.

Hyder-Rock Outcrop Complex:

The Hyder soils consist of very shallow and shallow, somewhat excessively drained soils that formed in alluvium from rhyolite and related volcanic rocks. Hyder soils are on mountains and hills and have slopes of 1-70%. From 0-7 inches the soil is a light brown extremely gravelly sandy loam. Below 7 inches the soil turns to rhyolite. These soils have high runoff, with moderate or moderately rapid permeability.

Dateland-Denure Complex:

Dateland soils consist of very deep, well drained soils with moderate permeability formed in stream or fan alluvium and eolian deposits. Dateland soils are on alluvial fans, stream terraces, fan piedmonts, or relict basin floors. Slopes are 0-8%. From 0-3 inches the soil is light brown fine sandy loam. Between 2 to 40 inches the is a reddish yellow very fine sandy loam. From 40-54 inches the soil is a reddish yellow gravelly coarse sandy loam. Between 54 to 60 inches the soil is a reddish yellow loam.

Denure soils consists of very deep, well drained and somewhat excessively drained soils that formed in alluvium. Denure soils are on alluvial fans, relict basin floors, stream terraces, or fan piedmonts and have slopes of 0-8% with depths of 0-60 inches. Light brown to brown gravelly sandy loam. The soils are slight to moderately alkaline throughout and are slightly calcareous in the surface layers. Surface runoff is somewhat excessively drained; runoff negligible to low; moderately rapid permeability.

Gunsight Family-Rillito Complex:

Gunsight soils are deep and well drained Typically, they have a light brown very gravelly loam or sandy loam surface layer about 2 inches thick and the subsoil is pink very gravelly loam about 8 inches thick. From 10 to 60 inches, the underlying material is white and pinkish gray very gravelly loam or sandy loam. Gunsight soils occur on old fan terraces with slopes of 0-15%. These soils have lo available water capacity, moderately rapid permeability and are moderately alkaline and strongly calcareous throughout. The profile generally contains more than 50% gravel and cobble and the substratum may be intermittently cemented by calcium carbonate. Runoff is medium and the hazard of erosion is slight.

Rillito soils are deep and well drained. They typically have a thin, light brown gravelly sandy loam surface layer about 3 inches thick and a pink gravelly subsurface layer over underlying materials of white and pinkish gray gravelly loam, sandy loam or loamy sand from about 12 to 60 inches. Rillito soils occur on nearly level to gently undulating fan terraces with slopes of 0-3%. These soils have low to moderate available water capacity and moderate or moderately rapid permeability. They are moderately alkaline and strongly calcareous throughout. The substratum averages 15 to 35% gravel and hard lime nodules that may be weakly cemented by calcium carbonate. Runoff is slow to medium, and the hazard of erosion is slight.

Mohall-Contine Complex:

Mohall loam is a deep and well-drained soil type. Mohall soils have a reddish-yellow or light brown sandy loam, loam or clay loam surface layer that is about 10 inches thick. The subsoils include reddish brown or brown clay loam about 30 inches thick over brown loam or sandy loam to more than 60 inches. Mohall soils occur on nearly level to gently undulating fan terraces with slopes of 0-5%. These soils have high

available water capacity, moderately slow permeability. These soils are moderately alkaline throughout and have high lime accumulation below 20 or 24 inches. Runoff is slow and the hazard of erosion is slight.

Contine soils consist of very deep, well drained, medium runoff with slow permeability soils formed in alluvium from mixed sources. Contine soils are on fan terraces and basin floors and have slopes of 0-10%. From 0-12 inches the soil is a brown clay loam. Between 12-25 inches, the soil is a reddish-brown clay. From 25-60 inches, the soil is a light reddish brown clay loam. The soil is also moderately alkaline.

Wintersburg-Laveen Complex:

The Wintersburg soils consists of very deep, well drained soils that formed in mixed alluvium weathered from granite, gneiss, andesite, tuff and basalt with some influence from limestone. Wintersburg soils are on stream and fan terraces and have slopes of 0-2%. From 0-12 inches the soil is a brown sandy loam. Between 12 and 18 inches, the soil is a light yellowish brown sandy loam. From 18 to 60 inches, is a very pale brown loam. These soils are moderately alkaline.

Laveen soils are deep and well drained. Typically, they have a pale brown loam surface layer about 13 inches thick underlain by light brown loam with common soft lime masses about 19 inches thick. The underlying material from 32 to 60 inches is light brown and pink loam with many soft and hard lime nodules. Laveen soils occur on stream terraces and low fan terraces with slopes ranging from 0-3%. These soils have high available water capacity and moderate permeability. They are moderately alkaline and calcareous throughout. Surface runoff is slow, and the hazard of erosion is slight.

Schenco-Chuichu-Rock Outcrop Complex:

Schenco soils consist of very shallow and shallow, well drained soils, medium to rapid runoff and moderate permeability formed in slope alluvium. Schenco soils are on hillslopes and have gradients of 3-60%. From 0-2 inches the soil is a reddish brown extremely channery loam. Between 2 and 5 inches, the soil is a light reddish brown very channery loam. From 5-11 inches, the soil is a light reddish brown very channery loam. And from 11 to 22 inches, the soil is a partially weathered schist. These soils are moderately to strongly alkaline throughout.

Chuichu soils consists of shallow, well drained soils formed in mixed slope alluvium and residuum from schist. Chuichu soils are on hills with slopes of 15-45%. From 0-2 inches the soil is a brown very channery sandy loam. Between 2 and 19 inches the soil is yellowish red very channery loam. From 19 to 25 inches the soil becomes a weathered schist and then becomes a schist from 25 inches and lower. The soil is neutral throughout.

3.1.4 Geology

Based on information reviewed by AZTEC, the Subject Property lies within the southwestern United States' Basin and Range Physiographic Province, consisting of broad alluvial basins dissected by small mountain ranges. The Basin and Range Province is bounded to the north by the Central Highlands Province, which includes the Colorado Plateau and associated Mogollon Rim. Landforms present within the Basin and Range Province consist of predominantly northwest-southeast trending, block-faulted mountain ranges, separated by broad, gently sloping alluvial basins, which have been in-filled with alluvial sediments. The alluvial sediments are primarily derived from the adjacent block-faulted Precambrian through Tertiary igneous, sedimentary, and metamorphic mountain ranges.

Geology at the Subject Property surface consists of Holocene surficial deposits (0-10 Ka), Late and middle Pleistocene surficial deposits (10-750 Ka), and Jurassic granitic rocks (150-180 Ma).

Holocene surficial deposits (0-10 Ka) are unconsolidated deposits associated with modern fluvial systems. This unit consists primarily of fine-grained, well-sorted sediment on alluvial plains, but also includes gravelly channel, terrace, and alluvial fan deposits on middle and upper piedmonts (AZGS, 2000).

Late and Middle Pleistocene surficial deposits (10-750 Ka) are unconsolidated to weakly consolidated alluvial fan, terrace, and basin-floor deposits with moderate to strong soil development. Fan and terrace deposits are primarily poorly sorted, moderately bedded gravel and sand, and basin-floor deposits are primarily sand, silt, and clay (AZGS, 2000).

Jurassic granitic rocks are comprised of granite to diorite and are locally foliated and locally alkalic; and may include Triassic granitoids (AZGS, 2000).

3.1.5 Nearest Surface Water Body

There are no naturally occurring surface water bodies near the Subject Property.

3.1.6 Groundwater Conditions - Wells

Review of well information from the Arizona Department of Water Resources (ADWR) identified the presence of one well registration on the Subject Property and no other well registrations within a quarter mile of the Subject Property boundaries. The well on the Subject Property is well registration 55-547147, and is the previously mentioned well located south of I-10 and east of Sore Finger Road. This is listed as an exempt well, and is owned by the ASLD. This well has a depth of 410 feet below ground surface (bgs) and a depth to water of 380 feet bgs.

No information was provided indicating groundwater flow direction in the vicinity of the Subject Property; however, groundwater would be anticipated to flow to the southwest along the topographical slope of the area.

3.1.7 Wetlands

Areas considered to be wetlands are characterized by the presence of three positive indicators, including hydrophytic vegetation, hydric soils, and field indicators of wetland hydrology. Areas characterized by all three of these criteria were not observed during the Subject Property reconnaissance visit. According to information provided by the National Wetlands Inventory (NWI), the NWI Electronic Data Coverage database indicates that the Subject Property is not located in a Riverine habitat (Appendix C).

3.1.8 Flood Zones

Part of the research conducted by the Federal Emergency Management Agency (FEMA) includes a review of current FEMA Flood Insurance Rate Maps (FIRM) for the Subject Property and vicinity (Appendix C). The Subject Property and surrounding area were not found to be located within a 100-year flood zone.

3.2 General Subject Property Environmental Conditions

During the Subject Property visits conducted on June 16 and July 9, 2022, Subject Property uses and conditions as defined by the ASTM Standard were noted (Table 3-1). Where observations indicated the potential presence of RECs, additional discussion is presented in the sections immediately following the table.

Table 3-1 Summary of General Subject Property Observations

Potential Environmental Concern	Observed Present?	Section for Additional Information	Potential Environmental Concern	Observed Present?	Section for Additional Information
Hazardous substances and petroleum products use	No	--	Drains and Sumps	No	--
Hazardous substances and petroleum product containers	No	--	Pits, Ponds and Lagoons	No	--
Storage Tanks	No	--	Exterior Stained Soil or Pavement	No	--
Odors	No	--	Stressed Vegetation	No	--
Pools of Liquid	No	--	Areas of fill or solid waste disposal	No	--
Drums	No		Unidentified substance containers	No	--
Polychlorinated Biphenyls	No	--	Wastewater or Storm water	No	--
Heating and Cooling	No	--	Wells/Drywells	Yes	3.2.1
Stains and Corrosion	No	--	Septic System	No	--

3.2.1 Wells/Drywells

One exempt drinking water well was identified on the Subject Property, located south of I-10 and east of Sore Finger Road. The presence of this well is not an environmental concern relative to the Subject Property.

3.3 On-site Records

The Subject Property is comprised of native desert land and is not developed. Therefore, there are no On-site records.

3.4 Subject Property History

The following resources were used in developing the summary Subject Property history (Table 3-2):

- Historical aerial photographs provided by ERIS, from selected years between 1951 and 2019
- USGS topographic maps from selected years between 1954 and 1990 (inclusively)
- Historical city directories were not searched for this Subject Property
- Fire insurance maps were not searched for this Subject Property
- Tax assessor information, provided by the La Paz County Assessor's Office
- Zoning/Subject Property usage and land use records, provided by the La Paz County Assessor's Office
- Subject Property reconnaissance
- Interviews

A complete list of references is included as Section 6.0.

Table 3-2 Subject Property Past Use and History

From	To	Subject Property Past Use and History	Source(s)
Circa 1951	Circa 1985	Circa 1951, the Subject Property was undeveloped, although 54th Street was present. Circa 1960, the corral is present, as well as the alignment of Sore Finger Road and Connector Road. Circa 1978, I-10 is present, as is the Sore Finger Road overpass, various borrow pits, and the perpendicular levees along I-10.	Topo Maps, Aerial Photographs
Circa 1985	Present Day	Circa 1985, the CAP canal is now present. No other changes to present day.	Topo Maps, Aerial Photographs

The ASTM Standard requires that the Subject Property use be documented to 1940, or first developed use, whichever is earlier. AZTEC documented that the property was undeveloped circa 1951, and since circa 1960 the property has variously been used as rangeland. Therefore, no data gaps exist with regards to this requirement.

3.5 Fire Insurance Maps

Sanborn Fire Insurance Maps contain information relating to past uses of individual structures, location of fuel or chemical tanks, and storage of other potentially toxic substances. Sanborn maps typically cover

higher population areas that were under use for industrial purposes between the 1880's and the mid 1960's. AZTEC did not search for Sanborn maps since we were not anticipating coverage.

3.6 Aerial Photographs

AZTEC reviewed historical aerial photographs of the Subject Property and vicinity from a report prepared by ERIS on June 7, 2022 (ERIS, 2022c, Appendix B), and also reviewed selected aerial photography from Google Earth as supplementary information. Aerial photographs were provided from the dates of 1951 to 2019. As previously described, development was very limited and no RECs or environmental concerns were noted from the aerial photograph review.

3.7 Topographic Maps

AZTEC reviewed historical topographic maps of the Subject Property and vicinity from the US Geological Survey, with topographic maps available from 1954, 1958, 1961, 1969, 1954, 1958, 1961, 1969, 1984 and 1990 on the USGS website and from 1963, 1967, 1990, 2014 and 2018 on the historicalaerials.com website. The topographic maps only depicted dirt roads crossing the Subject Property. No RECs or environmental concerns were noted from the topographic map review.

3.8 City Directories

AZTEC did not search City Directories for this property as there were no street addresses assigned to the parcels that comprise the Subject Property or adjacent properties.

3.9 50-year Chain of Title & Environmental Lien Search

AZTEC did not obtain a 50-year Chain of Title for the Subject Property as the Subject Property ownership remains with various state and federal entities (ASLD, BLM, and BOR). According to the User Questionnaire, no environmental liens were identified for the Subject Property, and would not be anticipated to be found based on the current and past uses of the Subject Property.

3.10 Interviews

In completing this Phase I ESA, Stephanie Lauer of Atlas North, LLC, provided a completed User Questionnaire, and as part of the interview process an Owner Questionnaire was completed by Ray Moore of the ASLD (as primary landowners). AZTEC also contacted selected state and/or local government officials and individuals who may have knowledge about the Subject Property (Table 1-1). Pertinent information regarding the interviews conducted is discussed below. Copies of the questionnaires are provided in Appendix E.

3.10.1 Owner Interviews

The Subject Property is primarily owned by the ASLD. Review of the completed questionnaire indicated that there were no environmental concerns noted for the Subject Property and there has never been any development.

3.10.2 Previous Environmental Reports

No other documents were presented for review.

3.10.3 State and/or Local Government Official Interviews

3.10.3.1.1 La Paz County

No records were identified.

3.10.3.2 Arizona Department of Environmental Quality (ADEQ)

Per online research using the applicable parcel numbers (since there were no assigned addresses). A majority of the Subject Property did not have an assigned parcel nor address. A review of ADEQ's 'megasearch' website did not identify any records for the Subject Property.

3.10.4 User-Supplied Information

The User of this report supplied information to AZTEC regarding the Subject Property and the planned transaction (Appendix E). A summary of the information is provided in Table 3-3 below.

Table 3-3 User Supplied Information

User Question	User Response and Provided Information
What is the purpose of the Phase I ESA? Is it for a loan?	Requirement of the Arizona State Land Department. Not for a loan.
What is the planned use of the Site?	Renewable energy facility
Did a search of recorded land title records identify any environmental liens filed or recorded against the Site under federal, tribal, state, or local law?	No.
Did a search of recorded land title records identify any activity use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls the Site under federal, tribal, state, or local law?	No.
Do you have any specialized knowledge or experience related to the Site or nearby properties?	No.
Does the purchase price for this property reasonably reflect the fair market value of the Site? Note that this question does not require an appraisal of the property, but is based on the experience of the user.	No.

User Question	User Response and Provided Information
If you answered "no" to the above question, have you considered whether the lower purchase price is because contamination is known or believed to be present at the Site?	Not Applicable.
Do you know the past uses of the Site?	Rangeland.
Do you know of specific chemicals that are present or once were present at the Site?	No.
Do you know of spills or other chemical releases that have taken place at the Site?	No.
Do you know of any environmental cleanups that have taken place at the Site?	No.
Based on your knowledge and experience related to the Site, are there any obvious indicators that point to the presence or likely presence of releases at the Site?	No.

3.11 Records Review

AZTEC conducted a review of selected regulatory lists published by state and federal regulatory agencies. The listings were supplied by ERIS, Inc. (ERIS), and the listings were searched for facilities or incidences at distances in general accordance with ASTM guidelines. For this report, AZTEC provided the specific boundaries of the Subject Property to ERIS, which then used the Subject Property boundaries to calculate the ASTM search distances used for the database search. Please note that regulatory listings are limited and include only those facilities that are known to the regulatory agencies at the time of publication to be contaminated, in the process of evaluation for potential contamination, or having complied with agency requested submittals (i.e., underground storage tank registration, hazardous material usage, storage, and disposal, etc.). ERIS provided ASTM Standard suggested lists and where applicable, some Non-ASTM Standard lists. Only those Non-ASTM Standard properties interpreted to potentially impact the Subject Property are discussed within this report.

A copy of the regulatory database search obtained and reviewed for this project, and a plotted map of the regulated facilities prepared by ERIS is included in Appendix B to this report. The release date from the Federal, State, or local entity for each reviewed list is also included with the ERIS document, and is subject to their limitations and disclaimers, which are described within the document. Detailed descriptions of each database are also included in the document.

Based upon the estimated southwest groundwater flow direction, adjacent properties located to the northeast of the Subject Property would be considered upgradient of the Subject Property relative to flow.

It is not possible for either AZTEC or ERIS to verify the accuracy or completeness of information contained in these databases. However, the use of and reliance on this information is a generally accepted practice in the conduct of environmental due diligence. Environmental record sources required by the ASTM

standard, and included in AZTEC's review, are listed below in Table 3-4. Additional record sources outside of ASTM requirements are provided in Table 3-5. Findings are discussed in the paragraphs following the tables. A glossary of terms in included in Appendix G. Note that reference to 'PO' is for 'site-only' records.

Table 3-4 Standard Environmental Record Sources

Environmental Record	Search Distance (Miles)	No. of Sites Identified
FEDERAL LISTINGS		
Formerly Utilized Sites Remedial Action Program (DOE FUSRAP)	1.0	0
National Priority List (NPL)	1.0	0
Priority National Priority List (Proposed NPL)	1.0	0
National Priority List (Deleted NPL)	0.5	0
SEMS List 8R Active Site Inventory (SEMS)	0.5	0
Inventory of Open Dumps, June 1985 (ODI)	0.5	0
Sems List 8R Archive Sites (SEMS Archive)	0.5	0
Comprehensive Environmental Response, Compensation and Liability Information System (CERCLIS)	0.5	0
EPA Report on the Status of Open Dumps on Indian Lands (IODI)	0.5	0
CERCLIS – No Further Remedial Action Planned (CERCLIS NFRAP)	0.5	0
CERCLIS Liens (CERCLIS LIENS)	PO	0
RCRA CORRACTS-Corrective Action (RCRA CORRACTS)	1.0	0
RCRA non-CORRACTS TSD Facilities (RCRA TSD)	0.5	0
RCRA Large Quantity Generator List (RCRA LQG)	0.25	0
RCRA Small Quantity Generator List (RCRA SQG)	0.25	0
RCRA Very Small Quantity Generator List (RCRA VSQG)	0.25	0
RCRA Non-Generators (RCRA NON-GEN)	0.25	0
Federal Engineering Controls-ECs (FED ENG)	0.5	0
Federal Institutional Controls-ICs (FED INST)	0.5	0
Land Use Control Information System (LUCIS)	0.5	0
Emergency Response Notification System (ERNS 1982 TO 1986)	PO	0
Emergency Response Notification System (ERNS 1987 TO 1989)	PO	0
Emergency Response Notification System (ERNS)	PO	0
The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfields Database (FED BROWNFIELDS)	0.5	0

Environmental Record	Search Distance (Miles)	No. of Sites Identified
FEMA Underground Storage Tank Listing (FEMA UST)	0.25	0
Facility Response Plan (FRP)	0.25	0
Historical Gas Stations (HIST GAS STATIONS)	0.25	0
Petroleum Refineries (REFN)	0.25	0
Petroleum Product and Crude Oil Terminals (BULK TERMINAL)	0.25	0
LIEN on Property (SEMS LIEN)	PO	0
Superfund Decision Documents (SUPERFUND ROD)	1.0	0
STATE LISTINGS		
Waste Program Remedial Projects – Superfund & DOD (SHWS)	1.0	0
CERCLIS Information Data System (SHWS ACIDS)	1.0	0
Water Quality Assurance Revolving Fund Sites (WQARF)	1.0	0
Delisted WQARF, Superfund, DOD (DELISTED SUPERFUND)	1.0	0
Directory of Solid Waste Facilities (SWF/LF)	0.5	0
Leaking Underground Storage Tanks (LUST)	0.5	0
Delisted Leaking Underground Storage Tanks (DELISTED LUST)	0.5	0
Underground Storage Tanks List (UST)	0.25	0
Aboveground Storage Tanks (AST)	0.25	0
Exemption Certificate Renewals (AST2)	0.25	0
Delisted Storage Tanks List (DELISTED TANKS)	0.25	0
Environmental Use Restriction Sites List (AUL)	0.5	0
Azurite Database (AZURITE)	0.5	0
Voluntary Remediation Program (VCP)	0.5	0
Brownfields Tracking System (BROWNFIELDS)	0.5	0
TRIBAL LISTINGS		
Leaking Underground Storage Tanks on Indian Lands (INDIAN LUST)	0.5	0
Underground Storage Tanks on Indian Lands (INDIAN UST)	0.25	0
Delisted Tribal Leaking Storage Tanks (DELISTED ILST)	0.5	0
Delisted Tribal Underground Storage Tanks (DELISTED IUST)	0.25	0

#PO = Property Only

The ASTM E1527-13 standard also provides for review and analysis of additional environmental record sources (generally provided by ERIS) at the discretion of the environmental professional. Relevant factors in determining whether additional environmental records sources should be reviewed include, but are not limited to:

- The completeness of data provided by standard environmental record sources
- Whether additional environmental records sources are reasonably ascertainable
- Whether additional environmental record sources are useful, accurate, and complete in light of the records review objectives, and
- Whether additional environmental record sources are customarily obtained pursuant to the type of commercial real estate transaction involved.

Table 3-5 describes the additional record sources and their typical search distances.

Table 3-5 Additional Environmental Record Sources

Environmental Record	Search Distance (Miles)	No. of Sites Identified
FEDERAL LISTINGS		
PFOA/PFOS Contaminated Sites (PFAS NPL)	0.5	0
Facility Registry Service/Facility Index (FINDS/FRS)	PO	0
Toxics Release Inventory (TRI) Program (TRIS)	PO	0
Perfluorinated Alkyl Substances (PFAS) Releases (PFAS TRI)	0.5	0
Perfluorinated Alkyl Substances (PFAS) Water Quality (PFAS WATER)	0.5	0
Hazardous Materials Information Reporting System (HMIRS)	0.125	0
National Clandestine Drug Labs (NCDL)	0.125	0
Toxic Substances Control Act (TSCA)	0.125	0
Hist TSCA (HIST TSCA)	0.125	0
FFTS Administrative Case Listing (FTTS ADMIN)	PO	0
FFTS Inspection Case Listing (FFTS INSP)	PO	0
Potentially Responsible Parties List (PRP)	PO	0
State Coalition for Remediation of Drycleaners (SCRD DRYCLEANER)	0.5	0
Integrated Compliance Information System (ICIS)	PO	0
Drycleaner Facilities (FED DRYCLEANERS)	0.25	0
Delisted Drycleaner Facilities (DELISTED FED DRY)	0.25	0
Formerly Used Defense Sites (FUDS)	1.0	**1**
Former Military Nike Missile Sites (FORMER NIKE)	1.0	0
PHMSA Pipeline Safety Flagged Incidents (PIPELINE INCIDENT)	PO	0
Material Licensing Tracking System (MLTS)	PO	0
Historical Material Licensing Tracking System Sites (HIST MLTS)	PO	0

Environmental Record	Search Distance (Miles)	No. of Sites Identified
Mines Master Index File (MINES)	0.25	0
Surface Mining Control and Reclamation Act Sites (SMCRA)	1.0	0
Mineral Resource Data System (MRDS)	1.0	0
Uranium Mill Tailings Radiation Control Act Sites (URANIUM)	1.0	0
Alternative Fueling Stations (ALT FUELS)	0.25	0
Registered Pesticide Establishments (SSTS)	0.25	0
Polychlorinated Biphenyl (PCB) Notifiers (PCB)	0.5	0
STATE LISTINGS		
Hazardous Material Logbook/Spills (SPILLS)	0.125	0
Dry Cleaning Facilities (DRYCLEANERS)	0.25	0
Per- and Polyfluoroalkyl Substances (PFAS)	0.5	0
Air Permits Major/Minor Sources (AIR PERMITS)	0.25	0
Drywell Database (DRYWELLS)	0.125	0
Drug Labs Remediation (DRUG LAB REMEDIATION)	0.125	0
Clandestine Drug Labs (CDL)	0.125	0
Tier 2 Chemical Inventory Reporting (TIER 2)	0.125	0
Biohazardous Medical Waste Facilities (BIO HAZ WASTE)	0.25	0

3.11.1 Subject Property Environmental Records

Based on a review of the database report, only record was found for the Subject Property.

3.11.1.1 Formerly Used Defense Sites (FUDS)

Facility Name	Address and Distance/Direction from Subject Property	Up, Down, or Cross Gradient of Subject Property with Respect to Groundwater Flow Direction	Status	REC for Subject Property (Yes/No)
Laguna Maneuver Area	30 miles east of Yuma, AZ 0.26 miles east	Not Applicable	Closed	No

This record is for a fighter jet practice area that is not located in the vicinity of the Subject Property. This finding is not anticipated to be a REC relative to the Subject Property.

3.11.2 Surrounding Property Environmental Records

Database listings for surrounding properties were reviewed to determine whether the listed offsite properties were likely to have an adverse impact relative to the Subject Property. The analysis included

consideration of one or more of the following factors: close proximity of a facility to the Subject Property, the nature and extent of a given release, the distance of the reported release from the Subject Property, the stratigraphy of the soils, the expected soil permeability, and the hydrogeologic position of a property with respect to known or expected local and/or regional groundwater flow direction.

No records were identified for facilities within the Subject Property vicinity.

3.11.3 Unplottable Records Summary

ERIS identified zero unplottable records.

4. Adjacent and Nearby Properties

AZTEC evaluated the adjacent and nearby properties for zoning, use, and the potential to impact the soil, soil vapor, and/or groundwater at the Subject Property.

4.1 General Adjacent Property Description

As depicted on Figure 2, adjacent properties are generally undeveloped native desert land. Table 4-1 provides detail on zoning (where available) and land use with reference to the Subject Property location. There were no indications that these adjacent properties have adversely affected the Subject Property.

Table 4-1 Adjacent Property Zoning and Use

Adjacent Property Location Relative to the Site	Zoning	Use
North	Not Available	Native desert land
Northeast	Not Available	Livestock pond, native desert land
East	Not Available	Native desert land
Southeast	Not Available	Communication towers, I-10, native desert land
South	Not Available	I-10, CAP canal, Sore Finger Road, native desert land
Southwest	Not Available	I-10, CAP canal, Sore Finger Road, native desert land
West	Not Available	I-10, CAP canal, native desert land
Northwest	Not Available	Native desert land

4.2 Adjacent Property History

The following resources were used in developing the summary adjacent property usage history:

- Historical aerial photographs provided by ERIS, from selected years between 1951 and 2019
- USGS topographic maps from selected years between 1954 and 1990 (inclusively)

The general historic uses of the adjacent properties to the Subject Property are summarized in Table 4.2 below. Additional details are provided in the appendices, and a complete list of references is included as Section 6.0. Where environmental concerns are identified, additional discussion is provided below.

Table 4-2 Adjacent Property Past Use and History

Direction from Subject Property	Adjacent Property Past Use and History	Source(s)
North	Circa 1951, the land was undeveloped with the exception of 54th Street and Sore Finger Road. Circa 1978, the livestock pond was present. No other major changes to present day.	Historical Aerial Photographs, Topo Maps

Direction from Subject Property	Adjacent Property Past Use and History	Source(s)
Northeast	Circa 1951 to present day, the land was undeveloped with the exception of what appear to be a series of flood control levees circa 1960 to present day.	Historical Aerial Photographs, Topo Maps
East	Circa 1951, the land was undeveloped with the exception of 54th Street. Circa 1960, flood control levees were present near the northeast corner of the Subject Property. Circa 1978, one borrow pit was present associated with construction of I-10. Circa 1997, one of the communication towers was present near the southeast corner of the Subject Property, with the second tower present circa 2007. No other changes to present day.	Historical Aerial Photographs, Topo Maps
Southeast	Circa 1951, the land was undeveloped. Circa 1978, I-10 was developed. No other changes to present day.	Historical Aerial Photographs, Topo Maps
South	Circa 1951, the land was undeveloped. Circa 1978, I-10 was developed, and two associated borrow pits are also now present. Sore Finger Road was also present circa 1978. Circa 1985, the CAP canal was developed. No other changes to present day.	Historical Aerial Photographs, Topo Maps
Southwest	Circa 1951, the land was undeveloped. Circa 1978, I-10 was developed, as was Sore Finger Road. The flood control levees were also present, as was another borrow pit. Circa 1985, the CAP canal was developed. No other changes to present day.	Historical Aerial Photographs, Topo Maps
West	Circa 1951, the land was undeveloped. Circa 1978, I-10 was developed. Circa 1985, the CAP canal was developed. No other changes to present day.	Historical Aerial Photographs, Topo Maps
Northwest	Circa 1951 to present day, the land was never developed.	Historical Aerial Photographs, Topo Maps

In summary, no environmental concerns were noted associated with the past uses of properties adjacent to the Subject Property.

4.3 Aerial Photographs

AZTEC reviewed historical aerial photographs of the Subject Property vicinity from a report prepared by ERIS on June 7, 2022 (ERIS, 2022c, Appendix B), and also reviewed selected aerial photography from Google Earth as supplementary information. Aerial photographs were provided from the dates of 1951 to 2019 and are discussed in detail in Table 4.2. In summary, circa 1951 much of the Subject Property vicinity

was comprised of native desert land with some dirt roads crossing the area. Circa 1978, I-10 was developed, and circa 1985 the CAP canal was developed. By 2007, both communication towers were present near the southeast corner of the Subject Property. No other major changes were noted to present day. No RECs or environmental concerns were noted from the aerial photograph review.

4.4 Topographic Maps

AZTEC reviewed historical topographic maps of the Subject Property vicinity from the US Geological Survey. The topographic maps were available from 1954, 1958, 1961, 1969, 1954, 1958, 1961, 1969, 1984 and 1990 on the USGS website and from 1963, 1967, 1990, 2014 and 2018 on the historicalaerials.com website. In summary, circa 1954 much of the Subject Property vicinity was comprised of native desert land with a couple of dirt roads in the area depicted. The only other major features depicted were I-10, the CAP canal, and Sore Finger Road. No additional structures were depicted close to the Subject Property. No RECs or environmental concerns were noted from the topographic map review.

4.5 City Directories

AZTEC did not search City Directories for this property as there were no street addresses associated with the Subject Property or the adjoining properties.

5. Conclusions

5.1 Findings and Opinion

We have performed a Phase I Environmental Site Assessment in conformance with the scope and limitations of ASTM Practice E1527-13 for a roughly square-shaped discontiguous portion of land referred to as 'Atlas North', located north and south of I-10 between MP 58.6 and 62.6 in La Paz County, Arizona. Any exceptions to, or deletions from, this practice are described in Section 7.1 of this report.

The following tables summarizes whether RECs were identified in connection with the property, a discussion of those RECs (if any), and our opinion:

Table 5-1 Recognized Environmental Conditions (RECs)

Facility	Discussion of RECs	Opinion
Subject Property	No RECs identified associated with the Subject Property	Not Applicable
Adjacent Properties	No RECs identified associated with the adjacent properties	Not Applicable

Table 5-2 Historical RECs (HRECs)

Facility	Discussion of HRECs	Opinion
Subject Property	No HRECs identified associated with the Subject Property	Not Applicable
Adjacent Properties	No HRECs identified associated with the adjacent properties	Not Applicable

Table 5-3 Controlled RECs (CRECs)

Facility	Discussion of CRECs	Opinion
Subject Property	No CRECs identified associated with the Subject Property	Not Applicable
Adjacent Properties	No CRECs identified associated with the adjacent properties	Not Applicable

Table 5-4 *De Minimis* Conditions

Facility	Discussion of *De Minimis* Conditions	Opinion
Subject Property	*De Minimis* conditions were not identified associated with the Subject Property	Not Applicable
Adjacent Properties	*De Minimis* conditions were not identified associated with the adjacent properties	Not Applicable

Table 5-5 Non-RECs (Additional Concerns)

Facility	Discussion of Non-RECs	Opinion
Subject Property	No additional concerns were identified associated with the Subject Property	Not Applicable
Adjacent Properties	No additional concerns were identified associated with the adjacent properties	Not Applicable

5.2 Landowner Liability Protections

The purchaser of this facility would qualify for the bona fide prospective purchaser (BFPP) in accordance with the Small Business Liability Relief and Brownfields Revitalization Act amendments ("Brownfield Amendments") to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund), although additional requirements beyond this Phase I ESA may be necessary.

5.3 Recommended Investigation and Services for RECs

No RECs were identified. Thus, no additional investigation is recommended.

5.4 Conclusions and Recommendations for Additional Concerns

No additional concerns noted.

5.5 Data Gaps – Data Failure

A data gap is a lack of or inability to obtain the information required by the ASTM standard despite good-faith efforts to gather such information. Data failure is a failure to achieve the historical research objectives of even after reviewing the standard historical sources that are reasonably ascertainable and likely to be useful.

Certain data-gathering aspects typical of a Phase I ESA were not conducted for this Subject Property, such as City Directories searches, Sanborn fire map searches, environmental lien searches, and a 50-year Chain of Title. The Subject Property and adjoining properties have never been developed, have no assigned addresses, and the land ownership has historically been with state and federal agencies. None of this information would have likely been useful if searched, therefore these data gaps and not expected to change our findings for the Subject Property.

6. References

ADWR, 2020. “Arizona Department of Water Resources, Well Registry Report – Well55,” Arizona Department of Water Resources, 2022.

Arizona Geological Survey (AZGS). “Geologic Map of Arizona,” Arizona Geological Survey, 2000.

ERIS, 2022a. “Physical Setting Report, Project Property: Atlas North Solar Phase I ESA, N of I-10 MP 91, Arizona AZ” ERIS, May 31, 2022.

ERIS, 2022b-1. “Database Report, Project Property: Atlas North Solar Phase I ESA, N of I-10 MP 91, Arizona AZ” ERIS, June 1, 2022.

ERIS, 2022b-2. “Database Report, Project Property: Atlas North, I-10 and Sorefinger Rd, Arizona AZ” ERIS, July 21, 2022.

ERIS, 2022c. “Historical Aerials, Project Property: Atlas North Solar Phase I ESA, N of I-10 MP 91, Arizona AZ” ERIS, June 7, 2022.

NRCS, 2018. “Custom Soil Resource Report for Maricopa County, Arizona, Central Part,” United States Department of Agriculture Natural Resources Conservation Service.

United States Geologic Survey (USGS), 2021. Toposearch: https://ngmdb.usgs.gov/topoview/viewer

7. Limitations

This report was prepared by AZTEC Engineering Group, Inc., at the request of and for the benefit of Atlas North, LLC (wholly owned by 174 Power Global), and the for the Arizona State Land Department. This report addresses certain physical characteristics of the Subject Property with regards to the release or presence of hazardous materials. It is not intended to warrant or otherwise imply that the Subject Property is or is not free from conditions, materials, or substances which could adversely impact the environment or pose a threat to public health and safety. The material in this report reflects the best judgment of AZTEC in light of the information that was readily available at the time of preparation. In general, AZTEC did not verify information obtained by others, and assumed the provided information to be truthful and accurate.

This report is for the exclusive use of Atlas North, LLC, and any entity controlling, controlled by, or under common control with Atlas North, LLC. Reliance is also given to the Arizona State Land Department (ASLD).

In the event of any reuse or publication of any portion of this report, AZTEC shall not be liable for any damages arising out of such reuse of publication. Any use a third party makes of this report, or any reliance on or decisions to be made on it, are the responsibility of such third party. AZTEC accepts no responsibility for damages, if any, suffered by any third party as a result of decisions made or actions taken based on this report.

The principles outlined in Section 4.5 of the ASTM Standard are an integral part of this practice and are intended to be referred to in resolving any ambiguity or exercising such discretion as is accorded the user or environmental professional in performing an environmental site assessment or in judging whether a user or environmental professional has conducted appropriate inquiry or has otherwise conducted an adequate environmental site assessment.

Under the ASTM Standard, this report is presumed to be valid for 180 days from the date of completion. For more information on the continued viability of this document, refer to the ASTM Standard, Section 4.6.

This report does not address additional requirements that must be met in order to qualify for the landowner liability protections (LLPs) (for example, the continuing obligations not to impede the integrity and effectiveness of activity and use limitations (AULs), or the duty to take reasonable steps to prevent releases, or the duty to comply with legally required release reporting obligations, etc.). Additionally, the report user has responsibilities with respect to All Appropriate Inquiry and LLPs.

7.1 Deletions and Deviations from Standard

There were no deletions or deviations from the Standard other than what is noted herein. Any data gaps/data failures encountered are discussed in Section 5.5.

8. Document Quality Assurance

As part of AZTEC's policy to provide quality products to its clients, all reports are subject to a peer review for technical accuracy, validity of conclusions and appropriateness of recommendations. This document was prepared under the direction of Mr. Steven P. Sutherland, Hazardous Materials Group Manager.

This document was prepared by: 

Printed / Typed Name: Brendan Leach

Date: 9/9/2022

This document was reviewed by: 

Printed / Typed Name: Steven P. Sutherland

Date: 9/9/2022

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Figures

Figure 1 - Site Location Map

Atlas North Solar Development
Atlas North LLC
La Paz County, Arizona

Source: Esri, USDA FSA. 2021 Aerials.

BLM Land

N
W
E
S

Miles
0 10 20
Kilometers
0 20 40

AZTEC TYPSA

Map Disclaimer: This map is intended for general siting purposes only.

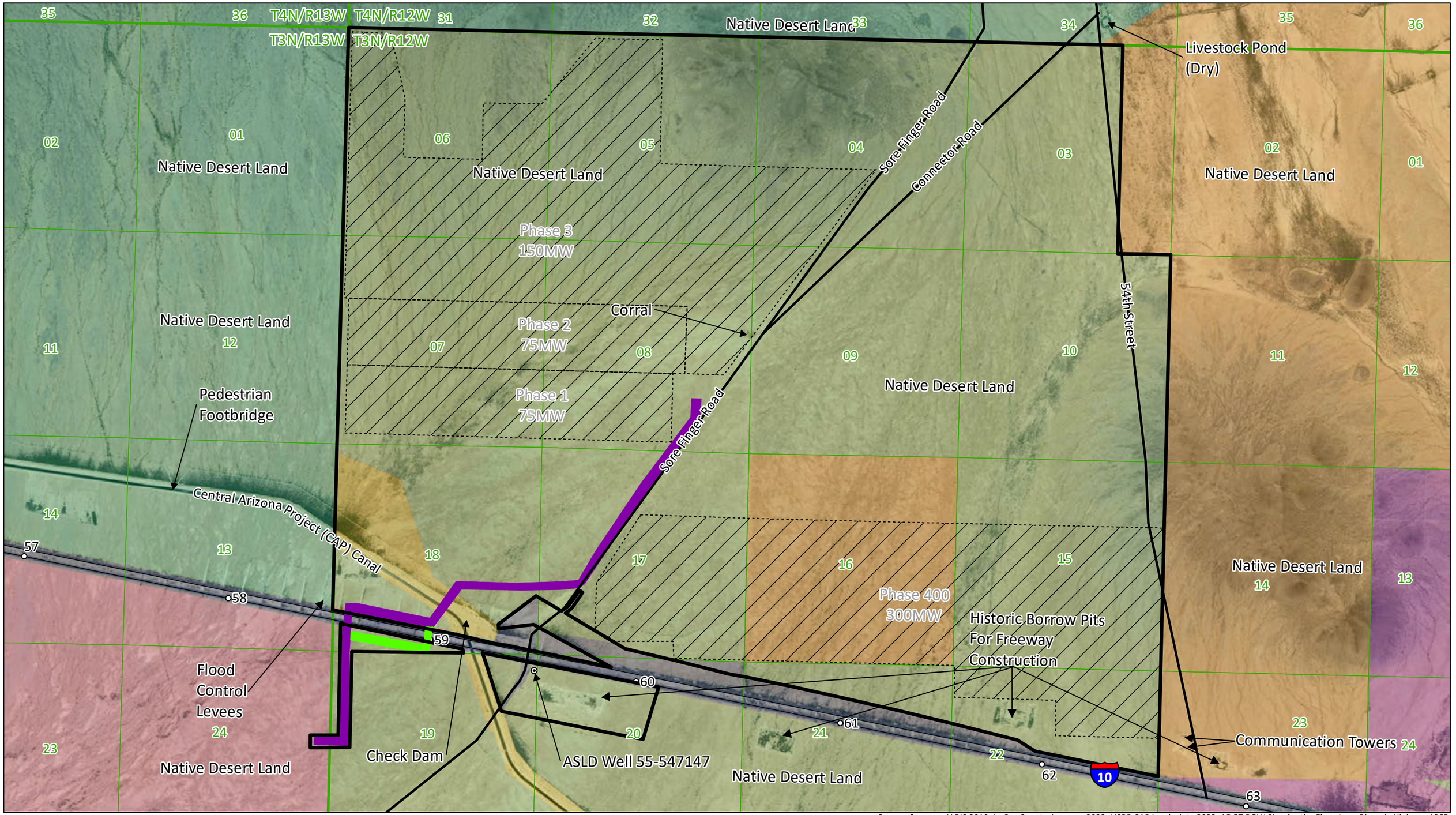


Figure 2 - Project Survey Area Map

Atlas North Solar Development
Atlas North LLC
La Paz County, Arizona

Source: Sources: ALRIS 2010; La Paz County Assessor 2022; USBR CAP Lands data 2022; ADOT ROW Plan for the Ehrenburg-Phoenix Highway 1965; ASLD Parcel Data 2022; ADOT ATIS 2013; ESRI Aerial Imagery Basemap; NAD83 UTM Zone 12N

Atlas North Solar Facility (174PG, July 13, 2022)

- Mileposts
- Survey Area
- Panel Array
- Proposed 500kV Gen-Tie Route
- Alternate 500kV Gen-Tie Route
- ADOT
- AZ State Land Department
- BLM: Hassayampa Field Office
- BLM: Lake Havasu Field Office
- BLM: Yuma Field Office
- La Paz County
- Private/Other Non-Federal Land
- US Bureau of Reclamation
- Township/Range
- Sections

N W E S

Feet
0 2,000 4,000

Meters
0 500 1,000

Map Disclaimer: This map is intended for general siting purposes only.

Appendices

Appendix A Photographic Log

Photo 1:
6-16-22: Historic borrow pit from construction of I-10, located near southeast corner of Subject Property. Looking north.

Photo 2:
6-16-22: Bottom of borrow pit, with heavier vegetation. No environmental concerns noted.

Photo 3:
6-16-22:
Looking east across Subject Property. Note communication towers in the background (located offsite).

Photo 4:
6-16-22:
Communication towers located adjacent to southeast corner of Subject Property, looking west.

Photo 5:
6-16-22: 54th Street dirt road, looking north-northwest.

Photo 6:
6-16-22: Looking west across east-central portion of Subject Property from 54th Street. Note natural gas line marker.

Photo 7:
6-16-22: Relatively new power poles off of 54th Street, looking west across Subject Property.

Photo 8:
6-16-22: Pole-mounted transformer on westernmost power pole. No evidence of staining or spills noted.

Photo 9:
6-16-22: Looking north along 54th Street to northeast segment of Subject Property.

Photo 10:
6-16-22: Gate and fence at northern property boundary for 54th Street, looking south.

Photo 11:
6-16-22: Adjacent to the gate is a dry livestock pond. No cattle were observed.

Photo 12:
6-16-22: Looking southwest along Connector Road from intersection with 54th Street.

Photo 13:
6-16-22:
Looking north at north-central segment of Subject Property from Connector Road.

Photo 14:
6-16-22:
Looking southwest at central portion of Subject Property from Connector Road.

Photo 15:
6-16-22:
Looking west at central segment of Subject Property from Connector Road.

Photo 16:
6-16-22:
Looking east at central segment of Subject Property from Connector Road.

Photo 17: 6-16-22: Looking southwest across Sore Finger Road at corral in central portion of Subject Property.

Photo 18: 6-16-22: Looking south at corral area east of Sore Finger Road. Note vertical water storage tank.

Photo 19:
6-16-22: Metal troughs at corral area.

Photo 20:
6-16-22: Typical pen at corral area.

Photo 21:
6-16-22: Older unused water storage tank at corral.

Photo 22:
6-16-22: Solid waste debris pile due north of corral area. Looking south towards corral (background).

Photo 23:
6-16-22: Looking southwest along Sore Finger Road south of corral area.

Photo 24:
6-16-22: Looking west across west-central portion of Subject Property from Sore Finger Road south of corral area.

Photo 25:
6-16-22: Looking east across east-central portion of Subject Property from Sore Finger Road south of corral area.

Photo 26:
6-16-22: Looking north across central portion of Subject Property from fence line due south of corral area.

Photo 27:
6-16-22:
Looking south across south-central portion of Subject Property from fence line due south of corral area.

Photo 28:
6-16-22:
Looking west across southwest portion of Subject Property from fence line due south of corral area.

Photo 29:
6-16-22:
Looking north at west-central portion of Subject Property from dirt road west of Sore Finger Road overpass.

Photo 30:
6-16-22:
Looking north at western portion of Subject Property from near southwest corner of Subject Property.

Photo 31:
6-16-22:
Looking north at Sore Finger Road at entrance to primary Subject Property area.

Photo 32:
6-16-22: Looking south at Sore Finger Road, where pavement begins and leads to the overpass.

Photo 33:
6-16-22: Looking west at northeast segment of Subject Property. I-10 to the left, and Sore Finger Road overpass in the background.

Photo 34:
7-9-22: Sore Finger Road south of the Subject Property, looking southwest near intersection with the Hayden-Rhodes Aqueduct (aqueduct).

Photo 35:
7-9-22: Looking west-northwest at southernmost portion of the southwest segment of Subject Property (southwest of Sore Finger Road overpass).

Photo 36:
7-9-22: Looking northwest at the Hayden-Rhodes Aqueduct south of I-10. I-10 in the background.

Photo 37:
7-9-22: Looking west at the southwest segment of the Subject Property.

Photo 38:
7-9-22: Looking southeast along the aqueduct and at the western portion of the southeast segment of the Subject Property (Sore Finger Road in the background).

Photo 39:
7-9-22: Looking west at the western portion of the southeast segment of the Subject Property from Sore Finger Road.

Photo 40:
7-9-22: Looking at native desert land south of the Subject Property.

Photo 41:
7-9-22: Looking north at native desert land on the southeast segment of the Subject Property (Sore Finger Road in the background).

Photo 42:
7-9-22: Looking west at native desert land on the southeast segment of the Subject Property, and a livestock drinker. No cattle were observed.

Photo 43:
7-9-22: Looking north-northeast at another historic borrow pit from construction of I-10, located in the center of the southeast segment of the Subject Property.

Photo 44:
7-9-22: Active well located adjacent to I-10 and Sore Finger Road in southeast segment of Subject Property. This ASLD well reportedly supplies water to the livestock drinker, and the corral.

Photo 45:
7-9-22: Two pole-mounted transformers adjacent to the well. Both were in good condition with no evidence of leaks noted.

Photo 46:
7-9-22: Well and borrow pit in southeast segment of Subject Property, looking southeast from Sore Finger Road overpass.

Photo 47:
7-9-22: Sore Finger Road overpass, looking north.

Photo 48:
7-9-22: Looking west at northwest segment of Subject Property from Sore Finger Road overpass.

Photo 49:
7-9-22: Looking southeast from the aqueduct towards the eastern portion of the northwest segment of the Subject Property. Sore Finger Road overpass in background, and I-10 to the right.

Photo 50:
7-9-22: Looking south at the central portion of the northwest segment of the Subject Property. Aqueduct in the foreground and I-10 in the background.

Photo 51:
7-9-22: Looking southeast at the easternmost portion of the northwest segment.

Photo 52:
7-9-22: Looking south from I-10 at the southwest segment of the Subject Property.

Photo 53:
7-9-22: Looking north from I-10 of the typical levees found on the northwest segment of the Subject Property.

Photo 54:
7-9-22: Looking northeast from I-10 of the northwest segment of the Subject Property.

Photo 55:
7-9-22: Looking northwest from I-10 of the northwest segment of the Subject Property.

Photo 56:
7-9-22: Looking east at the I-10 right-of-way adjacent to the northwest segment of the Subject Property.

Appendix B Agency Database Summaries and Reports

DATABASE REPORT

Project Property:	*Atlas North Solar Phase I ESA* *N of I-10 MP 61* *Arizona AZ*
Project No:	*AZENE2023-12*
Report Type:	*Database Report*
Order No:	*22052800001*
Requested by:	*AZTEC Engineering Group, Inc.*
Date Completed:	*June 1, 2022*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:		*Atlas North Solar Phase I ESA* *N of I-10 MP 61 Arizona AZ*
Project No:		*AZENE2023-12*
Coordinates:		
	Latitude:	*33.6161904*
	Longitude:	*-113.50644153*
	UTM Northing:	*3,722,418.13*
	UTM Easting:	*267,470.79*
	UTM Zone:	*UTM Zone 12S*
Elevation:		*1,458 FT*

Order Information:

Order No:	*22052800001*
Date Requested:	*May 28, 2022*
Requested by:	*AZTEC Engineering Group, Inc.*
Report Type:	*Database Report*

Historicals/Products:

Aerial Photographs	*GIS Ready Aerials*
ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*
Physical Setting Report (PSR)	*Physical Setting Report (PSR)*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
DOE FUSRAP	Y	1	0	0	0	0	0	0
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	0	0	-	-	0
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
FRP	Y	0.25	0	0	0	-	-	0
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
SHWS	Y	1	0	0	0	0	0	0
SHWS ACIDS	Y	1	0	0	0	0	0	0
WQARF	Y	1	0	0	0	0	0	0
DELISTED SUPERFUND	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	0	0	-	0
DELISTED LUST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	0	0	-	-	0
AST2	Y	0.25	0	0	0	-	-	0
DELISTED TANKS	Y	0.25	0	0	0	-	-	0
AUL	Y	0.5	0	0	0	0	-	0
RDT OTHER	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
Tribal								
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED ILST	Y	0.5	0	0	0	0	-	0
DELISTED IUST	Y	0.25	0	0	0	-	-	0
County	***No County databases were selected to be included in the search.***							

Additional Environmental Records

Federal

FINDS/FRS	Y	PO	0	-	-	-	-	0
TRIS	Y	PO	0	-	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
ERNS PFAS	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	**1**	0	0	0	0	**1**
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
URANIUM	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
SPILLS	Y	0.125	0	0	-	-	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0
PFAS	Y	0.5	0	0	0	0	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
AIR PERMITS	Y	0.25	0	0	0	-	-	0
DRYWELLS	Y	0.125	0	0	-	-	-	0
DRYWELLS HIST	Y	0.125	0	0	-	-	-	0
DRUG LAB REMEDIATION	Y	0.125	0	0	-	-	-	0
CDL	Y	0.125	0	0	-	-	-	0
TIER 2	Y	0.125	0	0	-	-	-	0
BIO HAZ WASTE	Y	0.25	0	0	0	-	-	0

Tribal ***No Tribal additional environmental record sources available for this State.***

County ***No County additional environmental record sources available for this State.***

Total:	***1***	*0*	*0*	*0*	*0*	***1***

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	FUDS	LAGUNA MANEUVER AREA	30 MILES NE OF YUMA AZ **FUDS Property No:** *J09AZ0439*	WNW	0.00 / 0.00	0	16

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the surrounding properties.

Executive Summary: Summary by Data Source

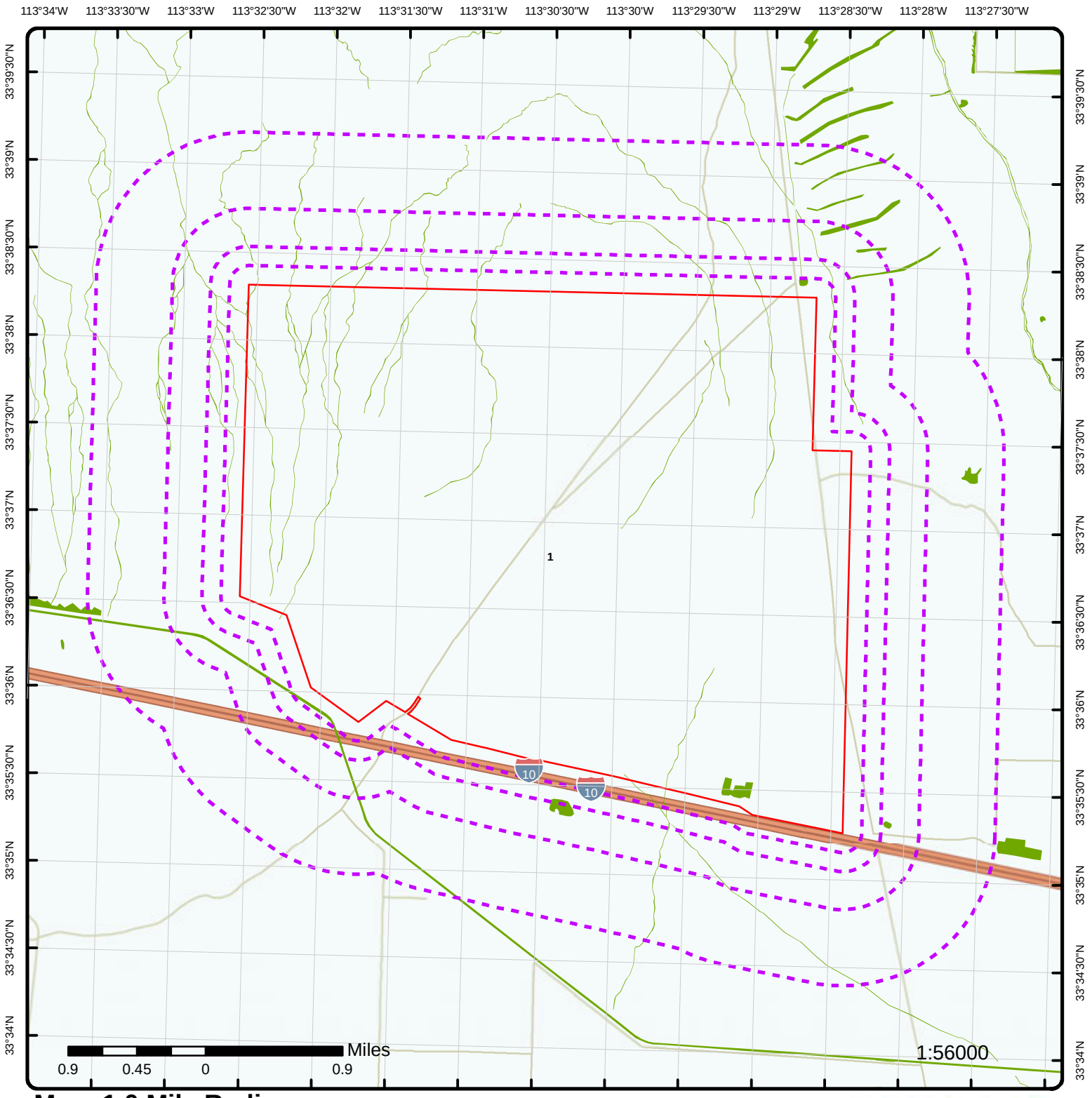
Non Standard

Federal

FUDS - Formerly Used Defense Sites

A search of the FUDS database, dated May 26, 2021 has found that there are 1 FUDS site(s) within approximately 1.00 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
LAGUNA MANEUVER AREA	30 MILES NE OF YUMA AZ ***FUDS Property No**: J09AZ0439*	WNW	0.00 / 0.00	1

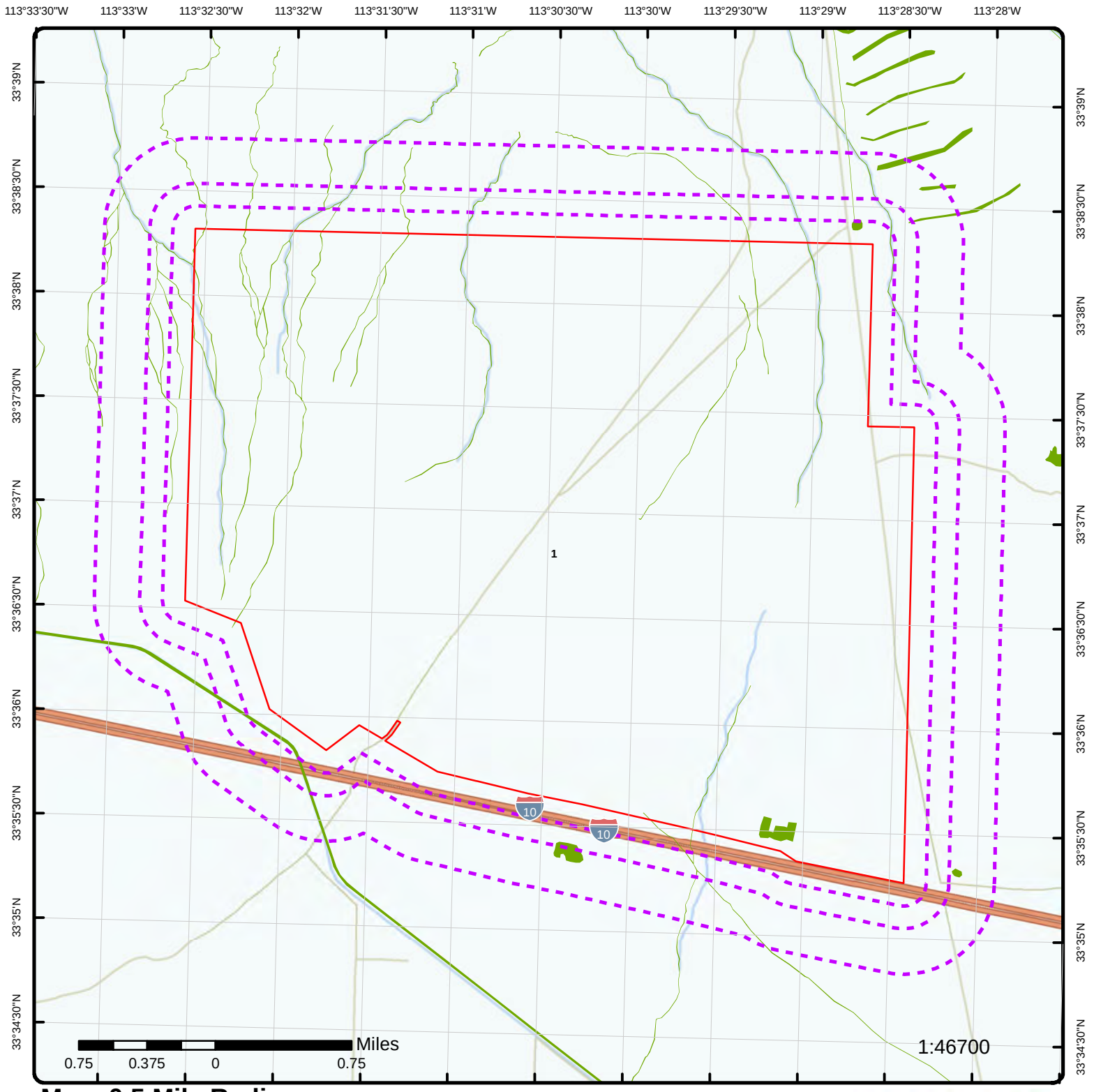


Map: 1.0 Mile Radius

Order Number: 22052800001

Address: N of I-10 MP 61, Arizona, AZ

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Eris Areas with Higher Elevation
- Eris Areas with Same Elevation
- Eris Areas with Lower Elevation
- Eris Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas

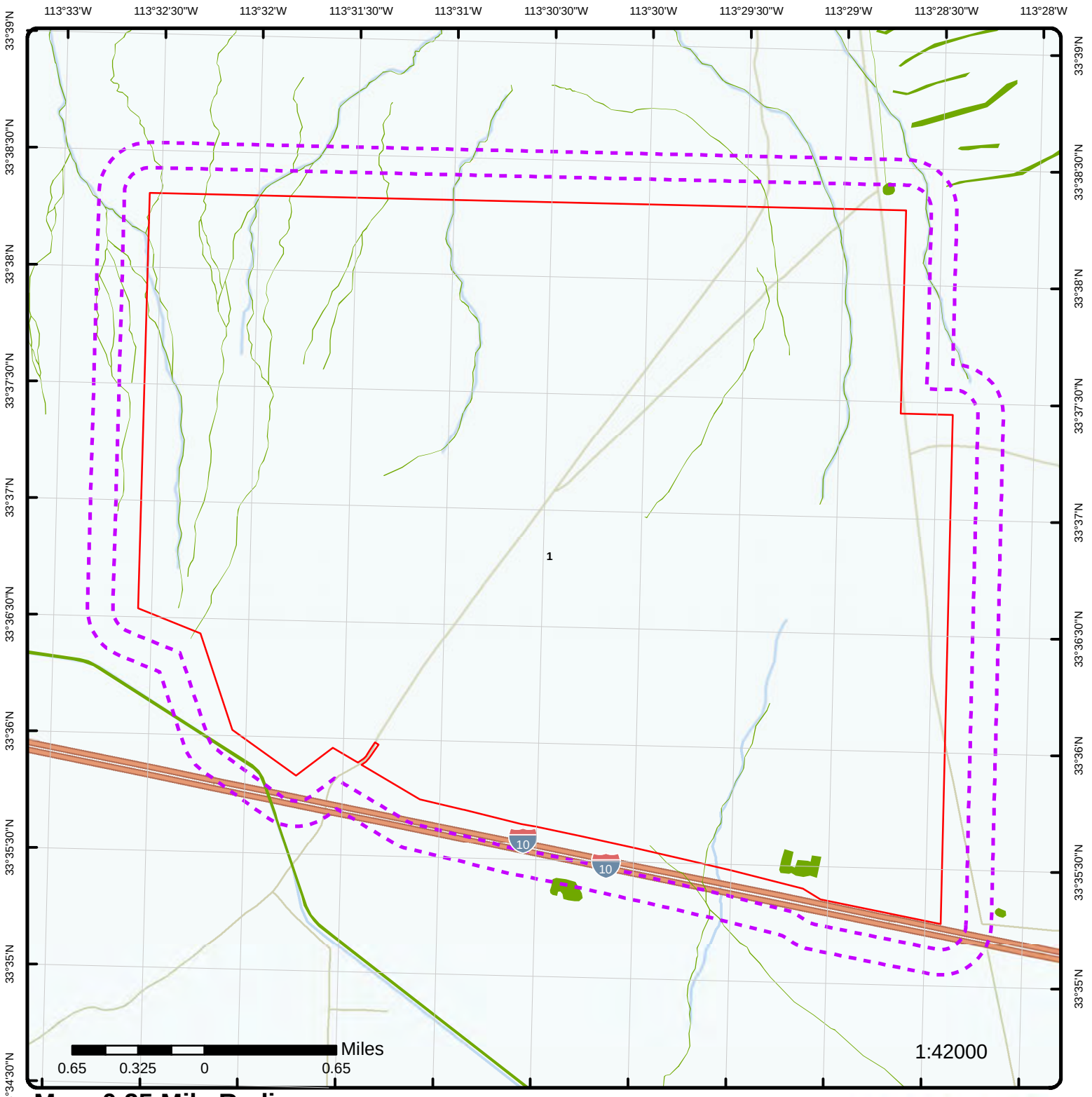


Map: 0.5 Mile Radius

Order Number: 22052800001

Address: N of I-10 MP 61, Arizona, AZ

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Eris Areas with Higher Elevation
- Eris Areas with Same Elevation
- Eris Areas with Lower Elevation
- Eris Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas



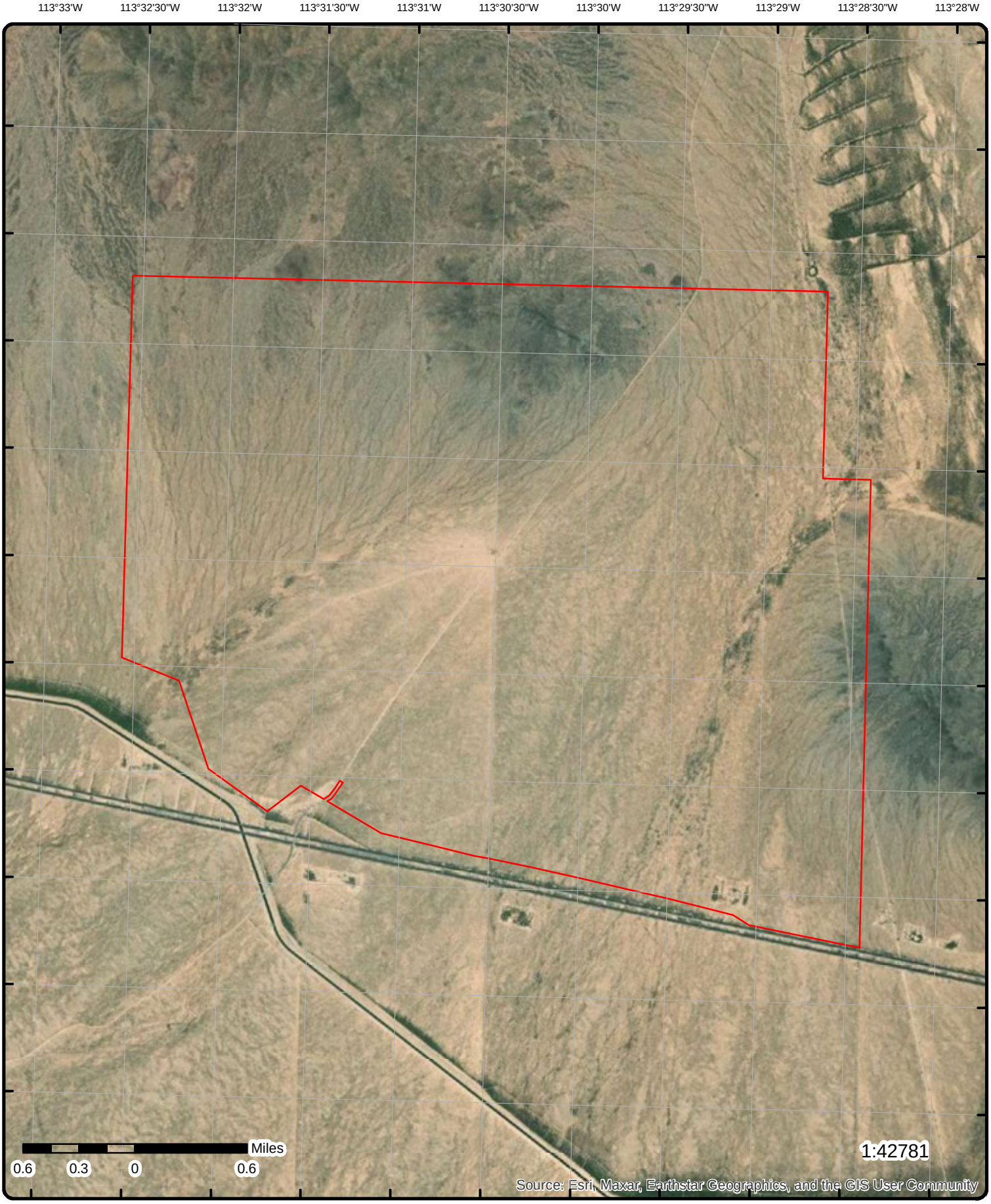
Map: 0.25 Mile Radius

Order Number: 22052800001

Address: N of I-10 MP 61, Arizona, AZ

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Eris Areas with Higher Elevation
- Eris Areas with Same Elevation
- Eris Areas with Lower Elevation
- Eris Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas

Source: © 2021 ESRI StreetMap Premium



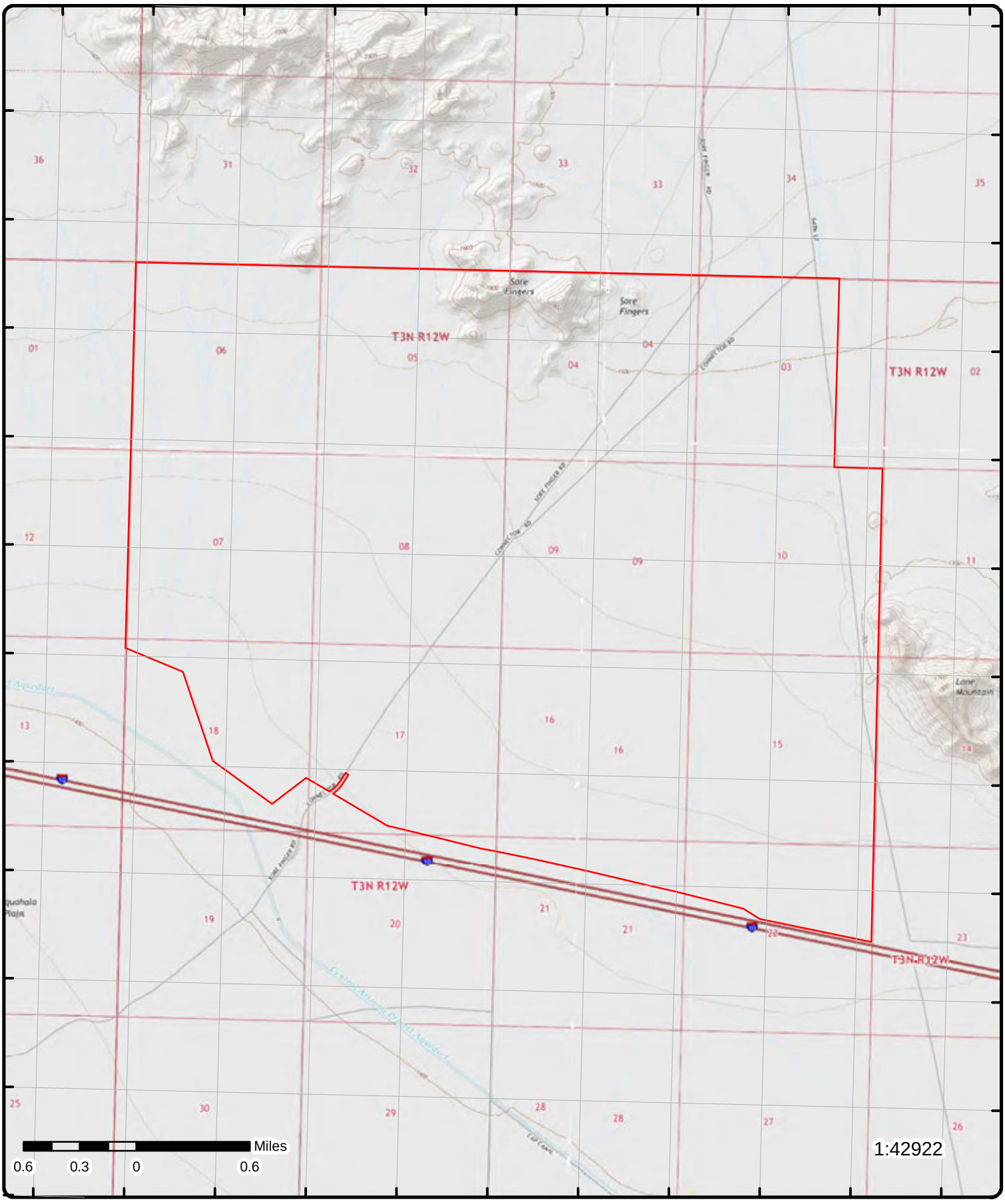
Aerial **Year: 2021**

Address: N of I-10 MP 61, Arizona, AZ

Source: ESRI World Imagery

Order Number: 22052800001

ERIS



Topographic Map

Year: 2014

Order Number: 22052800001

Address: N of I-10 MP 61, AZ

Quadrangle(s): Hope SE, AZ; Lone Mountain, AZ; Harrisburg Valley, AZ; Socorro Mine, AZ

Source: USGS Topographic Map

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 1	WNW	0.00 / 0.00	1,458.06 / 0	LAGUNA MANEUVER AREA 30 MILES NE OF YUMA AZ	FUDS

FUDS Property No:	J09AZ0439
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map/map?id=55960
FUDS INST ID:	AZ99799F512600
Status:	
SDS ID:	
NPL Status Code:	Not on the NPL
Eligibility:	Eligible
Site Eligib:	
Current Owner:	
Has Project:	Yes
DOD FUDS Pro:	
Project Required:	Yes
No Further Action:	
Congressional District:	04
EPA Region:	09
County:	LA PAZ
Latitude:	33.51583333
Longitude:	-113.47972222
Fiscal year:	2019
USACE Division:	SPD
USACE District:	Los Angeles District (SPL)
Shape Area:	1.10066633
Shape Len:	12.20788572
Centroid Latitude:	
Centroid Longitude:	
Media ID:	
Metadata ID:	
Feature Desc:	
Property History:	The site was part of the Desert Training Center. T he War Department acquired a total of 20,146.24 acres for the subject site. This included 3,358.52 acres acquired by transfer from the Department of Interior by Public Land Order No. 166, dated 15 Septem

Unplottable Summary

Total: 0 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID

No unplottable records were found that may be relevant for the search criteria.

Unplottable Report

No unplottable records were found that may be relevant for the search criteria.

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

Formerly Utilized Sites Remedial Action Program: DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

National Priority List: NPL

Sites on the United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

National Priority List - Proposed: PROPOSED NPL

Sites proposed - by the EPA, the state agency, or concerned citizens - for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

Deleted NPL: DELETED NPL

Sites deleted from the United States Environmental Protection Agency (EPA)'s National Priorities List. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

SEMS List 8R Active Site Inventory: SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Apr 27, 2022

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Apr 27, 2022

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Apr 11, 2022

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Apr 11, 2022

RCRA Generator List: RCRA LQG

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Apr 11, 2022

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Apr 11, 2022

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Apr 11, 2022

RCRA Non-Generators: RCRA NON GEN

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Apr 11, 2022

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Apr 11, 2022

Federal Engineering Controls-ECs: FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Dec 30, 2021

Federal Institutional Controls- ICs: FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: Dec 30, 2021

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Institutional Control Boundaries at NPL sites: NPL IC

Boundaries of Institutional Control areas at sites on the United States Environmental Protection Agency (EPA)'s National Priorities List, or Proposed or Deleted, made available by the EPA's Shared Enterprise Geodata and Services (SEGS). United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.

Government Publication Date: Mar 30, 2022

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Dec 31, 2021

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Aug 20, 2021

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 31, 2021

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 31, 2021

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Feb 4, 2022

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Feb 4, 2022

LIEN on Property: SEMS LIEN

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: Apr 27, 2022

Superfund Decision Documents: SUPERFUND ROD

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: May 3, 2022

State

Waste Program Remedial Projects - Superfund & DOD: SHWS

The Arizona Department of Environmental Quality (ADEQ) Waste Programs Division investigates, manages, and oversees remediation of soil and groundwater contaminated with hazardous substances. List of sites overseen by the Remedial Projects Section and/or Federal programs, including Federal DOD and Superfund sites.

Government Publication Date: Dec 8, 2021

CERCLIS Information Data System (ACIDS): SHWS ACIDS

The Arizona CERCLIS Information Data System (ACIDS) list was used by the Arizona Department of Environmental Quality Superfund Programs Section (SPS) prior to July 2000. The ACIDS list consists of locations subject to investigations concerning possible contamination of soil, surface water, or groundwater under the State Water Quality Assurance Revolving Fund (WQARF) and Federal CERCLA programs. The ACIDS list has been archived and is no longer being distributed or updated. The ACIDS list has been replaced by the Arizona Superfund Program List (ASPL).

Government Publication Date: Aug 3, 1995

Water Quality Assurance Revolving Fund Sites (WQARF): WQARF

The Arizona Department of Environmental Quality (ADEQ) Water Quality Assurance Revolving Fund (WQARF) program supports the ADEQ in identifying, prioritizing, assessing, and resolving the threat of contaminated soil and groundwater sites in the state. This list of sites includes those on the WQARF Registry, sites removed from the WQARF Registry, and sites requiring remediation under the WQARF Emergency Response.

Government Publication Date: Dec 8, 2021

Delisted WQARF, Superfund, DOD: DELISTED SUPERFUND

List of sites which once appeared, but have since been removed from either the WQARF Registry, Superfund Sites, Department of Defense Sites, or Superfund Alternative Sites.

Government Publication Date: Dec 8, 2021

Directory of Solid Waste Facilities: SWF/LF

A list of Solid Waste Facilities and Landfill sites in the State of Arizona. This list is made available by Arizona Department of Environmental Quality, Waste Programs Division, Solid Waste Management.

Government Publication Date: Jan 31, 2022

Leaking Underground Storage Tanks: LUST

A list of Leaking Underground Storage Tanks (LUST) sites in the state of Arizona. This list is made available by Arizona Department of Environment Quality.

Government Publication Date: Mar 1, 2022

Delisted Leaking Underground Storage Tanks: DELISTED LUST

A list of sites that once appeared on - and have since been removed from - the list of Leaking Underground Storage tanks made available by the Arizona Department of Environmental Quality.

Government Publication Date: Mar 1, 2022

Underground Storage Tanks List: UST

A list of Underground Storage Tank sites registered with the Arizona Department of Environmental Quality (ADEQ) Waste Program Division. This list is made available by ADEQ.

Government Publication Date: Mar 1, 2022

Aboveground Storage Tanks: AST

List of aboveground fuel storage tanks (ASTs) made available by the State Fire Marshal's Office. This list is of installed ASTs and does not include any AST permitted and inspected by any City, Town, County, or Fire District. This is not a complete list of storage systems in use in the State of Arizona; ASTs may have been installed and used without adequate permission from the State Fire Marshal's Office. The absence of a property from the State Fire Marshal records as a permitted tank is not proof that an AST for hazardous materials was never installed or used at a given address.

Government Publication Date: Sep 29, 2015

Exemption Certificate Renewals: AST2

The Exemption Certificate Renewals data lists applicants that have renewed their tank certificates that will never expire from the penny underground storage tank tax. This is provided by Arizona Department of Environmental Quality.

Government Publication Date: Sep 2, 2021

Delisted Storage Tanks List: DELISTED TANKS

This database contains a list of storage tank sites that were removed from the Arizona Department of Environmental Quality (ADEQ) Waste Program Division.

Government Publication Date: Mar 1, 2022

Environmental Use Restriction Sites List: AUL

List of sites in the Arizona Department of Environmental Quality (ADEQ)'s Remediation and DEUR Tracking System (RDT) with either a Declaration of Environmental Use Restriction (DEUR) or a Voluntary Environmental Mitigation Use Restriction (VEMUR). A DEUR is a restrictive land use covenant that is required when a property owner elects to use an institutional (i.e., administrative) control or engineering (i.e., physical) control as a means to meet remediation goals. The DEUR runs with and burdens the land, and requires maintenance of any institutional or engineering controls. A VEMUR is a restrictive land use covenant that, prior to July 18, 2000, was required when a property owner elected to remediate the property to non-residential uses. Effective July 18, 2000, the DEUR replaced the VEMUR as a restrictive use covenant.

Government Publication Date: Nov 10, 2021

Remediation and DEUR Tracking Other Remediation Sites: RDT OTHER

List of sites from the Arizona Department of Environmental Quality (ADEQ) Remediation and DEUR Tracking (RDT) System where the owner has elected to remediate the property without the use of an institutional or engineering control.

Government Publication Date: Apr 28, 2022

Voluntary Remediation Program: VCP

A list of sites registered in Voluntary Remediation Program (VRP). This list is made available by Arizona Department of Environment Quality (ADEQ). Through ADEQ's VRP, property owners, prospective purchasers and other interested parties investigate or clean up a contaminated site in cooperation with ADEQ.

Government Publication Date: Oct 21, 2020

Brownfields Tracking System: BROWNFIELDS

A list of brownfield sites in the State of Arizona, made available by Arizona Department of Environmental Quality. Brownfields are abandoned or underutilized properties where the reuse is complicated by actual or perceived environmental contamination.

Government Publication Date: Oct 21, 2020

Tribal

Leaking Underground Storage Tanks (LUSTs) on Indian Lands: INDIAN LUST

LUSTs on Tribal/Indian Lands in Region 9, which includes Arizona.

Government Publication Date: Oct 12, 2021

Underground Storage Tanks (USTs) on Indian Lands: INDIAN UST

USTs on Tribal/Indian Lands in Region 9, which includes Arizona.

Government Publication Date: Oct 12, 2021

Delisted Tribal Leaking Storage Tanks: DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: Oct 12, 2021

Delisted Tribal Underground Storage Tanks: DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: Oct 13, 2021

County

No County databases were selected to be included in the search.

Additional Environmental Record Sources

Federal

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Nov 2, 2020

Toxics Release Inventory (TRI) Program: TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U. S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Aug 24, 2021

Perfluorinated Alkyl Substances (PFAS) Releases: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

Government Publication Date: Aug 24, 2021

PFOA/PFOS Contaminated Sites: PFAS NPL

List of National Priorities List (NPL) and related Superfund Alternative Agreement (SAA) sites where PFOA or PFOS contaminants have been found in water and/or soil. The site listing is provided by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Apr 15, 2022

Perfluorinated Alkyl Substances (PFAS) Water Quality: PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Jul 20, 2020

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Access the following for the most current informations https://pfasproject.com/pfas-contamination-site-tr acker/

Government Publication Date: Dec 12, 2019

National Response Center PFAS Spills: ERNS PFAS

National Response Center (NRC) calls from 1990 to the most recent complete calendar year where there is indication of Aqueous Film Forming Foam (AFFF) usage. NRC calls may reference AFFF usage in the "Material Involved" or "Incident Description" fields. Data made available by the US Environmental Protection Agency (EPA). Disclaimer: dataset may include initial or misidentified incident data not yet validated or investigated by a federal/state response agency.

Government Publication Date: Feb 23, 2022

Hazardous Materials Information Reporting System: HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Sep 1, 2020

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Nov 22, 2021

Toxic Substances Control Act: TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Apr 11, 2019

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.

Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN

An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP

An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.

Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP

Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.

Government Publication Date: Mar 30, 2022

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER

The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin.

Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS

The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.

Government Publication Date: Jan 15, 2022

Drycleaner Facilities: FED DRYCLEANERS

A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.

Government Publication Date: May 5, 2021

Delisted Drycleaner Facilities: DELISTED FED DRY

List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).

Government Publication Date: May 5, 2021

Formerly Used Defense Sites: FUDS

Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.

Government Publication Date: May 26, 2021

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.

Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT

A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.

Government Publication Date: Jul 7, 2020

Material Licensing Tracking System (MLTS): MLTS

A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.

Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS

A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.

Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES

The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.

Government Publication Date: Nov 2, 2021

Surface Mining Control and Reclamation Act Sites: SMCRA

An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of Abandoned Mine Land (AML) impacts, as well as information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.

Government Publication Date: Dec 18, 2020

Mineral Resource Data System: MRDS

The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.

Government Publication Date: Mar 15, 2016

Uranium Mill Tailings Radiation Control Act Sites: URANIUM

The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).

Government Publication Date: Mar 4, 2017

Alternative Fueling Stations: ALT FUELS

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: May 16, 2022

Superfunds Consent Decrees: CONSENT DECREES

A list of Superfund consent decrees made available by the Department of Justice, Environment & Natural Resources Division (ENRD).

Government Publication Date: Sep 30, 2018

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.
Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.
Government Publication Date: Mar 30, 2022

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.
Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.
Government Publication Date: Jan 20, 2022

State

Hazardous Material Logbook/Spills: SPILLS

Hazardous Material Incident Logbook database made available by Arizona Department of Environmental Quality (ADEQ). This database is updated through November 15, 2001; after that date, reports were registered with the National Response Center.
Government Publication Date: Nov 15, 2001

Dry Cleaning Facilities: DRYCLEANERS

This list of dry cleaners includes sites from two sources: the 2016 Arizona Department of Environmental Quality (ADEQ) Dry Cleaners list, and the 2006 Dry Cleaner Inventory Project by Miller Brooks Environmental for ADEQ. The 2016 ADEQ Dry Cleaners list does not distinguish between contaminated or non-contaminated facilities and only provides limited details per facility with a Place ID. The 2006 Dry Cleaner Inventory Project was commissioned to assist in the identification, prioritization, investigation, and remediation of sites that have released hazardous substances into the lands and waters of the state. This Inventory includes the following types of sites: Sites with Known Contamination (sites with documented contamination, or a history of release and/or prior site characterization and remedial activities); Sites with High Potential for Release (sites with multiple owners, sites that have been in operation more than 10 years, sites that specifically operated between 1935 and 1984, and high-volume sites); and Sites with Low Potential for Release (sites that have been in operation only after 1985, or prior to 1934, sites that "broker" cleaning services to other facilities, and sites that operate primarily as a coin-operated laundry facility). Disclaimer: Due to the time spanned between these listings and available details, multiple listings may occur. Per ADEQ, these listings are no longer updated.
Government Publication Date: Jul 10, 2021

Per- and Polyfluoroalkyl Substances (PFAS): PFAS

The Arizona Department of Environmental Quality (ADEQ) Waste Programs Division investigates, manages, and oversees remediation of soil and groundwater contaminated with hazardous substances. List of sites overseen by the Remedial Projects Section and/or Federal programs, including Federal DOD and Superfund sites, where the contaminant or potential contaminant of concern is a Per- or polyfluorinated alkyl substances (PFAS).
Government Publication Date: Dec 8, 2021

Air Permits Major/Minor Sources: AIR PERMITS

A list of Arizona operating air permits major and minor sources. A "major" source is any source that has the potential to emit 100 tons per year of any criteria air pollutant and if it has the potential to emit 10 tons per year of any single Hazardous Air Pollutant or 25 tons per year of any combination of Hazardous Air Pollutants. This list is provided by the Department of Environmental Quality.
Government Publication Date: Nov 29, 2021

Drywell Database: DRYWELLS

The Drywell database contains information regarding drywells in Arizona. This database is maintained by the Arizona Department of Environmental Quality (ADEQ).

Government Publication Date: Mar 17, 2022

Historical Drywells: DRYWELLS HIST

Historical listing of registered drywells once maintained and made available by the Arizona Department of Environmental Quality (ADEQ) Water Quality Division. As of May 2018, ADEQ stopped accepting paper forms and will no longer be updating this list.

Government Publication Date: Aug 6, 2018

Drug Labs Remediation: DRUG LAB REMEDIATION

Arizona State Board of Technical Registration maintains a list of drug lab remediation. This is a list of seized drug laboratory sites or sites where drug manufacturing chemicals were seized. Remediated sites are removed from this list when the Board receives clean up notification from a certified clean up firm.

Government Publication Date: Sep 03,2013

Clandestine Drug Labs: CDL

A list of unremediated seized clandestine drug laboratory sites or sites where drug manufacturing chemicals were seized. This list is made available by Arizona State Board of Technical Registration.

Government Publication Date: Jan 22, 2019

Tier 2 Chemical Inventory Reporting: TIER 2

List of facilities that report to the Arizona Emergency Response Commission (AZSERC) for Tier II Chemical Inventory Reporting. AZSERC is tasked with the implementation of the Emergency Planning and Community Right to Know Act (EPRCA) in Arizona. As of 2016, the Arizona Emergency Response Commission (AZSERC) is overseen by Arizona Department of Environmental Quality (ADEQ).

Government Publication Date: Dec 31, 2018

Biohazardous Medical Waste Facilities: BIO HAZ WASTE

This list of biohazardous medical waste facilities is maintained by the Arizona Department of Environmental Quality (ADEQ) Waste Programs Division. This list includes: Biohazardous Medical Waste Disposal Facilities, Biohazardous Medical Waste Treatment Facilities, Biohazardous Medical Waste Storage & Transfer Facilities, Registered Biohazardous Medical Waste Transporters, and Registered Alternative Biohazardous Medical Waste Treatment Technologies. Biohazardous medical waste is medical waste that is composed of one or more of the following: cultures and stocks; human blood and blood products; human pathologic wastes; medical sharps; and research animal wastes. The Arizona Department of Environmental Quality adopted specific rules for handling biohazardous medical waste and discarded drugs. Non-biohazardous medical waste is handled as solid waste.

Government Publication Date: Jul 7, 2020

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental record sources available for this State.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

DATABASE REPORT

Project Property:	*Atlas North* *I-10 and Sorefinger Rd* *Arizona AZ*
Project No:	
Report Type:	*Database Report*
Order No:	*22071900844*
Requested by:	*AZTEC Engineering Group, Inc.*
Date Completed:	*July 21, 2022*

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

Table of Contents

Executive Summary

Property Information:

Project Property:		*Atlas North* *I-10 and Sorefinger Rd Arizona AZ*
Project No:		
Coordinates:		
	Latitude:	*33.59479483*
	Longitude:	*-113.53029551*
	UTM Northing:	*3,720,098.98*
	UTM Easting:	*265,199.23*
	UTM Zone:	*12S*
Elevation:		*1,411 FT*

Order Information:

Order No:	*22071900844*
Date Requested:	*July 19, 2022*
Requested by:	*AZTEC Engineering Group, Inc.*
Report Type:	*Database Report*

Historicals/Products:

ERIS Xplorer	*ERIS Xplorer*
Excel Add-On	*Excel Add-On*

Executive Summary: Report Summary

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
Standard Environmental Records								
Federal								
DOE FUSRAP	Y	1	0	0	0	0	0	0
NPL	Y	1	0	0	0	0	0	0
PROPOSED NPL	Y	1	0	0	0	0	0	0
DELETED NPL	Y	0.5	0	0	0	0	-	0
SEMS	Y	0.5	0	0	0	0	-	0
ODI	Y	0.5	0	0	0	0	-	0
SEMS ARCHIVE	Y	0.5	0	0	0	0	-	0
CERCLIS	Y	0.5	0	0	0	0	-	0
IODI	Y	0.5	0	0	0	0	-	0
CERCLIS NFRAP	Y	0.5	0	0	0	0	-	0
CERCLIS LIENS	Y	PO	0	-	-	-	-	0
RCRA CORRACTS	Y	1	0	0	0	0	0	0
RCRA TSD	Y	0.5	0	0	0	0	-	0
RCRA LQG	Y	0.25	0	0	0	-	-	0
RCRA SQG	Y	0.25	0	0	0	-	-	0
RCRA VSQG	Y	0.25	0	0	0	-	-	0
RCRA NON GEN	Y	0.25	0	0	0	-	-	0
RCRA CONTROLS	Y	0.5	0	0	0	0	-	0
FED ENG	Y	0.5	0	0	0	0	-	0
FED INST	Y	0.5	0	0	0	0	-	0
LUCIS	Y	0.5	0	0	0	0	-	0
NPL IC	Y	0.5	0	0	0	0	-	0
ERNS 1982 TO 1986	Y	PO	0	-	-	-	-	0
ERNS 1987 TO 1989	Y	PO	0	-	-	-	-	0
ERNS	Y	PO	0	-	-	-	-	0
FED BROWNFIELDS	Y	0.5	0	0	0	0	-	0
FEMA UST	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
FRP	Y	0.25	0	0	0	-	-	0
DELISTED FRP	Y	0.25	0	0	0	-	-	0
HIST GAS STATIONS	Y	0.25	0	0	0	-	-	0
REFN	Y	0.25	0	0	0	-	-	0
BULK TERMINAL	Y	0.25	0	0	0	-	-	0
SEMS LIEN	Y	PO	0	-	-	-	-	0
SUPERFUND ROD	Y	1	0	0	0	0	0	0
State								
SHWS	Y	1	0	0	0	0	0	0
SHWS ACIDS	Y	1	0	0	0	0	0	0
WQARF	Y	1	0	0	0	0	0	0
DELISTED SUPERFUND	Y	1	0	0	0	0	0	0
SWF/LF	Y	0.5	0	0	0	0	-	0
LUST	Y	0.5	0	0	0	0	-	0
DELISTED LUST	Y	0.5	0	0	0	0	-	0
UST	Y	0.25	0	0	0	-	-	0
AST	Y	0.25	0	0	0	-	-	0
AST2	Y	0.25	0	0	0	-	-	0
DELISTED TANKS	Y	0.25	0	0	0	-	-	0
AUL	Y	0.5	0	0	0	0	-	0
RDT OTHER	Y	0.5	0	0	0	0	-	0
VCP	Y	0.5	0	0	0	0	-	0
BROWNFIELDS	Y	0.5	0	0	0	0	-	0
Tribal								
SRPMIC BROWNFIELDS	Y	0.5	0	0	0	0	-	0
INDIAN LUST	Y	0.5	0	0	0	0	-	0
INDIAN UST	Y	0.25	0	0	0	-	-	0
DELISTED ILST	Y	0.5	0	0	0	0	-	0
DELISTED IUST	Y	0.25	0	0	0	-	-	0
County	***No County databases were selected to be included in the search.***							

Additional Environmental Records

Federal

FINDS/FRS	Y	PO	0	-	-	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
TRIS	Y	PO	0	-	-	-	-	0
PFAS TRI	Y	0.5	0	0	0	0	-	0
PFAS NPL	Y	0.5	0	0	0	0	-	0
PFAS WATER	Y	0.5	0	0	0	0	-	0
PFAS SSEHRI	Y	0.5	0	0	0	0	-	0
ERNS PFAS	Y	0.5	0	0	0	0	-	0
HMIRS	Y	0.125	0	0	-	-	-	0
NCDL	Y	0.125	0	0	-	-	-	0
TSCA	Y	0.125	0	0	-	-	-	0
HIST TSCA	Y	0.125	0	0	-	-	-	0
FTTS ADMIN	Y	PO	0	-	-	-	-	0
FTTS INSP	Y	PO	0	-	-	-	-	0
PRP	Y	PO	0	-	-	-	-	0
SCRD DRYCLEANER	Y	0.5	0	0	0	0	-	0
ICIS	Y	PO	0	-	-	-	-	0
FED DRYCLEANERS	Y	0.25	0	0	0	-	-	0
DELISTED FED DRY	Y	0.25	0	0	0	-	-	0
FUDS	Y	1	**1**	0	0	0	0	**1**
FORMER NIKE	Y	1	0	0	0	0	0	0
PIPELINE INCIDENT	Y	PO	0	-	-	-	-	0
MLTS	Y	PO	0	-	-	-	-	0
HIST MLTS	Y	PO	0	-	-	-	-	0
MINES	Y	0.25	0	0	0	-	-	0
SMCRA	Y	1	0	0	0	0	0	0
MRDS	Y	1	0	0	0	0	0	0
URANIUM	Y	1	0	0	0	0	0	0
ALT FUELS	Y	0.25	0	0	0	-	-	0
CONSENT DECREES	Y	0.25	0	0	0	-	-	0
AFS	Y	PO	0	-	-	-	-	0
SSTS	Y	0.25	0	0	0	-	-	0
PCBT	Y	0.5	0	0	0	0	-	0
PCB	Y	0.5	0	0	0	0	-	0
State								
SPILLS	Y	0.125	0	0	-	-	-	0
DRYCLEANERS	Y	0.25	0	0	0	-	-	0

Database	Searched	Search Radius	Project Property	Within 0.12mi	0.125mi to 0.25mi	0.25mi to 0.50mi	0.50mi to 1.00mi	Total
PFAS	Y	0.5	0	0	0	0	-	0
AIR PERMITS	Y	0.25	0	0	0	-	-	0
DRYWELLS	Y	0.125	0	0	-	-	-	0
DRYWELLS HIST	Y	0.125	0	0	-	-	-	0
DRUG LAB REMEDIATION	Y	0.125	0	0	-	-	-	0
CDL	Y	0.125	0	0	-	-	-	0
TIER 2	Y	0.125	0	0	-	-	-	0
BIO HAZ WASTE	Y	0.25	0	0	0	-	-	0

Tribal ***No Tribal additional environmental record sources available for this State.***

County ***No County additional environmental record sources available for this State.***

Total:	***1***	*0*	*0*	*0*	*0*	***1***

**** PO – Property Only***
**** 'Property and adjoining properties' database search radii are set at 0.25 miles.***

Executive Summary: Site Report Summary - Project Property

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number
1	FUDS	LAGUNA MANEUVER AREA	30 MILES NE OF YUMA AZ ***FUDS Property No:*** *J09AZ0439*	W	0.00 / 0.00	0	16

Executive Summary: Site Report Summary - Surrounding Properties

Map Key	DB	Company/Site Name	Address	Direction	Distance (mi/ft)	Elev Diff (ft)	Page Number

No records found in the selected databases for the surrounding properties.

Executive Summary: Summary by Data Source

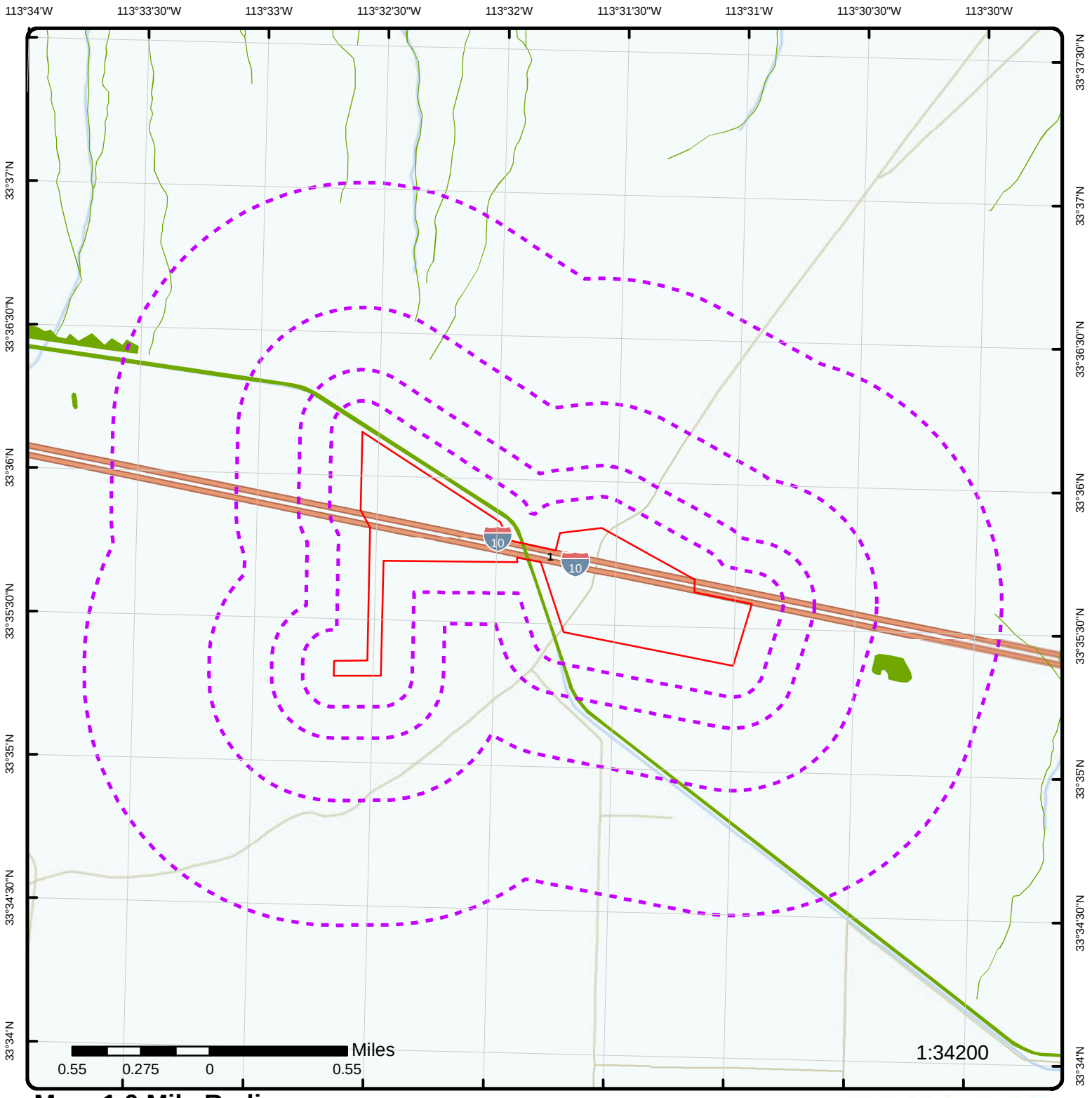
Non Standard

Federal

FUDS - Formerly Used Defense Sites

A search of the FUDS database, dated May 26, 2021 has found that there are 1 FUDS site(s) within approximately 1.00 miles of the project property.

Equal/Higher Elevation	Address	Direction	Distance (mi/ft)	Map Key
LAGUNA MANEUVER AREA	30 MILES NE OF YUMA AZ ***FUDS Property No**: J09AZ0439*	W	0.00 / 0.00	1



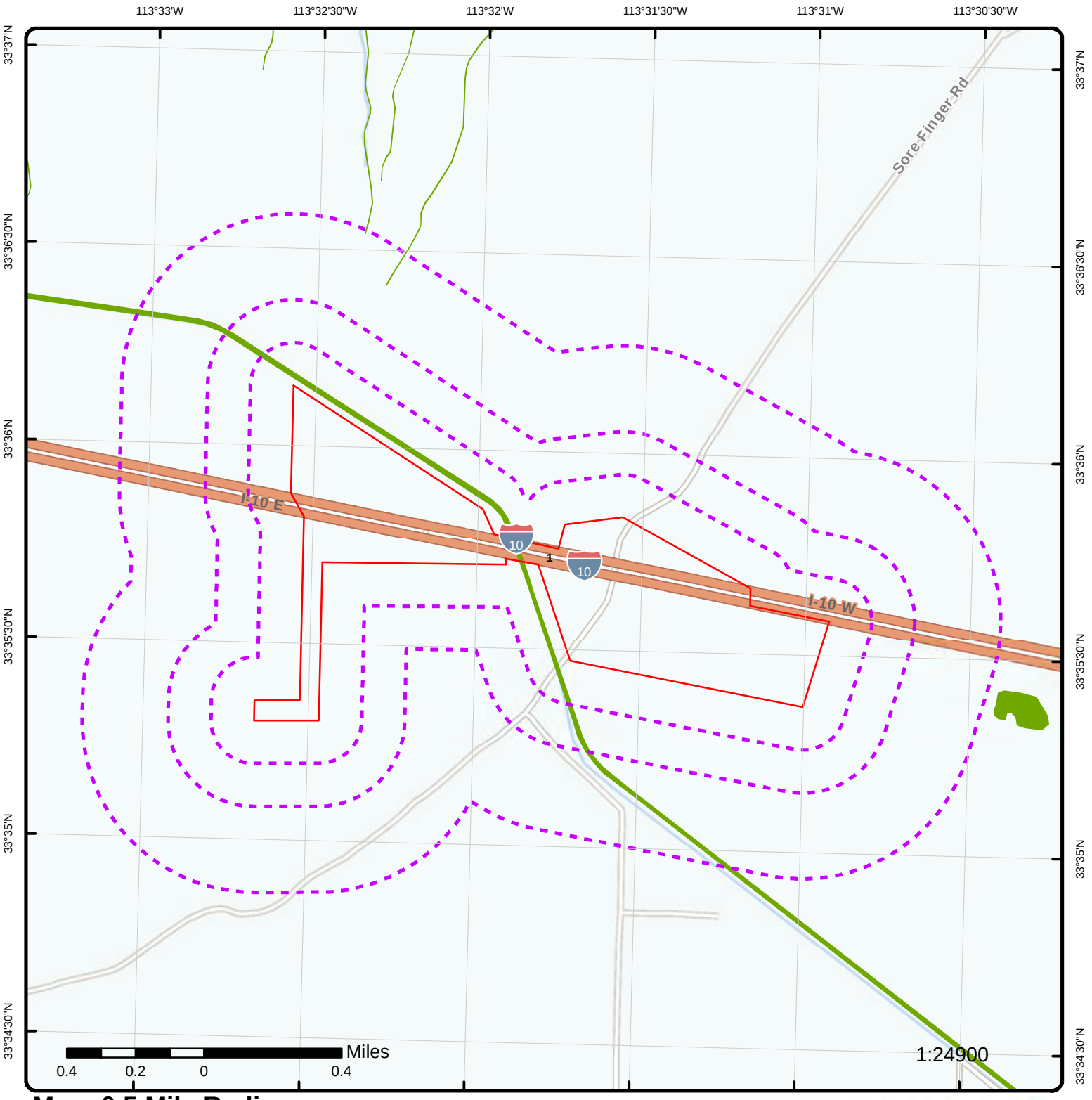
Map: 1.0 Mile Radius

Order Number: 22071900844

Address: I-10 and Sorefinger Rd, Arizona, AZ

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Eris Areas with Higher Elevation
- Eris Areas with Same Elevation
- Eris Areas with Lower Elevation
- Eris Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas

Source: © 2021 ESRI StreetMap Premium

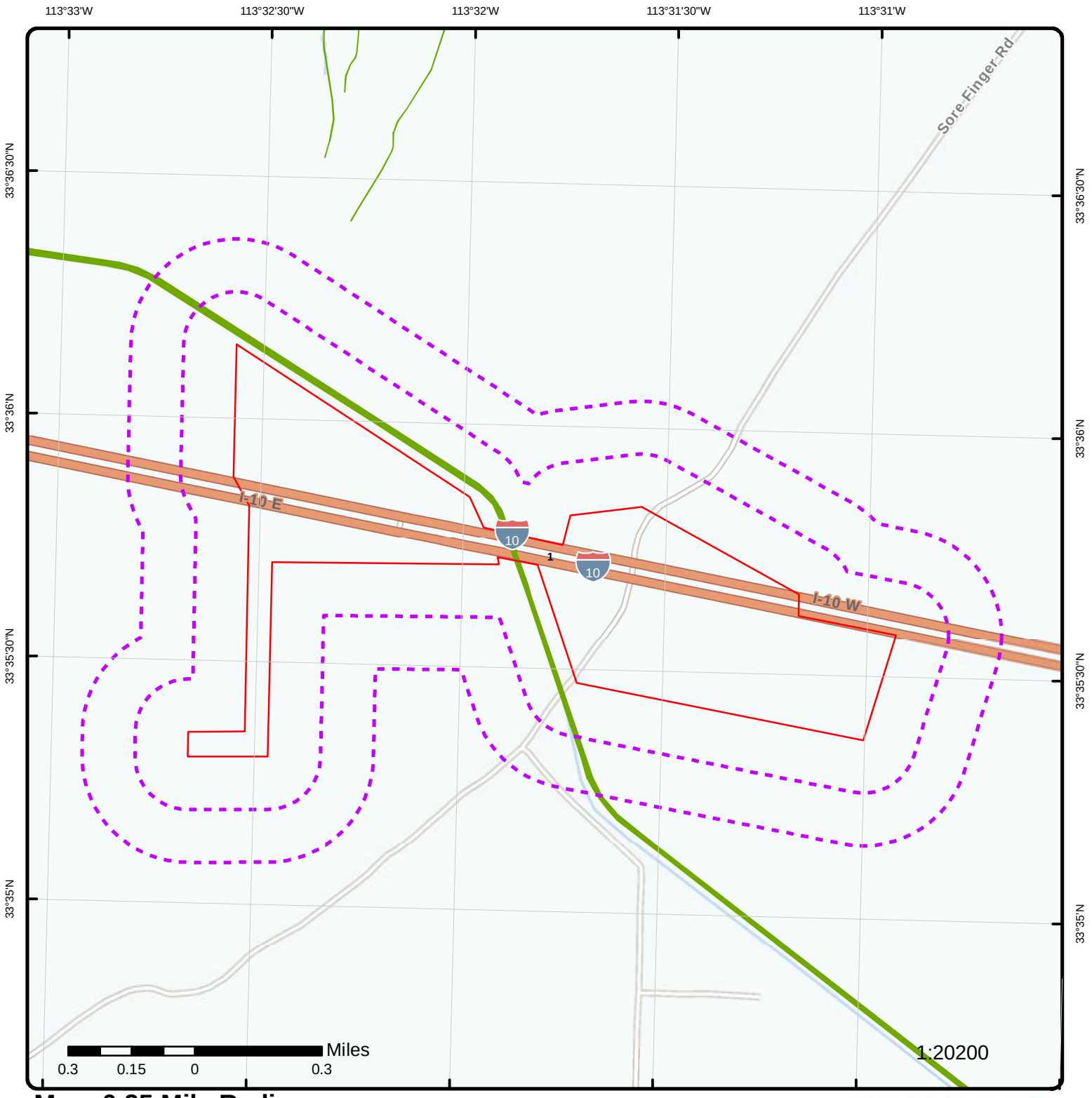


Map: 0.5 Mile Radius

Order Number: 22071900844

Address: I-10 and Sorefinger Rd, Arizona, AZ

- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Eris Areas with Higher Elevation
- Eris Areas with Same Elevation
- Eris Areas with Lower Elevation
- Eris Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas



Map: 0.25 Mile Radius

Order Number: 22071900844

Address: I-10 and Sorefinger Rd, Arizona, AZ

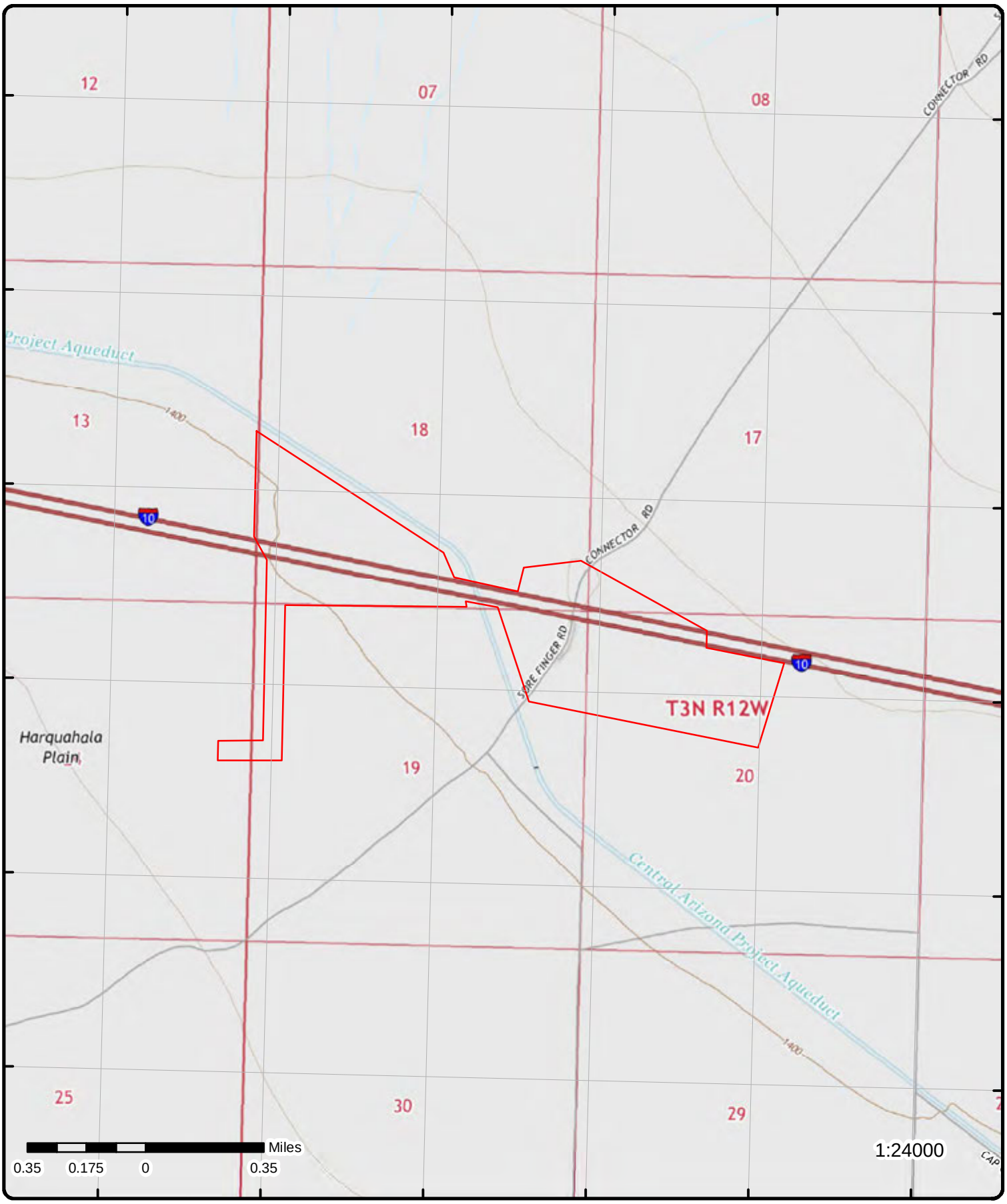
- Project Property
- Buffer Outline
- Eris Sites with Higher Elevation
- Eris Sites with Same Elevation
- Eris Sites with Lower Elevation
- Eris Sites with Unknown Elevation
- Eris Areas with Higher Elevation
- Eris Areas with Same Elevation
- Eris Areas with Lower Elevation
- Eris Areas with Unknown Elevation
- Freeways; Highways
- Traffic Circle; Ramp
- Major & Minor Arterial
- Traffic Circle; Ramp
- Local Road
- Rail
- State
- Country
- National Wetland
- Indian Reserve Land
- Plume
- 100 Year Flood Zone
- 500 Year Flood Zone
- FWS Special Designation Areas

Aerial **Year: 2021**

Address: I-10 and Sorefinger Rd, Arizona, AZ

Source: ESRI World Imagery

Order Number: 22071900844



Topographic Map

Year: 2014

Order Number: 22071900844

Address: I-10 and Sorefinger Rd, AZ

Quadrangle(s): Hope SE, AZ; Lone Mountain, AZ; Harrisburg Valley, AZ

Source: USGS Topographic Map

Detail Report

Map Key	Number of Records	Direction	Distance (mi/ft)	Elev/Diff (ft)	Site	DB
1	1 of 1	W	0.00 / 0.00	1,411.26 / 0	LAGUNA MANEUVER AREA 30 MILES NE OF YUMA AZ	FUDS

FUDS Property No:	J09AZ0439
EMS Map Link:	https://fudsportal.usace.army.mil/ems/inventory/map/map?id=55960
FUDS INST ID:	AZ99799F512600
Status:	
SDS ID:	
NPL Status Code:	Not on the NPL
Eligibility:	Eligible
Site Eligib:	
Current Owner:	
Has Project:	Yes
DOD FUDS Pro:	
Project Required:	Yes
No Further Action:	
Congressional District:	04
EPA Region:	09
County:	LA PAZ
Latitude:	33.51583333
Longitude:	-113.47972222
Fiscal year:	2019
USACE Division:	SPD
USACE District:	Los Angeles District (SPL)
Shape Area:	1.10066633
Shape Len:	12.20788572
Centroid Latitude:	
Centroid Longitude:	
Media ID:	
Metadata ID:	
Feature Desc:	
Property History:	The site was part of the Desert Training Center. T he War Department acquired a total of 20,146.24 acres for the subject site. This included 3,358.52 acres acquired by transfer from the Department of Interior by Public Land Order No. 166, dated 15 Septem

Unplottable Summary

Total: 3 Unplottable sites

DB	Company Name/Site Name	Address	City	Zip	ERIS ID
ERNS		I-10 ***NRC Report No:*** 27713	QUARTSIDE AZ		807077035
ERNS		INTERSTATE 10 EASTBOUND ***NRC Report No:*** 157823	QUARTZITE AZ		806975096
SPILLS	Ted's Truck Stop	I-10 Frontage Rd.	Quartzsite AZ		820446087

Unplottable Report

Site:

I-10 QUARTSIDE AZ

ERNS

NRC Report No:	27713	***Latitude Degrees:***	
Type of Incident:	FIXED	***Latitude Minutes:***	
Incident Cause:	EQUIPMENT FAILURE	***Latitude Seconds:***	
Incident Date:	19-Jun-1990 20:30:00	***Longitude Degrees:***	
Incident Location:		***Longitude Minutes:***	
Incident Dtg:	DISCOVERED	***Longitude Seconds:***	
Distance from City:		***Lat Quad:***	
Distance Units:		***Long Quad:***	
Direction from City:		***Location Section:***	
Location County:	LA PAZ	***Location Township:***	
Potential Flag:		***Location Range:***	
Year:	Year 1990 Reports		
Description of Incident:	LEAKING STORAGE TANK		

Material Spill Information

Chris Code:	WTO	***Unit of Measure:***	UNKNOWN AMOUNT
CAS No:		***If Reached Water:***	YES
UN No:		***Amount in Water:***	0
Name of Material:	WASTE OIL/LUBRICANTS - POSS. CON	***Unit Reach Water:***	NONE
Amount of Material:	0		

Calls Information

Date Time Received:	20-Jun-1990 16:37:18	***Responsible City:***	QUARTSIDE
Date Time Complete:	20-Jun-1990 16:42:22	***Responsible State:***	AZ
Call Type:	INC	***Responsible Zip:***	
Resp Company:	TED'S TRUCK STOP	***Source:***	UNAVAILABLE
Resp Org Type:	PRIVATE ENTERPRISE		

Incident Information

Tank ID:		***Building ID:***	
Tank Regulated:	U	***Location Area ID:***	
Tank Regulated By:		***Location Block ID:***	
Capacity of Tank:		***OCSG No:***	
Capacity Tank Units:		***OCSP No:***	
Description of Tank:		***State Lease No:***	
Actual Amount:		***Pier Dock No:***	
Actual Amount Units:		***Berth Slip No:***	
Tank Above Ground:	ABOVE	***Brake Failure:***	N
NPDES:		***Airbag Deployed:***	
NPDES Compliance:	U	***Transport Contain:***	U
Init Contin Rel No:		***Location Subdiv:***	
Contin Rel Permit:		***Platform Rig Name:***	
Contin Release Type:		***Platform Letter:***	
Aircraft ID:		***Allision:***	N
Aircraft Runway No:		***Type of Structure:***	
Aircraft Spot No:		***Structure Name:***	
Aircraft Type:	UNKNOWN	***Structure Oper:***	Y
Aircraft Model:		***Transit Bus Flag:***	
Aircraft Fuel Cap:		***Date Time Norm Serv:***	
Aircraft Fuel Cap U:		***Serv Disrupt Time:***	
Aircraft Fuel on Brd:		***Serv Disrupt Units:***	
Aircraft Fuel OB U:		***CR Begin Date:***	
Aircraft Hanger:		***CR End Date:***	

Road Mile Marker:		***CR Change Date:***	
Power Gen Facility:	U	***FBI Contact:***	
Generating Capacity:		***FBI Contact Dt Tm:***	
Type of Fixed Obj:	UNKNOWN	***Passenger Handling:***	
Type of Fuel:		***Passenger Route:***	XXX
DOT Crossing No:		***Passenger Delay:***	XXX
DOT Regulated:	U	***Sub Part C Test Req:***	XXX
Pipeline Type:	UNKNOWN	***Conductor Test:***	
Pipeline Abv Ground:	ABOVE	***Engineer Test:***	
Pipeline Covered:	U	***Trainman Test:***	
Exposed Underwater:	U	***Yard Foreman Test:***	
Railroad Hotline:	No	***RCL Operator Test:***	
Railroad Milepost:	UNKNOWN	***Brakeman Test:***	
Grade Crossing:	N	***Train Dispat Test:***	
Crossing Device Ty:		***Signalman Test:***	
Ty Vehicle Involved:	UNKNOWN	***Oth Employee Test:***	
Device Operational:	Y	***Unknown Test:***	

Incident Details Information

Release Secured:	U	***State Agen Report No:***	
Release Rate:		***State Agen on Scene:***	
Release Rate Unit:		***State Agen Notified:***	
Release Rate Rate:		***Fed Agency Notified:***	
Est Duration of Rel:		***Oth Agency Notified:***	
Desc Remedial Act:	APPEARS THAT COMPANY HAS TAKEN CONTAMINATED SOIL INTO DESERT	***Body of Water:***	
Fire Involved:	N	***Tributary of:***	
Fire Extinguished:	U	***Near River Mile Make:***	
Any Evacuations:	N	***Near River Mile Mark:***	
No Evacuated:		***Offshore:***	N
Who Evacuated:		***Weather Conditions:***	
Radius of Evacu:		***Air Temperature:***	
Any Injuries:	U	***Wind Direction:***	
No. Injured:		***Wind Speed:***	
No. Hospitalized:		***Wind Speed Unit:***	
No. Fatalities:		***Water Supp Contam:***	U
Any Fatalities:	U	***Water Temperature:***	
Any Damages:	N	***Wave Condition:***	
Damage Amount:		***Current Speed:***	
Air Corridor Closed:	N	***Current Direction:***	
Air Corridor Desc:		***Current Speed Unit:***	
Air Closure Time:		***EMPL Fatality:***	
Waterway Closed:	N	***Pass Fatality:***	
Waterway Desc:		***Community Impact:***	N
Waterway Close Time:		***Passengers Transfer:***	UNK
Road Closed:	N	***Passenger Injuries:***	
Road Desc:		***Employee Injuries:***	
Road Closure Time:		***Occupant Fatality:***	
Road Closure Units:		***Sheen Size:***	
Closure Direction:		***Sheen Size Units:***	
Major Artery:	No	***Sheen Size Length:***	
Track Closed:	N	***Sheen Size Length U:***	
Track Desc:		***Sheen Size Width:***	
Track Closure Time:		***Sheen Size Width U:***	
Track Closure Units:		***Sheen Color:***	
Track Close Dir:		***Dir of Sheen Travel:***	
Media Interest:		***Sheen Odor Desc:***	
Medium Desc:	LAND	***Duration Unit:***	
Addl Medium Info:	SOIL	***Additional Info:***	NONE

Site:

INTERSTATE 10 EASTBOUND QUARTZITE AZ

ERNS

NRC Report No:	157823	***Latitude Degrees:***	
Type of Incident:	MOBILE	***Latitude Minutes:***	
Incident Cause:	TRANSPORT ACCIDENT	***Latitude Seconds:***	
Incident Date:	11-Feb-1993 03:00:00	***Longitude Degrees:***	
Incident Location:		***Longitude Minutes:***	

Incident Dtg:	OCCURRED	***Longitude Seconds:***	
Distance from City:		***Lat Quad:***	
Distance Units:		***Long Quad:***	
Direction from City:		***Location Section:***	
Location County:	LA PAZ	***Location Township:***	
Potential Flag:		***Location Range:***	
Year:	Year 1993 Reports		
Description of Incident:	5 GALLON CONTAINERS BEING CARRIED ON TRACTOR TRAILER / CONTAINERSLEAKED WHEN TRUCK TURNED OVER		

Material Spill Information

Chris Code:	NCC	***Unit of Measure:***	UNKNOWN AMOUNT
CAS No:		***If Reached Water:***	YES
UN No:		***Amount in Water:***	0
Name of Material:	HIGH PH CLEANING MATERIALS	***Unit Reach Water:***	NONE
Amount of Material:	0		

Calls Information

Date Time Received:	12-Feb-1993 14:11:56	***Responsible City:***	GOODYEAR
Date Time Complete:	12-Feb-1993 14:21:33	***Responsible State:***	AZ
Call Type:	INC	***Responsible Zip:***	85338
Resp Company:	ORION	***Source:***	UNAVAILABLE
Resp Org Type:	PRIVATE ENTERPRISE		

Incident Information

Tank ID:		***Building ID:***	
Tank Regulated:	U	***Location Area ID:***	
Tank Regulated By:		***Location Block ID:***	
Capacity of Tank:		***OCSG No:***	
Capacity Tank Units:		***OCSP No:***	
Description of Tank:		***State Lease No:***	
Actual Amount:		***Pier Dock No:***	
Actual Amount Units:		***Berth Slip No:***	
Tank Above Ground:	ABOVE	***Brake Failure:***	N
NPDES:		***Airbag Deployed:***	
NPDES Compliance:	U	***Transport Contain:***	U
Init Contin Rel No:		***Location Subdiv:***	
Contin Rel Permit:		***Platform Rig Name:***	
Contin Release Type:		***Platform Letter:***	
Aircraft ID:		***Allision:***	N
Aircraft Runway No:		***Type of Structure:***	
Aircraft Spot No:		***Structure Name:***	
Aircraft Type:	UNKNOWN	***Structure Oper:***	Y
Aircraft Model:		***Transit Bus Flag:***	
Aircraft Fuel Cap:		***Date Time Norm Serv:***	
Aircraft Fuel Cap U:		***Serv Disrupt Time:***	
Aircraft Fuel on Brd:		***Serv Disrupt Units:***	
Aircraft Fuel OB U:		***CR Begin Date:***	
Aircraft Hanger:		***CR End Date:***	
Road Mile Marker:		***CR Change Date:***	
Power Gen Facility:	U	***FBI Contact:***	
Generating Capacity:		***FBI Contact Dt Tm:***	
Type of Fixed Obj:	UNKNOWN	***Passenger Handling:***	
Type of Fuel:		***Passenger Route:***	XXX
DOT Crossing No:		***Passenger Delay:***	XXX
DOT Regulated:	U	***Sub Part C Test Req:***	XXX
Pipeline Type:	UNKNOWN	***Conductor Test:***	
Pipeline Abv Ground:	ABOVE	***Engineer Test:***	
Pipeline Covered:	U	***Trainman Test:***	
Exposed Underwater:	U	***Yard Foreman Test:***	
Railroad Hotline:	No	***RCL Operator Test:***	
Railroad Milepost:	58	***Brakeman Test:***	
Grade Crossing:	N	***Train Dispat Test:***	
Crossing Device Ty:		***Signalman Test:***	
Ty Vehicle Involved:	UNKNOWN	***Oth Employee Test:***	

Device Operational:	Y	***Unknown Test:***	

Incident Details Information

Release Secured:	U	***State Agen Report No:***	
Release Rate:		***State Agen on Scene:***	
Release Rate Unit:		***State Agen Notified:***	
Release Rate Rate:		***Fed Agency Notified:***	
Est Duration of Rel:		***Oth Agency Notified:***	
Desc Remedial Act:	CONTAMINATED SOIL WAS EXCAVATED	***Body of Water:***	
Fire Involved:	N	***Tributary of:***	
Fire Extinguished:	U	***Near River Mile Make:***	
Any Evacuations:	N	***Near River Mile Mark:***	
No Evacuated:		***Offshore:***	N
Who Evacuated:		***Weather Conditions:***	
Radius of Evacu:		***Air Temperature:***	
Any Injuries:	U	***Wind Direction:***	
No. Injured:		***Wind Speed:***	
No. Hospitalized:		***Wind Speed Unit:***	
No. Fatalities:		***Water Supp Contam:***	U
Any Fatalities:	U	***Water Temperature:***	
Any Damages:	U	***Wave Condition:***	
Damage Amount:		***Current Speed:***	
Air Corridor Closed:	N	***Current Direction:***	
Air Corridor Desc:		***Current Speed Unit:***	
Air Closure Time:		***EMPL Fatality:***	
Waterway Closed:	N	***Pass Fatality:***	
Waterway Desc:		***Community Impact:***	N
Waterway Close Time:		***Passengers Transfer:***	UNK
Road Closed:	N	***Passenger Injuries:***	
Road Desc:		***Employee Injuries:***	
Road Closure Time:		***Occupant Fatality:***	
Road Closure Units:		***Sheen Size:***	
Closure Direction:		***Sheen Size Units:***	
Major Artery:	No	***Sheen Size Length:***	
Track Closed:	N	***Sheen Size Length U:***	
Track Desc:		***Sheen Size Width:***	
Track Closure Time:		***Sheen Size Width U:***	
Track Closure Units:		***Sheen Color:***	
Track Close Dir:		***Dir of Sheen Travel:***	
Media Interest:		***Sheen Odor Desc:***	
Medium Desc:	LAND	***Duration Unit:***	
Addl Medium Info:	SOIL	***Additional Info:***	EXACT COMPOSITION ON MATERIAL UNKNOWN / COMPRISED PRIMARILY OFJANITORIAL SUPPLIES

Site: ***Ted's Truck Stop***
I-10 Frontage Rd. Quartzsite AZ

SPILLS

ID:	3898
County:	LaPaz

--Details--

Incident NO:	90-079-C	***Chemic Material:***	Diesel
Incident Dt:	6/19/1990	***Structure:***	UST
Date Reported:	6/19/1990	***Type:***	Release
Quantity:	10-25 gals.	***Response Dt:***	N/A
Fund Amount:	N/A	***Admin:***	admin

Appendix: Database Descriptions

Environmental Risk Information Services (ERIS) can search the following databases. The extent of historical information varies with each database and current information is determined by what is publicly available to ERIS at the time of update. ERIS updates databases as set out in ASTM Standard E1527-13 and E1527-21, Section 8.1.8 Sources of Standard Source Information:

"Government information from nongovernmental sources may be considered current if the source updates the information at least every 90 days, or, for information that is updated less frequently than quarterly by the government agency, within 90 days of the date the government agency makes the information available to the public."

Standard Environmental Record Sources

Federal

Formerly Utilized Sites Remedial Action Program: DOE FUSRAP

The U.S. Department of Energy (DOE) established the Formerly Utilized Sites Remedial Action Program (FUSRAP) in 1974 to remediate sites where radioactive contamination remained from the Manhattan Project and early U.S. Atomic Energy Commission (AEC) operations. The DOE Office of Legacy Management (LM) established long-term surveillance and maintenance (LTS&M) requirements for remediated FUSRAP sites. DOE evaluates the final site conditions of a remediated site on the basis of risk for different future uses. DOE then confirms that LTS&M requirements will maintain protectiveness.

Government Publication Date: Mar 4, 2017

National Priority List: NPL

Sites on the United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. The NPL, which EPA is required to update at least once a year, is based primarily on the score a site receives from EPA's Hazard Ranking System. A site must be on the NPL to receive money from the Superfund Trust Fund for remedial action. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

National Priority List - Proposed: PROPOSED NPL

Sites proposed - by the EPA, the state agency, or concerned citizens - for addition to the NPL due to contamination by hazardous waste and identified by the Environmental Protection Agency (EPA) as a candidate for cleanup because it poses a risk to human health and/or the environment. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

Deleted NPL: DELETED NPL

Sites deleted from the United States Environmental Protection Agency (EPA)'s National Priorities List. The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) establishes the criteria that the EPA uses to delete sites from the NPL. In accordance with 40 CFR 300.425.(e), sites may be deleted from the NPL where no further response is appropriate. Sites are represented by boundaries where available in the EPA Superfund Site Boundaries maintained by the Shared Enterprise Geodata and Services (SEGS). Site boundaries represent the footprint of a whole site, the sum of all of the Operable Units and the current understanding of the full extent of contamination; for Federal Facility sites, the total site polygon may be the Facility boundary. Where there is no polygon boundary data available for a given site, the site is represented as a point.

Government Publication Date: Mar 30, 2022

SEMS List 8R Active Site Inventory: SEMS

The Superfund Program has deployed the Superfund Enterprise Management System (SEMS), which integrates multiple legacy systems into a comprehensive tracking and reporting tool. This inventory contains active sites evaluated by the Superfund program that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The Active Site Inventory Report displays site and location information at active SEMS sites. An active site is one at which site assessment, removal, remedial, enforcement, cost recovery, or oversight activities are being planned or conducted.

Government Publication Date: Apr 27, 2022

Inventory of Open Dumps, June 1985: ODI

The Resource Conservation and Recovery Act (RCRA) provides for publication of an inventory of open dumps. The Act defines "open dumps" as facilities which do not comply with EPA's "Criteria for Classification of Solid Waste Disposal Facilities and Practices" (40 CFR 257).

Government Publication Date: Jun 1985

SEMS List 8R Archive Sites: SEMS ARCHIVE

The Superfund Enterprise Management System (SEMS) Archived Site Inventory displays site and location information at sites archived from SEMS. An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time.

Government Publication Date: Apr 27, 2022

Comprehensive Environmental Response, Compensation and Liability Information System - CERCLIS: CERCLIS

Superfund is a program administered by the United States Environmental Protection Agency (EPA) to locate, investigate, and clean up the worst hazardous waste sites throughout the United States. CERCLIS is a database of potential and confirmed hazardous waste sites at which the EPA Superfund program has some involvement. It contains sites that are either proposed to be or are on the National Priorities List (NPL) as well as sites that are in the screening and assessment phase for possible inclusion on the NPL. The EPA administers the Superfund program in cooperation with individual states and tribal governments; this database is made available by the EPA.

Government Publication Date: Oct 25, 2013

EPA Report on the Status of Open Dumps on Indian Lands: IODI

Public Law 103-399, The Indian Lands Open Dump Cleanup Act of 1994, enacted October 22, 1994, identified congressional concerns that solid waste open dump sites located on American Indian or Alaska Native (AI/AN) lands threaten the health and safety of residents of those lands and contiguous areas. The purpose of the Act is to identify the location of open dumps on Indian lands, assess the relative health and environment hazards posed by those sites, and provide financial and technical assistance to Indian tribal governments to close such dumps in compliance with Federal standards and regulations or standards promulgated by Indian Tribal governments or Alaska Native entities.

Government Publication Date: Dec 31, 1998

CERCLIS - No Further Remedial Action Planned: CERCLIS NFRAP

An archived site is one at which EPA has determined that assessment has been completed and no further remedial action is planned under the Superfund program at this time. The Archive designation means that, to the best of EPA's knowledge, assessment at a site has been completed and that EPA has determined no further steps will be taken to list this site on the National Priorities List (NPL). This decision does not necessarily mean that there is no hazard associated with a given site; it only means that, based upon available information, the location is not judged to be a potential NPL site.

Government Publication Date: Oct 25, 2013

CERCLIS Liens: CERCLIS LIENS

A Federal Superfund lien exists at any property where EPA has incurred Superfund costs to address contamination ("Superfund site") and has provided notice of liability to the property owner. A Federal CERCLA ("Superfund") lien can exist by operation of law at any site or property at which EPA has spent Superfund monies. This database is made available by the United States Environmental Protection Agency (EPA). This database was provided by the United States Environmental Protection Agency (EPA). Refer to SEMS LIEN as the current data source for Superfund Liens.

Government Publication Date: Jan 30, 2014

RCRA CORRACTS-Corrective Action: RCRA CORRACTS

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. At these sites, the Corrective Action Program ensures that cleanups occur. EPA and state regulators work with facilities and communities to design remedies based on the contamination, geology, and anticipated use unique to each site.

Government Publication Date: Apr 11, 2022

RCRA non-CORRACTS TSD Facilities: RCRA TSD

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. This database includes Non-Corrective Action sites listed as treatment, storage and/or disposal facilities of hazardous waste as defined by the Resource Conservation and Recovery Act (RCRA).

Government Publication Date: Apr 11, 2022

RCRA Generator List: RCRA LQG

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Large Quantity Generators (LQGs) generate 1,000 kilograms per month or more of hazardous waste or more than one kilogram per month of acutely hazardous waste.

Government Publication Date: Apr 11, 2022

RCRA Small Quantity Generators List: RCRA SQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Small Quantity Generators (SQGs) generate more than 100 kilograms, but less than 1,000 kilograms, of hazardous waste per month.

Government Publication Date: Apr 11, 2022

RCRA Very Small Quantity Generators List: RCRA VSQG

RCRA Info is the EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Very Small Quantity Generators (VSQG) generate 100 kilograms or less per month of hazardous waste, or one kilogram or less per month of acutely hazardous waste. Additionally, VSQG may not accumulate more than 1,000 kilograms of hazardous waste at any time.

Government Publication Date: Apr 11, 2022

RCRA Non-Generators: RCRA NON GEN

RCRA Info is EPA's comprehensive information system, providing access to data supporting the Resource Conservation and Recovery Act (RCRA) of 1976 and the Hazardous and Solid Waste Amendments (HSWA) of 1984. RCRA Info replaces the data recording and reporting abilities of the Resource Conservation and Recovery Information System (RCRIS) and the Biennial Reporting System (BRS). A hazardous waste generator is any person or site whose processes and actions create hazardous waste (see 40 CFR 260.10). Non-Generators do not presently generate hazardous waste.

Government Publication Date: Apr 11, 2022

RCRA Sites with Controls: RCRA CONTROLS

List of Resource Conservation and Recovery Act (RCRA) facilities with institutional controls in place. RCRA gives the U.S. Environmental Protection Agency (EPA) the authority to control hazardous waste from the "cradle-to-grave." This includes the generation, transportation, treatment, storage, and disposal of hazardous waste. RCRA also set forth a framework for the management of non-hazardous solid wastes. The 1986 amendments to RCRA enabled EPA to address environmental problems that could result from underground tanks storing petroleum and other hazardous substances.

Government Publication Date: Apr 11, 2022

Federal Engineering Controls-ECs: FED ENG

Engineering controls (ECs) encompass a variety of engineered and constructed physical barriers (e.g., soil capping, sub-surface venting systems, mitigation barriers, fences) to contain and/or prevent exposure to contamination on a property. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: May 25, 2022

Federal Institutional Controls- ICs: FED INST

Institutional controls are non-engineered instruments, such as administrative and legal controls, that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy. Although it is EPA's (United States Environmental Protection Agency) expectation that treatment or engineering controls will be used to address principal threat wastes and that groundwater will be returned to its beneficial use whenever practicable, ICs play an important role in site remedies because they reduce exposure to contamination by limiting land or resource use and guide human behavior at a site.

Government Publication Date: May 25, 2022

Land Use Control Information System: LUCIS

The LUCIS database is maintained by the U.S. Department of the Navy and contains information for former Base Realignment and Closure (BRAC) properties across the United States.

Government Publication Date: Sep 1, 2006

Institutional Control Boundaries at NPL sites: NPL IC

Boundaries of Institutional Control areas at sites on the United States Environmental Protection Agency (EPA)'s National Priorities List, or Proposed or Deleted, made available by the EPA's Shared Enterprise Geodata and Services (SEGS). United States Environmental Protection Agency (EPA)'s National Priorities List of the most serious uncontrolled or abandoned hazardous waste sites identified for possible long-term remedial action under the Superfund program. Institutional controls are non-engineered instruments such as administrative and legal controls that help minimize the potential for human exposure to contamination and/or protect the integrity of the remedy.

Government Publication Date: Mar 30, 2022

Emergency Response Notification System: ERNS 1982 TO 1986

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1982-1986

Emergency Response Notification System: ERNS 1987 TO 1989

Database of oil and hazardous substances spill reports controlled by the National Response Center. The primary function of the National Response Center is to serve as the sole national point of contact for reporting oil, chemical, radiological, biological, and etiological discharges into the environment anywhere in the United States and its territories.

Government Publication Date: 1987-1989

Emergency Response Notification System: ERNS

Database of oil and hazardous substances spill reports made available by the United States Coast Guard National Response Center (NRC). The NRC fields initial reports for pollution and railroad incidents and forwards that information to appropriate federal/state agencies for response. These data contain initial incident data that has not been validated or investigated by a federal/state response agency.

Government Publication Date: Jun 5, 2022

The Assessment, Cleanup and Redevelopment Exchange System (ACRES) Brownfield Database: FED BROWNFIELDS

Brownfields are real property, the expansion, redevelopment, or reuse of which may be complicated by the presence or potential presence of a hazardous substance, pollutant, or contaminant. Cleaning up and reinvesting in these properties protects the environment, reduces blight, and takes development pressures off greenspaces and working lands. This database is made available by the United States Environmental Protection Agency (EPA).

Government Publication Date: Aug 20, 2021

FEMA Underground Storage Tank Listing: FEMA UST

The Federal Emergency Management Agency (FEMA) of the Department of Homeland Security maintains a list of FEMA owned underground storage tanks.

Government Publication Date: Dec 31, 2017

Facility Response Plan: FRP

List of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 31, 2021

Delisted Facility Response Plans: DELISTED FRP

Facilities that once appeared in - and have since been removed from - the list of facilities that have submitted Facility Response Plans (FRP) to EPA. Facilities that could reasonably be expected to cause "substantial harm" to the environment by discharging oil into or on navigable waters are required to prepare and submit Facility Response Plans (FRPs). Harm is determined based on total oil storage capacity, secondary containment and age of tanks, oil transfer activities, history of discharges, proximity to a public drinking water intake or sensitive environments.

Government Publication Date: Dec 31, 2021

Historical Gas Stations: HIST GAS STATIONS

This historic directory of service stations is provided by the Cities Service Company. The directory includes Cities Service filling stations that were located throughout the United States in 1930.

Government Publication Date: Jul 1, 1930

Petroleum Refineries: REFN

List of petroleum refineries from the U.S. Energy Information Administration (EIA) Refinery Capacity Report. Includes operating and idle petroleum refineries (including new refineries under construction) and refineries shut down during the previous year located in the 50 States, the District of Columbia, Puerto Rico, the Virgin Islands, Guam, and other U.S. possessions. Survey locations adjusted using public data.

Government Publication Date: Feb 4, 2022

Petroleum Product and Crude Oil Rail Terminals: BULK TERMINAL

List of petroleum product and crude oil rail terminals made available by the U.S. Energy Information Administration (EIA). Includes operable bulk petroleum product terminals located in the 50 States and the District of Columbia with a total bulk shell storage capacity of 50,000 barrels or more, and/or the ability to receive volumes from tanker, barge, or pipeline; also rail terminals handling the loading and unloading of crude oil that were active between 2017 and 2018. Petroleum product terminals comes from the EIA-815 Bulk Terminal and Blender Report, which includes working, shell in operation, and shell idle for several major product groupings. Survey locations adjusted using public data.

Government Publication Date: Feb 4, 2022

LIEN on Property: SEMS LIEN

The EPA Superfund Enterprise Management System (SEMS) provides LIEN information on properties under the EPA Superfund Program.

Government Publication Date: Apr 27, 2022

Superfund Decision Documents: SUPERFUND ROD

This database contains a listing of decision documents for Superfund sites. Decision documents serve to provide the reasoning for the choice of (or) changes to a Superfund Site cleanup plan. The decision documents include Records of Decision (ROD), ROD Amendments, Explanations of Significant Differences (ESD), along with other associated memos and files. This information is maintained and made available by the US EPA (Environmental Protection Agency).

Government Publication Date: May 3, 2022

State

Waste Program Remedial Projects - Superfund & DOD: SHWS

The Arizona Department of Environmental Quality (ADEQ) Waste Programs Division investigates, manages, and oversees remediation of soil and groundwater contaminated with hazardous substances. List of sites overseen by the Remedial Projects Section and/or Federal programs, including Federal DOD and Superfund sites.

Government Publication Date: May 10, 2022

CERCLIS Information Data System (ACIDS): SHWS ACIDS

The Arizona CERCLIS Information Data System (ACIDS) list was used by the Arizona Department of Environmental Quality Superfund Programs Section (SPS) prior to July 2000. The ACIDS list consists of locations subject to investigations concerning possible contamination of soil, surface water, or groundwater under the State Water Quality Assurance Revolving Fund (WQARF) and Federal CERCLA programs. The ACIDS list has been archived and is no longer being distributed or updated. The ACIDS list has been replaced by the Arizona Superfund Program List (ASPL).

Government Publication Date: Aug 3, 1995

Water Quality Assurance Revolving Fund Sites (WQARF): WQARF

The Arizona Department of Environmental Quality (ADEQ) Water Quality Assurance Revolving Fund (WQARF) program supports the ADEQ in identifying, prioritizing, assessing, and resolving the threat of contaminated soil and groundwater sites in the state. This list of sites includes those on the WQARF Registry, sites removed from the WQARF Registry, and sites requiring remediation under the WQARF Emergency Response.

Government Publication Date: May 10, 2022

Delisted WQARF, Superfund, DOD: DELISTED SUPERFUND

List of sites which once appeared, but have since been removed from either the WQARF Registry, Superfund Sites, Department of Defense Sites, or Superfund Alternative Sites.

Government Publication Date: May 10, 2022

Directory of Solid Waste Facilities: SWF/LF

A list of Solid Waste Facilities and Landfill sites in the State of Arizona. This list is made available by Arizona Department of Environmental Quality, Waste Programs Division, Solid Waste Management.

Government Publication Date: Jan 31, 2022

Leaking Underground Storage Tanks: LUST

A list of Leaking Underground Storage Tanks (LUST) sites in the state of Arizona. This list is made available by Arizona Department of Environment Quality.

Government Publication Date: Jun 13, 2022

Delisted Leaking Underground Storage Tanks: DELISTED LUST

A list of sites that once appeared on - and have since been removed from - the list of Leaking Underground Storage tanks made available by the Arizona Department of Environmental Quality.

Government Publication Date: Jun 13, 2022

Underground Storage Tanks List: UST

A list of Underground Storage Tank sites registered with the Arizona Department of Environmental Quality (ADEQ) Waste Program Division. This list is made available by ADEQ.

Government Publication Date: Jun 14, 2022

Aboveground Storage Tanks: AST

List of aboveground fuel storage tanks (ASTs) made available by the State Fire Marshal's Office. This list is of installed ASTs and does not include any AST permitted and inspected by any City, Town, County, or Fire District. This is not a complete list of storage systems in use in the State of Arizona; ASTs may have been installed and used without adequate permission from the State Fire Marshal's Office. The absence of a property from the State Fire Marshal records as a permitted tank is not proof that an AST for hazardous materials was never installed or used at a given address.

Government Publication Date: Sep 29, 2015

Exemption Certificate Renewals: AST2

The Exemption Certificate Renewals data lists applicants that have renewed their tank certificates that will never expire from the penny underground storage tank tax. This is provided by Arizona Department of Environmental Quality.

Government Publication Date: Sep 2, 2021

Delisted Storage Tanks List: DELISTED TANKS

This database contains a list of storage tank sites that were removed from the Arizona Department of Environmental Quality (ADEQ) Waste Program Division.

Government Publication Date: Jun 14, 2022

Environmental Use Restriction Sites List: AUL

A list of sites with either a Declaration of Environmental Use Restriction (DEUR) or a Voluntary Environmental Mitigation Use Restriction (VEMUR) from the Arizona Department of Environmental Quality's (ADEQ) Remediation and DEUR Tracking System (RDT) and/or the AZURITE Database of License Applications. A DEUR is a restrictive land use covenant that is required when a property owner elects to use an institutional (i.e., administrative) control or engineering (i.e., physical) control as a means to meet remediation goals. The DEUR runs with and burdens the land, and requires maintenance of any institutional or engineering controls. A VEMUR is a restrictive land use covenant that, prior to July 18, 2000, was required when a property owner elected to remediate the property to non-residential uses. Effective July 18, 2000, the DEUR replaced the VEMUR as a restrictive use covenant.

Government Publication Date: Apr 28, 2022

Remediation and DEUR Tracking Other Remediation Sites: RDT OTHER

List of sites from the Arizona Department of Environmental Quality (ADEQ) Remediation and DEUR Tracking (RDT) System where the owner has elected to remediate the property without the use of an institutional or engineering control.

Government Publication Date: Apr 28, 2022

Voluntary Remediation Program: VCP

A list of sites registered in Voluntary Remediation Program (VRP). This list is made available by Arizona Department of Environment Quality (ADEQ). Through ADEQ's VRP, property owners, prospective purchasers and other interested parties investigate or clean up a contaminated site in cooperation with ADEQ.

Government Publication Date: Oct 21, 2020

Brownfields Tracking System: BROWNFIELDS

A list of brownfield sites in the State of Arizona, made available by Arizona Department of Environmental Quality. Brownfields are abandoned or underutilized properties where the reuse is complicated by actual or perceived environmental contamination.

Government Publication Date: Oct 21, 2020

Tribal

Salt River Pima Maricopa Indian Community Brownfields: SRPMIC BROWNFIELDS

This Brownfield Program Public Record site listing is made available by the Environmental Protection and Natural Resources Division (EPNR) of the Community Development Department (CDD). The EPNR of the CDD was established to enhance the quality of life within the Salt River Pima-Maricopa Indian Community (SRPMIC) by protecting and preserving the land, ecosystems, wildlife, history, and natural resources of the Community. The list contains public information regarding ongoing Brownfield assessments, clean ups and/or planned assessments, cleanups, remediation and information inviting community involvement in identifying potential Brownfield sites.

Government Publication Date: Nov 22, 2021

Leaking Underground Storage Tanks (LUSTs) on Indian Lands: INDIAN LUST

LUSTs on Tribal/Indian Lands in Region 9, which includes Arizona.

Government Publication Date: Apr 8, 2022

Underground Storage Tanks (USTs) on Indian Lands: INDIAN UST

USTs on Tribal/Indian Lands in Region 9, which includes Arizona.

Government Publication Date: Apr 8, 2022

Delisted Tribal Leaking Storage Tanks: DELISTED ILST

Leaking Underground Storage Tank facilities which have been removed from the Regional Tribal LUST lists made available by the EPA.

Government Publication Date: Apr 7, 2022

Delisted Tribal Underground Storage Tanks: DELISTED IUST

Underground Storage Tank facilities which have been removed from the Regional Tribal UST lists made available by the EPA.

Government Publication Date: Jan 30, 2022

County

No County databases were selected to be included in the search.

Additional Environmental Record Sources

Federal

Facility Registry Service/Facility Index: FINDS/FRS

The Facility Registry Service (FRS) is a centrally managed database that identifies facilities, sites, or places subject to environmental regulations or of environmental interest. FRS creates high-quality, accurate, and authoritative facility identification records through rigorous verification and management procedures that incorporate information from program national systems, state master facility records, and data collected from EPA's Central Data Exchange registrations and data management personnel. This list is made available by the Environmental Protection Agency (US EPA).

Government Publication Date: Nov 2, 2020

Toxics Release Inventory (TRI) Program: TRIS

The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U. S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment. One of TRI's primary purposes is to inform communities about toxic chemical releases to the environment.

Government Publication Date: Aug 24, 2021

Perfluorinated Alkyl Substances (PFAS) Releases: PFAS TRI

List of Toxics Release Inventory (TRI) facilities at which the reported chemical is a Per- or polyfluorinated alkyl substance (PFAS) included in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances. The EPA's Toxics Release Inventory (TRI) is a database containing data on disposal or other releases of over 650 toxic chemicals from thousands of U.S. facilities and information about how facilities manage those chemicals through recycling, energy recovery, and treatment.

Government Publication Date: Aug 24, 2021

PFOA/PFOS Contaminated Sites: PFAS NPL

List of National Priorities List (NPL) and related Superfund Alternative Agreement (SAA) sites where PFOA or PFOS contaminants have been found in water and/or soil. The site listing is provided by the Federal Environmental Protection Agency (EPA).

Government Publication Date: Apr 15, 2022

Perfluorinated Alkyl Substances (PFAS) Water Quality: PFAS WATER

The Water Quality Portal (WQP) is a cooperative service sponsored by the United States Geological Survey (USGS), the Environmental Protection Agency (EPA), and the National Water Quality Monitoring Council (NWQMC). This listing includes records from the Water Quality Portal where the characteristic (environmental measurement) is in the Environmental Protection Agency (EPA)'s consolidated PFAS Master List of PFAS Substances.

Government Publication Date: Jul 20, 2020

SSEHRI PFAS Contamination Sites: PFAS SSEHRI

This PFAS Contamination Site Tracker database is compiled by the Social Science Environmental Health Research Institute (SSEHRI) at Northeastern University. According to the SSEHRI, the database records qualitative and quantitative data from each known site of PFAS contamination, including timeline of discovery, sources, levels, health impacts, community response, and government response. The goal of this database is to compile information and support public understanding of the rapidly unfolding issue of PFAS contamination. All data presented was extracted from government websites, news articles, or publicly available documents, and this is cited in the tracker. Disclaimer: The source conveys this database undergoes regular updates as new information becomes available, some sites may be missing and/or contain information that is incorrect or outdated, as well as their information represents all contamination sites SSEHRI is aware of, not all possible contamination sites. This data is not intended to be used for legal purposes. Limited location details are available with this data. Access the following for the most current informations https://pfasproject.com/pfas-contamination-site-tr acker/

Government Publication Date: Dec 12, 2019

National Response Center PFAS Spills: ERNS PFAS

National Response Center (NRC) calls from 1990 to the most recent complete calendar year where there is indication of Aqueous Film Forming Foam (AFFF) usage. NRC calls may reference AFFF usage in the "Material Involved" or "Incident Description" fields. Data made available by the US Environmental Protection Agency (EPA). Disclaimer: dataset may include initial or misidentified incident data not yet validated or investigated by a federal/state response agency.

Government Publication Date: Feb 23, 2022

Hazardous Materials Information Reporting System: HMIRS

US DOT - Department of Transportation Pipeline and Hazardous Materials Safety Administration (PHMSA) Incidents Reports Database taken from Hazmat Intelligence Portal, U.S. Department of Transportation.

Government Publication Date: Sep 1, 2020

National Clandestine Drug Labs: NCDL

The U.S. Department of Justice ("the Department") provides this data as a public service. It contains addresses of some locations where law enforcement agencies reported they found chemicals or other items that indicated the presence of either clandestine drug laboratories or dumpsites. In most cases, the source of the entries is not the Department, and the Department has not verified the entry and does not guarantee its accuracy.

Government Publication Date: Apr 30, 2022

Toxic Substances Control Act: TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.

The CDR enables EPA to collect and publish information on the manufacturing, processing, and use of commercial chemical substances and mixtures (referred to hereafter as chemical substances) on the TSCA Chemical Substance Inventory (TSCA Inventory). This includes current information on chemical substance production volumes, manufacturing sites, and how the chemical substances are used. This information helps the Agency determine whether people or the environment are potentially exposed to reported chemical substances. EPA publishes submitted CDR data that is not Confidential Business Information (CBI).

Government Publication Date: Apr 11, 2019

Hist TSCA: HIST TSCA

The Environmental Protection Agency (EPA) is amending the Toxic Substances Control Act (TSCA) section 8(a) Inventory Update Reporting (IUR) rule and changing its name to the Chemical Data Reporting (CDR) rule.
The 2006 IUR data summary report includes information about chemicals manufactured or imported in quantities of 25,000 pounds or more at a single site during calendar year 2005. In addition to the basic manufacturing information collected in previous reporting cycles, the 2006 cycle is the first time EPA collected information to characterize exposure during manufacturing, processing and use of organic chemicals. The 2006 cycle also is the first time manufacturers of inorganic chemicals were required to report basic manufacturing information.
Government Publication Date: Dec 31, 2006

FTTS Administrative Case Listing: FTTS ADMIN
An administrative case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

FTTS Inspection Case Listing: FTTS INSP
An inspection case listing from the Federal Insecticide, Fungicide, & Rodenticide Act (FIFRA) and Toxic Substances Control Act (TSCA), together known as FTTS. This database was obtained from the Environmental Protection Agency's (EPA) National Compliance Database (NCDB). The FTTS and NCDB was shut down in 2006.
Government Publication Date: Jan 19, 2007

Potentially Responsible Parties List: PRP
Early in the cleanup process, the Environmental Protection Agency (EPA) conducts a search to find the potentially responsible parties (PRPs). EPA looks for evidence to determine liability by matching wastes found at the site with parties that may have contributed wastes to the site.
Government Publication Date: May 25, 2022

State Coalition for Remediation of Drycleaners Listing: SCRD DRYCLEANER
The State Coalition for Remediation of Drycleaners (SCRD) was established in 1998, with support from the U.S. Environmental Protection Agency (EPA) Office of Superfund Remediation and Technology Innovation. Coalition members are states with mandated programs and funding for drycleaner site remediation. Current members are Alabama, Connecticut, Florida, Illinois, Kansas, Minnesota, Missouri, North Carolina, Oregon, South Carolina, Tennessee, Texas, and Wisconsin. Since 2017, the SCRD no longer maintains this data, refer to applicable state source data where available.
Government Publication Date: Nov 08, 2017

Integrated Compliance Information System (ICIS): ICIS
The Integrated Compliance Information System (ICIS) is a system that provides information for the Federal Enforcement and Compliance (FE&C) and the National Pollutant Discharge Elimination System (NPDES) programs. The FE&C component supports the Environmental Protection Agency's (EPA) Civil Enforcement and Compliance program activities. These activities include Compliance Assistance, Compliance Monitoring and Enforcement. The NPDES program supports tracking of NPDES permits, limits, discharge monitoring data and other program reports.
Government Publication Date: Apr 30, 2022

Drycleaner Facilities: FED DRYCLEANERS
A list of drycleaner facilities from Enforcement and Compliance History Online (ECHO) online search. The Environmental Protection Agency (EPA) tracks facilities that possess NAIC and SIC codes that classify businesses as drycleaner establishments.
Government Publication Date: May 5, 2021

Delisted Drycleaner Facilities: DELISTED FED DRY
List of sites removed from the list of Drycleaner Facilities (sites in the EPA's Integrated Compliance Information System (ICIS) with NAIC or SIC codes identifying the business as a drycleaner establishment).
Government Publication Date: May 5, 2021

Formerly Used Defense Sites: FUDS
Formerly Used Defense Sites (FUDS) are properties that were formerly owned by, leased to, or otherwise possessed by and under the jurisdiction of the Secretary of Defense prior to October 1986, where the Department of Defense (DoD) is responsible for an environmental restoration. This list is published by the U.S. Army Corps of Engineers.
Government Publication Date: May 26, 2021

Former Military Nike Missile Sites: FORMER NIKE

This information was taken from report DRXTH-AS-IA-83A016 (Historical Overview of the Nike Missile System, 12/1984) which was performed by Environmental Science and Engineering, Inc. for the U.S. Army Toxic and Hazardous Materials Agency Assessment Division. The Nike system was deployed between 1954 and the mid-1970's. Among the substances used or stored on Nike sites were liquid missile fuel (JP-4); starter fluids (UDKH, aniline, and furfuryl alcohol); oxidizer (IRFNA); hydrocarbons (motor oil, hydraulic fluid, diesel fuel, gasoline, heating oil); solvents (carbon tetrachloride, trichloroethylene, trichloroethane, stoddard solvent); and battery electrolyte. The quantities of material a disposed of and procedures for disposal are not documented in published reports. Virtually all information concerning the potential for contamination at Nike sites is confined to personnel who were assigned to Nike sites. During deactivation most hardware was shipped to depot-level supply points. There were reportedly instances where excess materials were disposed of on or near the site itself at closure. There was reportedly no routine site decontamination.
Government Publication Date: Dec 2, 1984

PHMSA Pipeline Safety Flagged Incidents: PIPELINE INCIDENT
A list of flagged pipeline incidents made available by the U.S. Department of Transportation (US DOT) Pipeline and Hazardous Materials Safety Administration (PHMSA). PHMSA regulations require incident and accident reports for five different pipeline system types.
Government Publication Date: Jul 7, 2020

Material Licensing Tracking System (MLTS): MLTS
A list of sites that store radioactive material subject to the Nuclear Regulatory Commission (NRC) licensing requirements. This list is maintained by the NRC. As of September 2016, the NRC no longer releases location information for sites. Site locations were last received in July 2016.
Government Publication Date: May 11, 2021

Historic Material Licensing Tracking System (MLTS) sites: HIST MLTS
A historic list of sites that have inactive licenses and/or removed from the Material Licensing Tracking System (MLTS). In some cases, a site is removed from the MLTS when the state becomes an "Agreement State". An Agreement State is a State that has signed an agreement with the Nuclear Regulatory Commission (NRC) authorizing the State to regulate certain uses of radioactive materials within the State.
Government Publication Date: Jan 31, 2010

Mines Master Index File: MINES
The Master Index File (MIF) contains mine identification numbers issued by the Department of Labor Mine Safety and Health Administration (MSHA) for mines active or opened since 1971. Note that addresses may or may not correspond with the physical location of the mine itself.
Government Publication Date: Feb 1, 2022

Surface Mining Control and Reclamation Act Sites: SMCRA
An inventory of land and water impacted by past mining (primarily coal mining) is maintained by the Office of Surface Mining Reclamation and Enforcement (OSMRE) to provide information needed to implement the Surface Mining Control and Reclamation Act of 1977 (SMCRA). The inventory contains information on the location, type, and extent of Abandoned Mine Land (AML) impacts, as well as information on the cost associated with the reclamation of those problems. The inventory is based upon field surveys by State, Tribal, and OSMRE program officials. It is dynamic to the extent that it is modified as new problems are identified and existing problems are reclaimed.
Government Publication Date: Feb 22, 2022

Mineral Resource Data System: MRDS
The Mineral Resource Data System (MRDS) is a collection of reports describing metallic and nonmetallic mineral resources throughout the world. Included are deposit name, location, commodity, deposit description, geologic characteristics, production, reserves, resources, and references. This database contains the records previously provided in the Mineral Resource Data System (MRDS) of USGS and the Mineral Availability System/Mineral Industry Locator System (MAS/MILS) originated in the U.S. Bureau of Mines, which is now part of USGS. The USGS has ceased systematic updates of the MRDS database with their focus more recently on deposits of critical minerals while providing a well-documented baseline of historical mine locations from USGS topographic maps.
Government Publication Date: Mar 15, 2016

Uranium Mill Tailings Radiation Control Act Sites: URANIUM
The Legacy Management Office of the Department of Energy (DOE) manages radioactive and chemical waste, environmental contamination, and hazardous material at over 100 sites across the U.S. The L.M. Office manages this database of sites registered under the Uranium Mill Tailings Control Act (UMTRCA).
Government Publication Date: Mar 4, 2017

Alternative Fueling Stations: ALT FUELS

List of alternative fueling stations made available by the US Department of Energy's Office of Energy Efficiency & Renewable Energy. Includes Biodiesel stations, Ethanol (E85) stations, Liquefied Petroleum Gas (Propane) stations, Ethanol (E85) stations, Natural Gas stations, Hydrogen stations, and Electric Vehicle Supply Equipment (EVSE). The National Renewable Energy Laboratory (NREL) obtains information about new stations from trade media, Clean Cities coordinators, a Submit New Station form on the Station Locator website, and through collaborating with infrastructure equipment and fuel providers, original equipment manufacturers (OEMs), and industry groups.

Government Publication Date: May 16, 2022

Superfunds Consent Decrees: CONSENT DECREES

A list of Superfund consent decrees made available by the Department of Justice, Environment & Natural Resources Division (ENRD).

Government Publication Date: May 18, 2022

Air Facility System: AFS

This EPA retired Air Facility System (AFS) dataset contains emissions, compliance, and enforcement data on stationary sources of air pollution. Regulated sources cover a wide spectrum; from large industrial facilities to relatively small operations such as dry cleaners. AFS does not contain data on facilities that are solely asbestos demolition and/or renovation contractors, or landfills. ECHO Clean Air Act data from AFS are frozen and reflect data as of October 17, 2014; the EPA retired this system for Clean Air Act stationary sources and transitioned to ICIS-Air.

Government Publication Date: Oct 17, 2014

Registered Pesticide Establishments: SSTS

List of active EPA-registered foreign and domestic pesticide-producing and device-producing establishments based on data from the Section Seven Tracking System (SSTS). The Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) Section 7 requires that facilities producing pesticides, active ingredients, or devices be registered. The list of establishments is made available by the EPA.

Government Publication Date: Mar 30, 2022

Polychlorinated Biphenyl (PCB) Transformers: PCBT

Locations of Transformers Containing Polychlorinated Biphenyls (PCBs) registered with the United States Environmental Protection Agency. PCB transformer owners must register their transformer(s) with EPA. Although not required, PCB transformer owners who have removed and properly disposed of a registered PCB transformer may notify EPA to have their PCB transformer de-registered. Data made available by EPA.

Government Publication Date: Oct 15, 2019

Polychlorinated Biphenyl (PCB) Notifiers: PCB

Facilities included in the national list of facilities that have notified the United States Environmental Protection Agency (EPA) of Polychlorinated Biphenyl (PCB) activities. Any company or person storing, transporting or disposing of PCBs or conducting PCB research and development must notify the EPA and receive an identification number.

Government Publication Date: Jan 20, 2022

State

Hazardous Material Logbook/Spills: SPILLS

Hazardous Material Incident Logbook database made available by Arizona Department of Environmental Quality (ADEQ). This database is updated through November 15, 2001; after that date, reports were registered with the National Response Center.

Government Publication Date: Nov 15, 2001

Dry Cleaning Facilities: DRYCLEANERS

This list of dry cleaners includes sites from two sources: the 2016 Arizona Department of Environmental Quality (ADEQ) Dry Cleaners list, and the 2006 Dry Cleaner Inventory Project by Miller Brooks Environmental for ADEQ. The 2016 ADEQ Dry Cleaners list does not distinguish between contaminated or non-contaminated facilities and only provides limited details per facility with a Place ID. The 2006 Dry Cleaner Inventory Project was commissioned to assist in the identification, prioritization, investigation, and remediation of sites that have released hazardous substances into the lands and waters of the state. This Inventory includes the following types of sites: Sites with Known Contamination (sites with documented contamination, or a history of release and/or prior site characterization and remedial activities); Sites with High Potential for Release (sites with multiple owners, sites that have been in operation more than 10 years, sites that specifically operated between 1935 and 1984, and high-volume sites); and Sites with Low Potential for Release (sites that have been in operation only after 1985, or prior to 1934, sites that "broker" cleaning services to other facilities, and sites that operate primarily as a coin-operated laundry facility). Disclaimer: Due to the time spanned between these listings and available details, multiple listings may occur. Per ADEQ, these listings are no longer updated.

Government Publication Date: Jul 10, 2021

Per- and Polyfluoroalkyl Substances (PFAS): PFAS

The Arizona Department of Environmental Quality (ADEQ) Waste Programs Division investigates, manages, and oversees remediation of soil and groundwater contaminated with hazardous substances. List of sites overseen by the Remedial Projects Section and/or Federal programs, including Federal DOD and Superfund sites, where the contaminant or potential contaminant of concern is a Per- or polyfluorinated alkyl substances (PFAS).
Government Publication Date: May 10, 2022

Air Permits Major/Minor Sources: AIR PERMITS

A list of Arizona operating air permits major and minor sources. A "major" source is any source that has the potential to emit 100 tons per year of any criteria air pollutant and if it has the potential to emit 10 tons per year of any single Hazardous Air Pollutant or 25 tons per year of any combination of Hazardous Air Pollutants. This list is provided by the Department of Environmental Quality.
Government Publication Date: Nov 29, 2021

Drywell Database: DRYWELLS

The Drywell database contains information regarding drywells in Arizona. This database is maintained by the Arizona Department of Environmental Quality (ADEQ).
Government Publication Date: Mar 17, 2022

Historical Drywells: DRYWELLS HIST

Historical listing of registered drywells once maintained and made available by the Arizona Department of Environmental Quality (ADEQ) Water Quality Division. As of May 2018, ADEQ stopped accepting paper forms and will no longer be updating this list.
Government Publication Date: Aug 6, 2018

Drug Labs Remediation: DRUG LAB REMEDIATION

Arizona State Board of Technical Registration maintains a list of drug lab remediation. This is a list of seized drug laboratory sites or sites where drug manufacturing chemicals were seized. Remediated sites are removed from this list when the Board receives clean up notification from a certified clean up firm.
Government Publication Date: Sep 03,2013

Clandestine Drug Labs: CDL

A list of unremediated seized clandestine drug laboratory sites or sites where drug manufacturing chemicals were seized. This list is made available by Arizona State Board of Technical Registration.
Government Publication Date: Jan 22, 2019

Tier 2 Chemical Inventory Reporting: TIER 2

List of facilities that report to the Arizona Emergency Response Commission (AZSERC) for Tier II Chemical Inventory Reporting. AZSERC is tasked with the implementation of the Emergency Planning and Community Right to Know Act (EPRCA) in Arizona. As of 2016, the Arizona Emergency Response Commission (AZSERC) is overseen by Arizona Department of Environmental Quality (ADEQ).
Government Publication Date: Dec 31, 2018

Biohazardous Medical Waste Facilities: BIO HAZ WASTE

This list of biohazardous medical waste facilities is maintained by the Arizona Department of Environmental Quality (ADEQ) Waste Programs Division. This list includes: Biohazardous Medical Waste Disposal Facilities, Biohazardous Medical Waste Treatment Facilities, Biohazardous Medical Waste Storage & Transfer Facilities, Registered Biohazardous Medical Waste Transporters, and Registered Alternative Biohazardous Medical Waste Treatment Technologies. Biohazardous medical waste is medical waste that is composed of one or more of the following: cultures and stocks; human blood and blood products; human pathologic wastes; medical sharps; and research animal wastes. The Arizona Department of Environmental Quality adopted specific rules for handling biohazardous medical waste and discarded drugs. Non-biohazardous medical waste is handled as solid waste.
Government Publication Date: Jul 7, 2020

Tribal

No Tribal additional environmental record sources available for this State.

County

No County additional environmental record sources available for this State.

Definitions

Database Descriptions: This section provides a detailed explanation for each database including: source, information available, time coverage, and acronyms used. They are listed in alphabetic order.

Detail Report: This is the section of the report which provides the most detail for each individual record. Records are summarized by location, starting with the project property followed by records in closest proximity.

Distance: The distance value is the distance between plotted points, not necessarily the distance between the sites' boundaries. All values are an approximation.

Direction: The direction value is the compass direction of the site in respect to the project property and/or center point of the report.

Elevation: The elevation value is taken from the location at which the records for the site address have been plotted. All values are an approximation. Source: Google Elevation API.

Executive Summary: This portion of the report is divided into 3 sections:

'Report Summary'- Displays a chart indicating how many records fall on the project property and, within the report search radii.

'Site Report Summary'-Project Property'- This section lists all the records which fall on the project property. For more details, see the 'Detail Report' section.

'Site Report Summary-Surrounding Properties'- This section summarizes all records on adjacent properties, listing them in order of proximity from the project property. For more details, see the 'Detail Report' section.

Map Key: The map key number is assigned according to closest proximity from the project property. Map Key numbers always start at #1. The project property will always have a map key of '1' if records are available. If there is a number in brackets beside the main number, this will indicate the number of records on that specific property. If there is no number in brackets, there is only one record for that property.

The symbol and colour used indicates 'elevation': the red inverted triangle will dictate 'ERIS Sites with Lower Elevation', the yellow triangle will dictate 'ERIS Sites with Higher Elevation' and the orange square will dictate 'ERIS Sites with Same Elevation.'

Unplottables: These are records that could not be mapped due to various reasons, including limited geographic information. These records may or may not be in your study area, and are included as reference.

Appendix C Historical Aerial Photographs

ERIS

HISTORICAL AERIALS

Project Property: Atlas North Solar Phase I ESA
N of I-10 MP 61
Arizona AZ

Project No: AZENE2023-12

Requested By: AZTEC Engineering Group, Inc.

Order No: 22052800001

Date Completed: June 07,2022

Environmental Risk Information Services
A division of Glacier Media Inc.
1.866.517.5204 | info@erisinfo.com | erisinfo.com

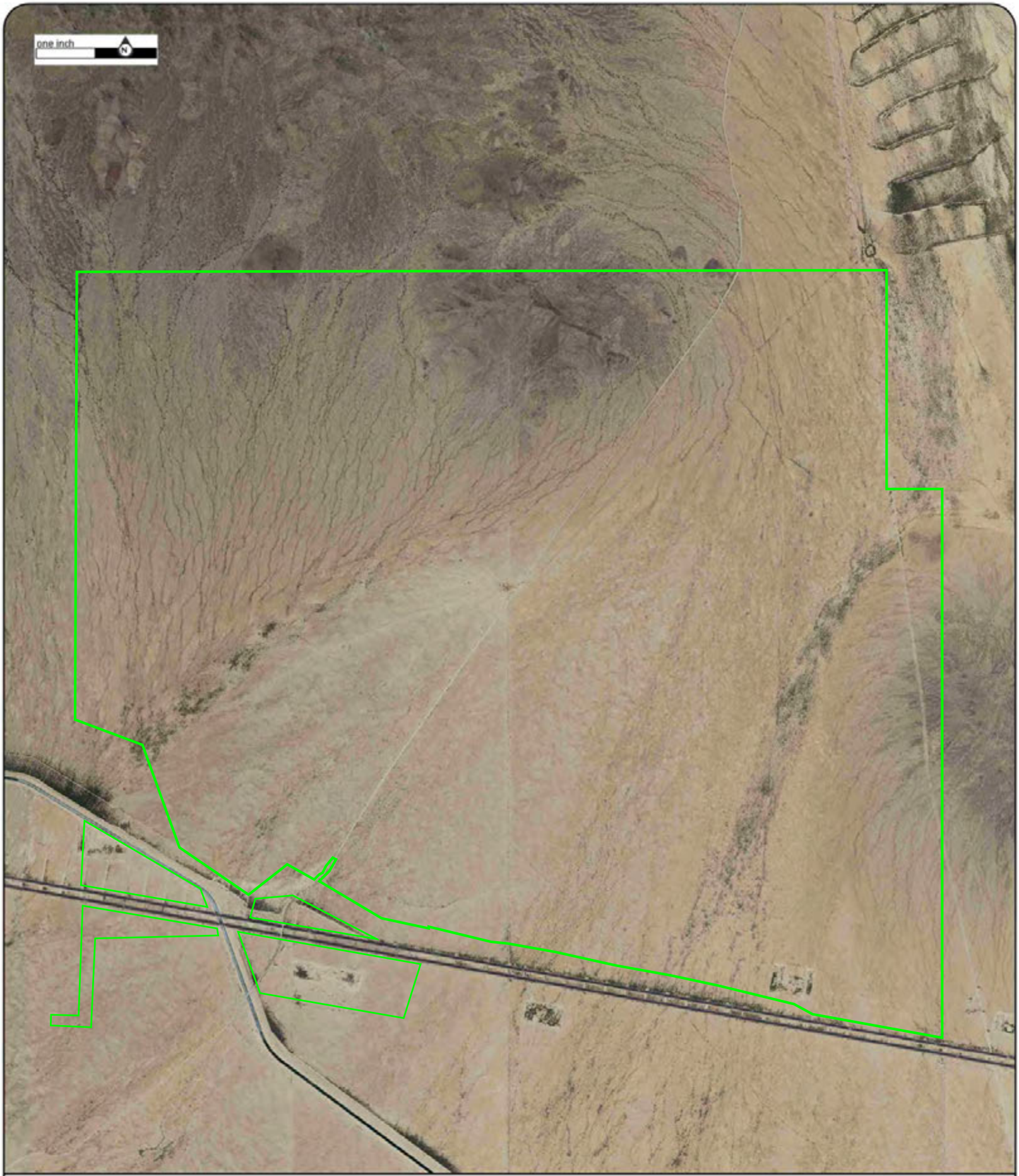
Date	Source	Scale	Comments
2019	United States Department of Agriculture	1" = 2800'	
2017	United States Department of Agriculture	1" = 2800'	
2015	United States Department of Agriculture	1" = 2800'	
2013	United States Department of Agriculture	1" = 2800'	
2010	United States Department of Agriculture	1" = 2800'	
2007	United States Department of Agriculture	1" = 2800'	
1997	United States Geological Survey	1" = 2800'	
1985	United States Geological Survey	1" = 2800'	
1980	United States Geological Survey	1" = 2800'	
1978	United States Air Force	1" = 2800'	
1960	United States Geological Survey	1" = 2800'	
1951	United States Geological Survey	1" = 2800'	

Year: 2019
Source: USDA
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS

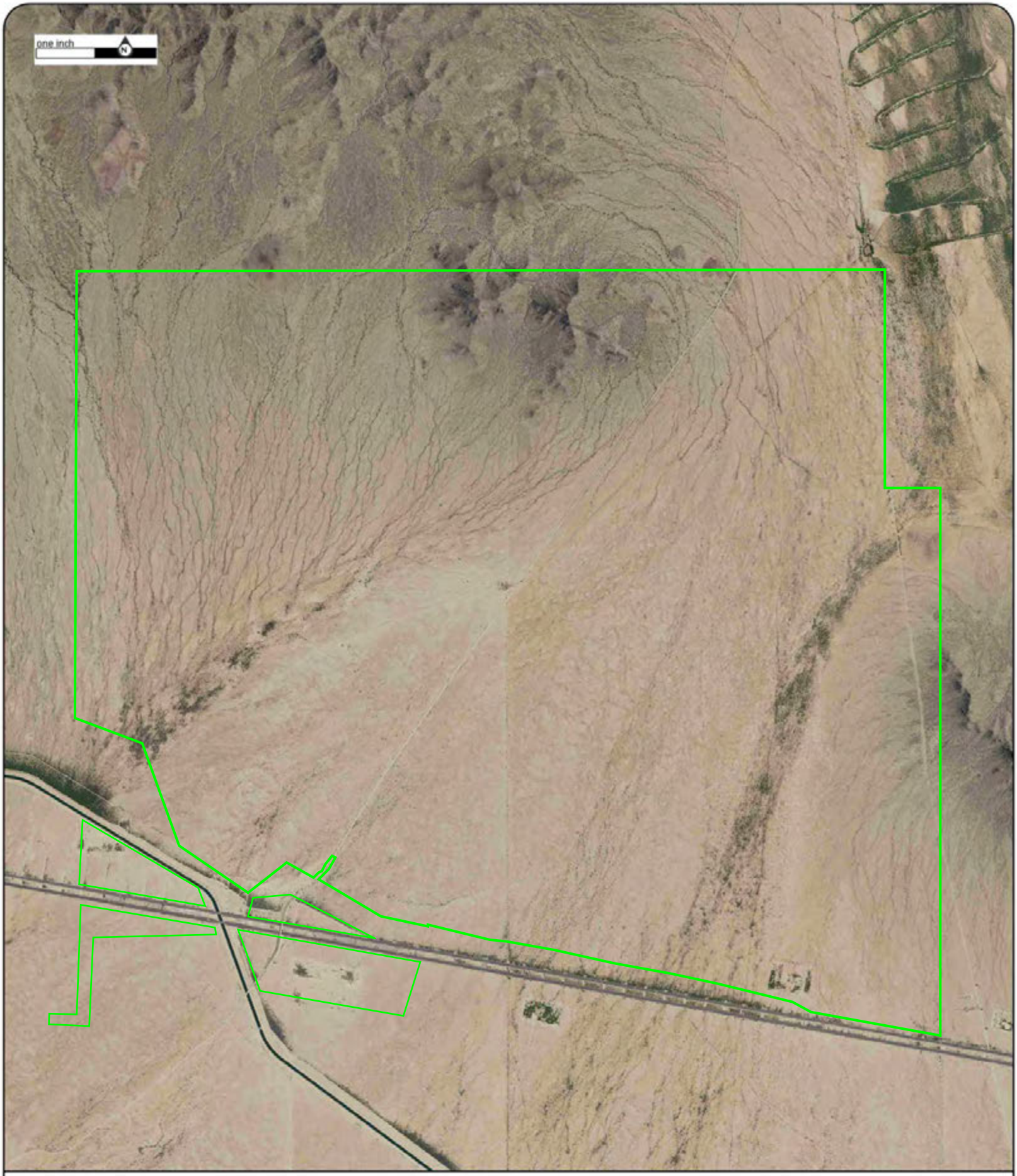


Year: 2017
Source: USDA
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS



Year: 2015
Source: USDA
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

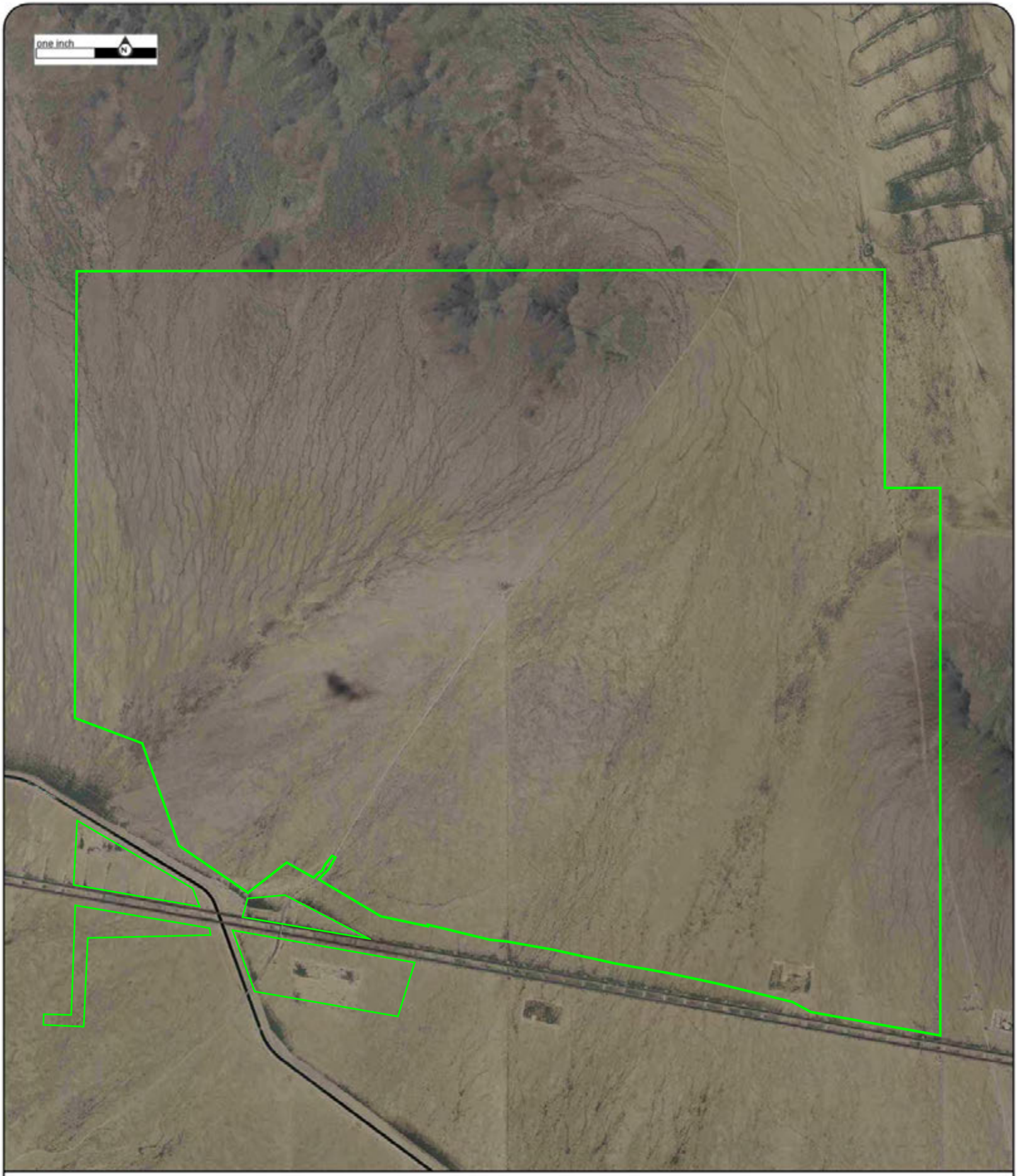
ERIS

Year: 2013
Source: USDA
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS



Year: 2010
Source: USDA
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS

Year: 2007
Source: USDA
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

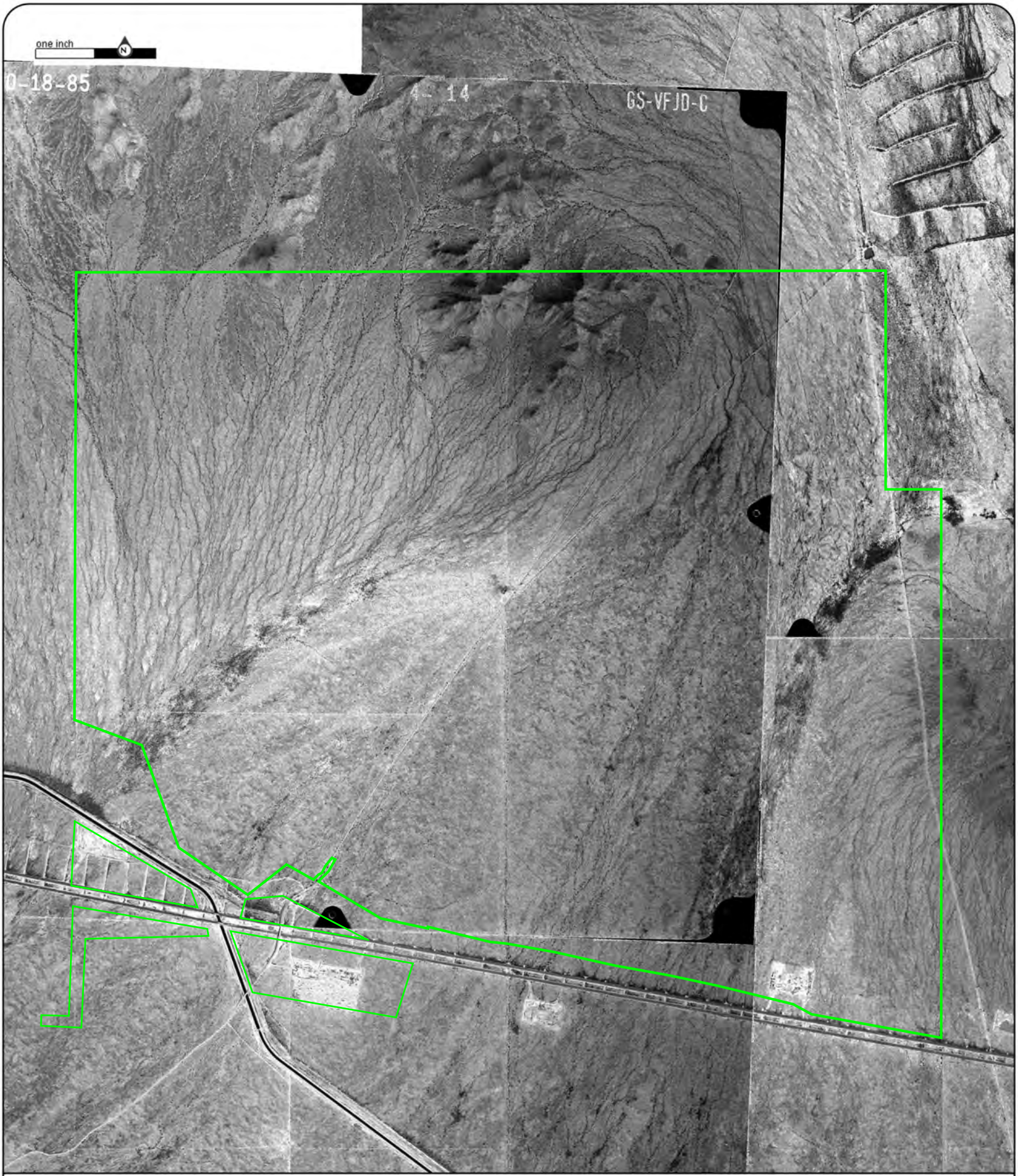
ERIS

Year: 1997
Source: USGS
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS

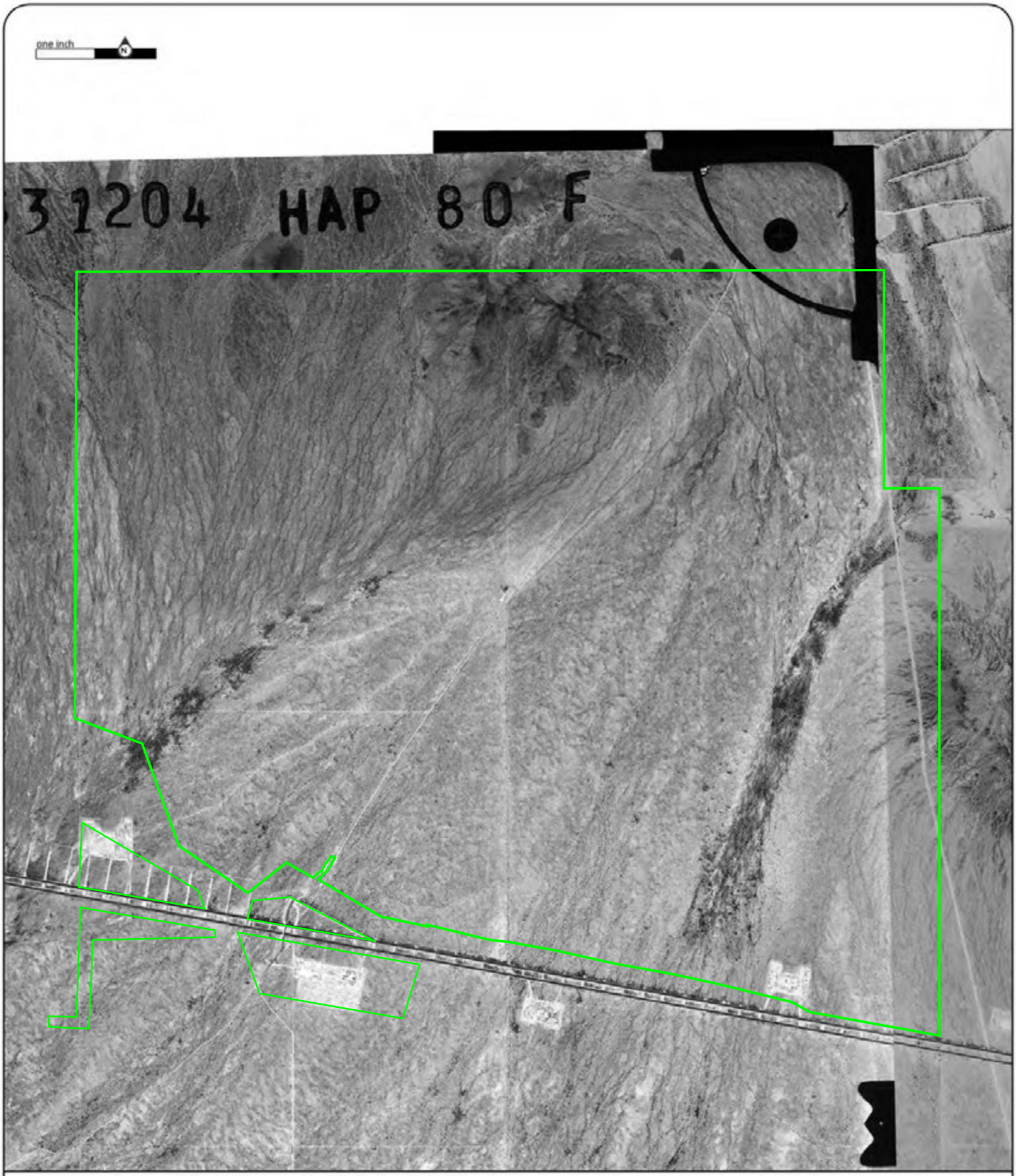


Year: 1985
Source: USGS
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS

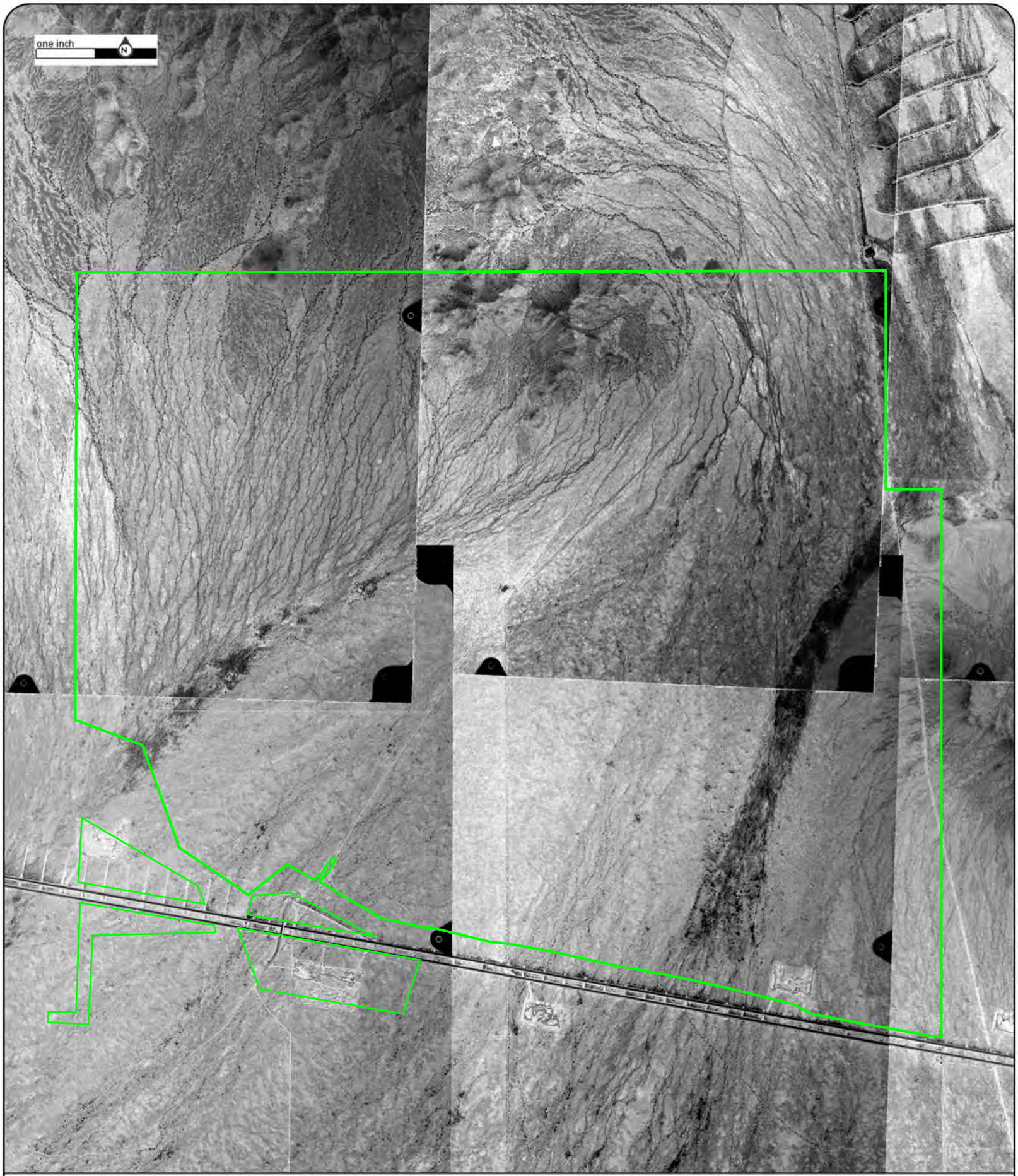


Year: 1980
Source: USGS
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS

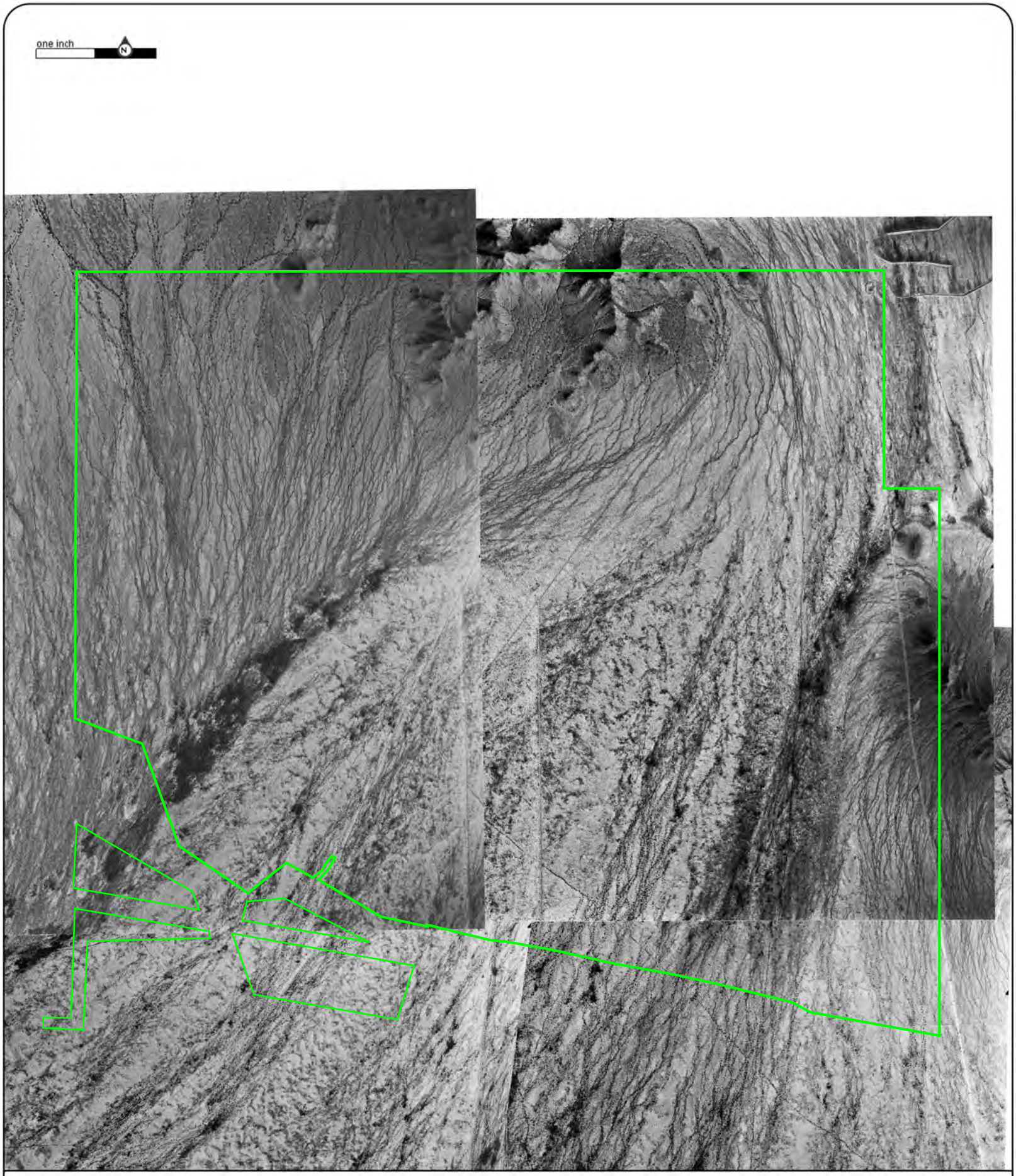


Year: 1978
Source: USAF
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS

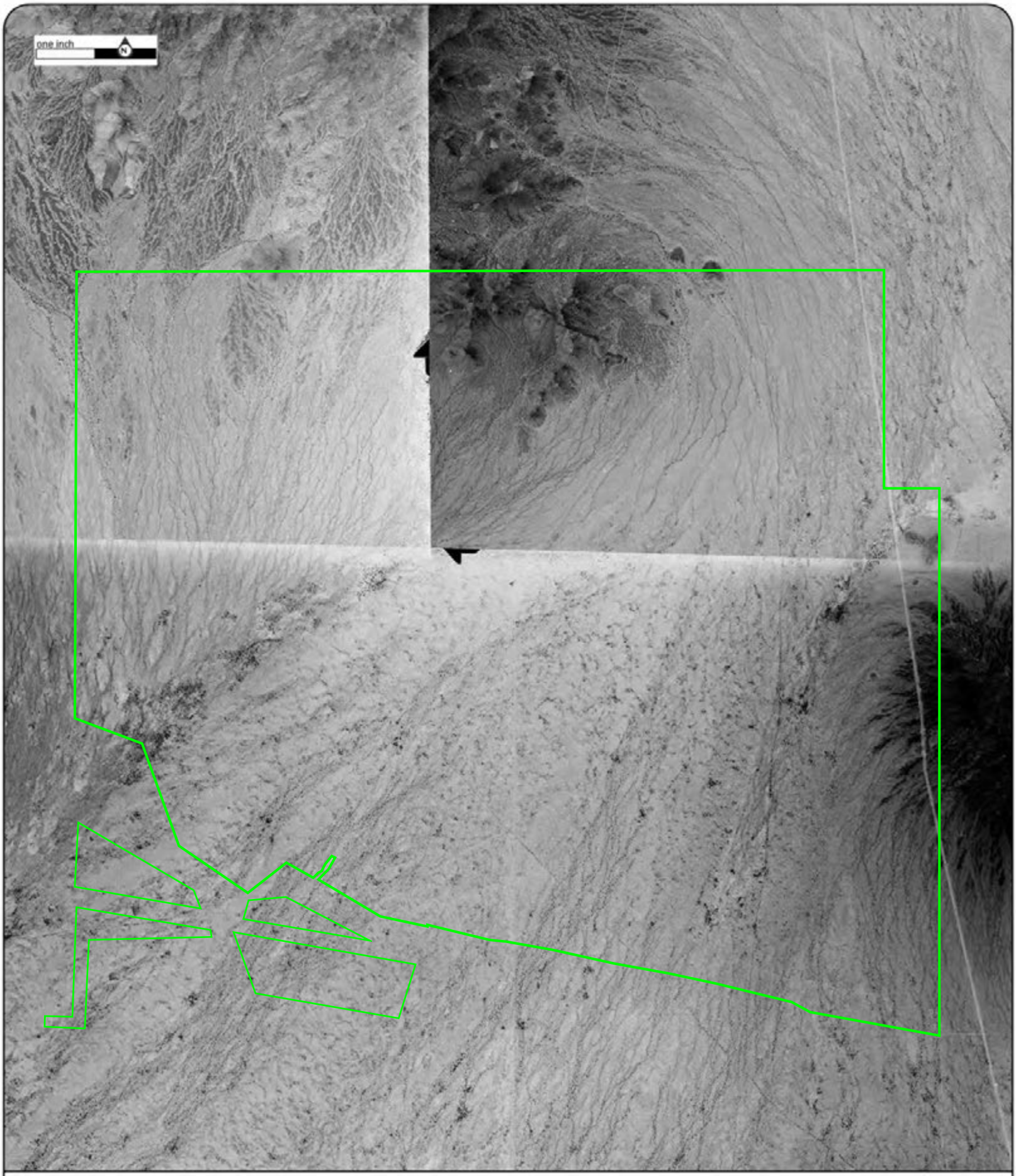


Year: 1960
Source: USGS
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS



Year: 1951
Source: USGS
Scale: 1" = 2800'
Comment:

Address: N of I-10 MP 61, Arizona, AZ
Approx Center: -113.50644153,33.6161904

Order No: 22052800001

ERIS

Appendix D Physical Settings Report

PSR
PHYSICAL SETTING REPORT

Property Information

Order Number:		22052800001p
Date Completed:		May 31, 2022
Project Number:		AZENE2023-12
Project Property:		Atlas North Solar Phase I ESA N of I-10 MP 61 Arizona AZ
Coordinates:		
	Latitude:	33.6161904
	Longitude:	-113.50644153
	UTM Northing:	3722418.13467 Meters
	UTM Easting:	267470.788307 Meters
	UTM Zone:	UTM Zone 12S
	Elevation:	1,458.06 ft
	Slope Direction:	SW

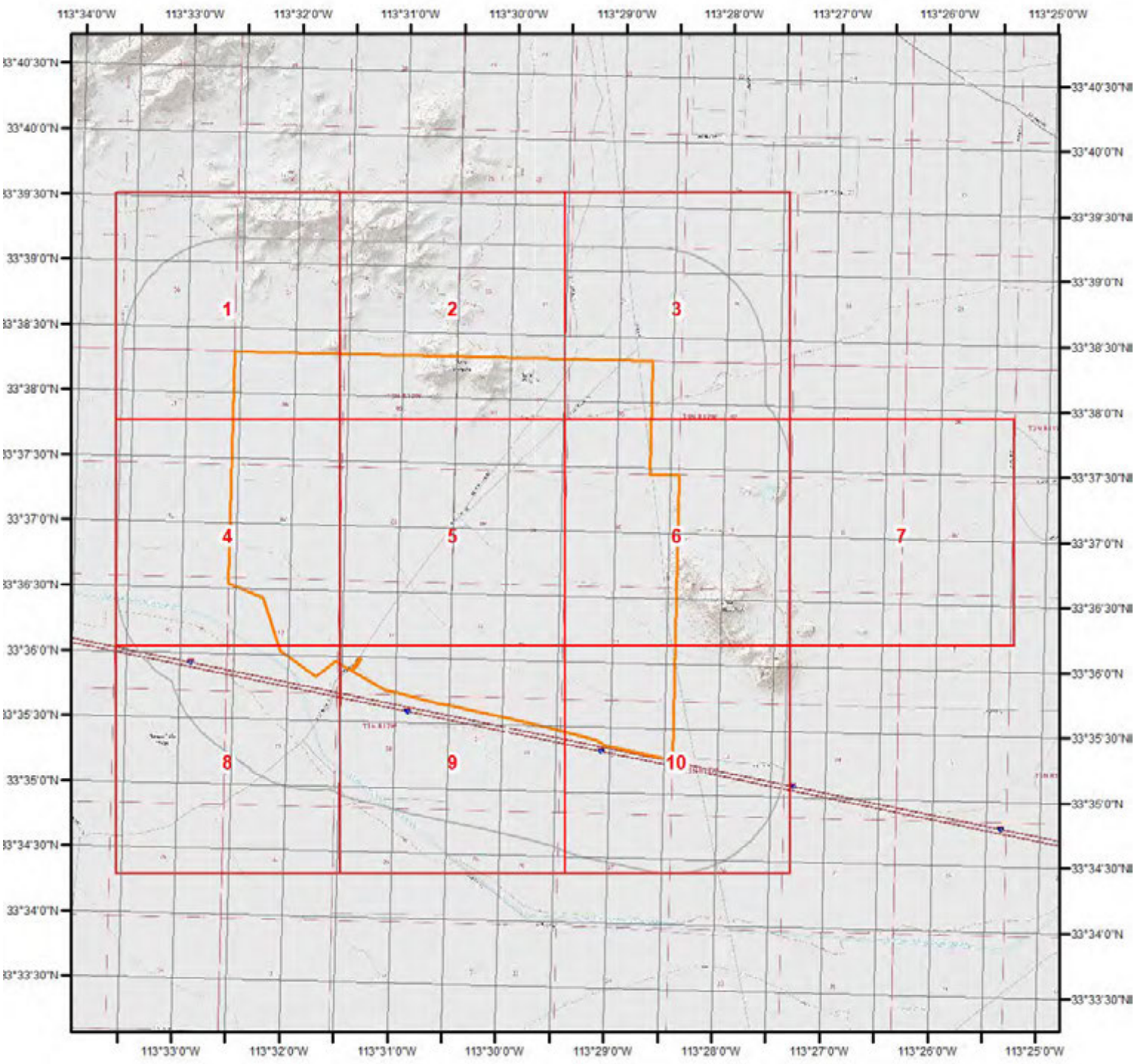
The ERIS ***Physical Setting Report - PSR*** provides comprehensive information about the physical setting around a site and includes a complete overview of topography and surface topology, in addition to hydrologic, geologic and soil characteristics. The location and detailed attributes of oil and gas wells, water wells, public water systems and radon are also included for review.

The compilation of both physical characteristics of a site and additional attribute data is useful in assessing the impact of migration of contaminants and subsequent impact on soils and groundwater.

Disclaimer

This Report does not provide a full environmental evaluation for the site or adjacent properties. Please see the terms and disclaimer at the end of the Report for greater detail.

Topographic Information



Current USGS Topo (2014)

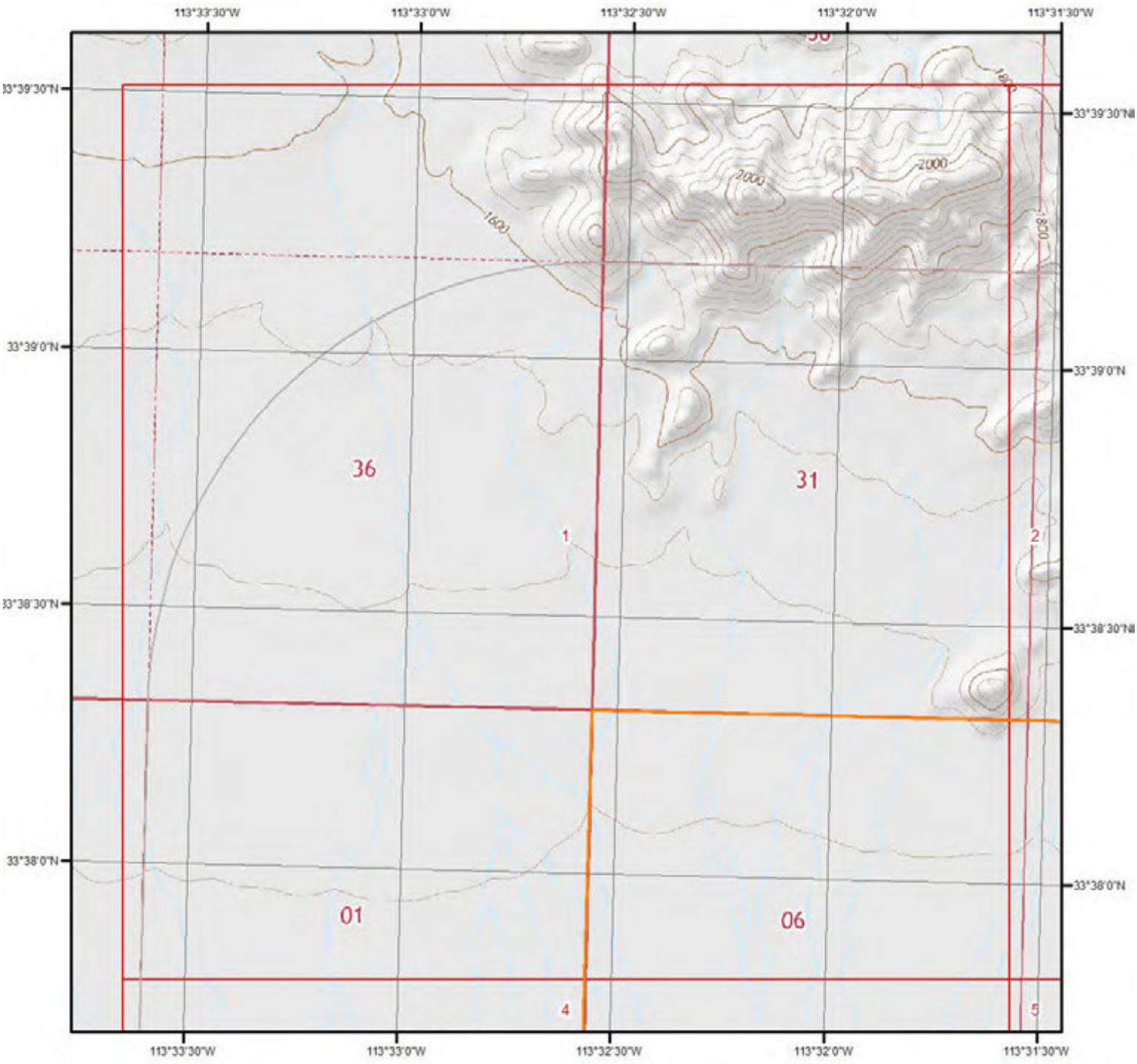
0 0.20.4 0.8 1.2 1.6 2 2.4 Miles

N

Quadrangle(s): Harrisburg Valley,AZ; Hope,AZ; Hope SE,AZ; Hope SW,AZ; Lone Mountain,AZ; Socorro Mine,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 1

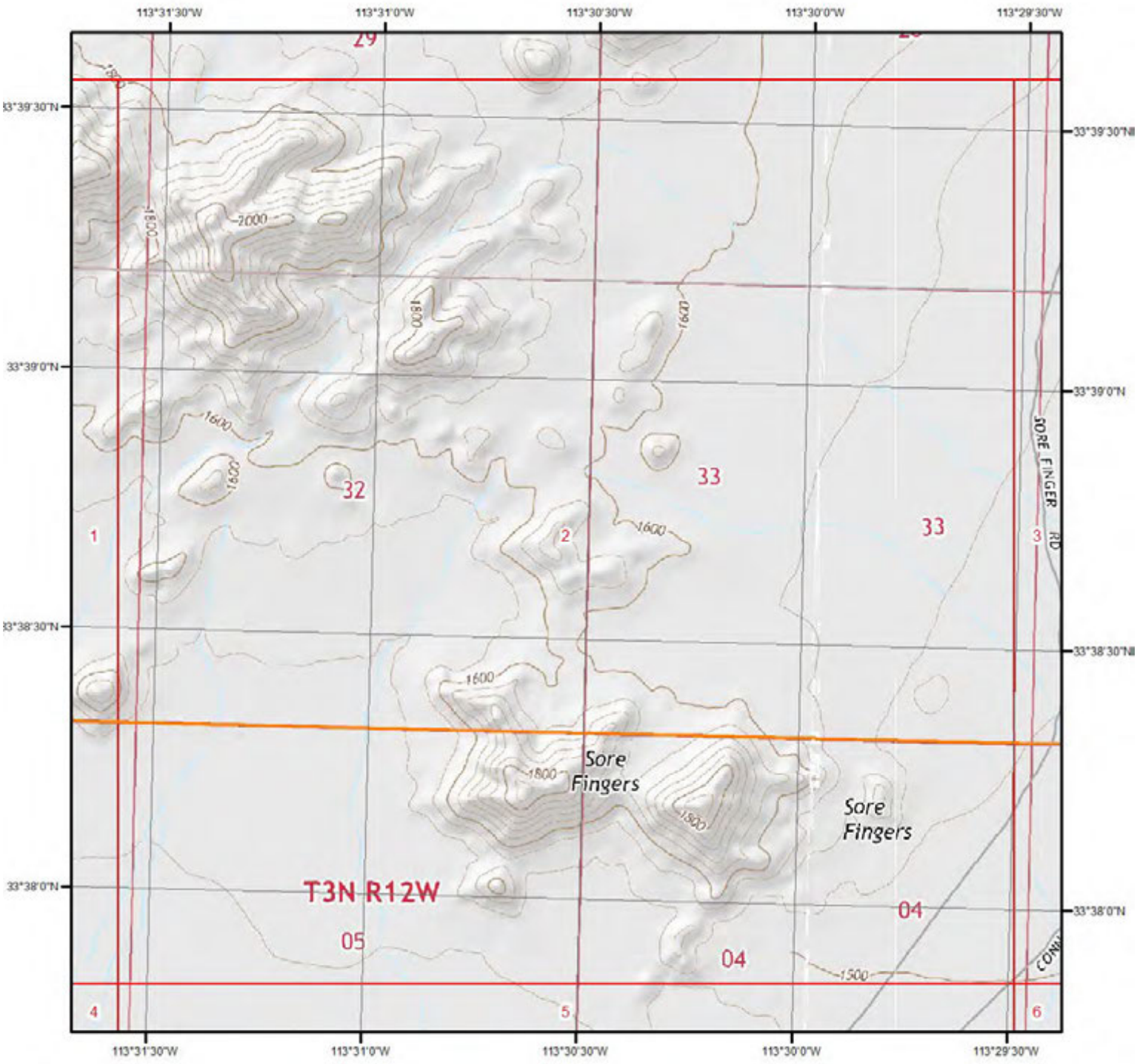
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Harrisburg Valley,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 2

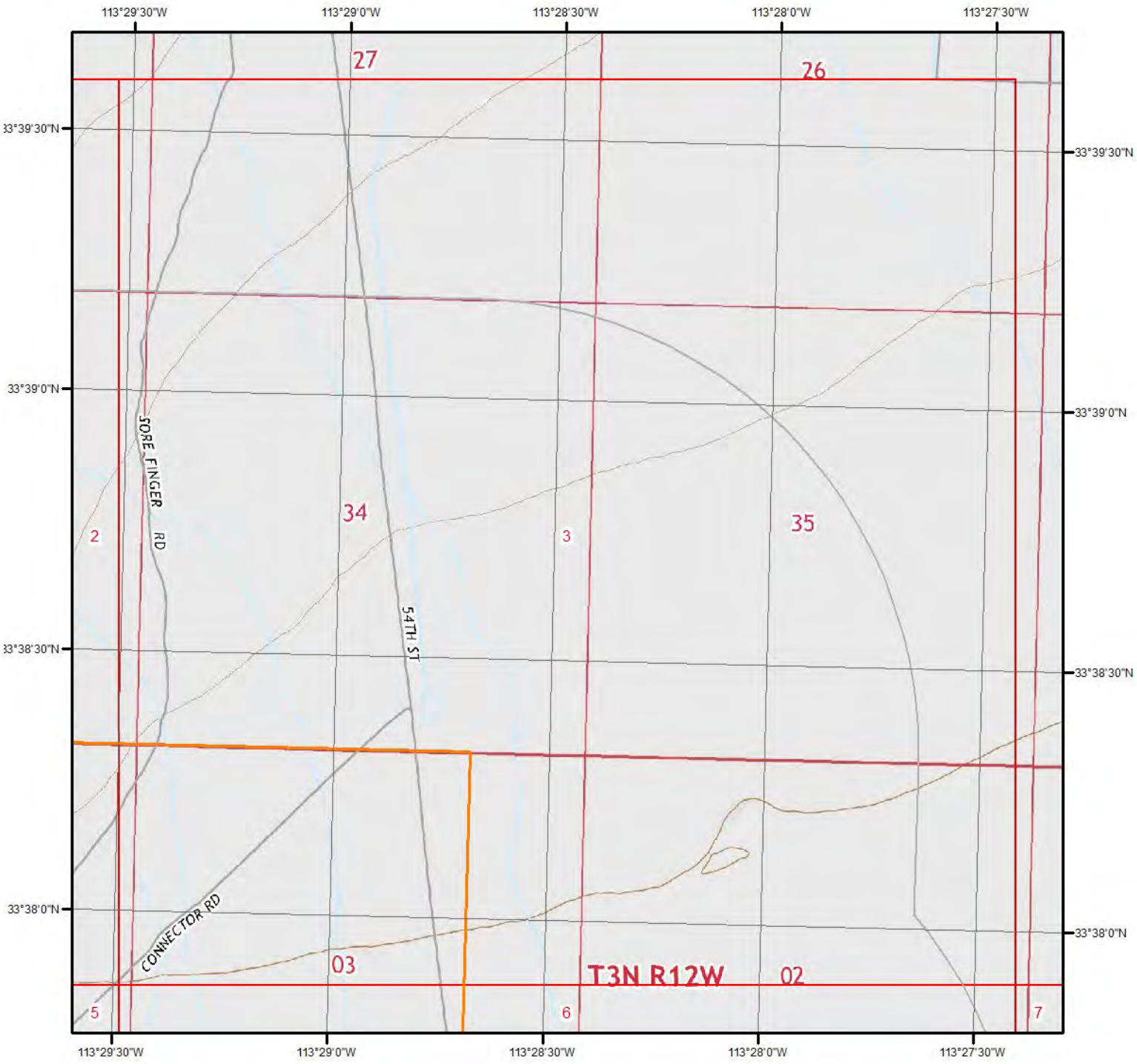
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Harrisburg Valley,AZ; Socorro Mine,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 3

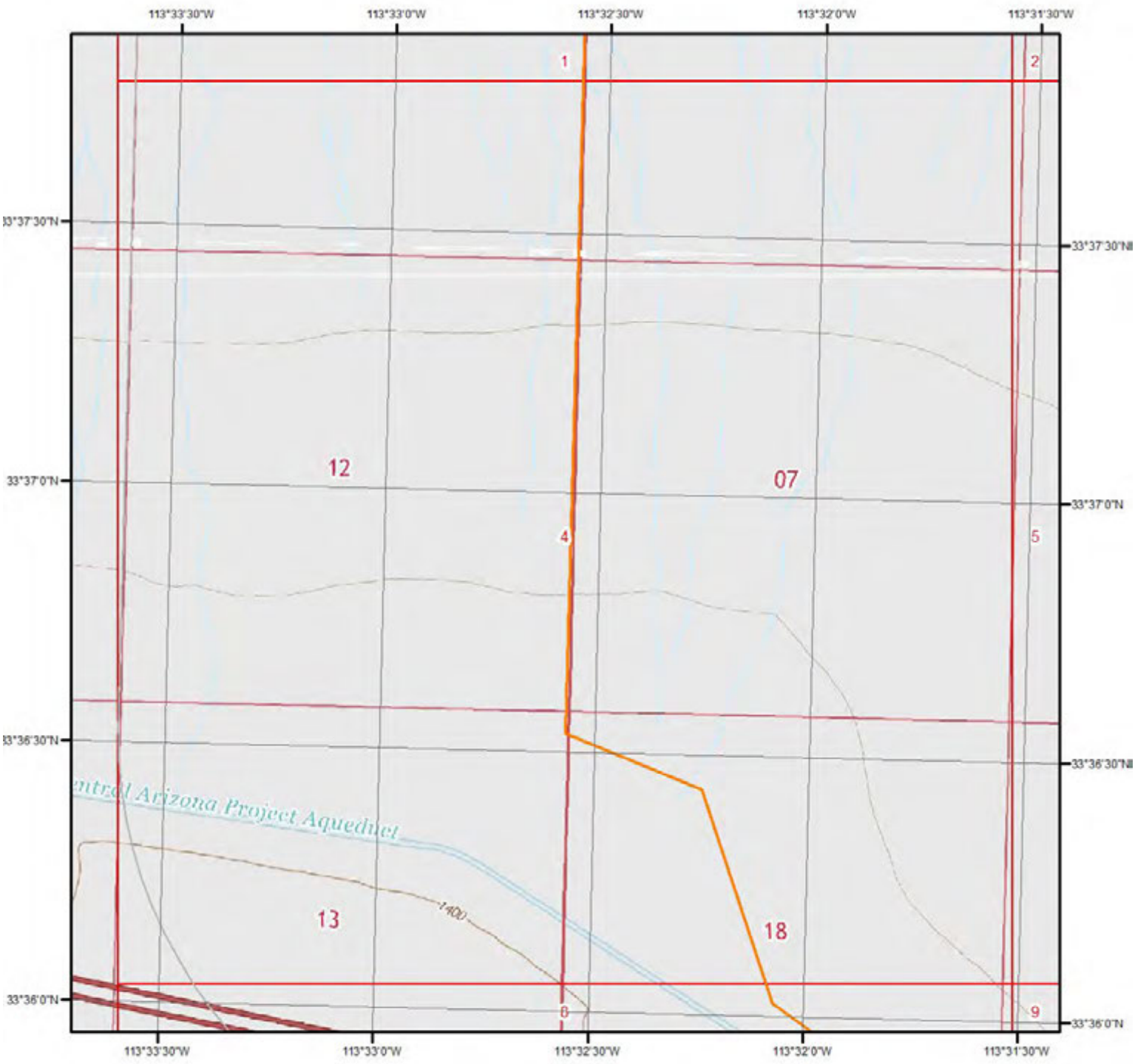
Miles
0 0.2 0.4 0.8

N

Quadrangle(s): Socorro Mine,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 4

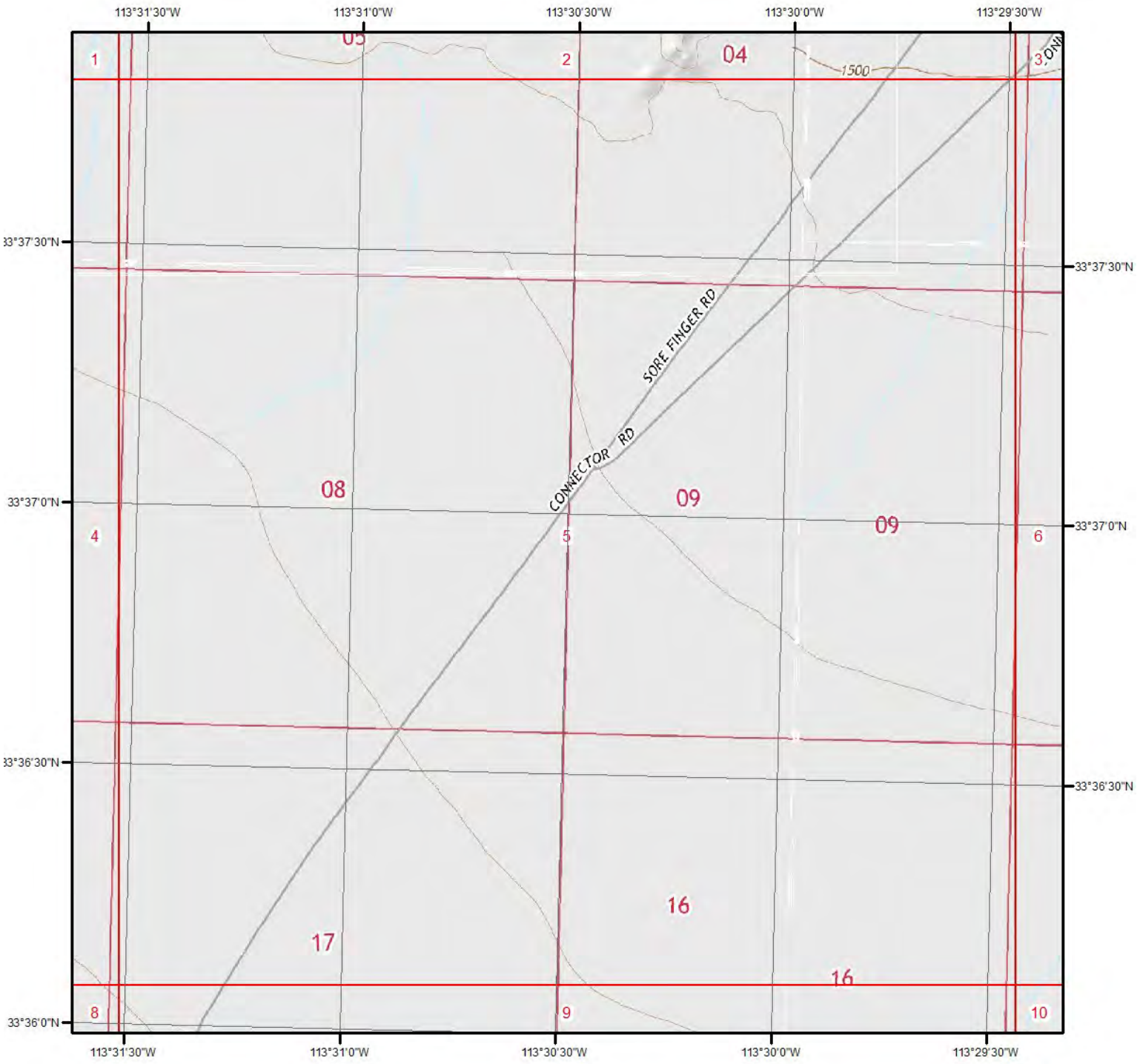
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Harrisburg Valley,AZ; Hope SE,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 5

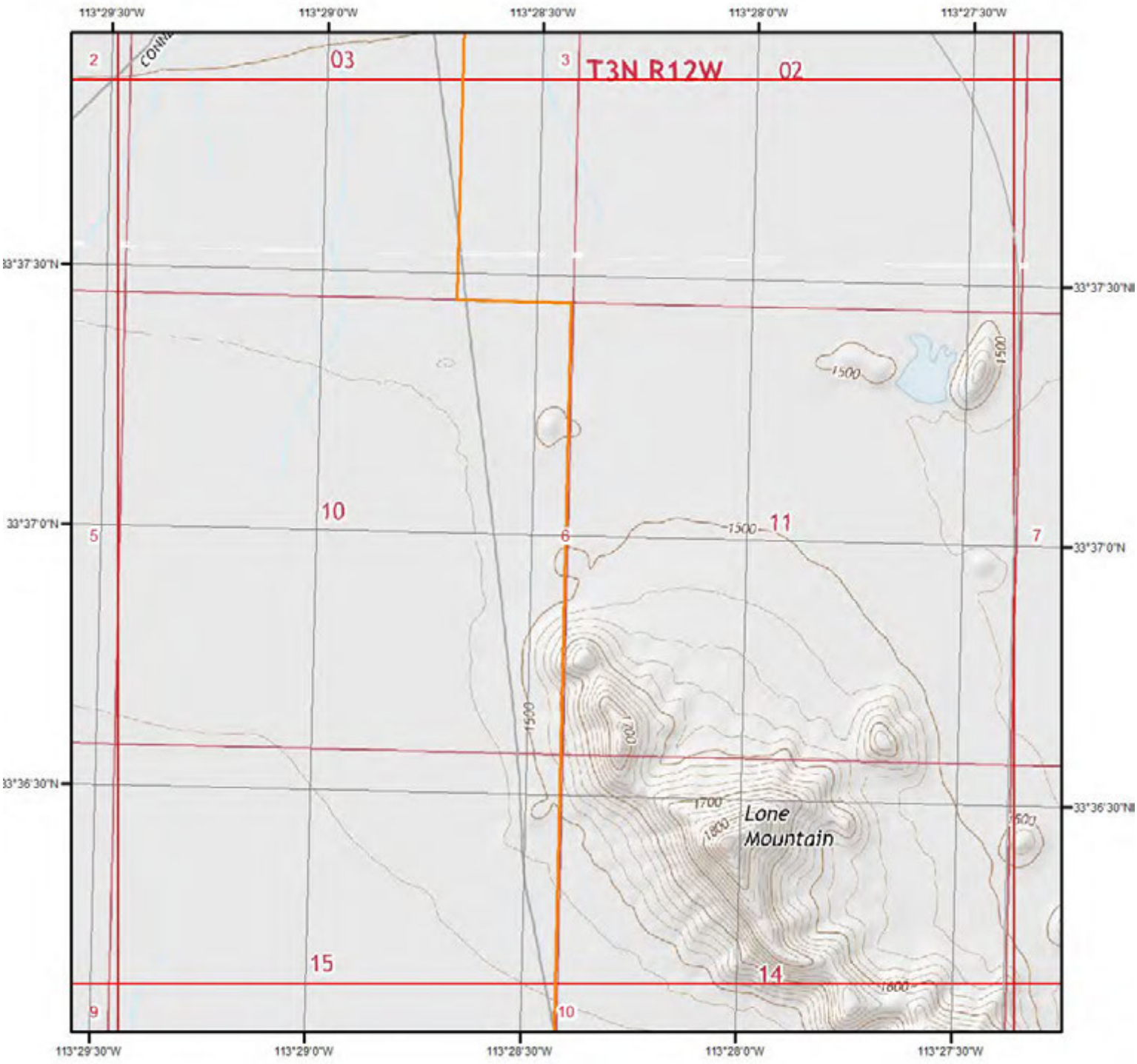
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Harrisburg Valley,AZ; Hope SE,AZ; Lone Mountain,AZ; Socorro Mine,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 6

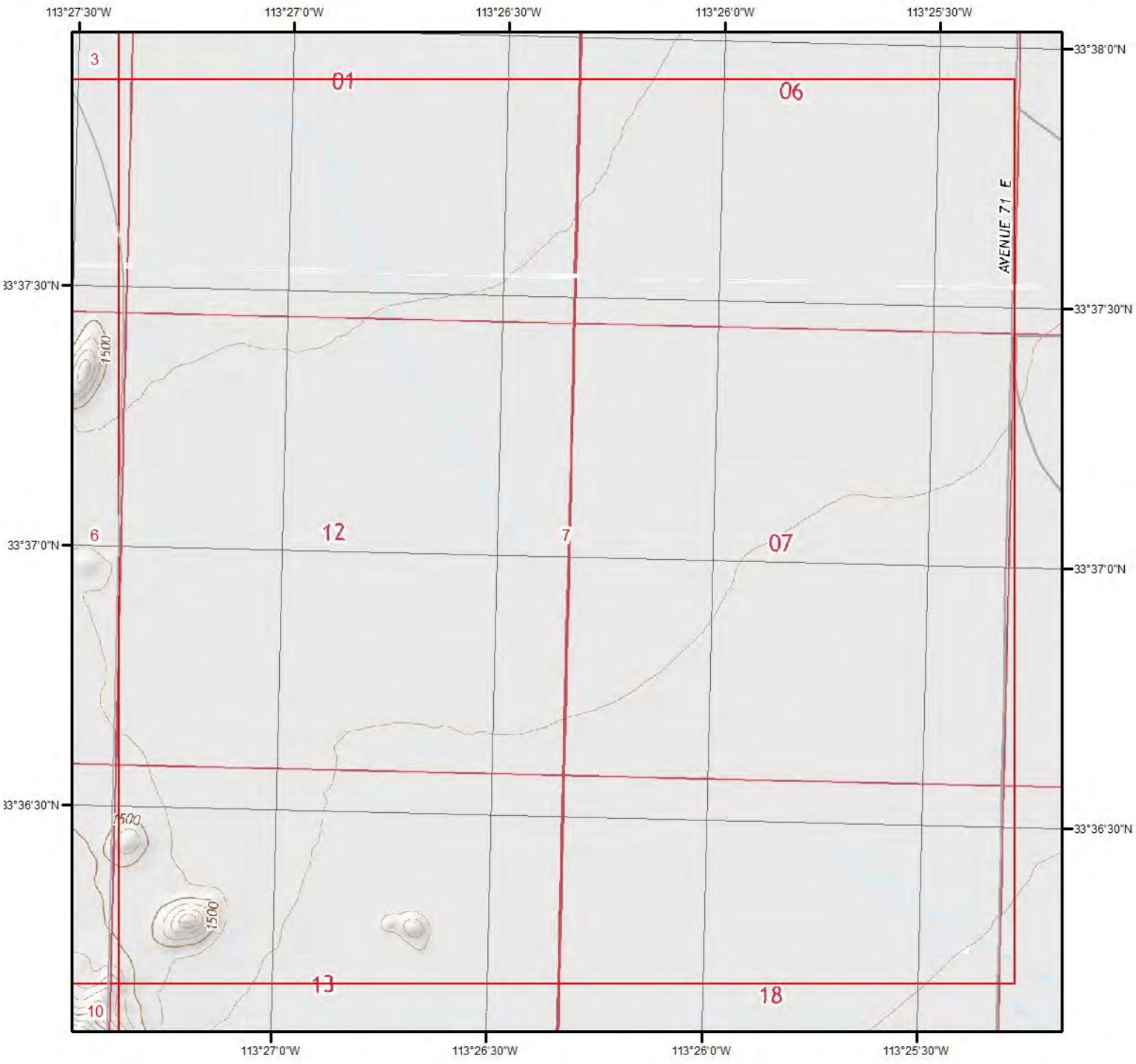
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Lone Mountain,AZ; Socorro Mine,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 7

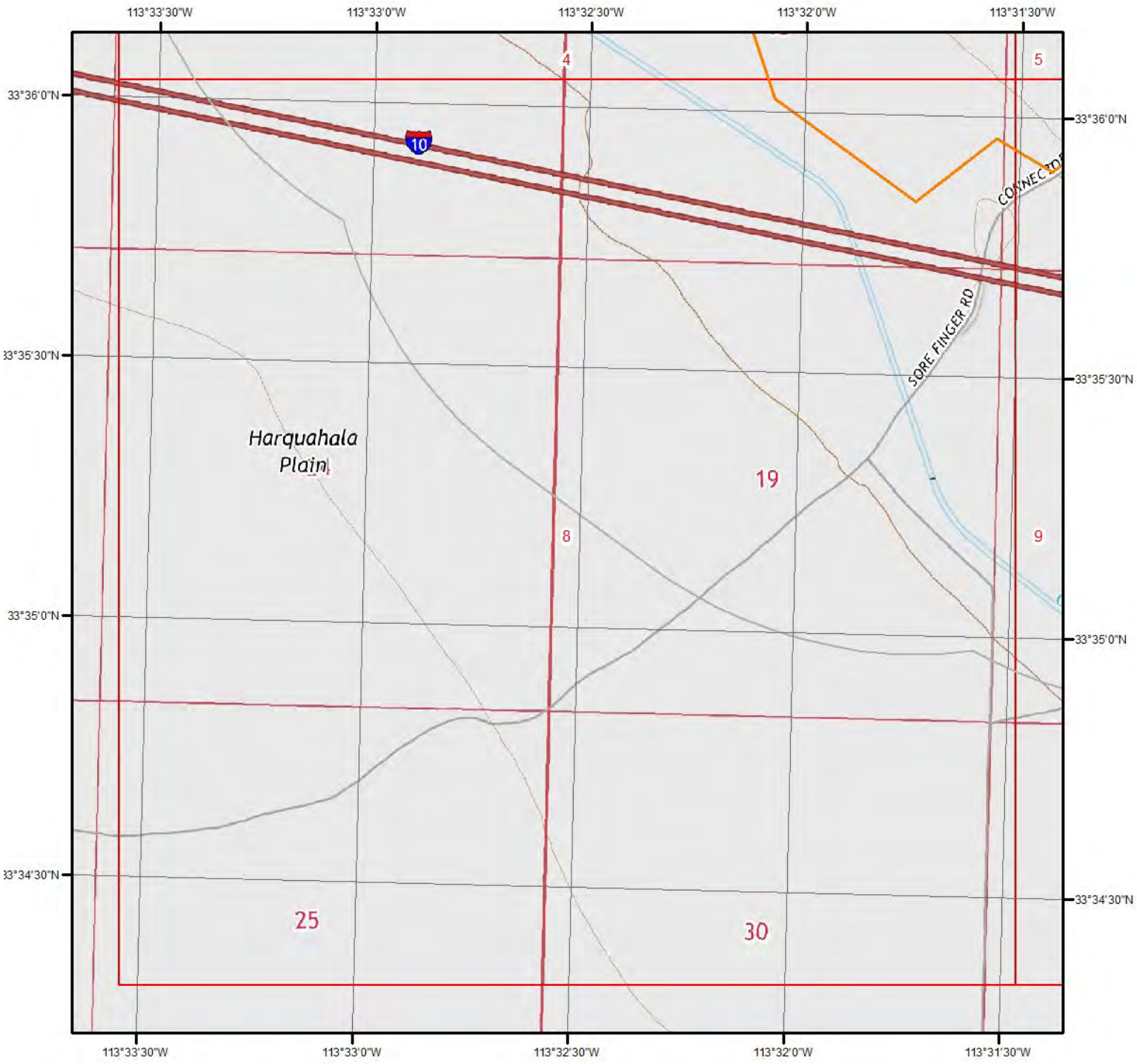
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Lone Mountain,AZ; Socorro Mine,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 8

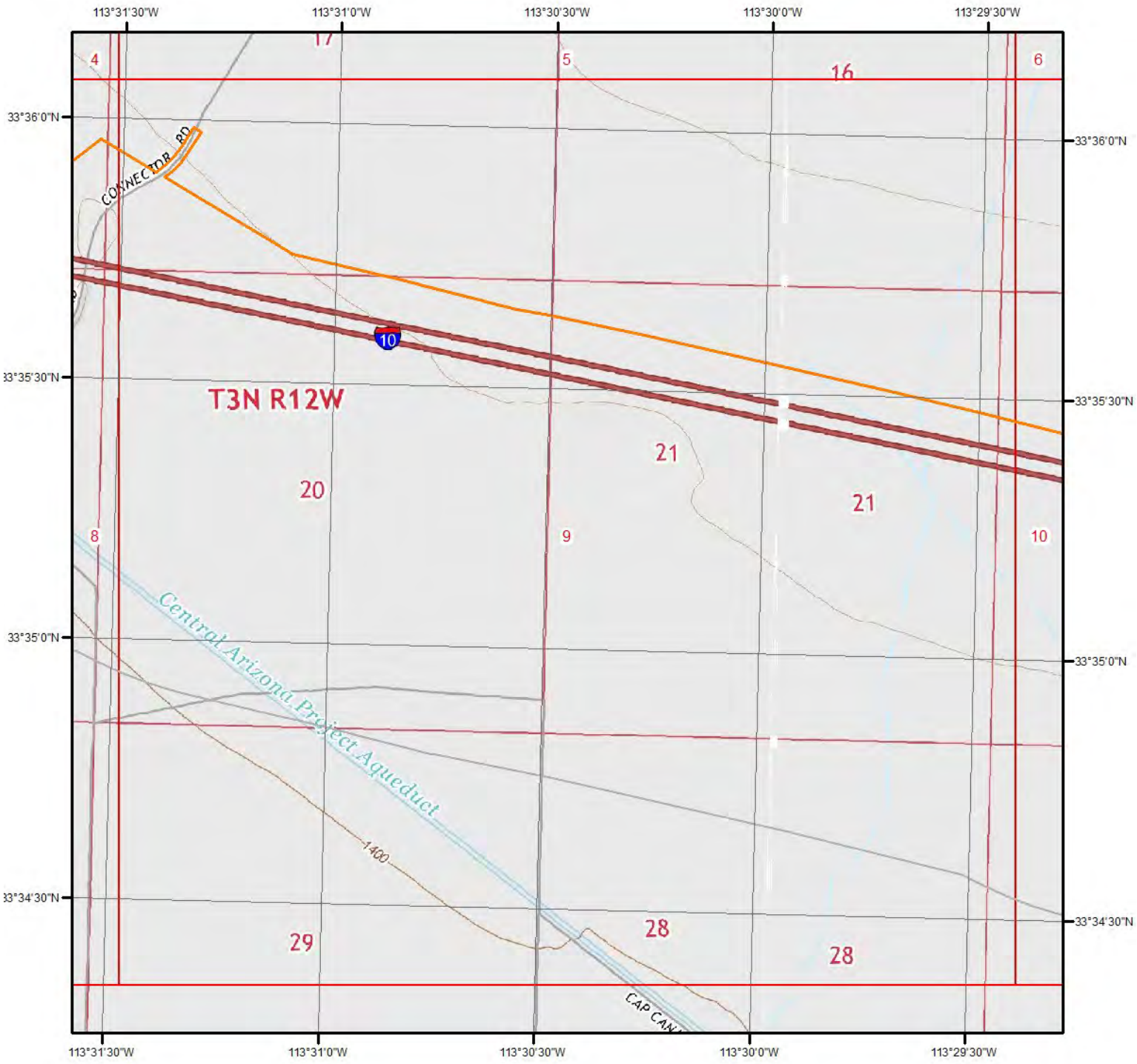
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Hope SE,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 9

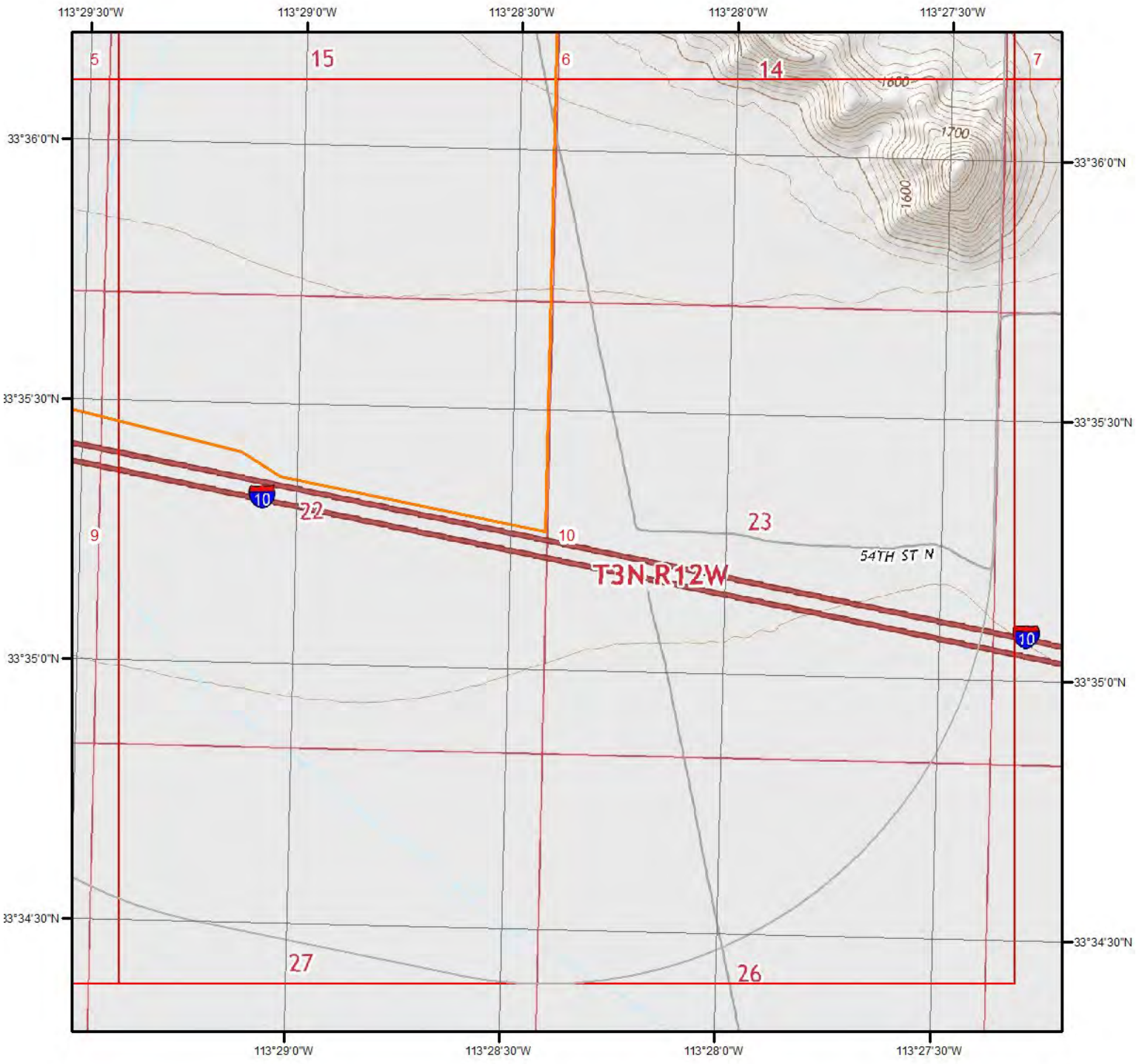
0 0.2 0.4 0.8 Miles

N

Quadrangle(s): Hope SE,AZ; Lone Mountain,AZ

Source: USGS 7.5 Minute Topographic Map

Topographic Information



Current USGS Topo - Page 10

Miles
0 0.2 0.4 0.8

N

Quadrangle(s): Lone Mountain,AZ

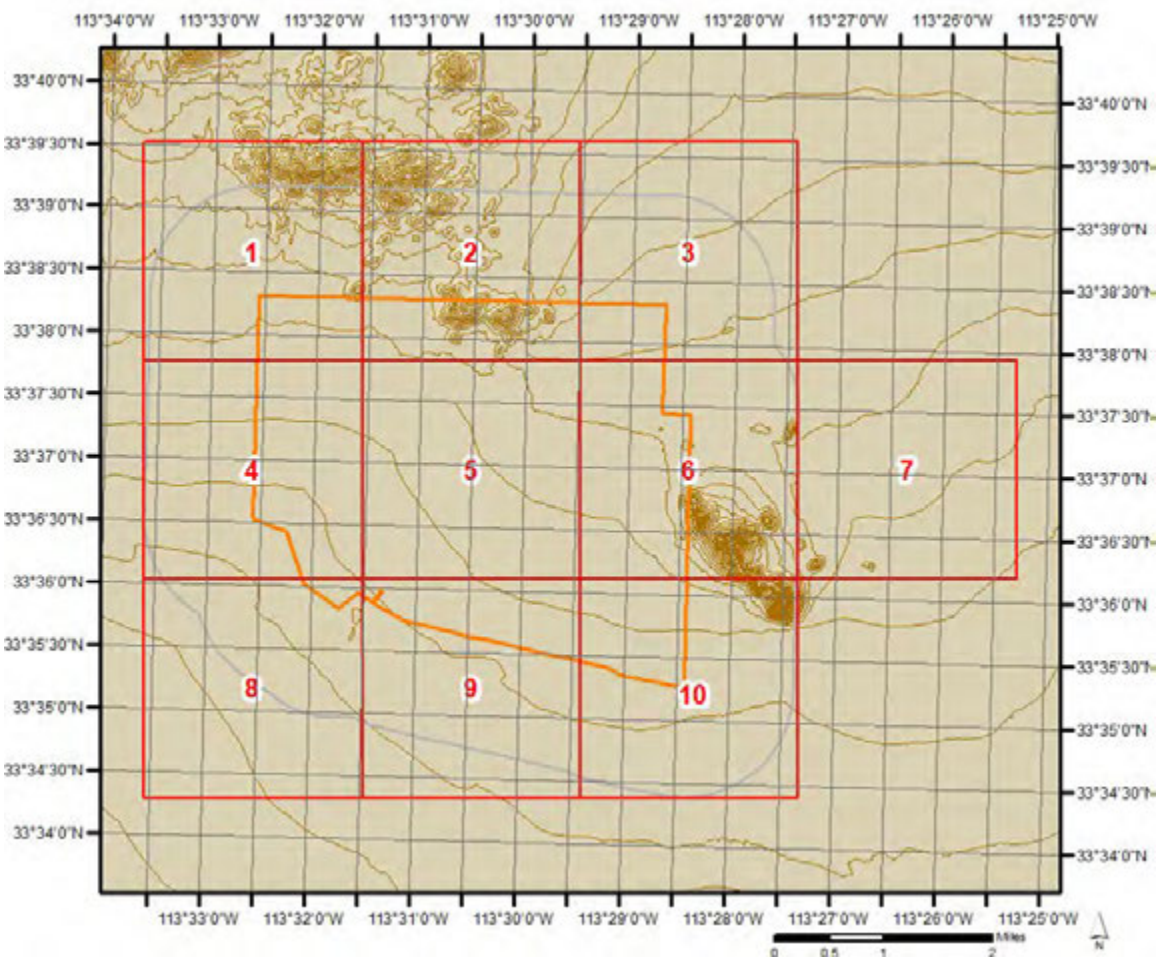
Source: USGS 7.5 Minute Topographic Map

Topographic Information

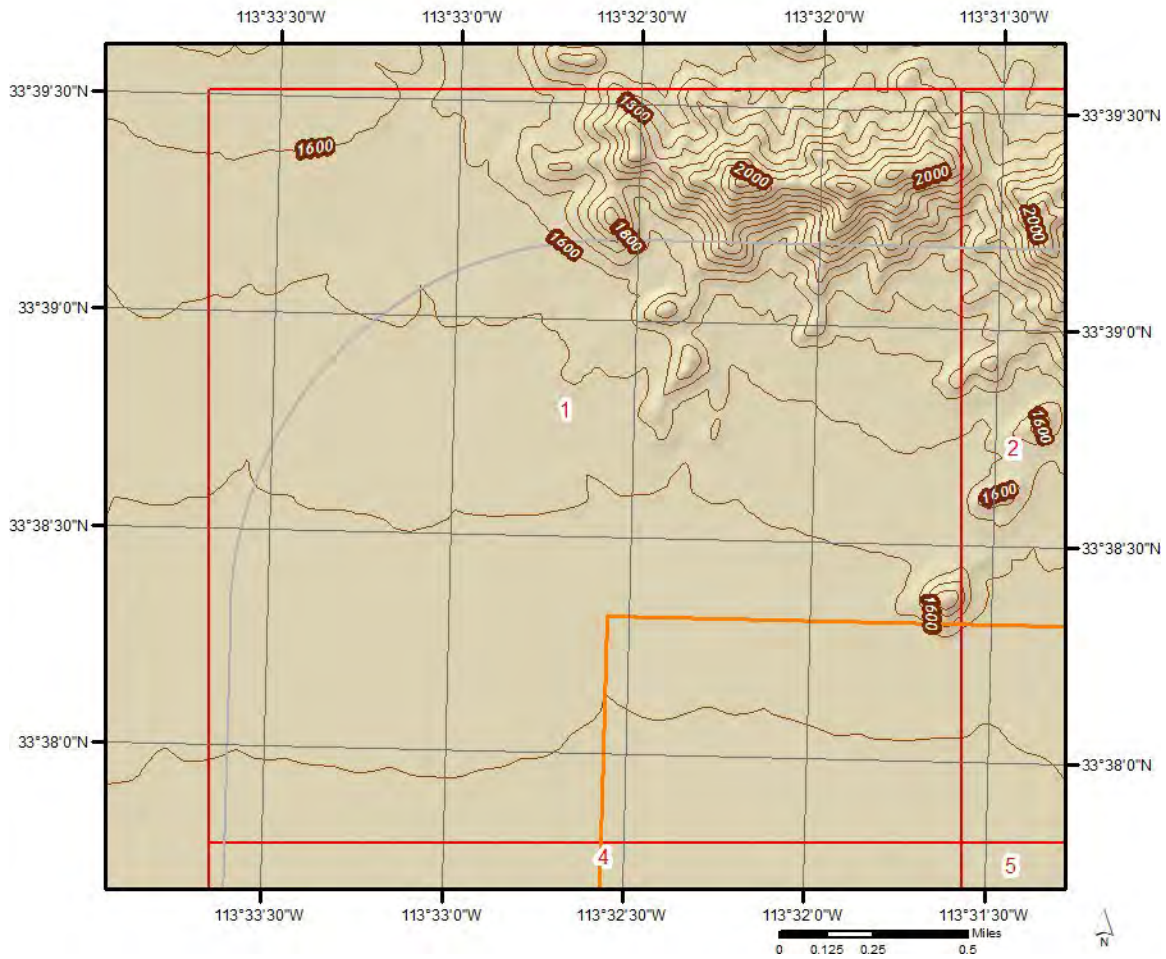
The previous topographic map(s) are created by seamlessly merging and cutting current USGS topographic data. Below are shaded relief map(s), derived from USGS elevation data to show surrounding topography in further detail.

Topographic information at project property:

Elevation:	1,458.06 ft
Slope Direction:	SW



Topographic Information



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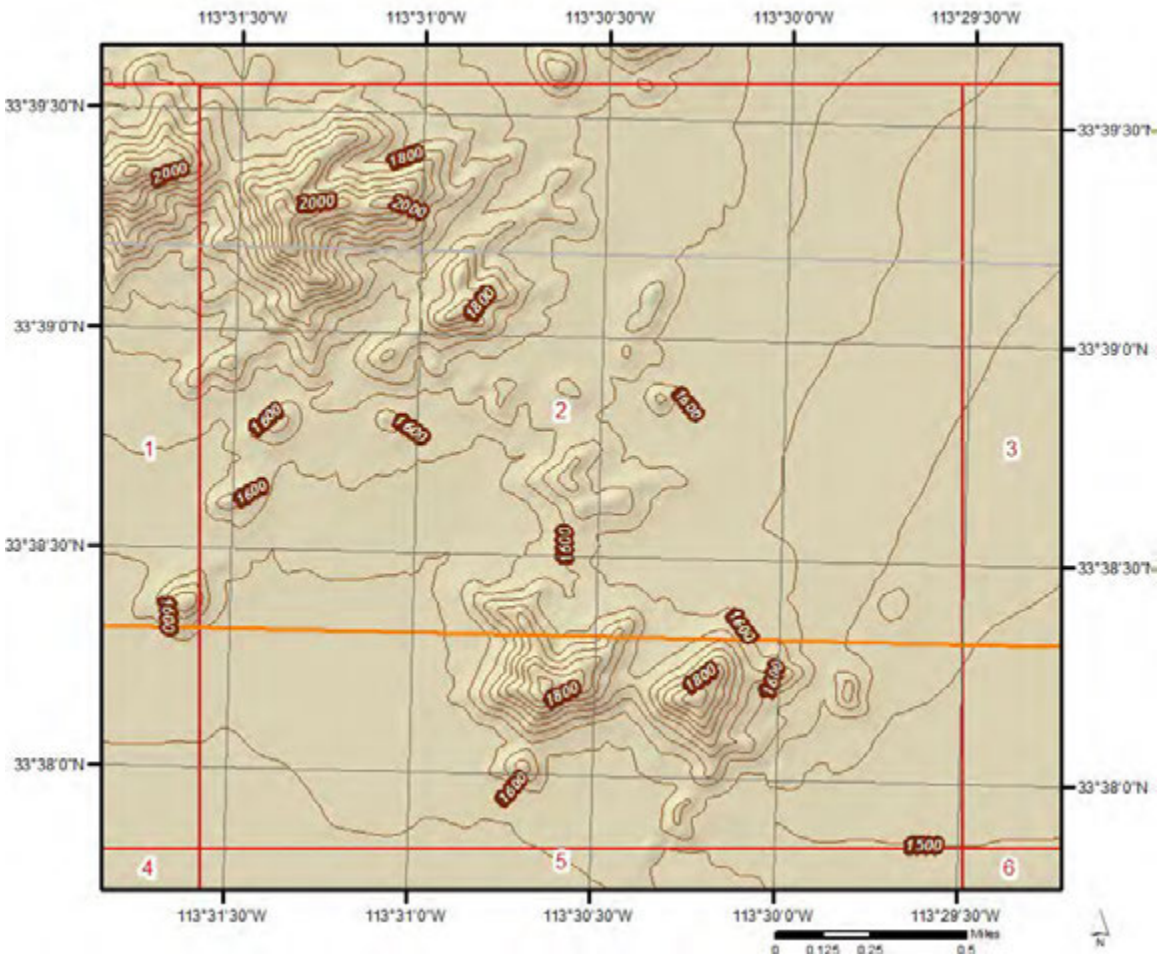
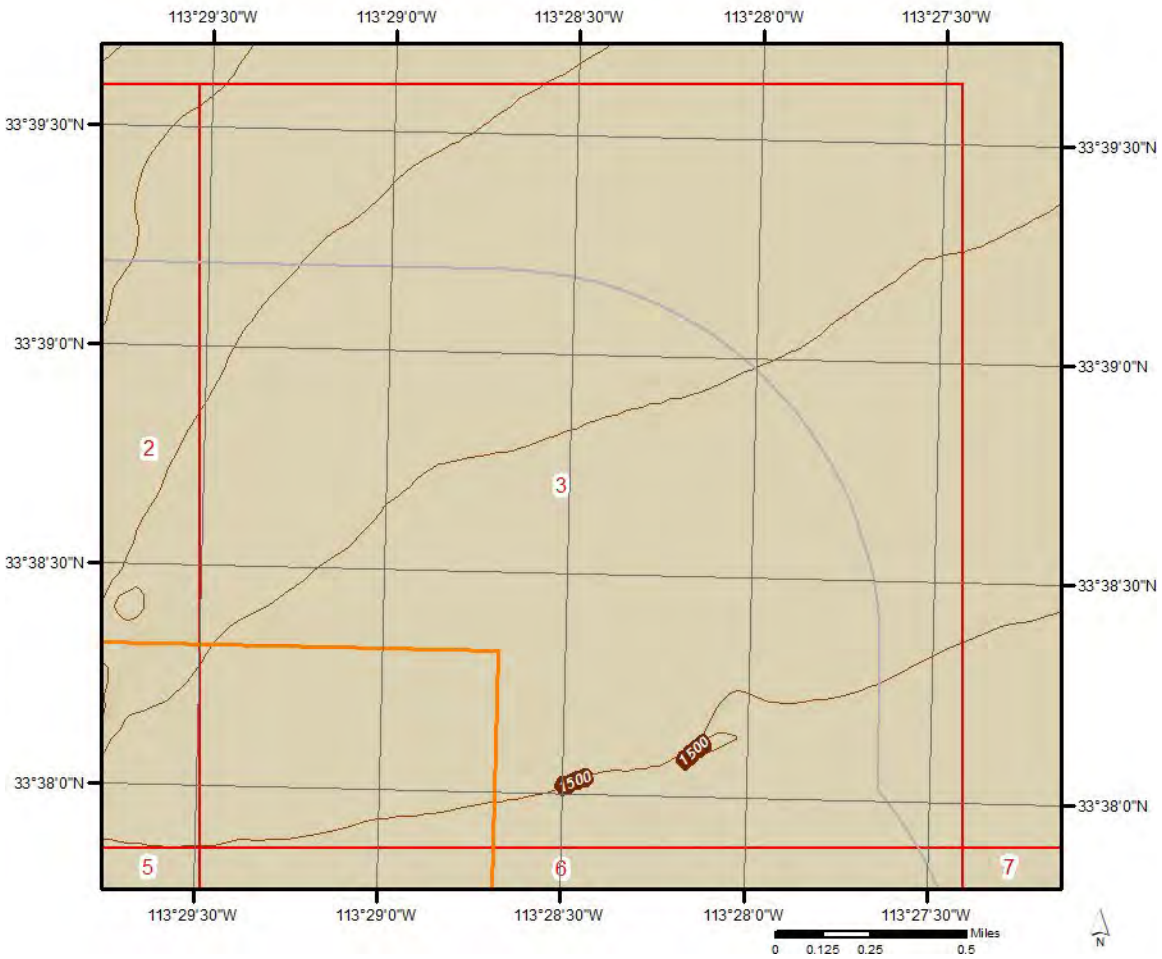


Topographic Information



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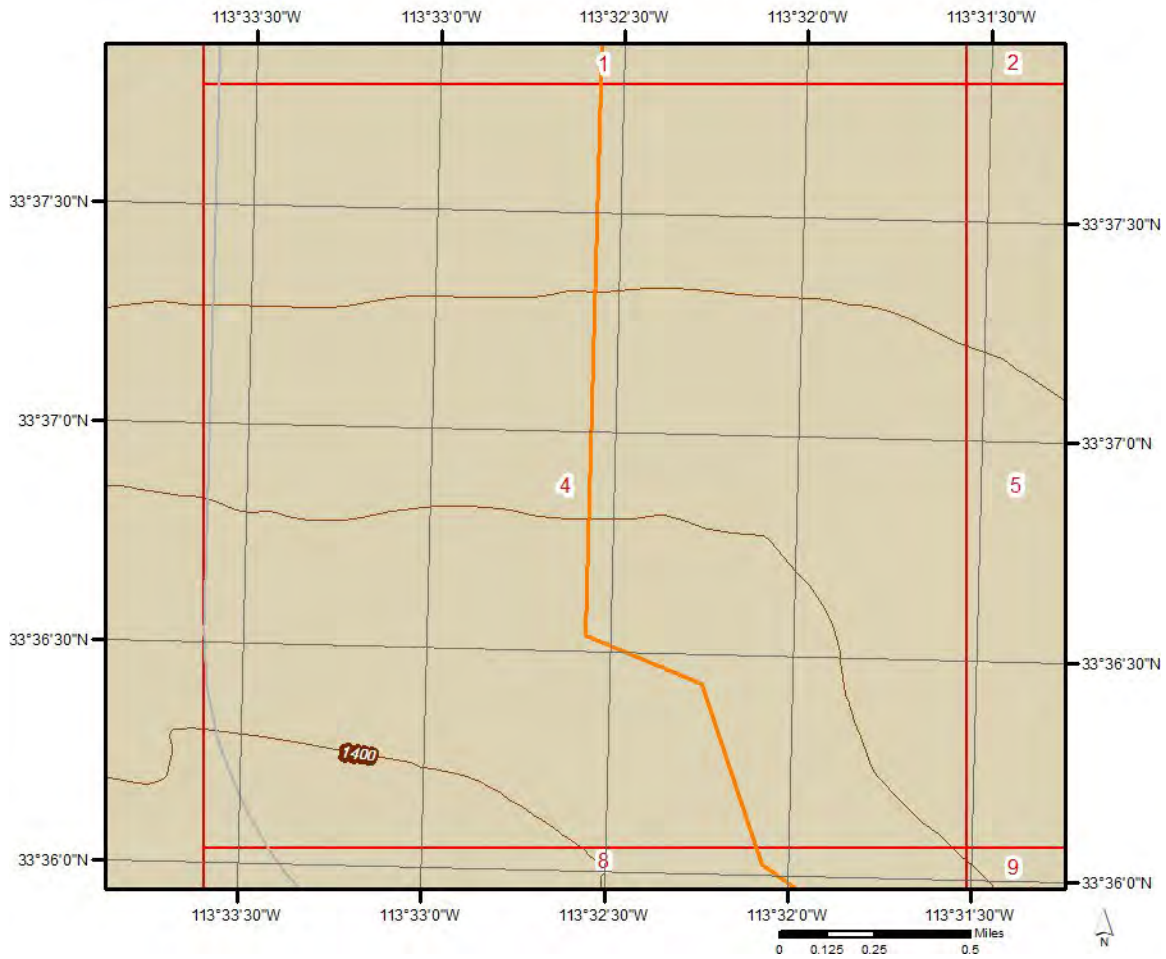

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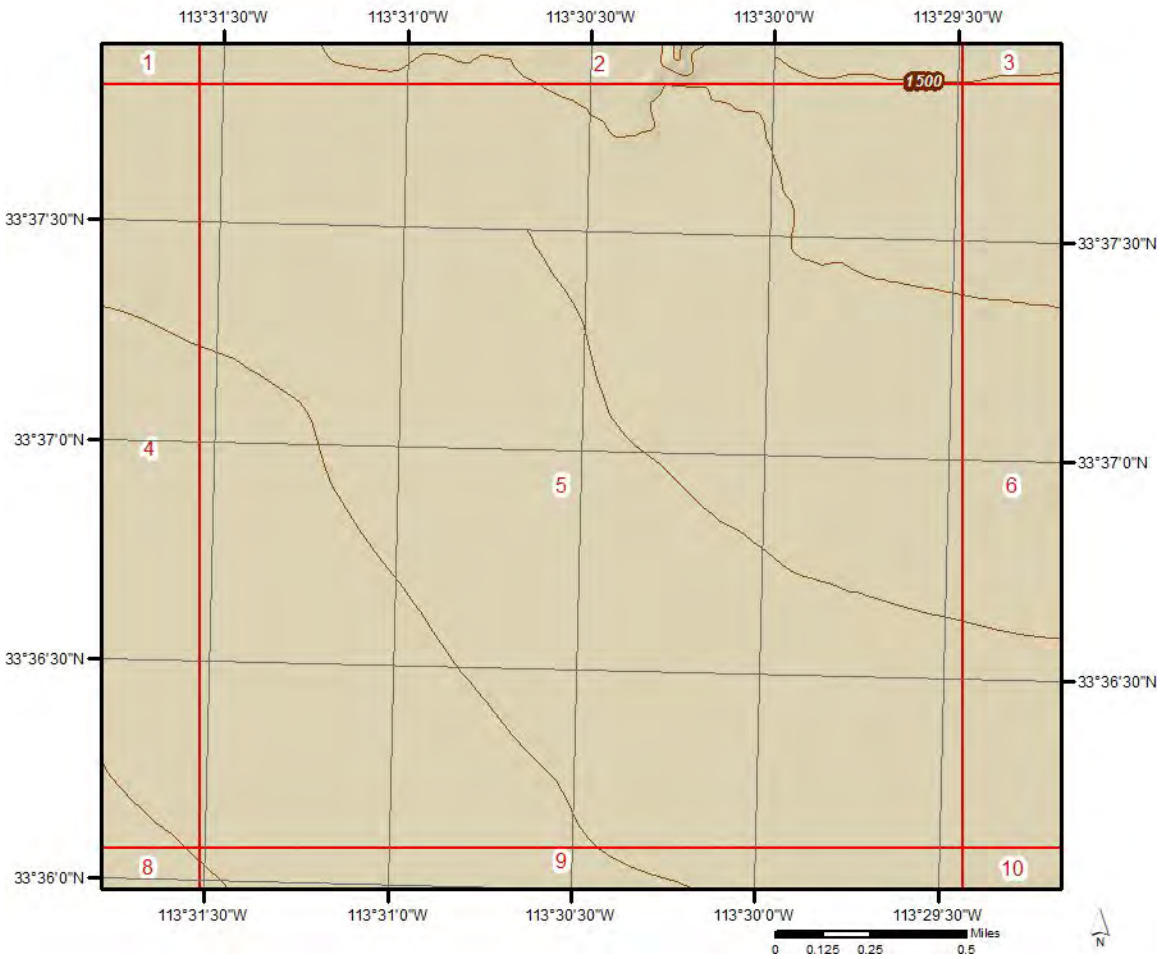
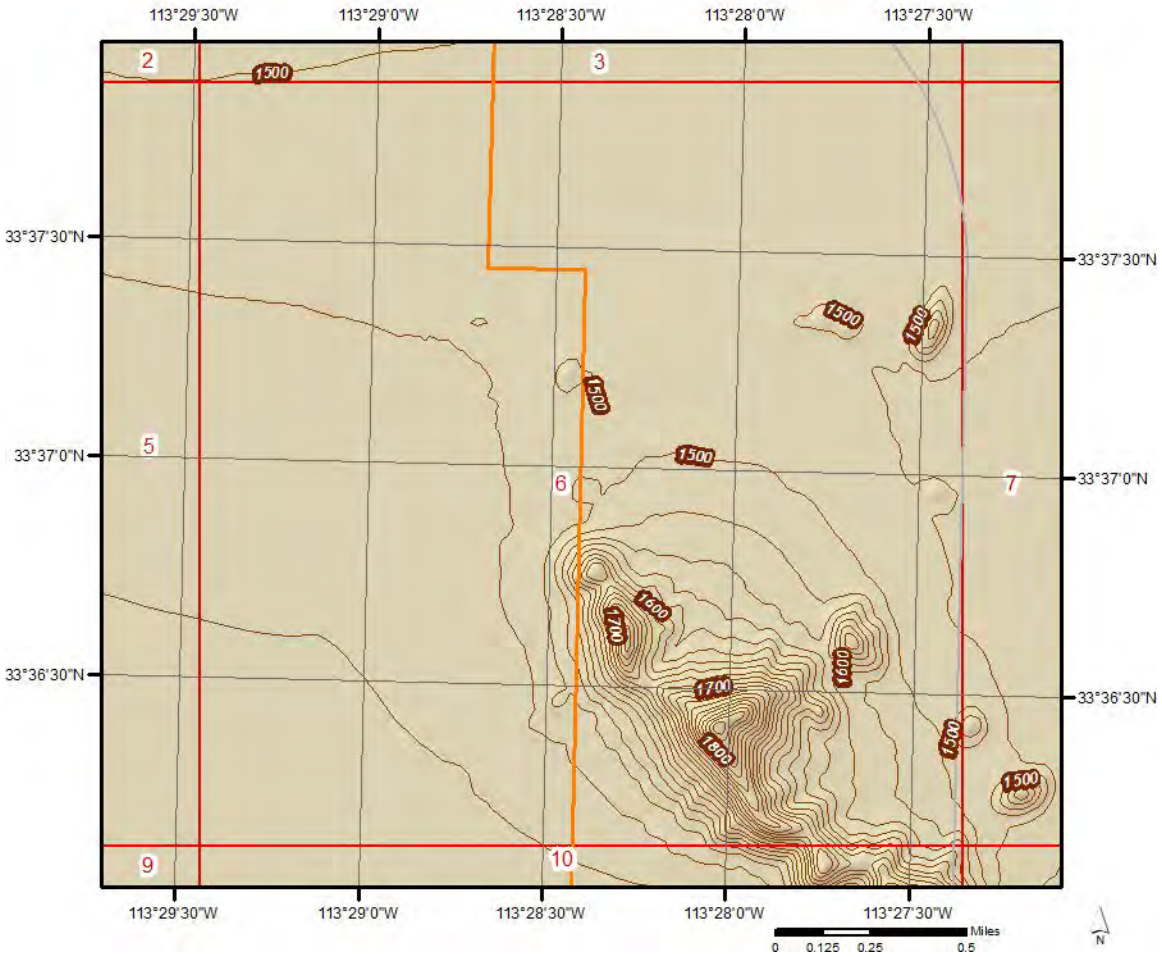
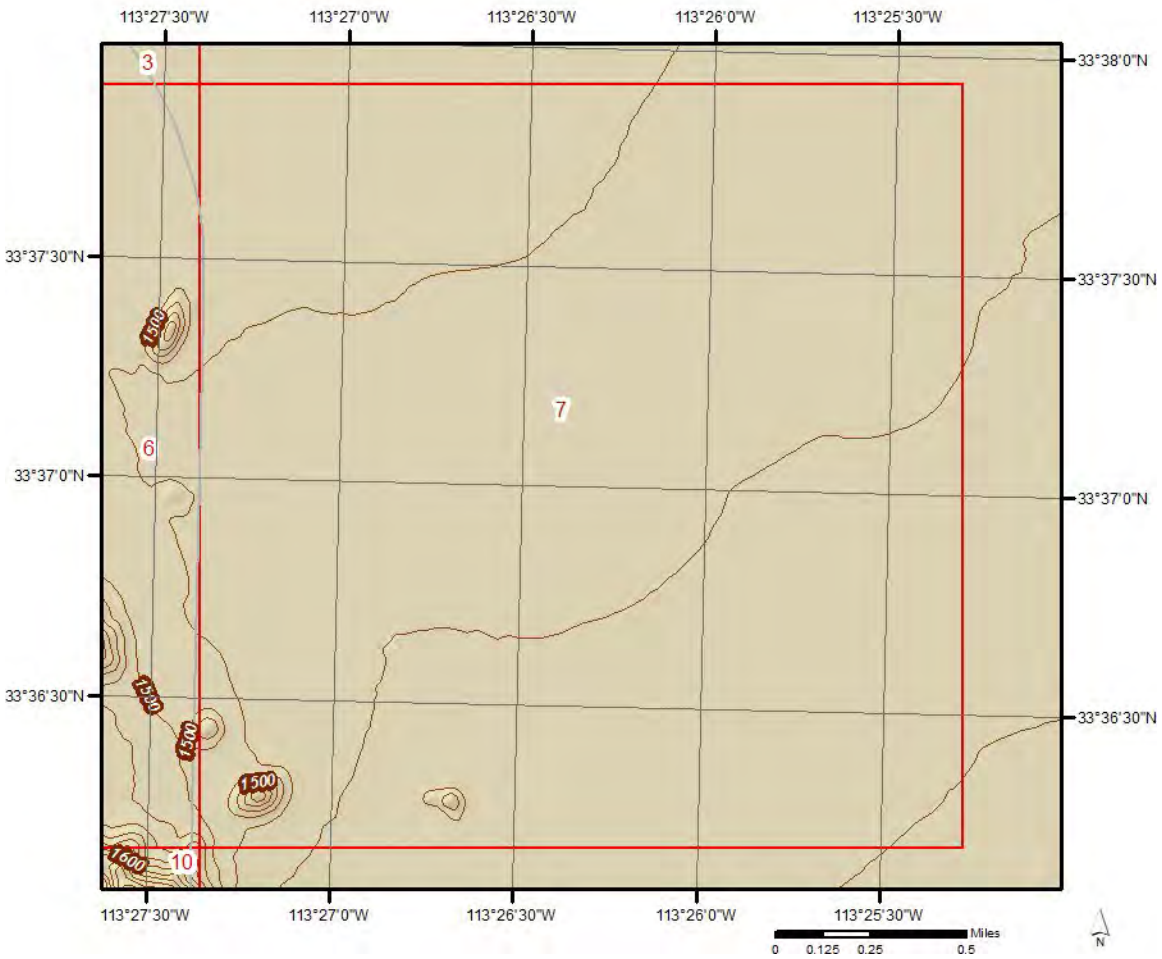


Topographic Information



Topographic Information



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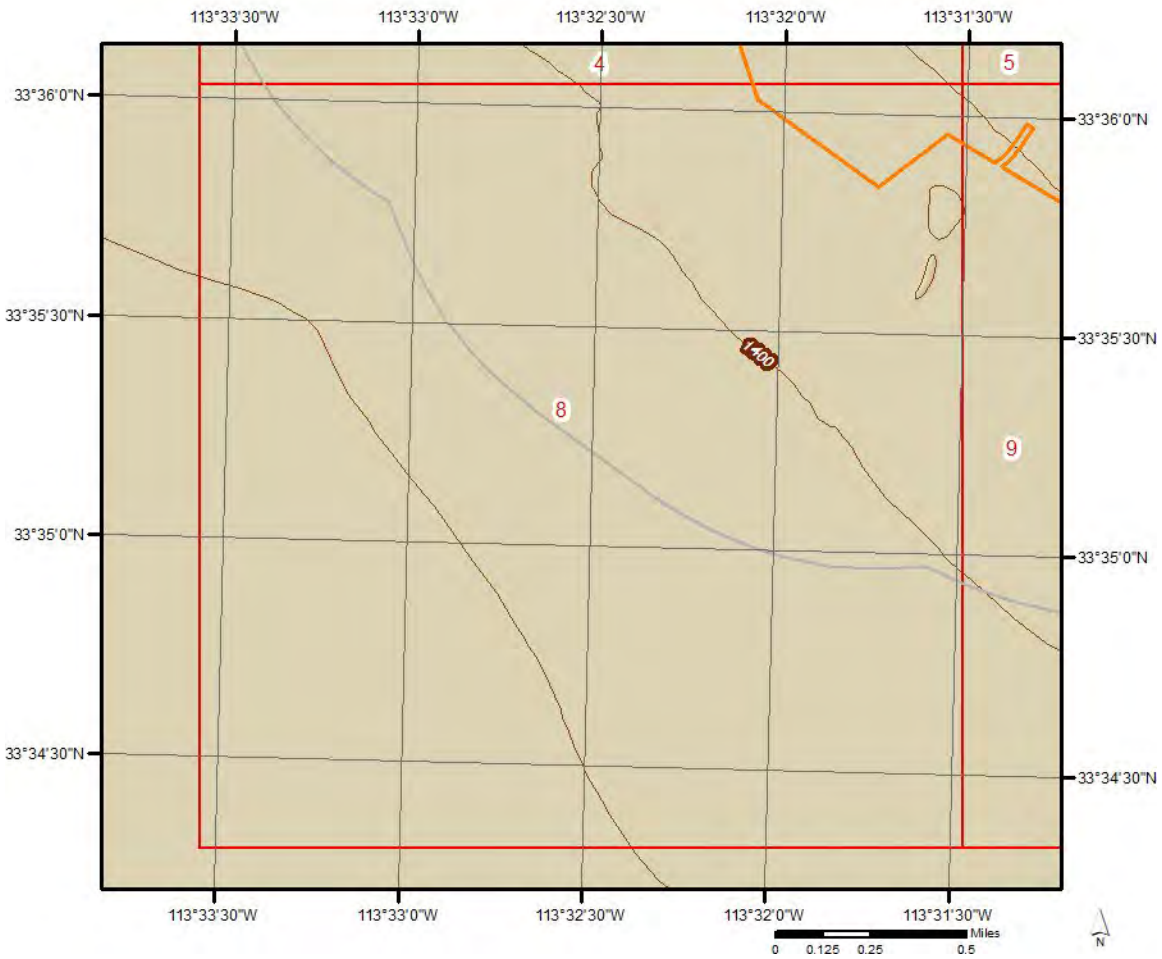

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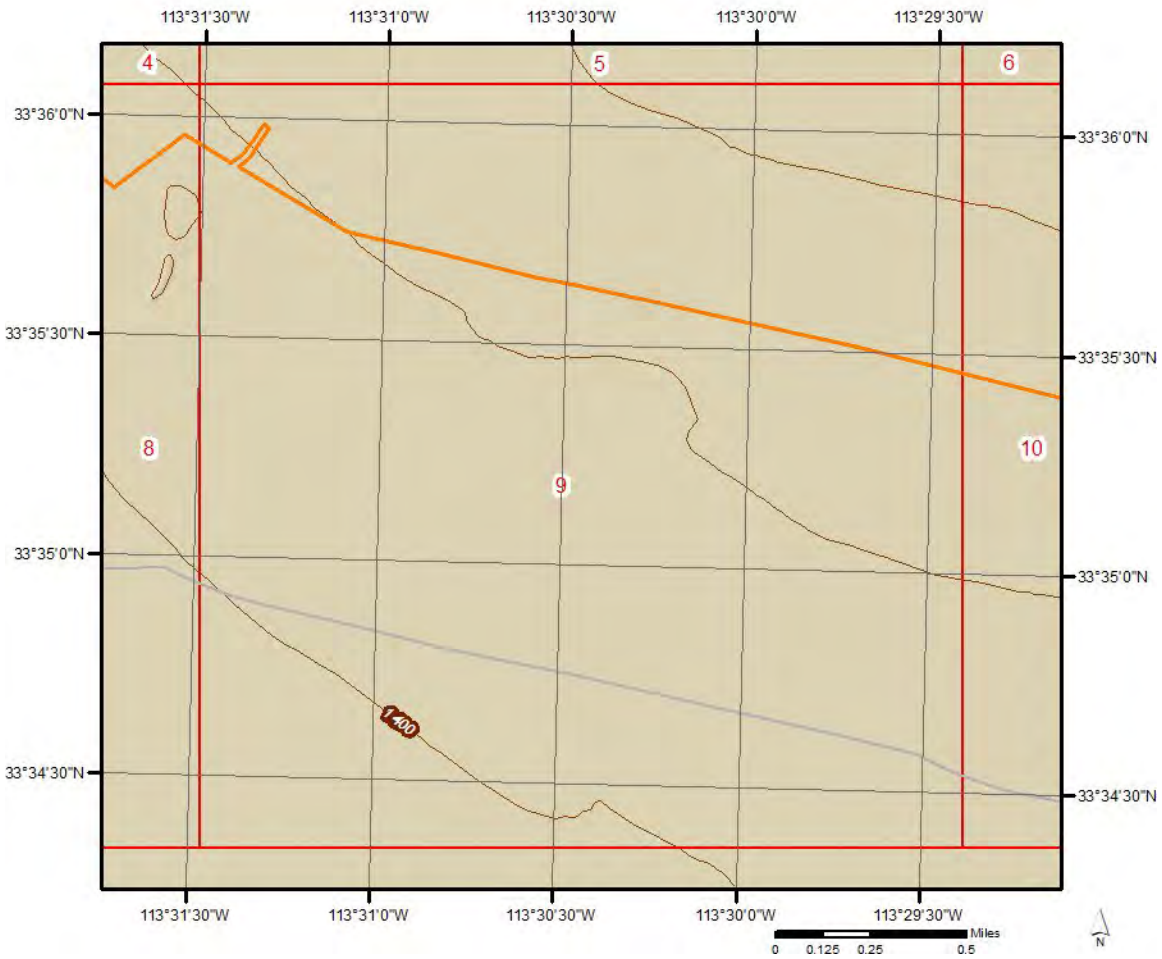

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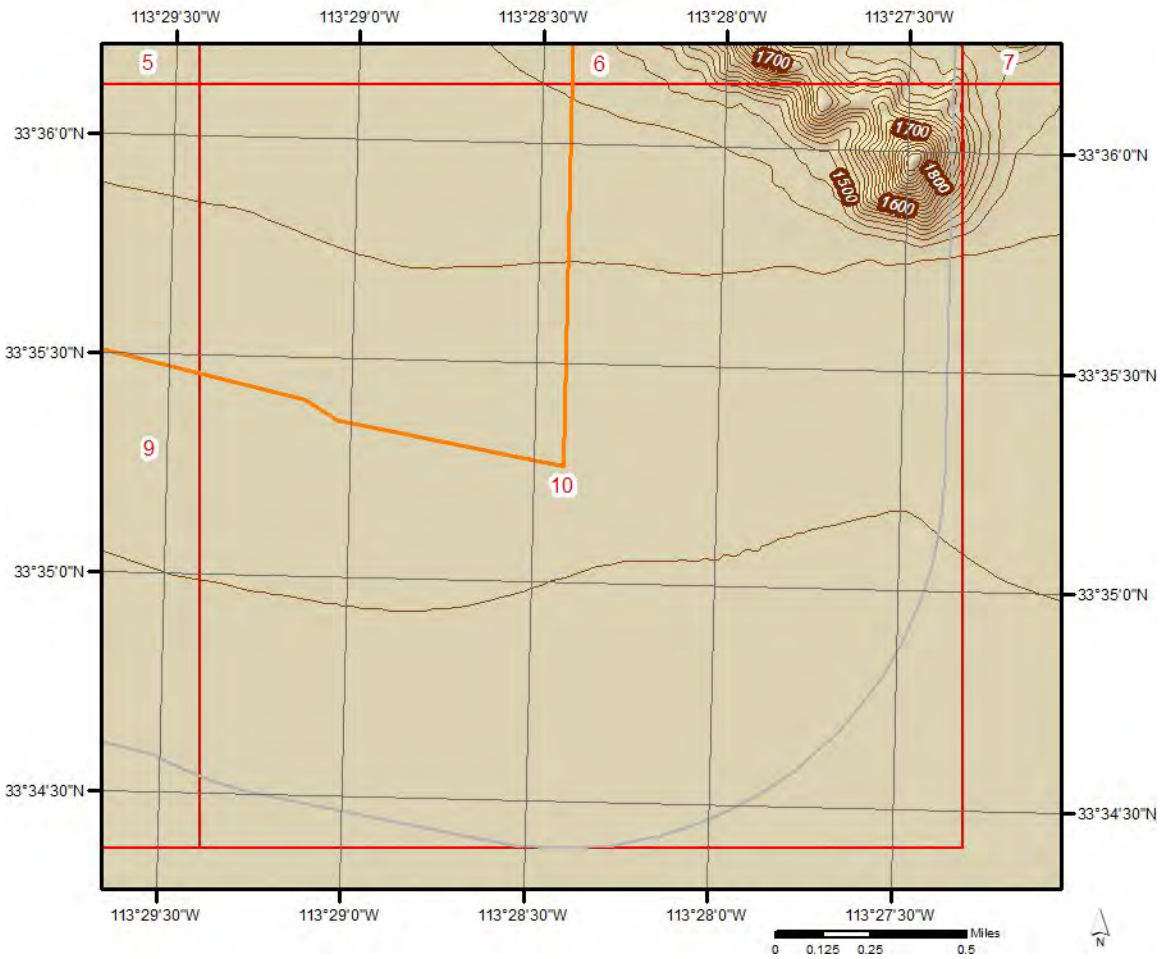
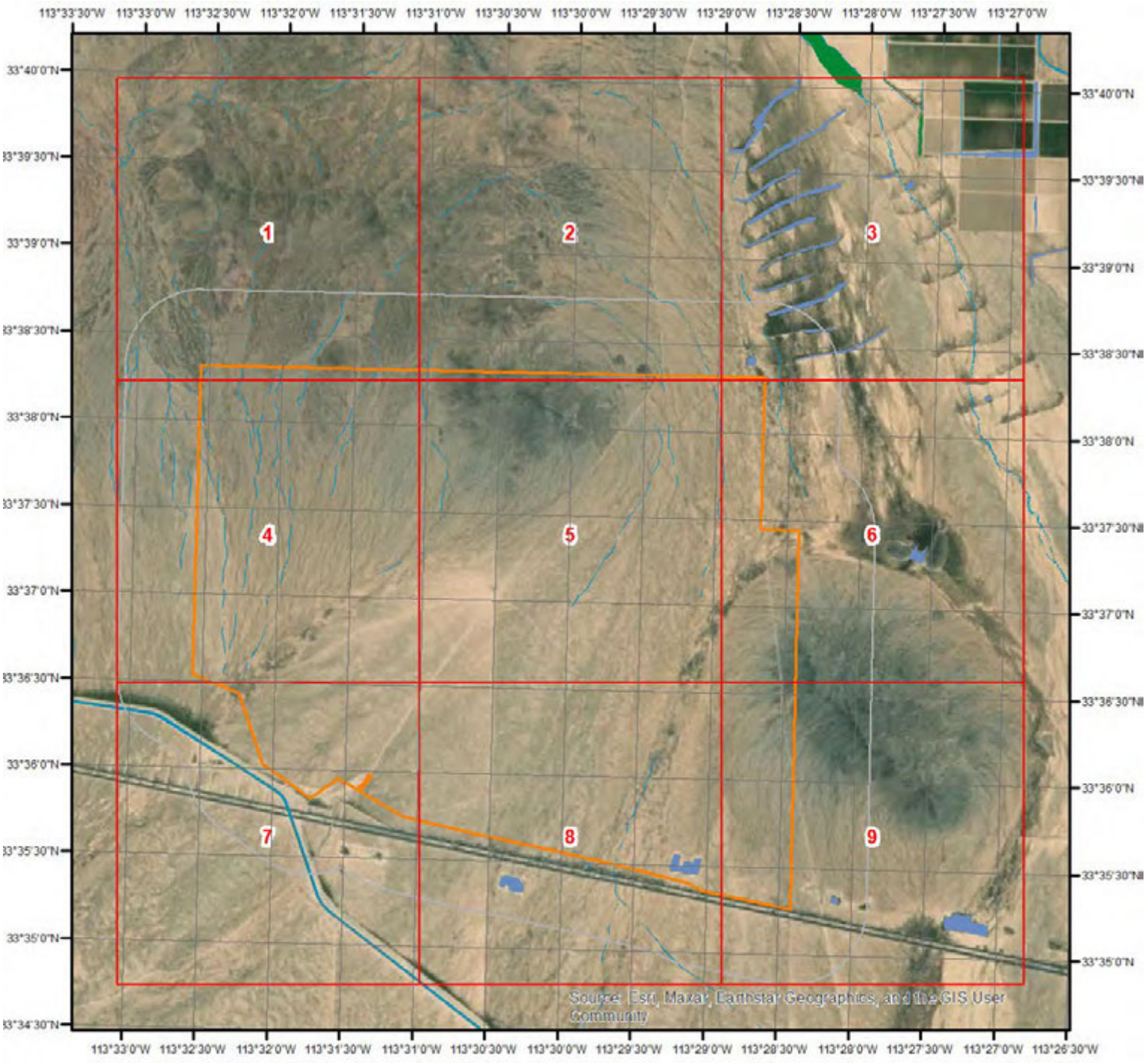


Hydrologic Information



Wetland

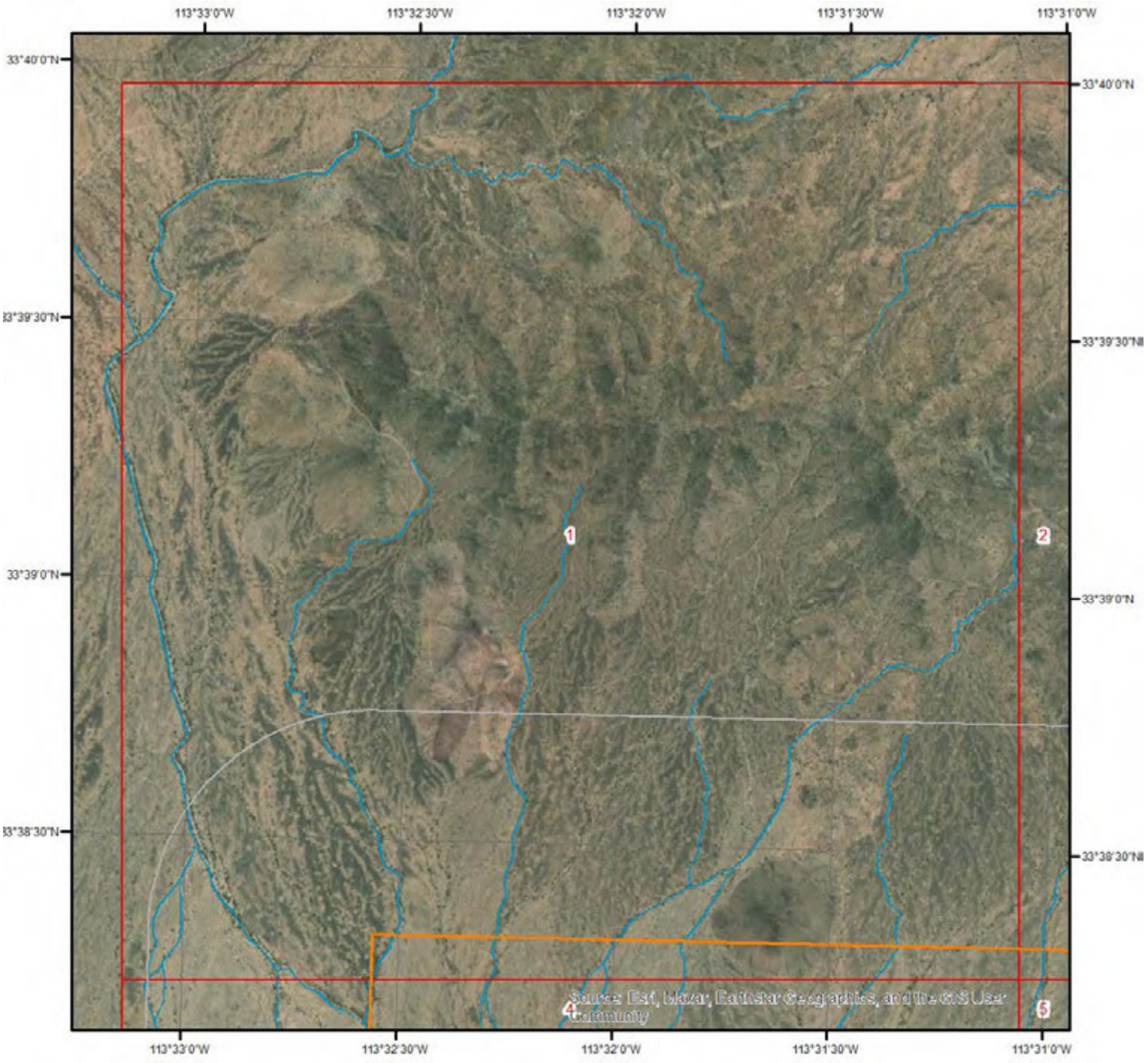
Miles
0 0.425 0.85 1.7
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 1

Miles
0 0.125 0.25 0.5

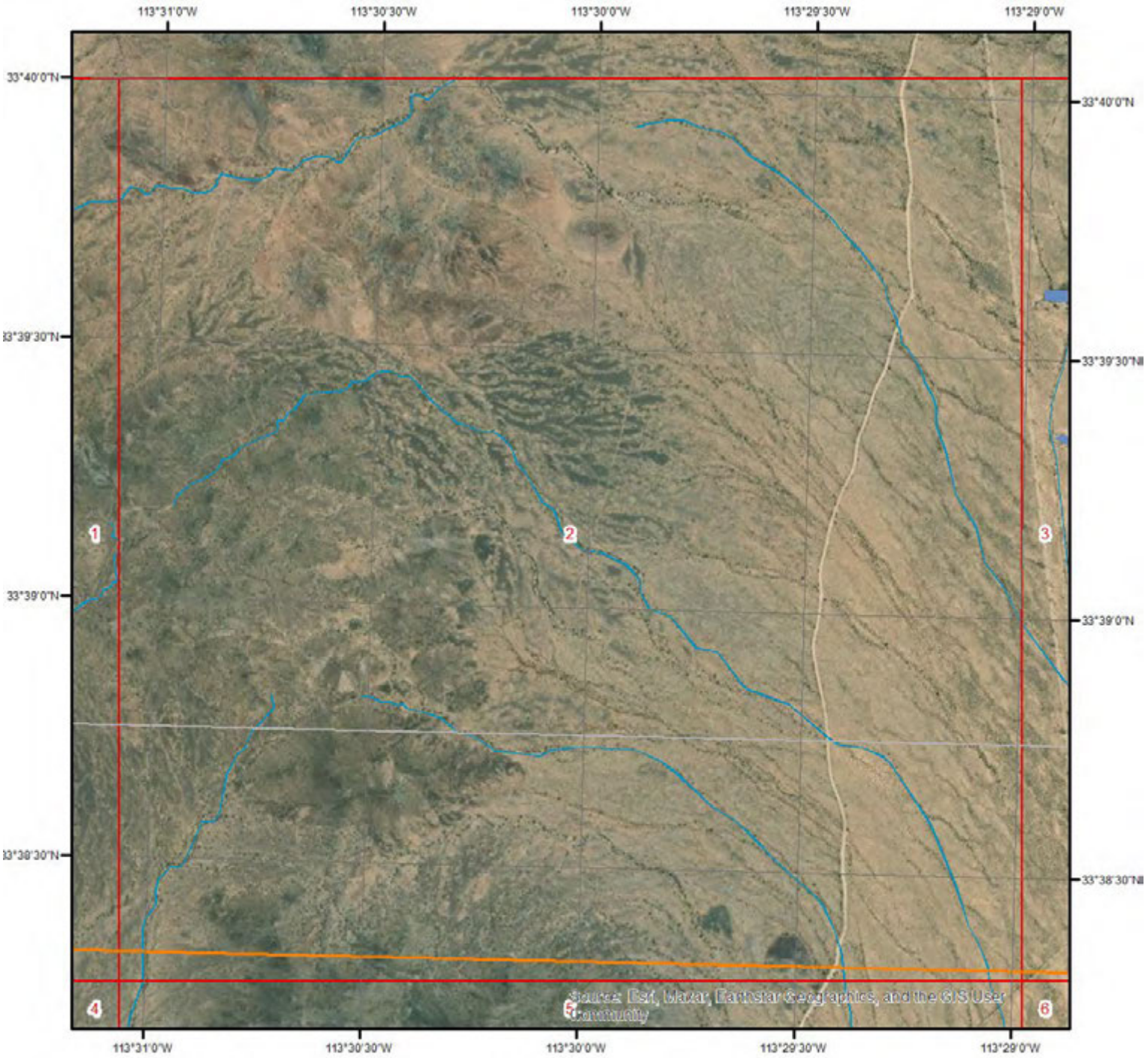
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 2

Miles
0 0.125 0.25 0.5

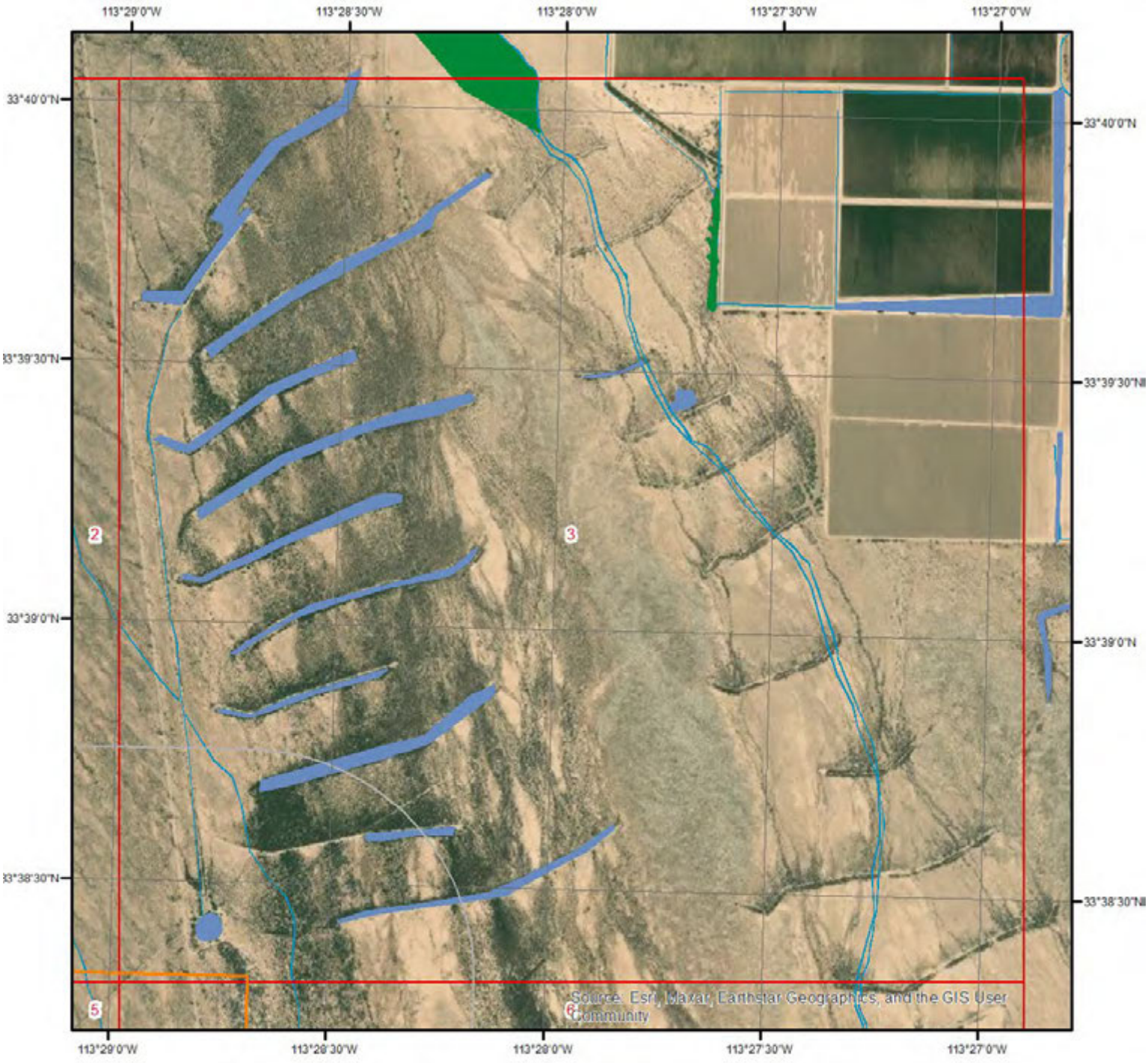
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 3

0 0.125 0.25 0.5 Miles

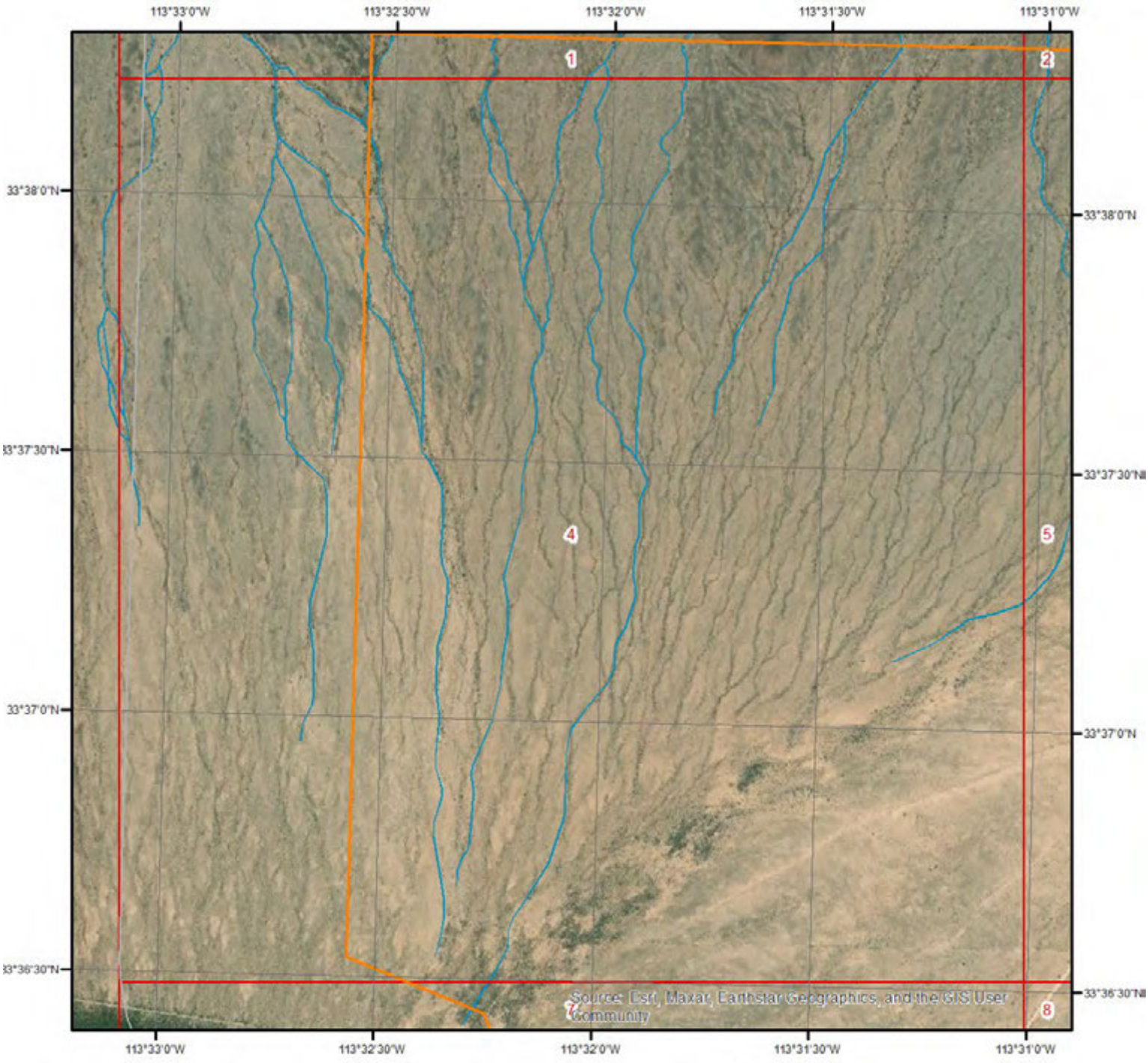
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 4

0 0.125 0.25 0.5 Miles

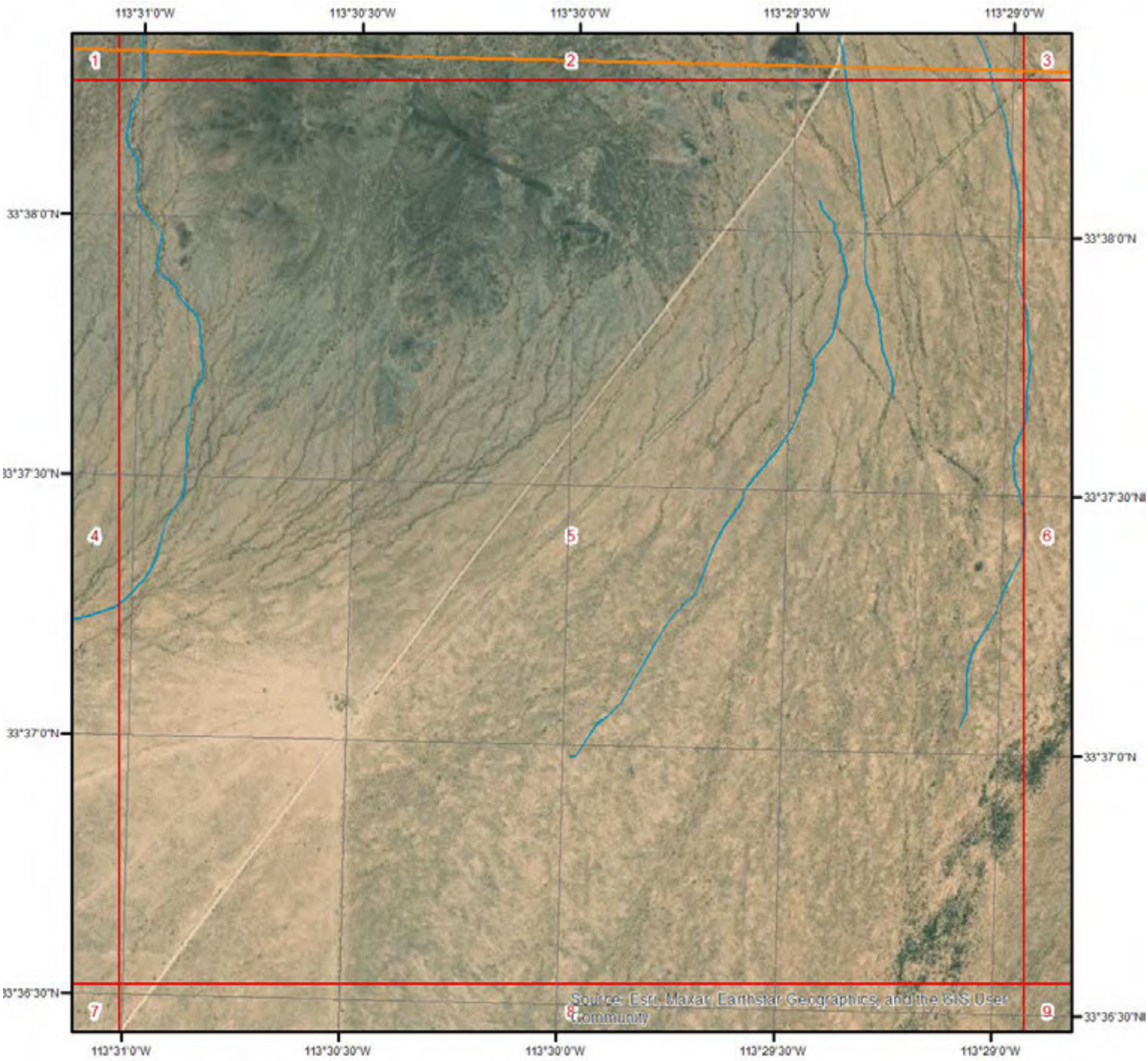
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 5

0 0.125 0.25 0.5 Miles

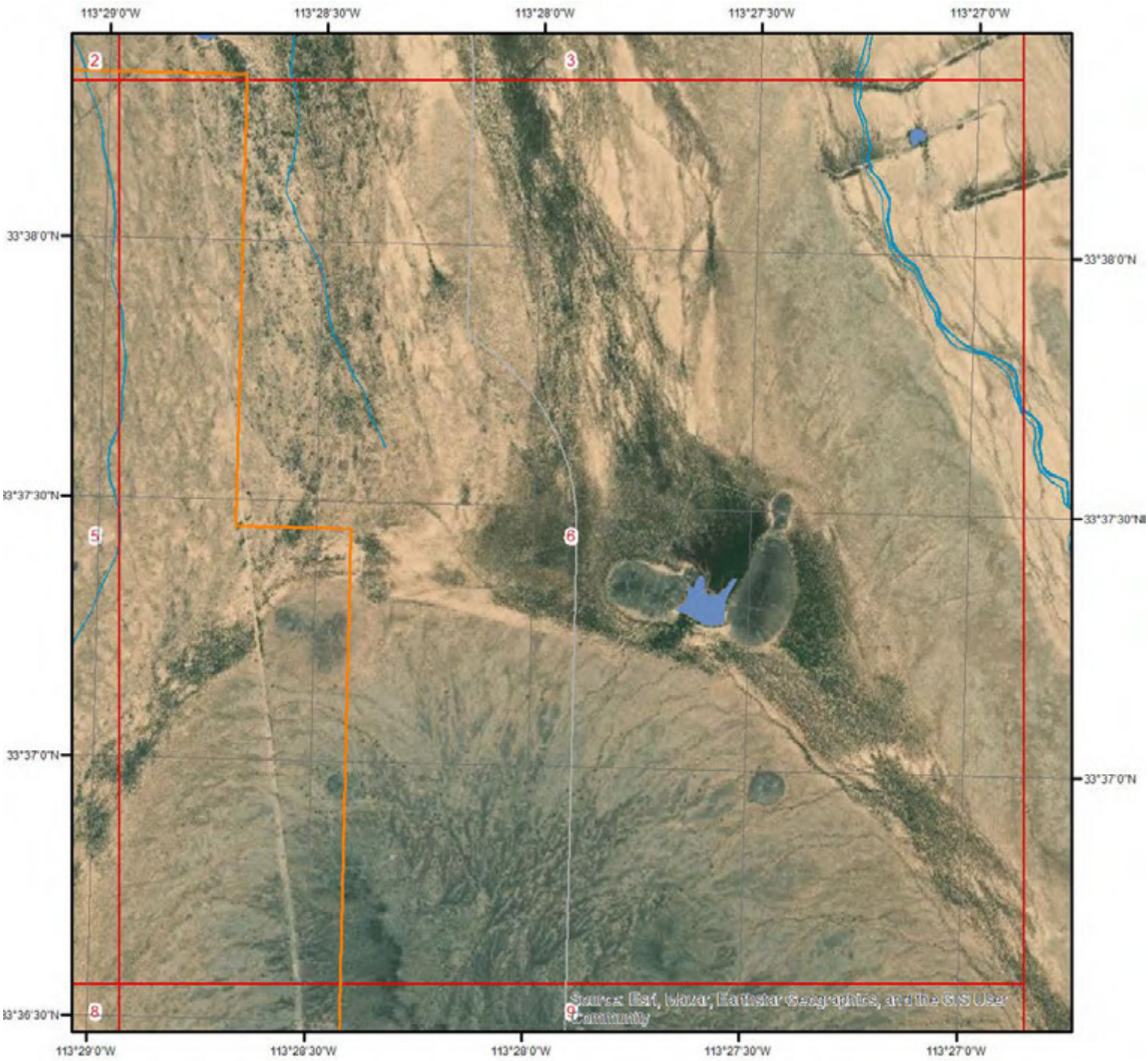
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 6

0 0.125 0.25 0.5 Miles

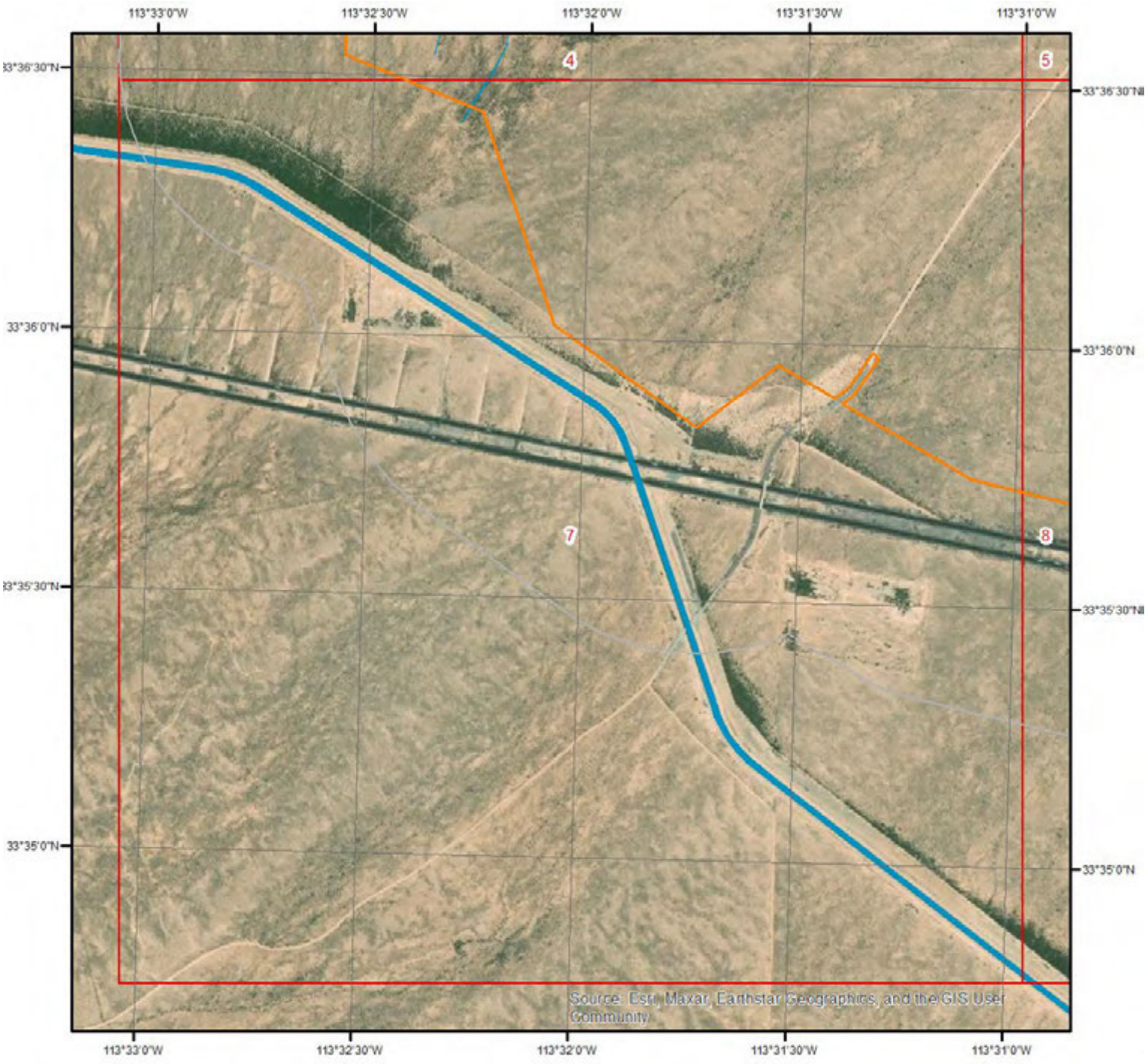
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 7

0 0.125 0.25 0.5 Miles

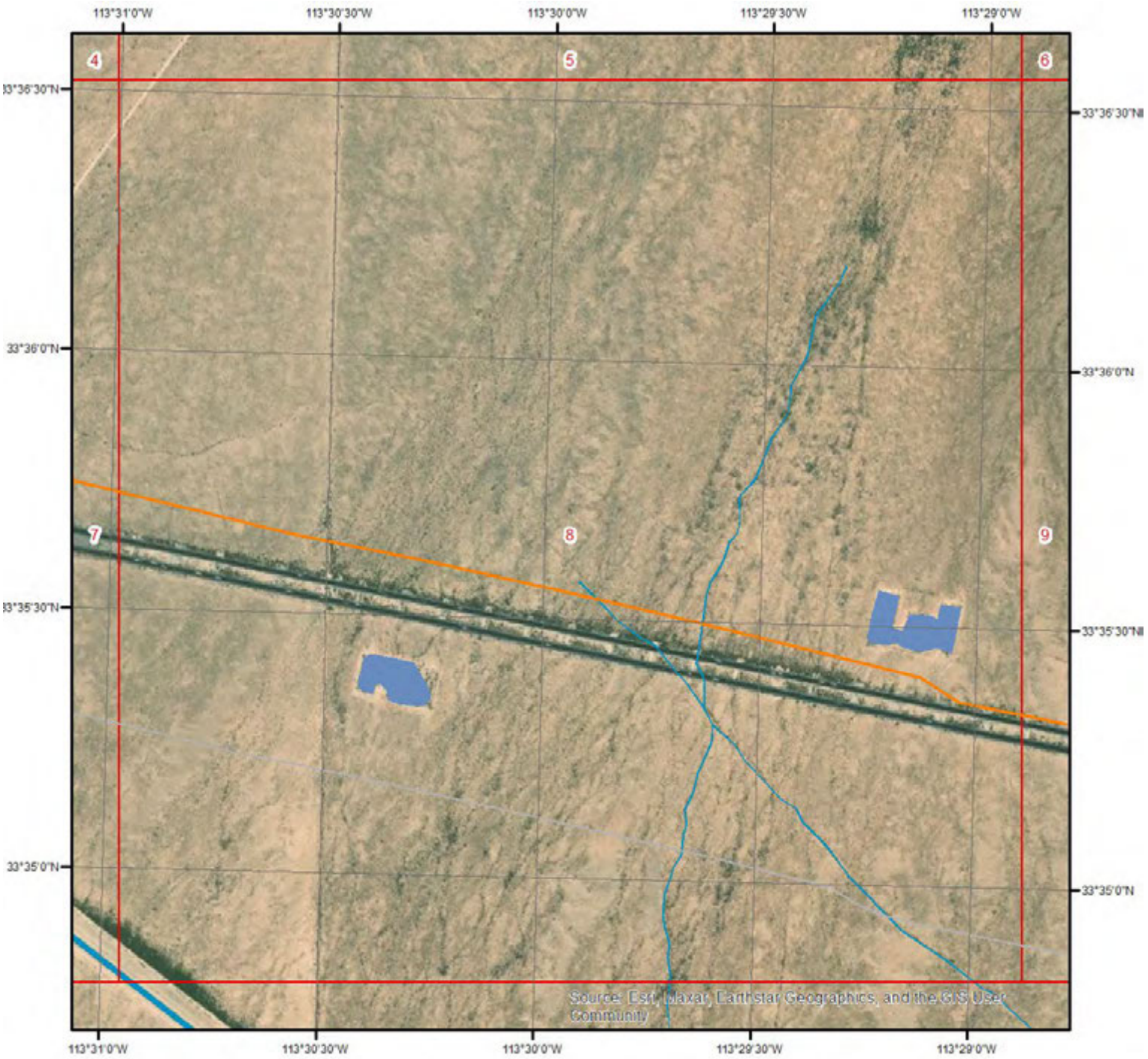
N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information



Wetland Type - Page 8

0 0.125 0.25 0.5 Miles

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

Hydrologic Information

Wetland Type - Page 9

Miles
0 0.125 0.25 0.5

N

This map shows wetland existence using data from US Fish & Wildlife.
Data coverage is shown to the right. Gray indicates no data available in the area.

- Estuarine and Marine Deepwater
- Estuarine and Marine Wetland
- Freshwater Emergent Wetland
- Freshwater Forested/Shrub Wetland
- Freshwater Pond
- Lake
- Other
- Riverine

ERIS

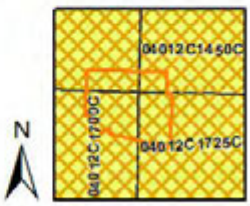
Hydrologic Information

Flood Hazard Zones

Miles
0 0.2 0.4 0.8 1.2

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

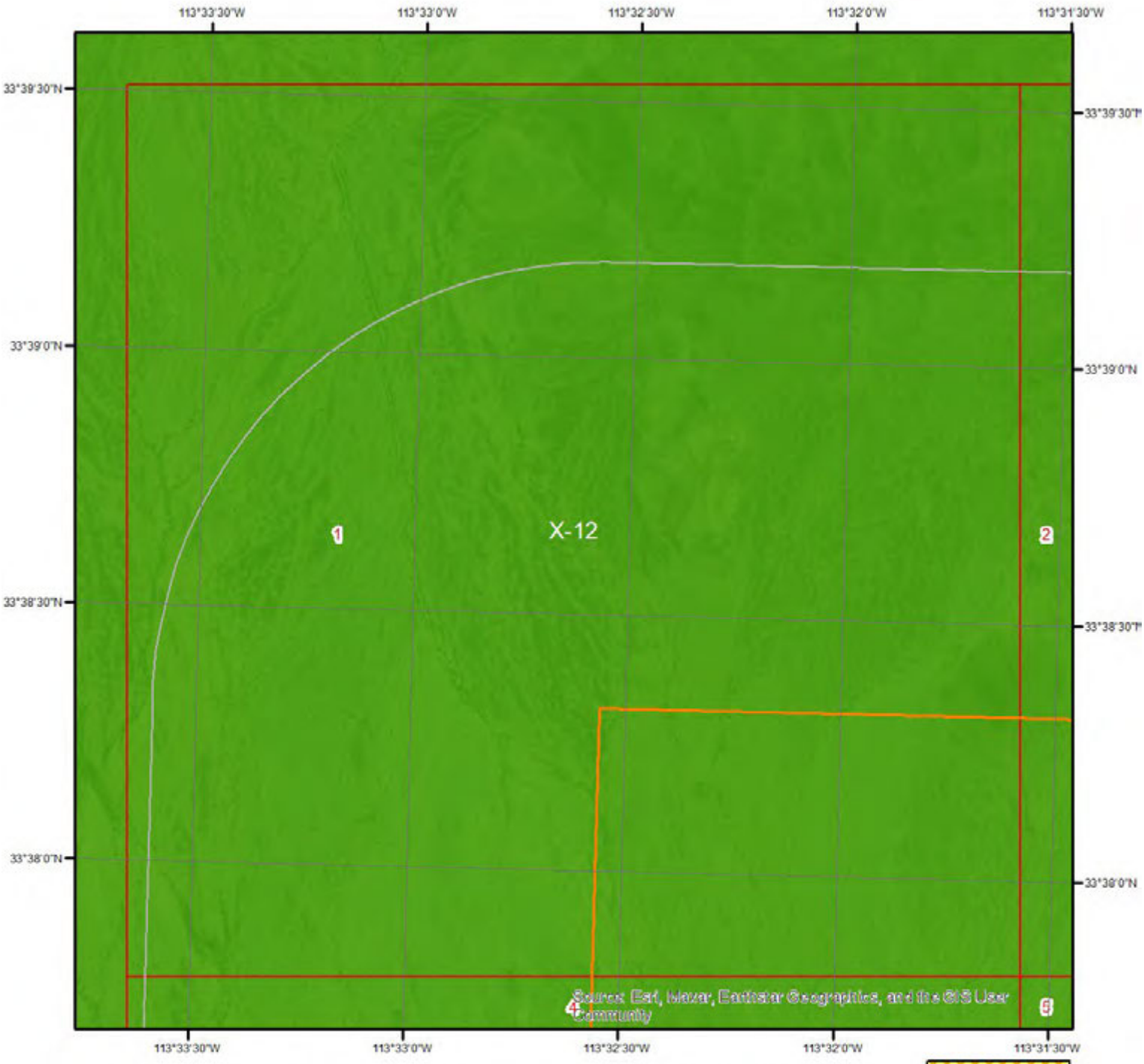
A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED



Quadrangle(s): Harrisburg Valley,AZ; Hope,AZ; Hope SE,AZ; Hope SW,AZ; Lone Mountain,AZ; Socorro

ERIS

Hydrologic Information



Flood Hazard Zones - Page 1

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

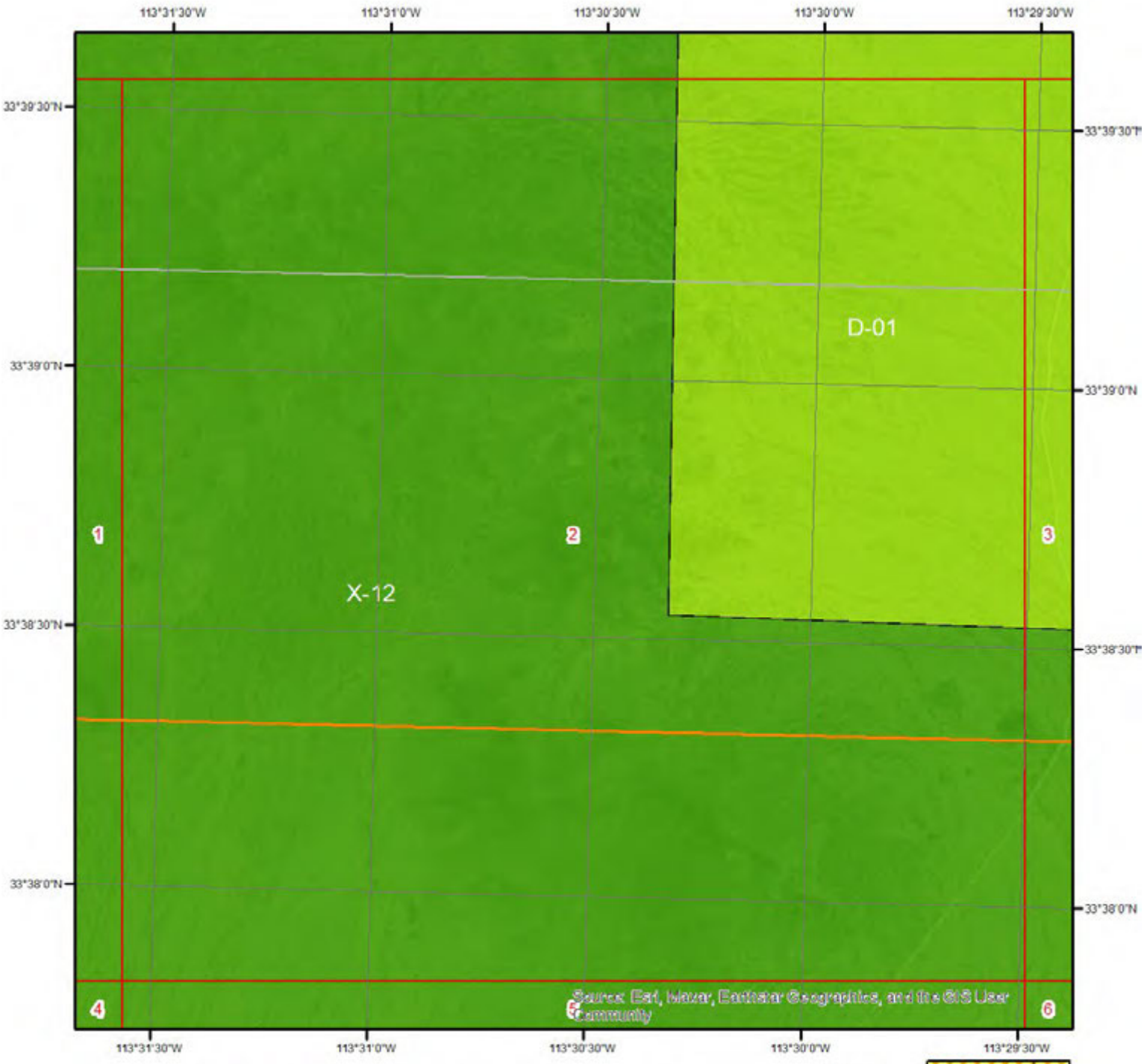
04012C1425C

Quadrangle(s): Harrisburg Valley,AZ

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

Hydrologic Information



Flood Hazard Zones - Page 2

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

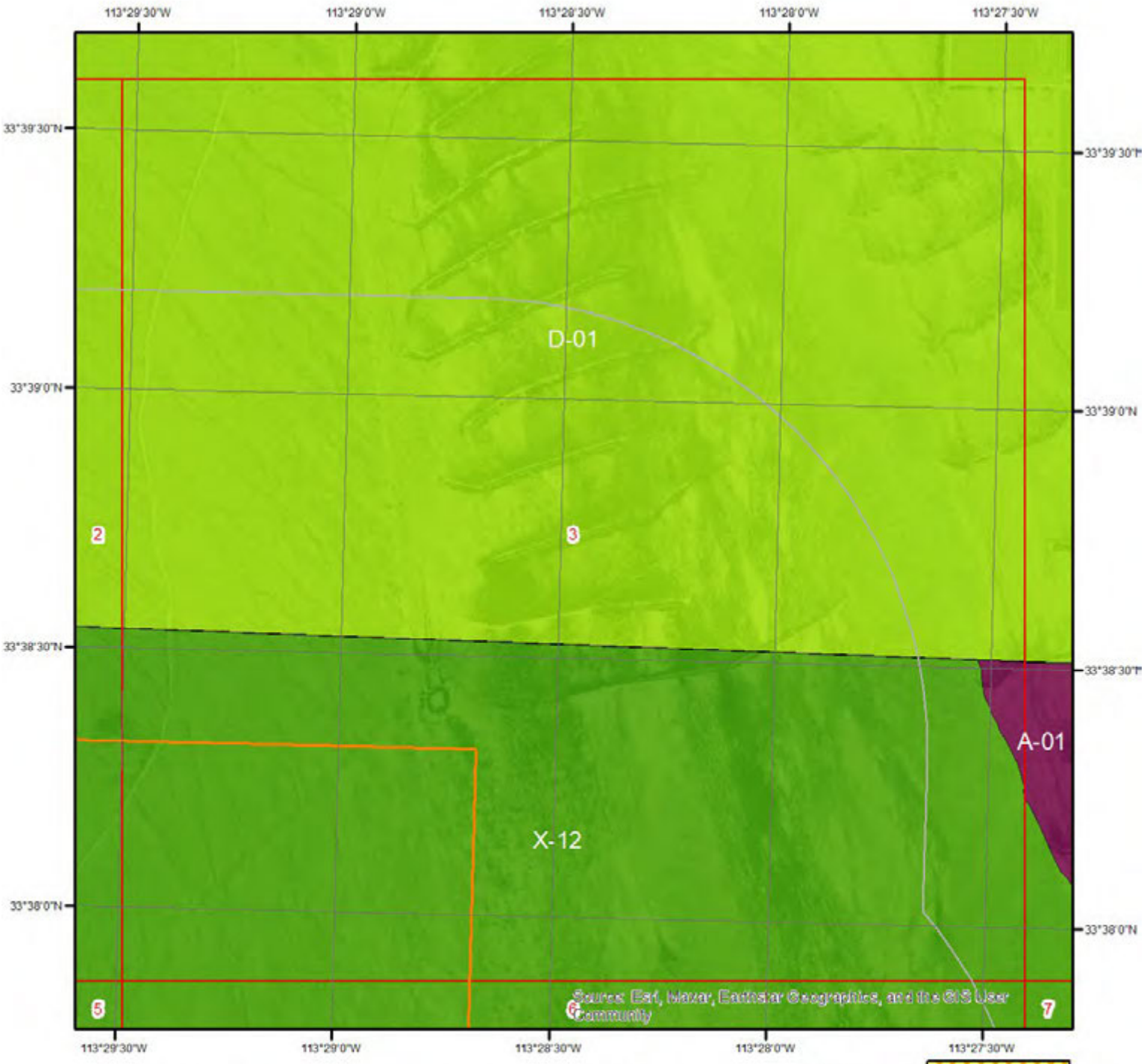
N

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

Quadrangle(s): Harrisburg Valley,AZ; Socorro Mine,AZ

ERIS

Hydrologic Information



Flood Hazard Zones - Page 3

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

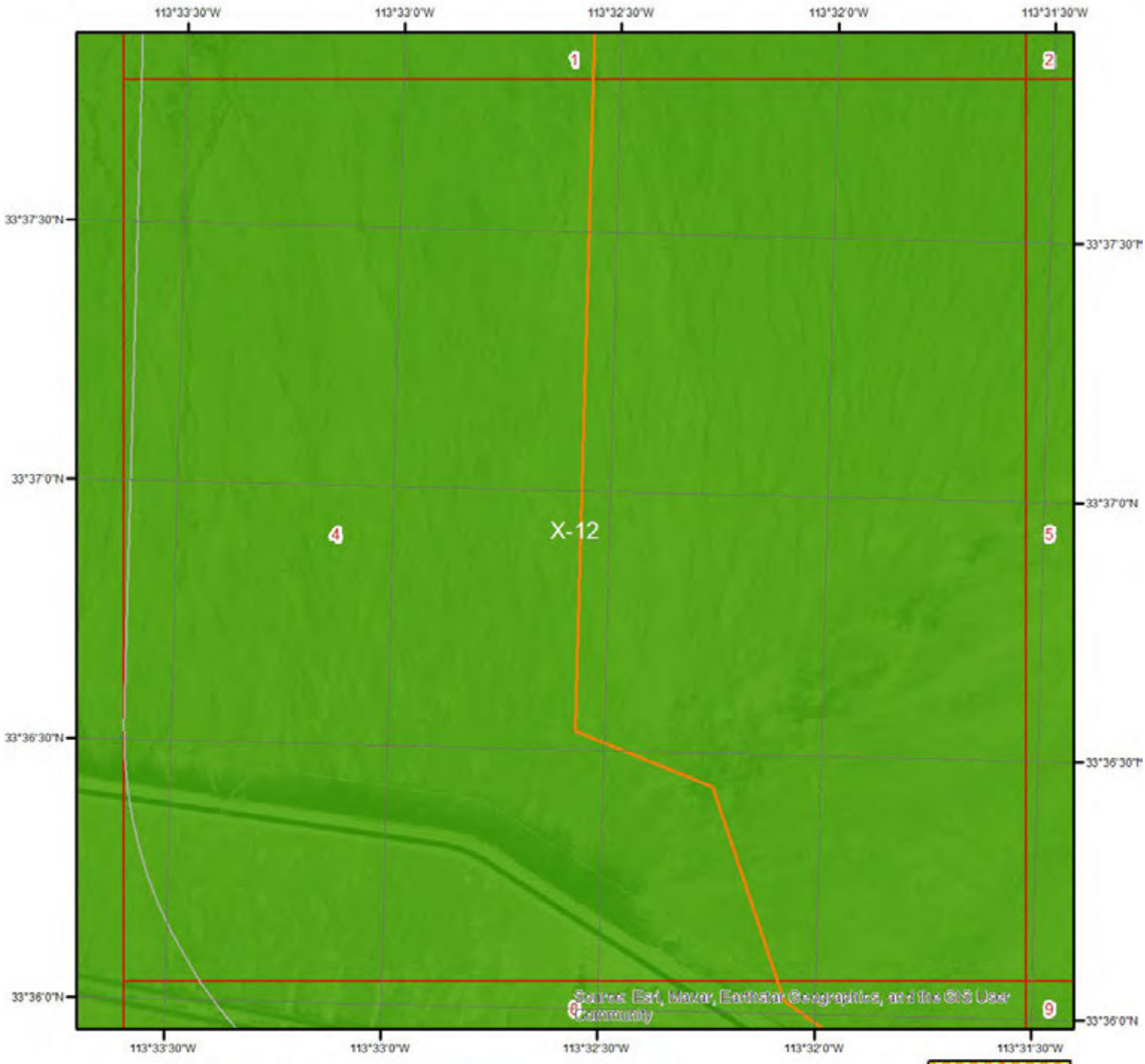
04012C1450C

Quadrangle(s): Socorro Mine,AZ

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

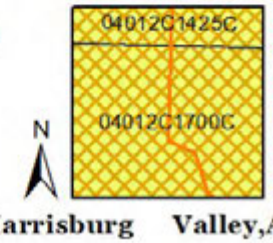
Hydrologic Information



Flood Hazard Zones - Page 4

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

0 0.2 0.4 Miles

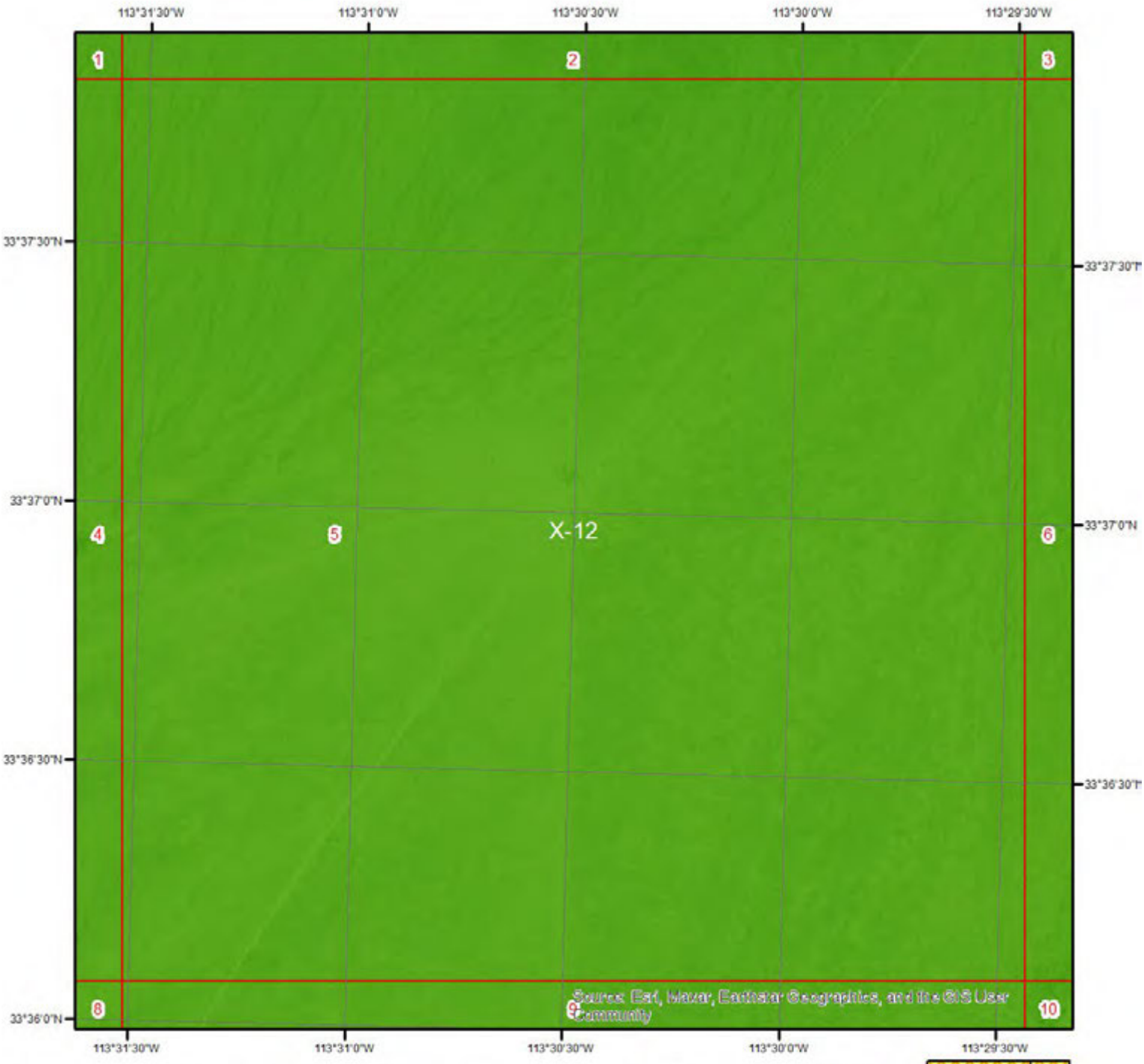


A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

Quadrangle(s): Harrisburg Valley,AZ; Hope SE,AZ

ERIS

Hydrologic Information



Flood Hazard Zones - Page 5

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

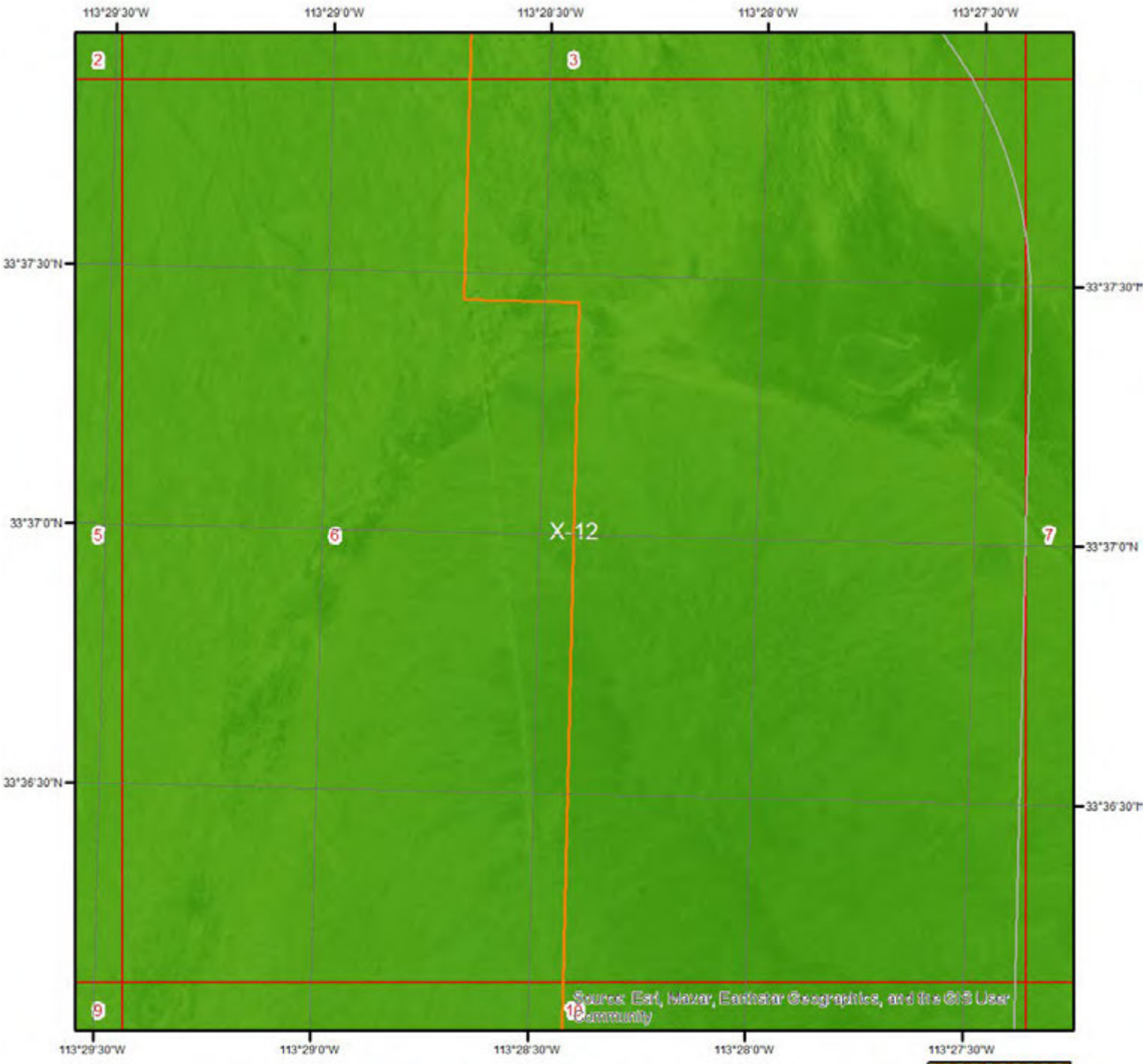
Miles
0 0.2 0.4

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

Quadrangle(s): Harrisburg Valley,AZ; Hope SE,AZ; Lone Mountain,AZ; Socorro

ERIS

Hydrologic Information



Flood Hazard Zones - Page 6

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

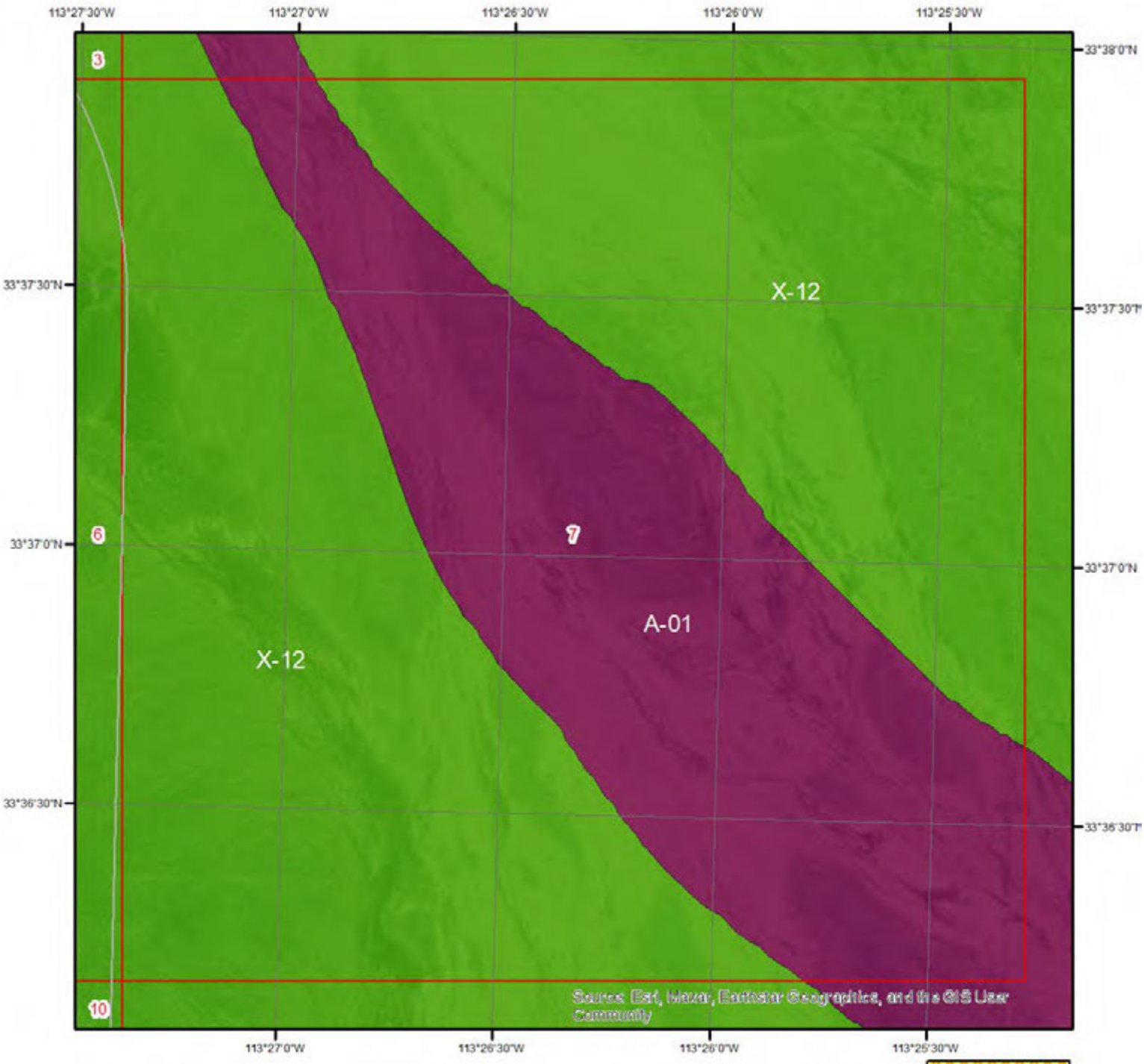
0 0.2 0.4 Miles

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

Quadrangle(s): Lone Mountain,AZ; Socorro Mine,AZ

ERIS

Hydrologic Information



Flood Hazard Zones - Page 7

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

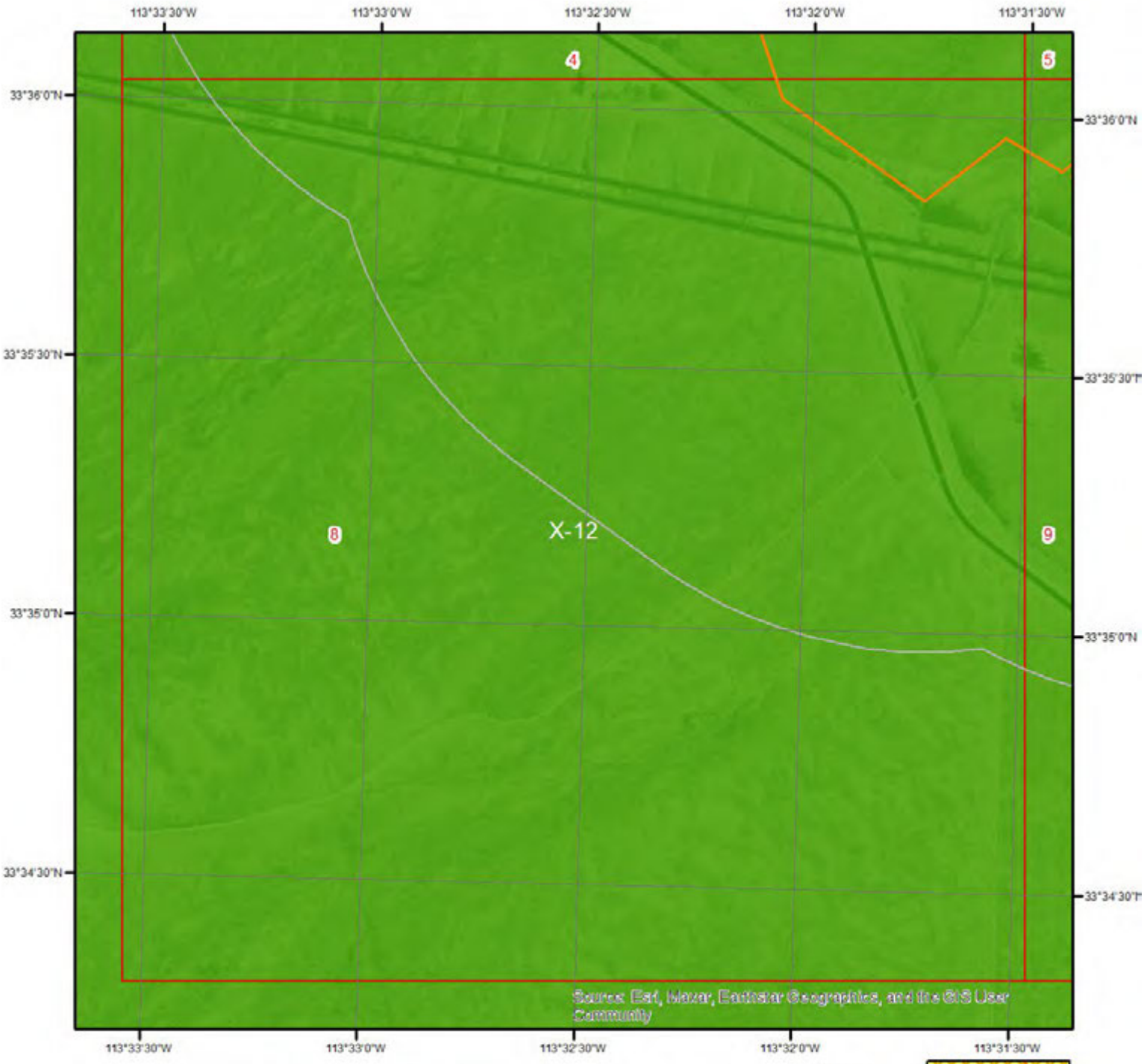
04012C1450C
04012C1725C

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

Quadrangle(s): Lone Mountain,AZ; Socorro Mine,AZ

ERIS

Hydrologic Information



Flood Hazard Zones - Page 8

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

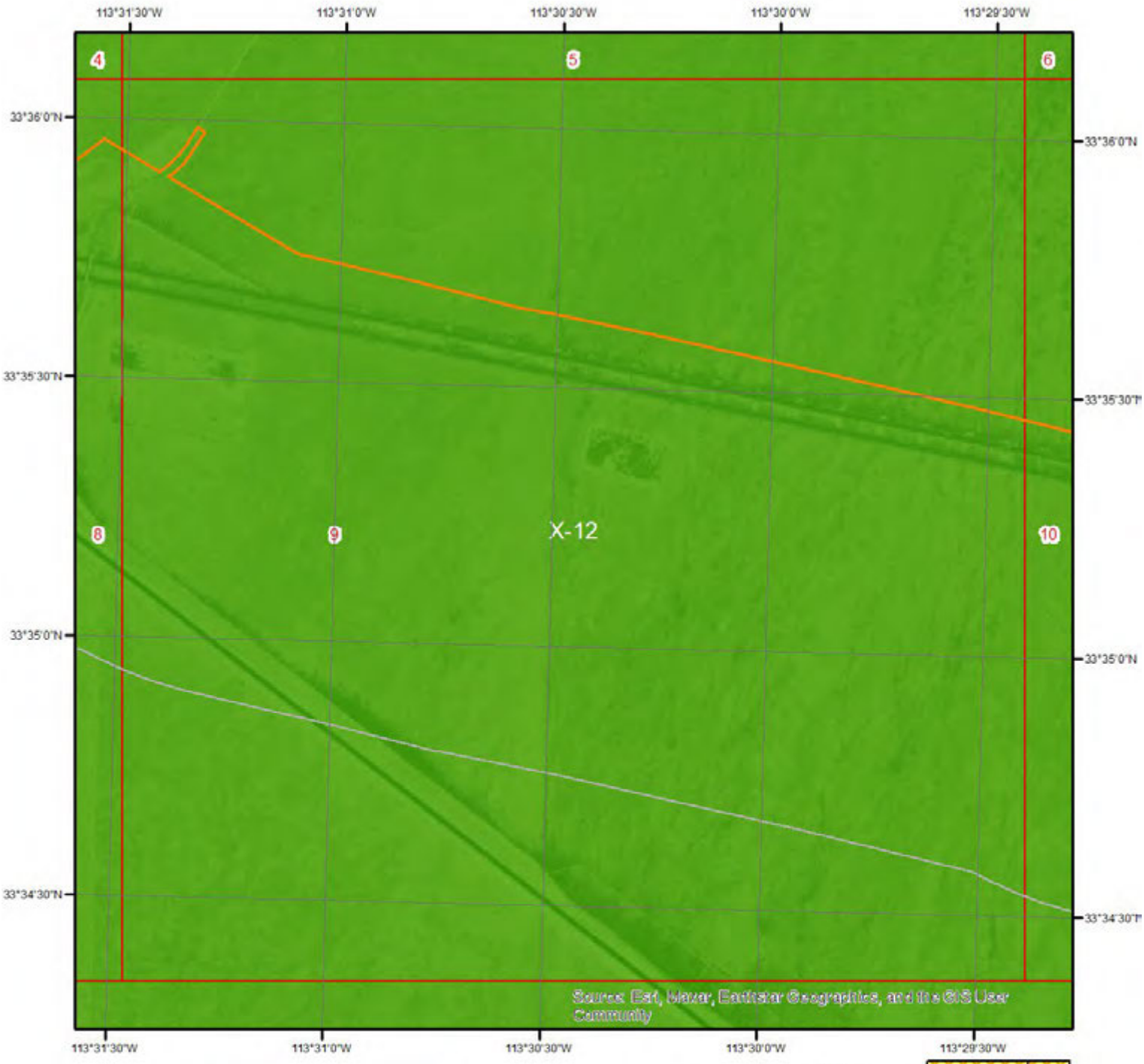
04012C1700C

Quadrangle(s): Hope SE,AZ

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

Hydrologic Information

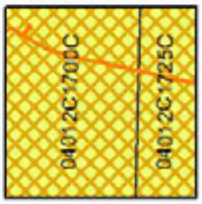


Flood Hazard Zones - Page 9

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

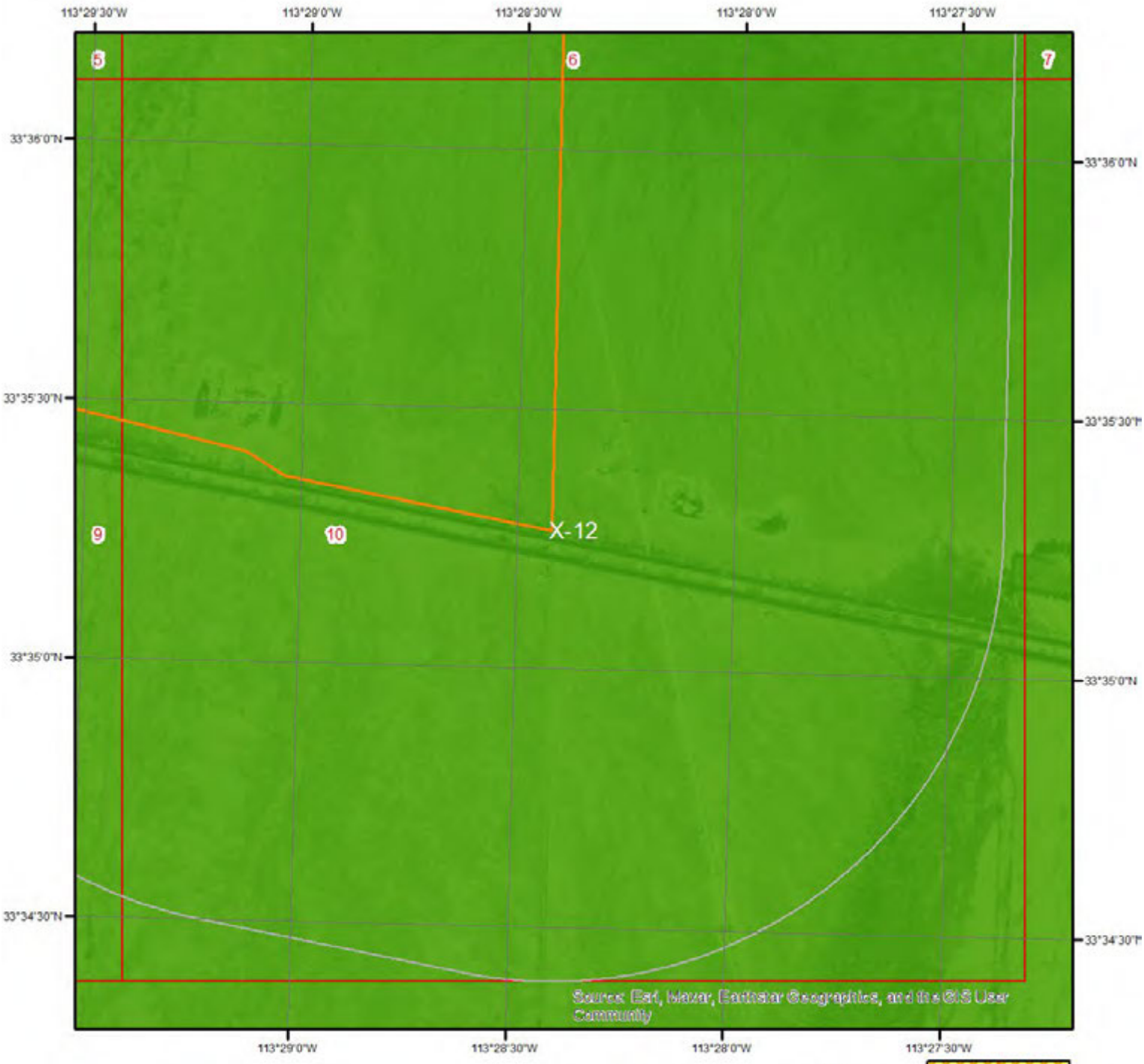


A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

Quadrangle(s): Hope SE,AZ; Lone Mountain,AZ

ERIS

Hydrologic Information



Flood Hazard Zones - Page 10

This map shows FEMA flood hazard zones. FIRM panels are shown to the right, and blank indicates no data is available.

Miles
0 0.2 0.4

N

04012C1725C

Quadrangle(s): Lone Mountain,AZ

A	AO	X
A99	V	OPEN WATER
AE	VE	NOT POPULATED
AH	D	AREA NOT INCLUDED

ERIS

Hydrologic Information

The Wetland Type map shows wetland existence overlaid on an aerial imagery. The Flood Hazard Zones map shows FEMA flood hazard zones overlaid on an aerial imagery. Relevant FIRM panels and detailed zone information is provided below.
For detailed Zone descriptions please click the link: https://floodadvocate.com/fema-zone-definitions

Available FIRM Panels in area:	04012C1700C(effective:2008-08-28) 04012C1725C(effective:2008-08-28) 04012C1450C(effective:2008-08-28) 04012C1425C(effective:2008-08-28)

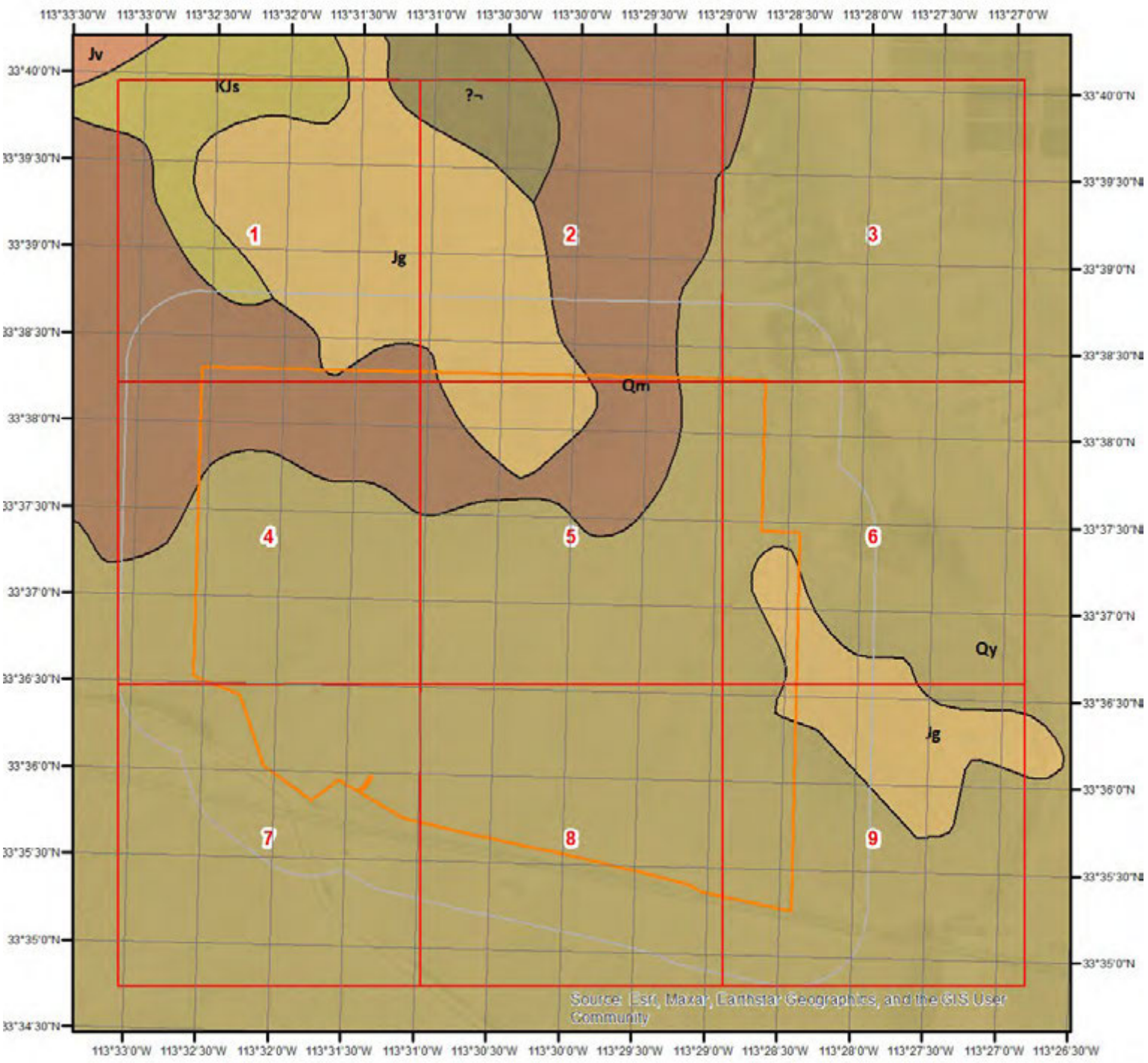
Flood Zone D-01

Zone:	D
Zone subtype:	

Flood Zone X-12

Zone:	X
Zone subtype:	AREA OF MINIMAL FLOOD HAZARD

Geologic Information



0 0.75 1.5 Miles

N

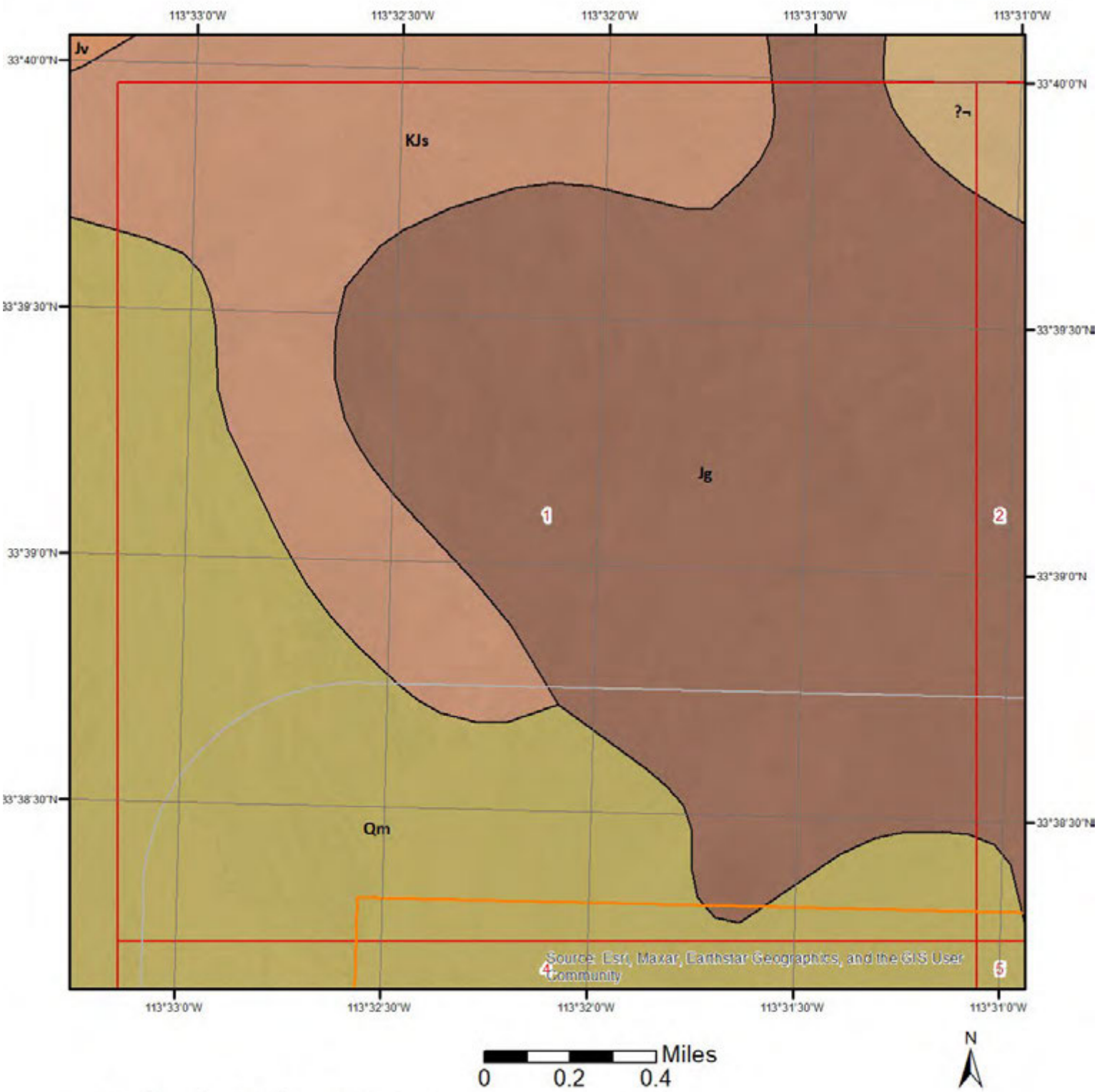
Geologic Units

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

0 0.4 0.8 1.6 2.4 3.2 Miles

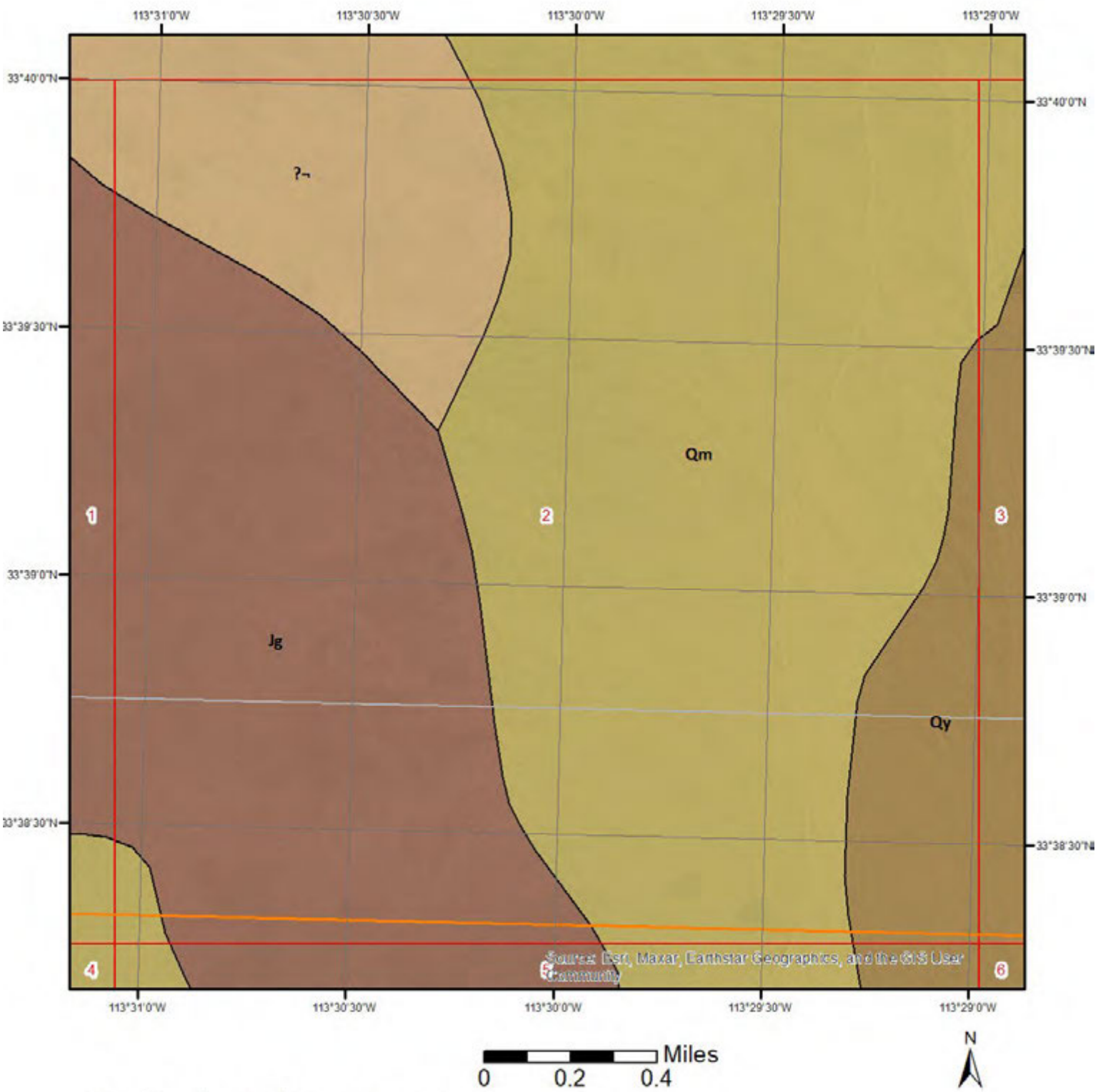
Geologic Information



Geologic Units - Page 1

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

Geologic Information

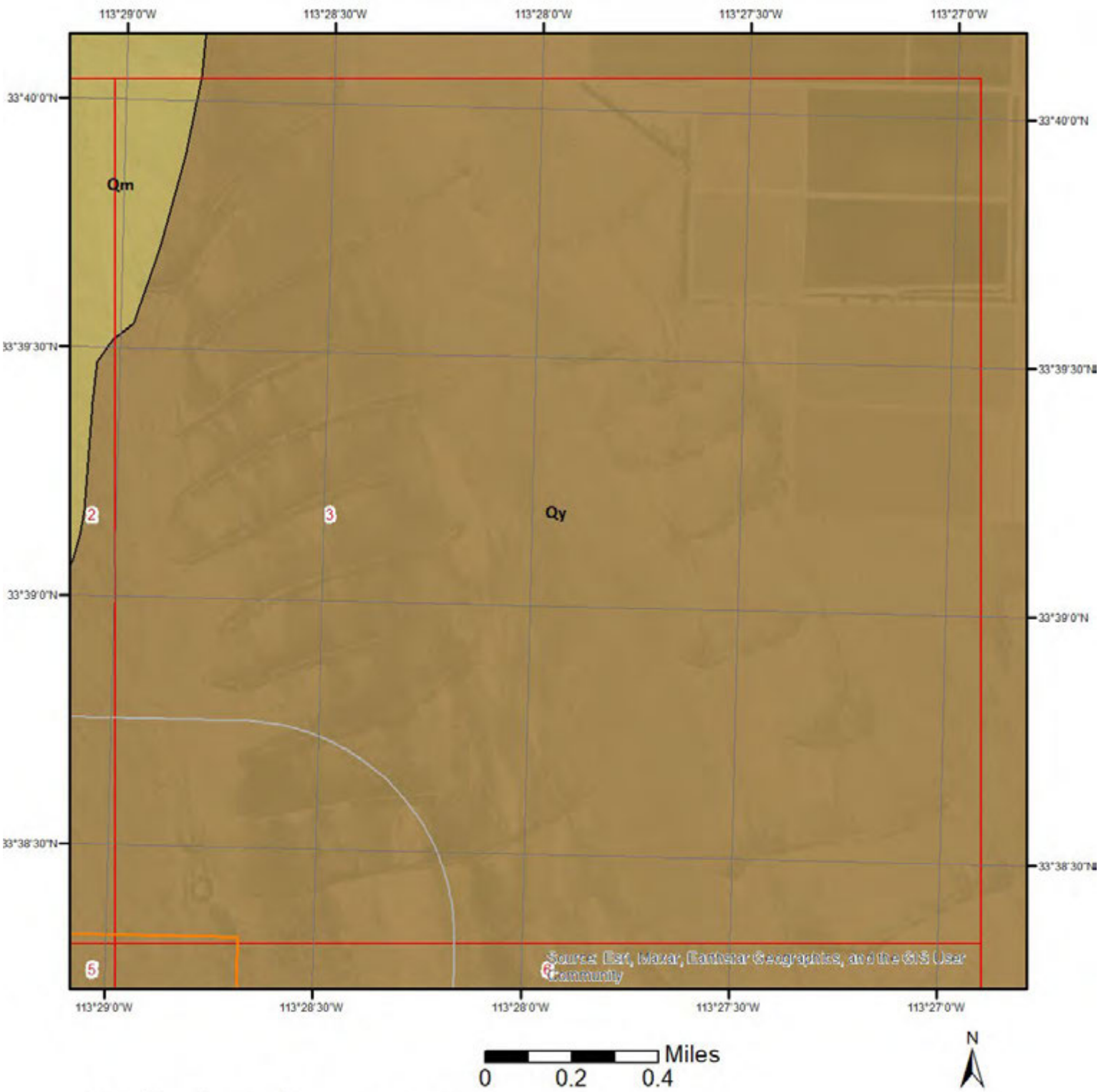


Geologic Units - Page 2

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

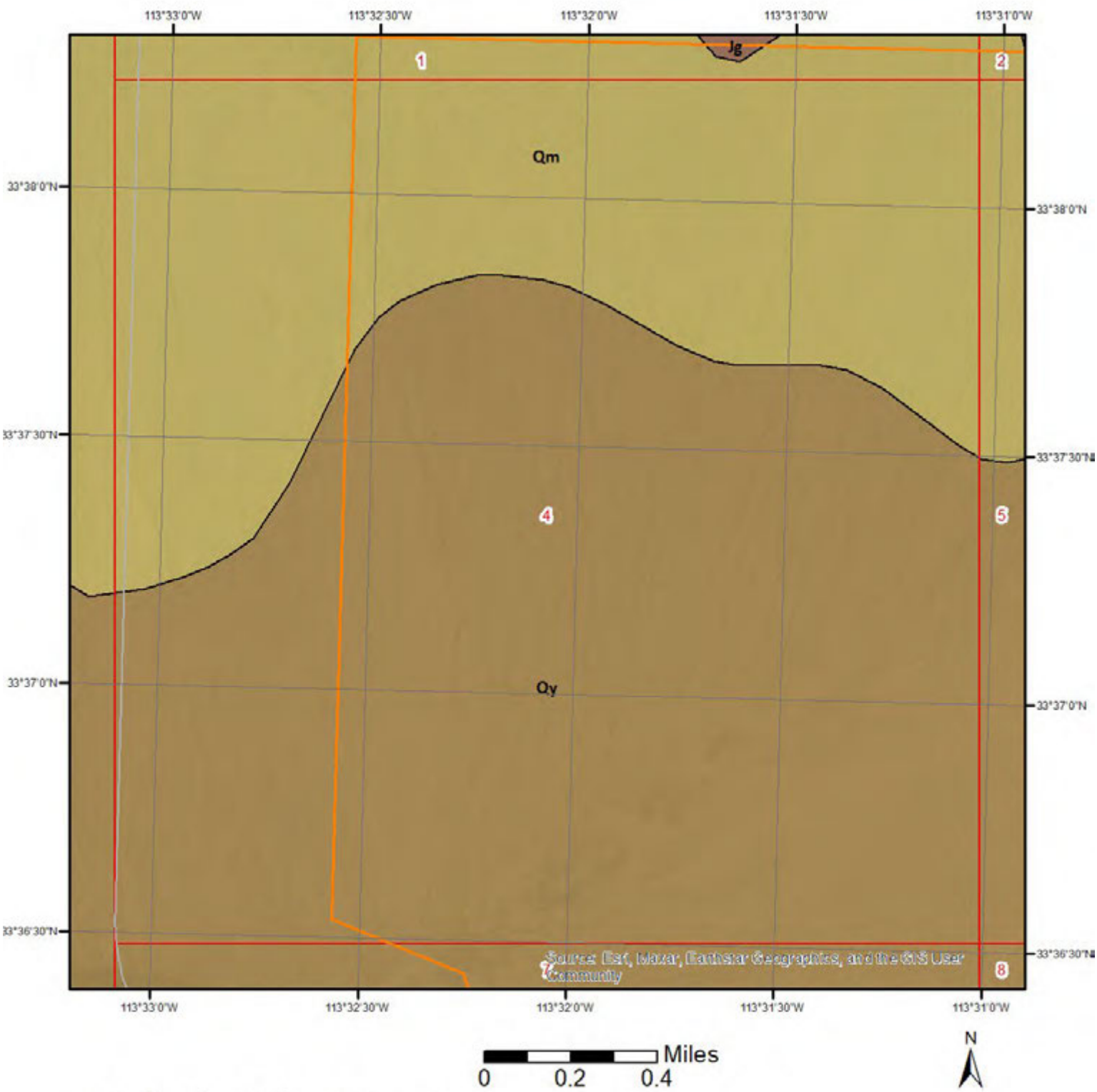


Geologic Units - Page 3

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

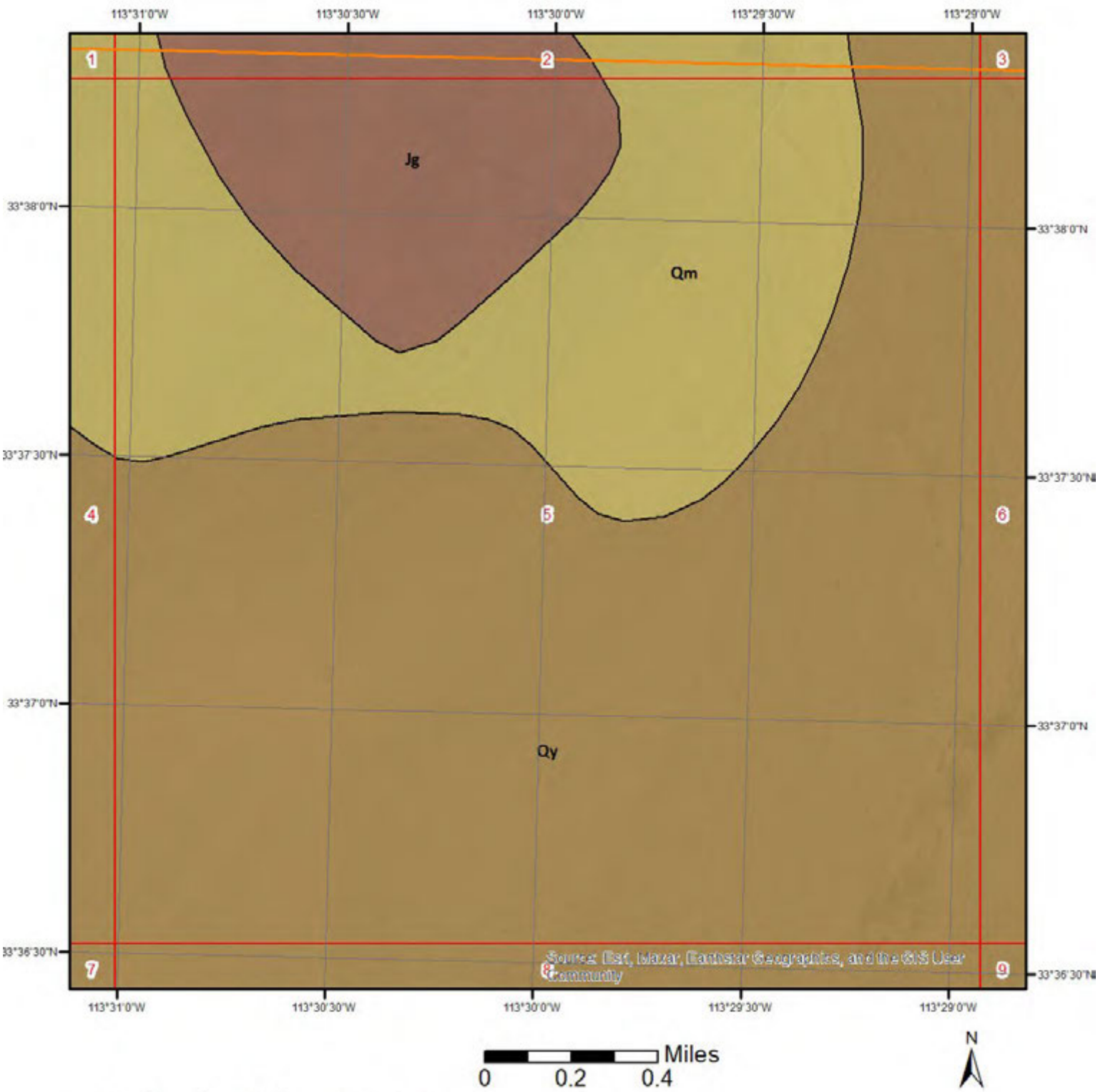


Geologic Units - Page 4

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

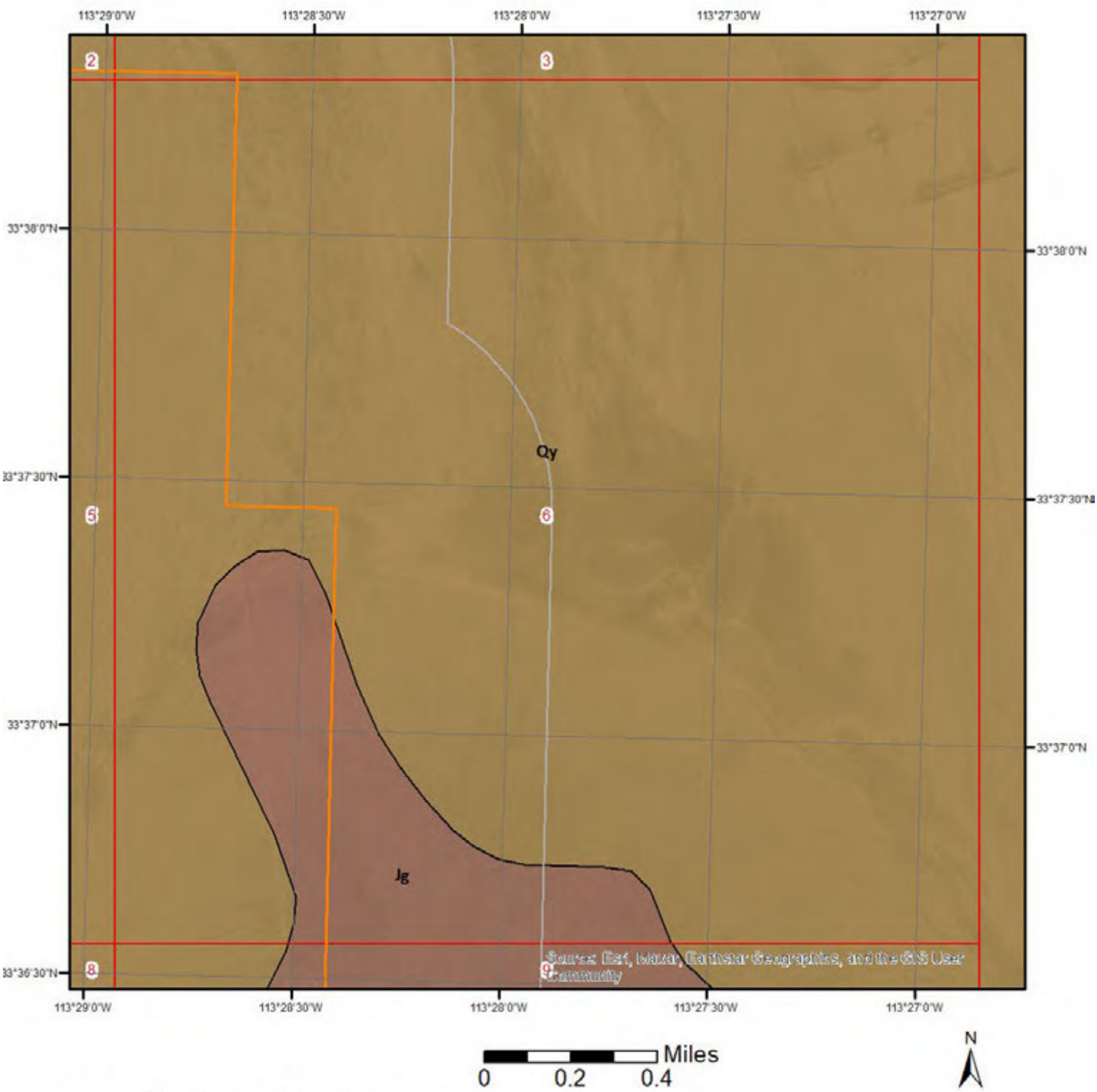


Geologic Units - Page 5

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

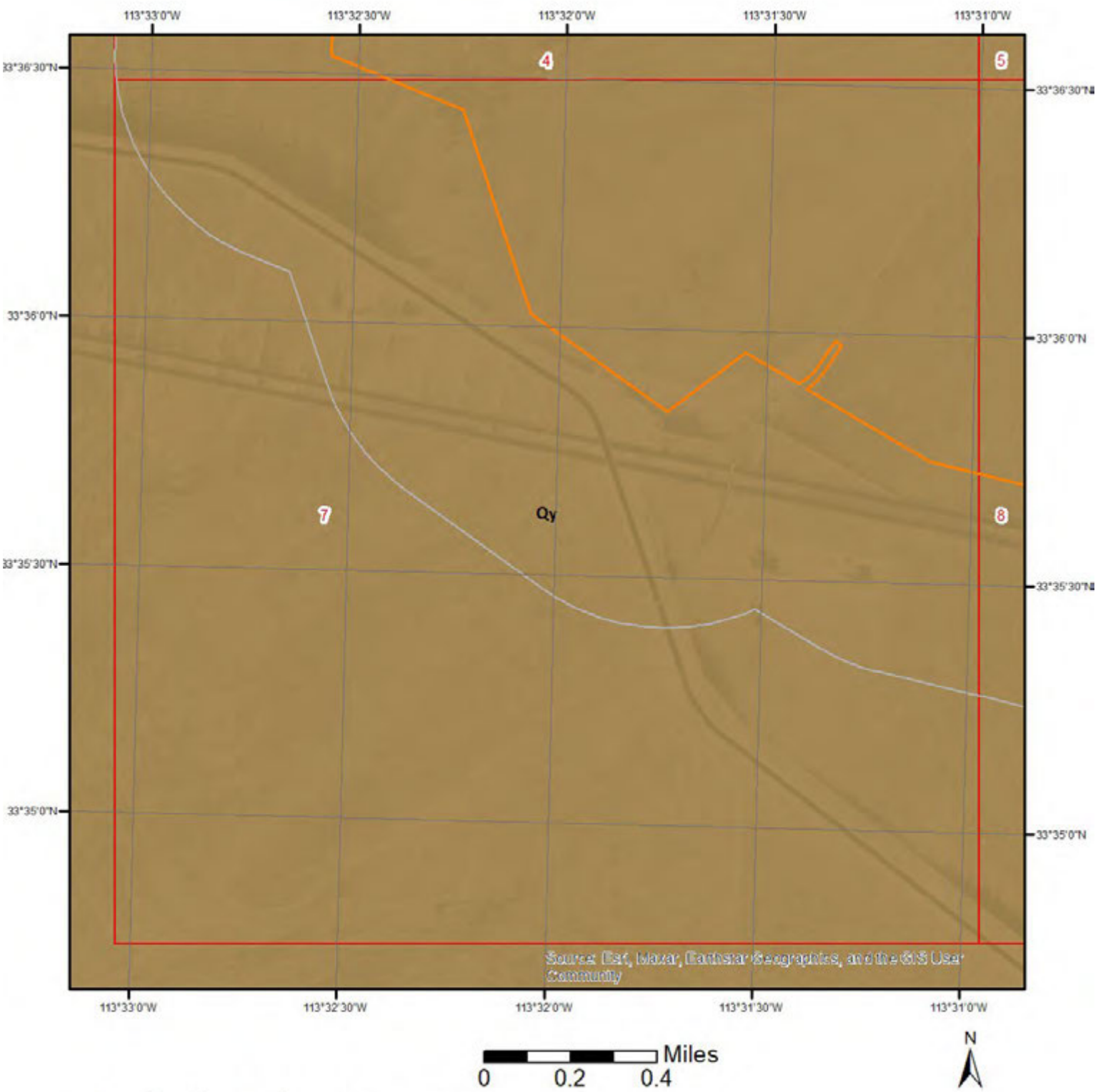


Geologic Units - Page 6

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

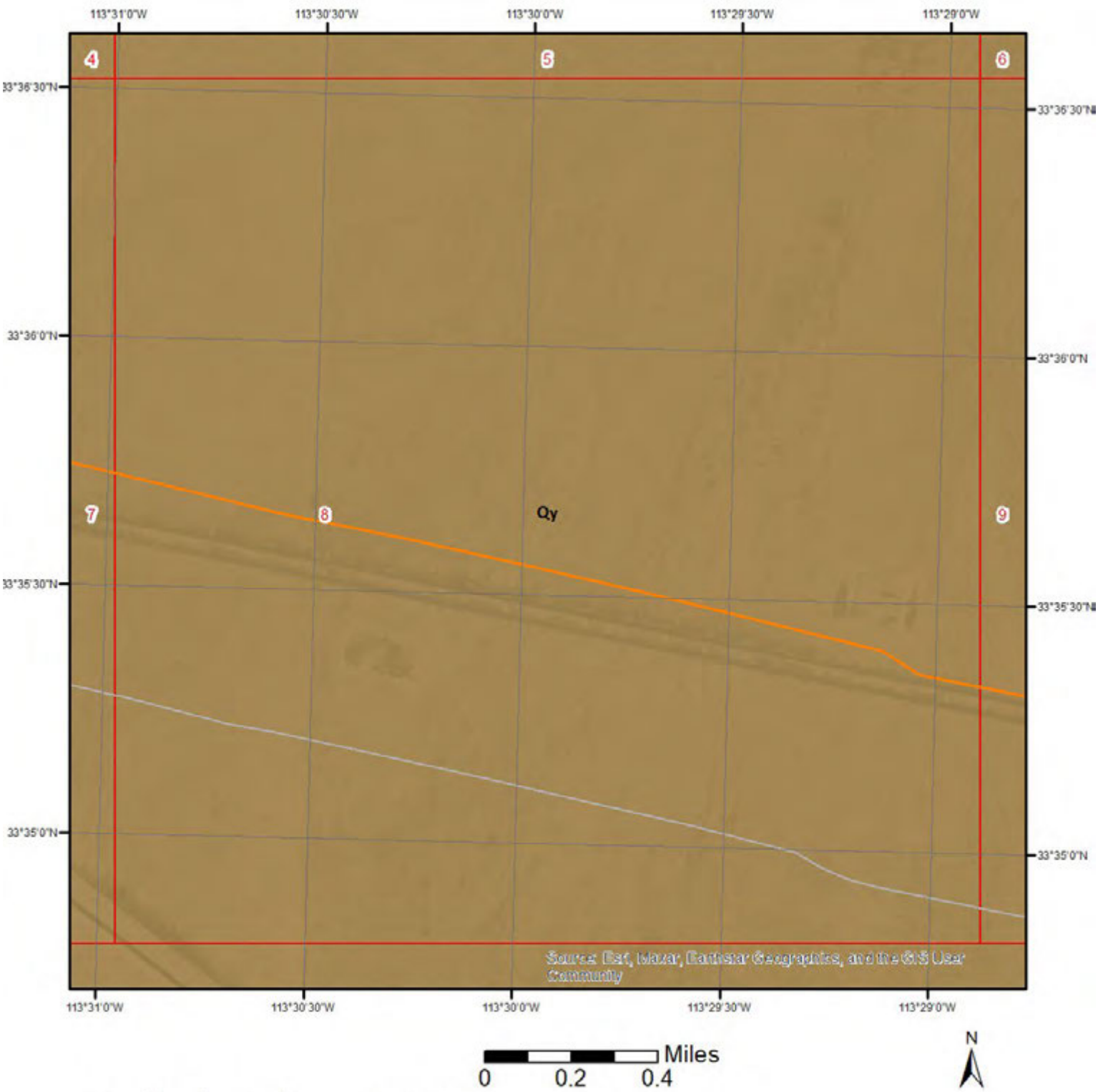


Geologic Units - Page 7

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information

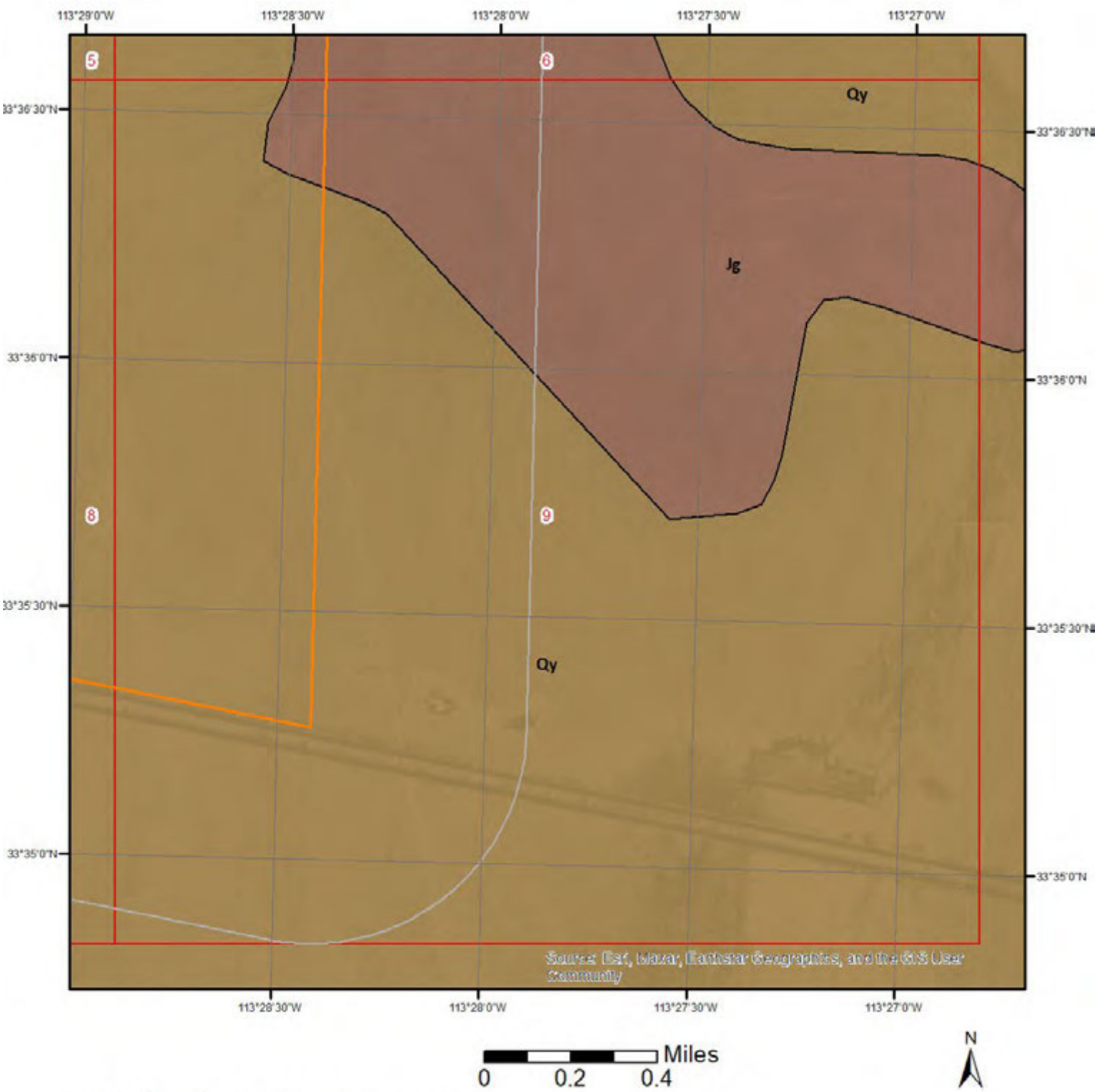


Geologic Units - Page 8

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

ERIS

Geologic Information



Geologic Units - Page 9

This maps shows geologic units in the area. Please refer to the report for detailed descriptions.

Geologic Information

The previous page shows USGS geology information. Detailed information about each unit is provided below.

Geologic Unit Qy

Unit Name:	Holocene surficial deposits
Unit Age:	Holocene
Primary Rock Type:	sand
Secondary Rock Type:	gravel
Unit Description:	Unconsolidated deposits associated with modern fluvial systems. This unit consists primarily of fine-grained, well-sorted sediment on alluvial plains, but also includes gravelly channel, terrace, and alluvial fan deposits on middle and upper piedmonts. (0-10 ka)

Geologic Unit Qm

Unit Name:	Late and middle Pleistocene surficial deposits
Unit Age:	Middle to Late Pleistocene
Primary Rock Type:	gravel
Secondary Rock Type:	sand
Unit Description:	Unconsolidated to weakly consolidated alluvial fan, terrace, and basin-floor deposits with moderate to strong soil development. Fan and terrace deposits are primarily poorly sorted, moderately bedded gravel and sand, and basin-floor deposits are primarily sand, silt, and clay. (10-750 ka)

Geologic Unit Jg

Unit Name:	Jurassic granitic rocks
Unit Age:	Jurassic
Primary Rock Type:	granodiorite
Secondary Rock Type:	granite
Unit Description:	Granite to diorite, locally foliated and locally alkalic; includes Triassic(?) granitoids in the Trigo Mountains. This unit includes two dominant assemblages of igneous rocks. The Kitt Peak-Trigo Peaks superunit includes, from oldest to youngest: dark, foliated or gneissic diorite, medium-grained equigranular to porphyritic granodiorite, and small, irregular intrusions of light-colored, fine-grained granite. The Ko Vaya superunit, limited to south-central Arizona, includes texturally heterogeneous K-feldspar-rich granitic rocks. (150-180 Ma)

Geologic Unit KJs

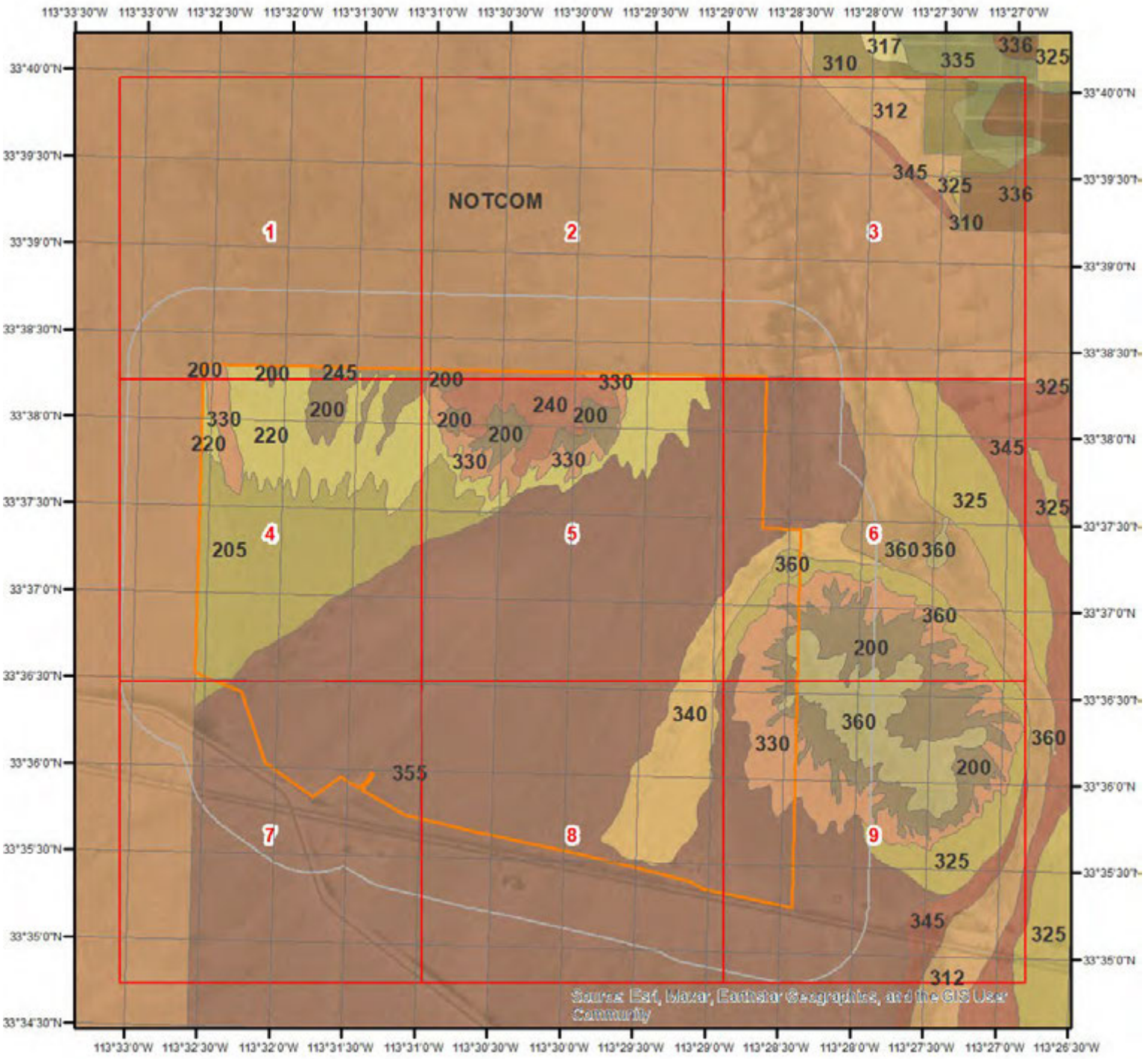
Unit Name:	Cretaceous to Late Jurassic sedimentary rocks with minor volcanic rocks
Unit Age:	Late Jurassic to Cretaceous
Primary Rock Type:	conglomerate
Secondary Rock Type:	sandstone
Unit Description:	Sandstone and conglomerate, rarely forms prominent outcrops; massive conglomerate is typical near base of unit and locally in upper part. These deposits are nonmarine except in southeastern Arizona, where prominent gray marine limestone (Mural Limestone) forms the middle of the Bisbee Group. Sandstones are typically medium-bedded, drab brown, lithic-feldspathic arenites. Includes Bisbee Group (largely Early Cretaceous) and related rocks,

	Temporal, Bathtub, and Sand Wells formations, rocks of Gu Achi, McCoy Mountains Formation, and Upper Cretaceous Fort Crittenden Formation and equivalent rocks. (80-160 Ma)

Geologic Unit Jg

Unit Name:	Jurassic granitic rocks
Unit Age:	Jurassic
Primary Rock Type:	granodiorite
Secondary Rock Type:	granite
Unit Description:	Granite to diorite, locally foliated and locally alkalic; includes Triassic(?) granitoids in the Trigo Mountains. This unit includes two dominant assemblages of igneous rocks. The Kitt Peak-Trigo Peaks superunit includes, from oldest to youngest: dark, foliated or gneissic diorite, medium-grained equigranular to porphyritic granodiorite, and small, irregular intrusions of light-colored, fine-grained granite. The Ko Vaya superunit, limited to south-central Arizona, includes texturally heterogeneous K-feldspar-rich granitic rocks. (150-180 Ma)

Soil Information



SSURGO Soils

0 0.20.4 0.8 1.2 1.6 2 Miles

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information

SSURGO Soils - Page 1

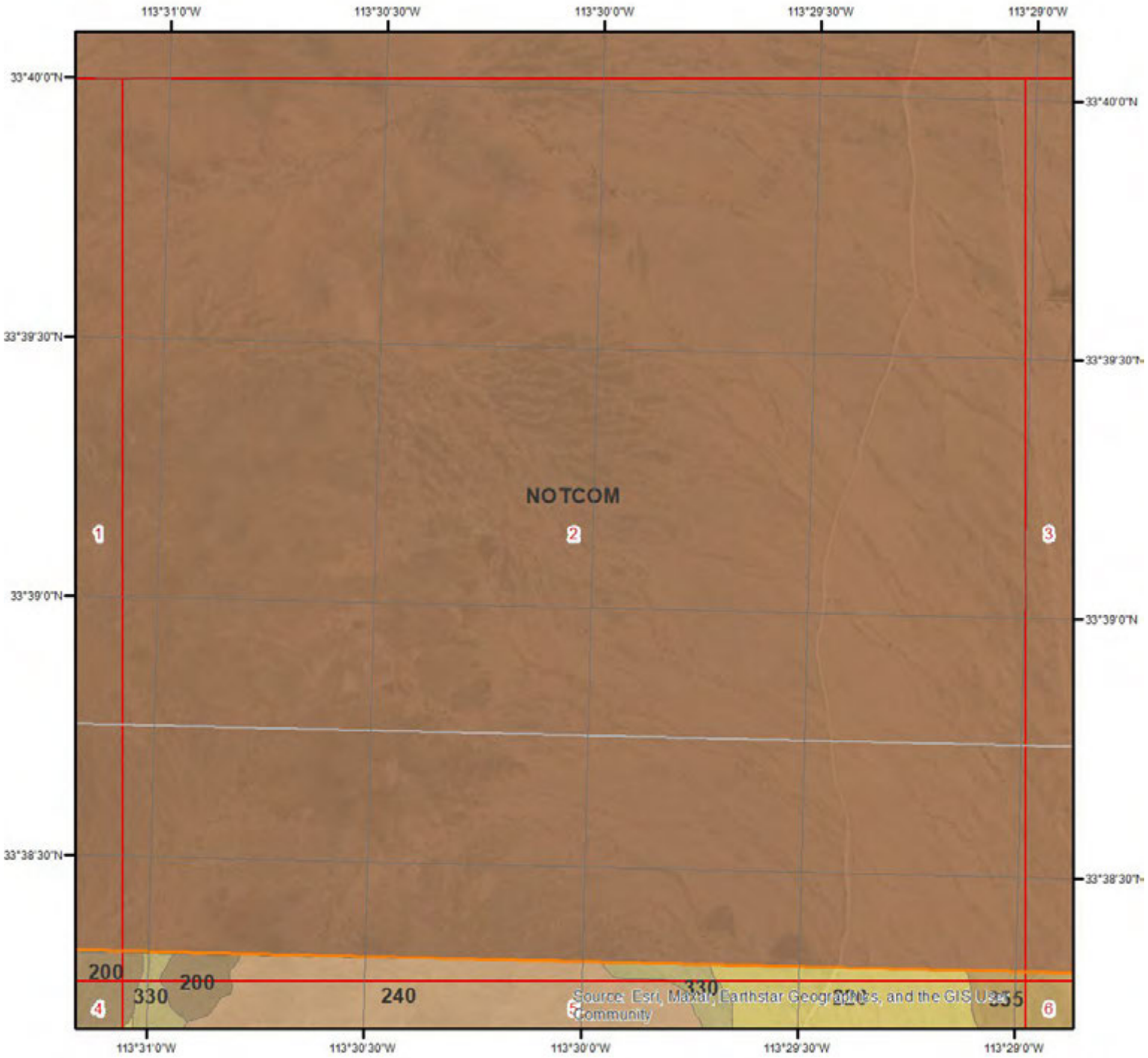
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 2

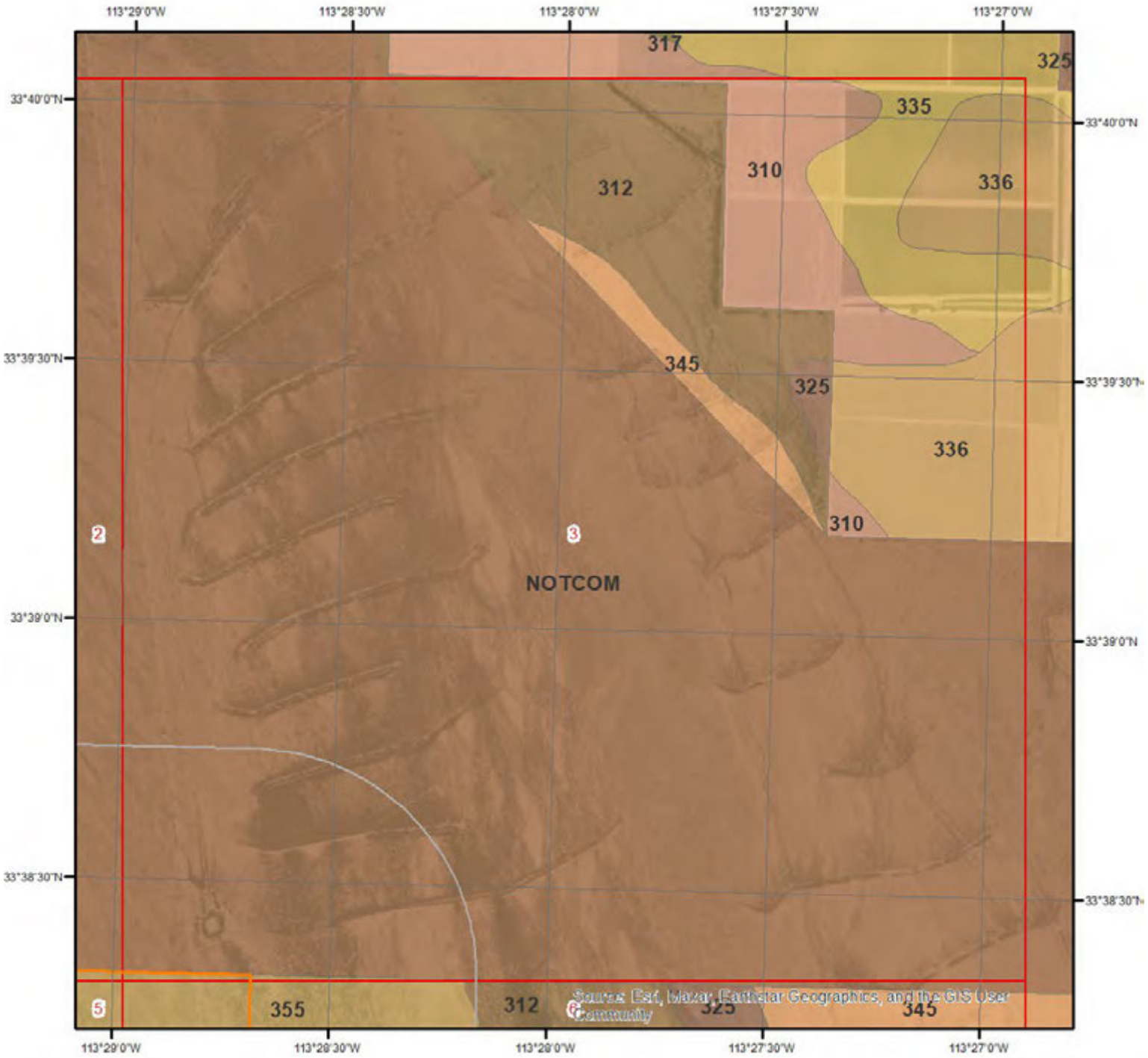
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 3

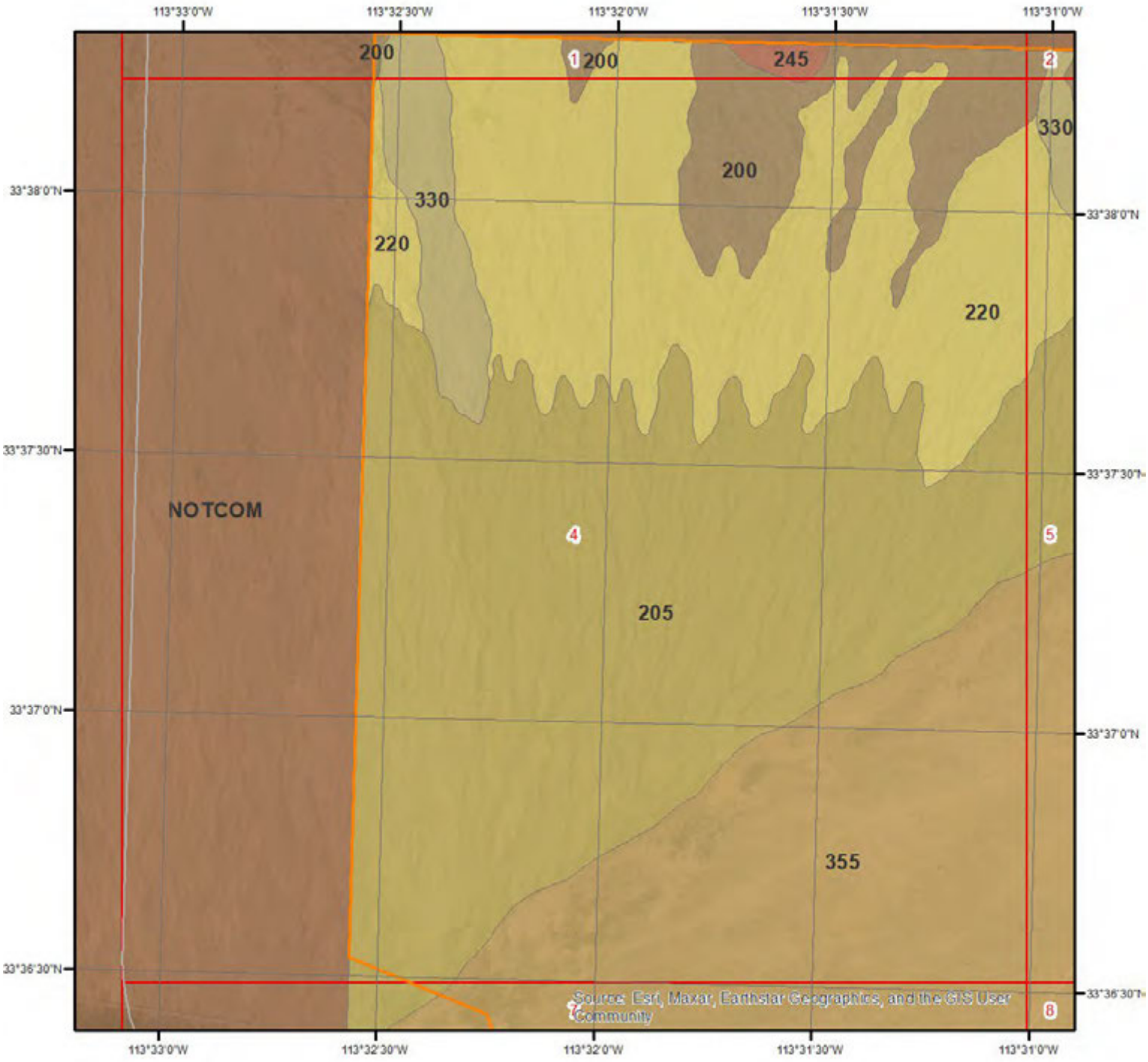
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 4

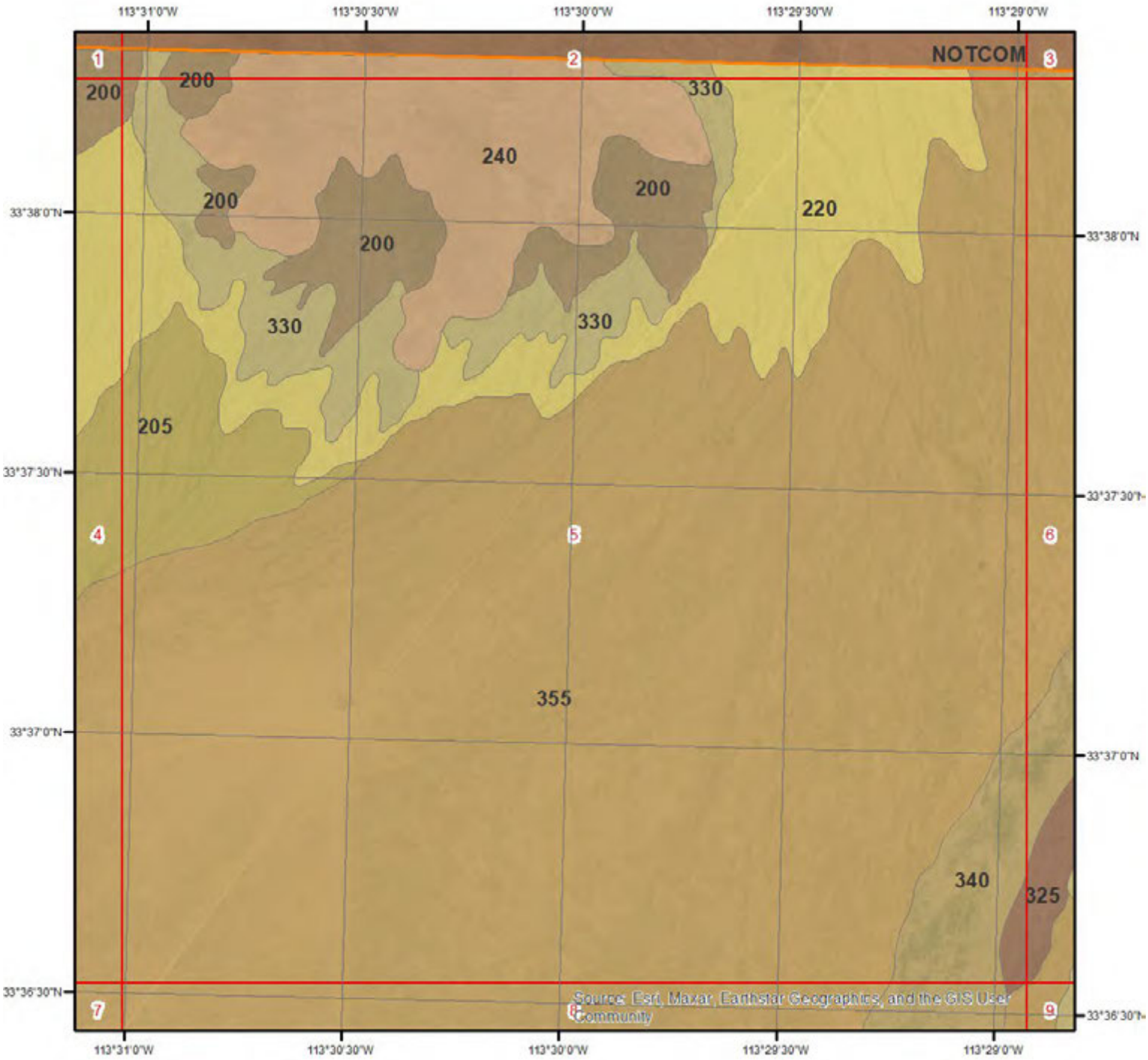
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 5

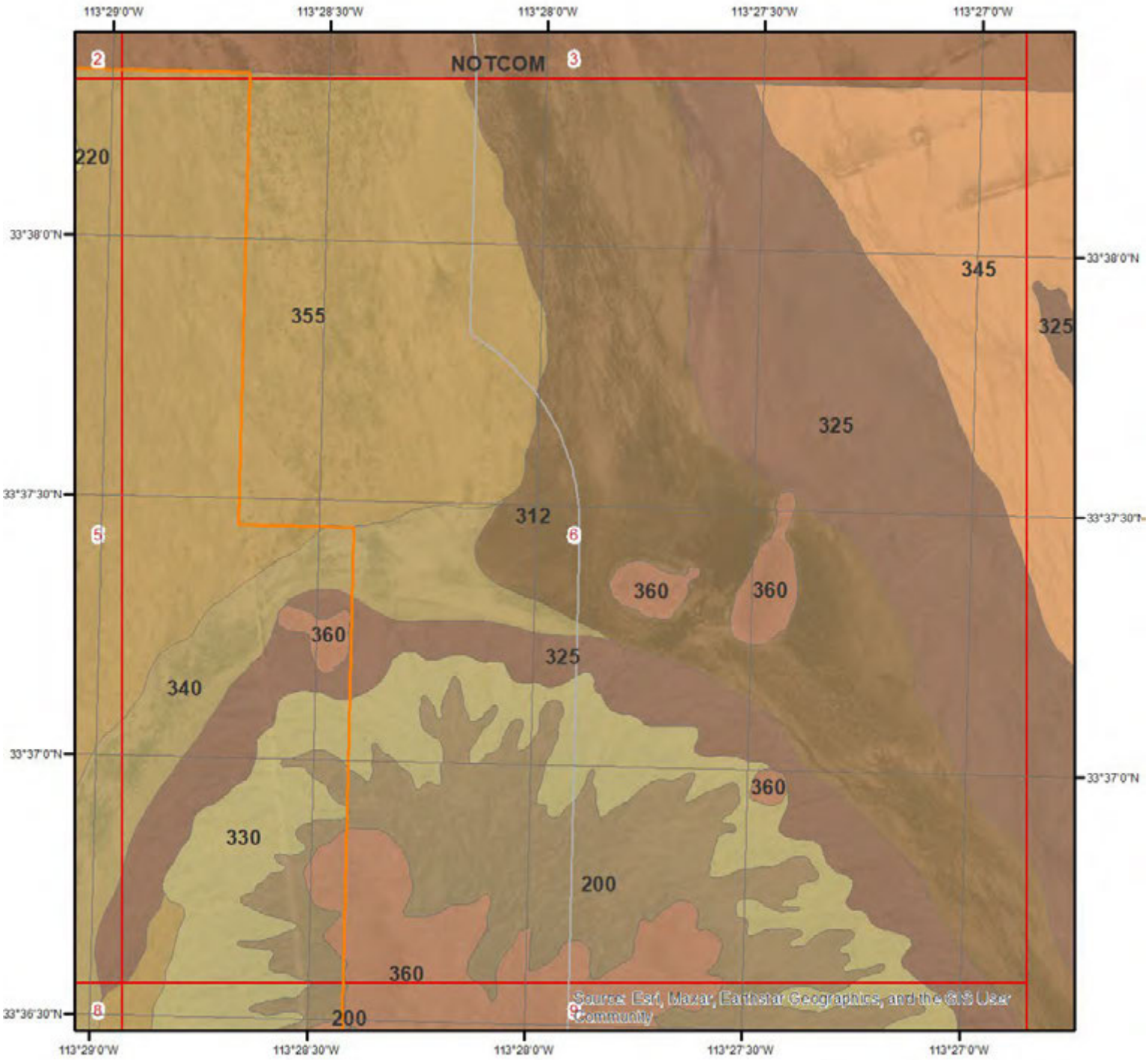
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 6

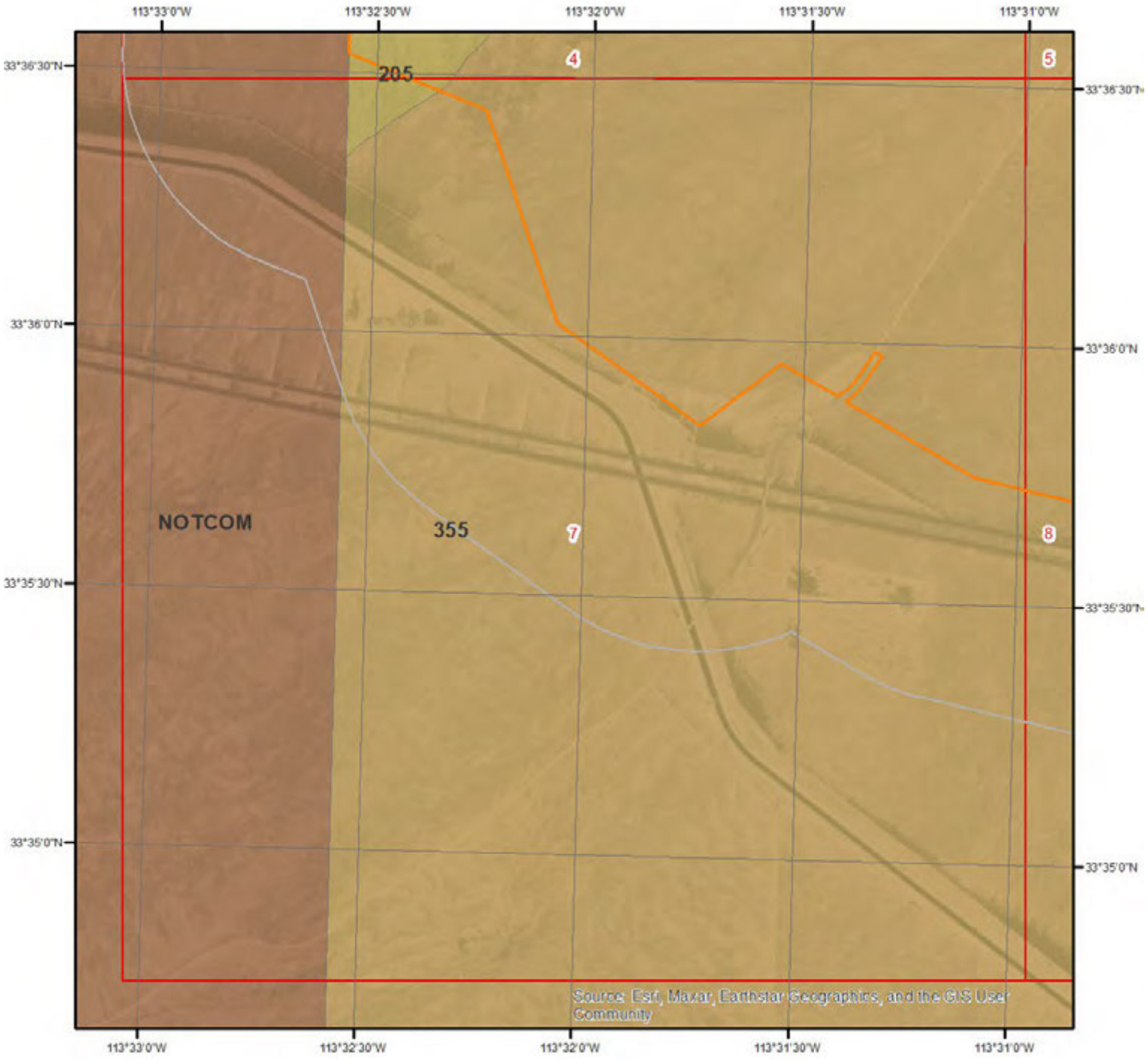
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 7

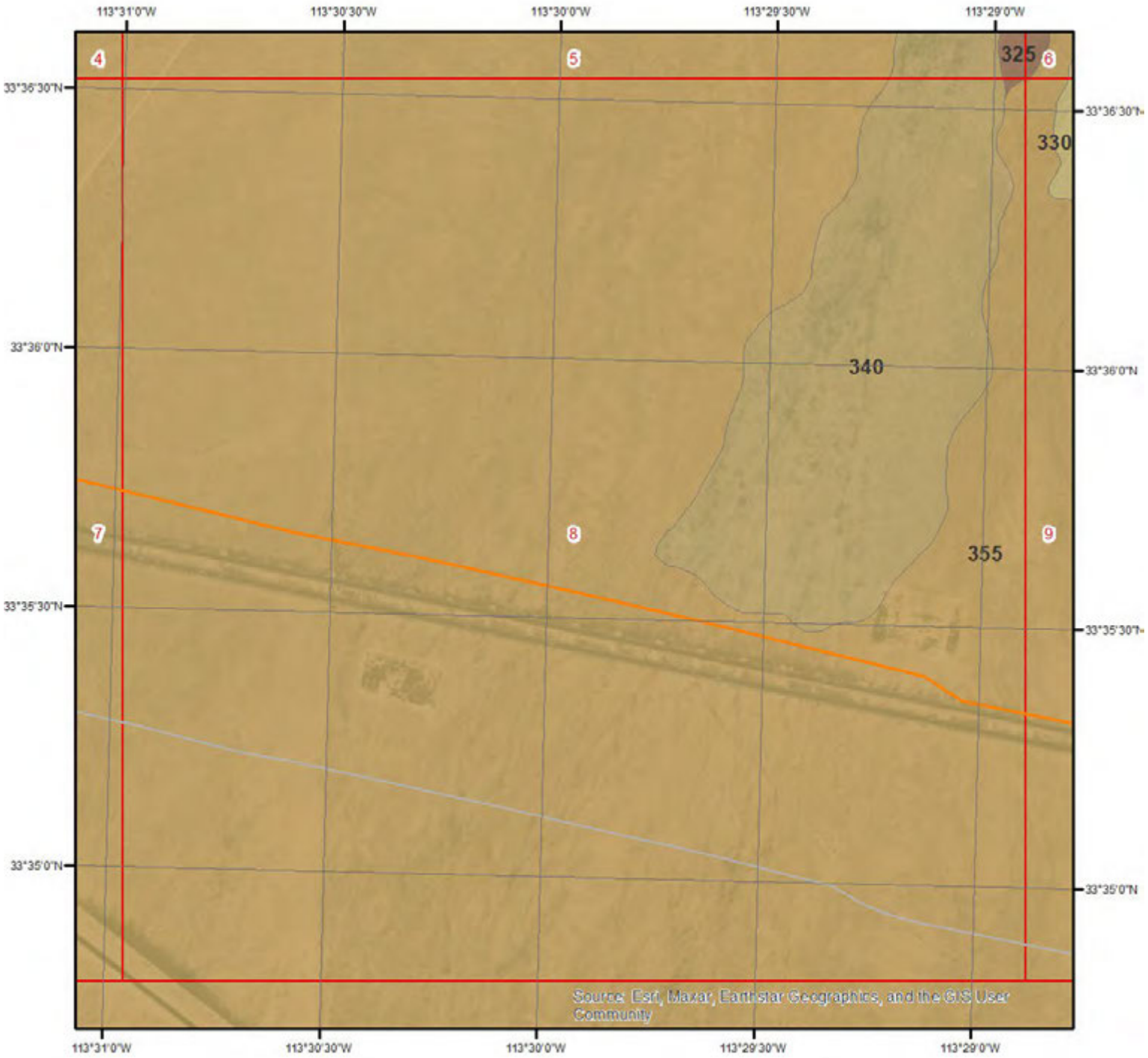
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 8

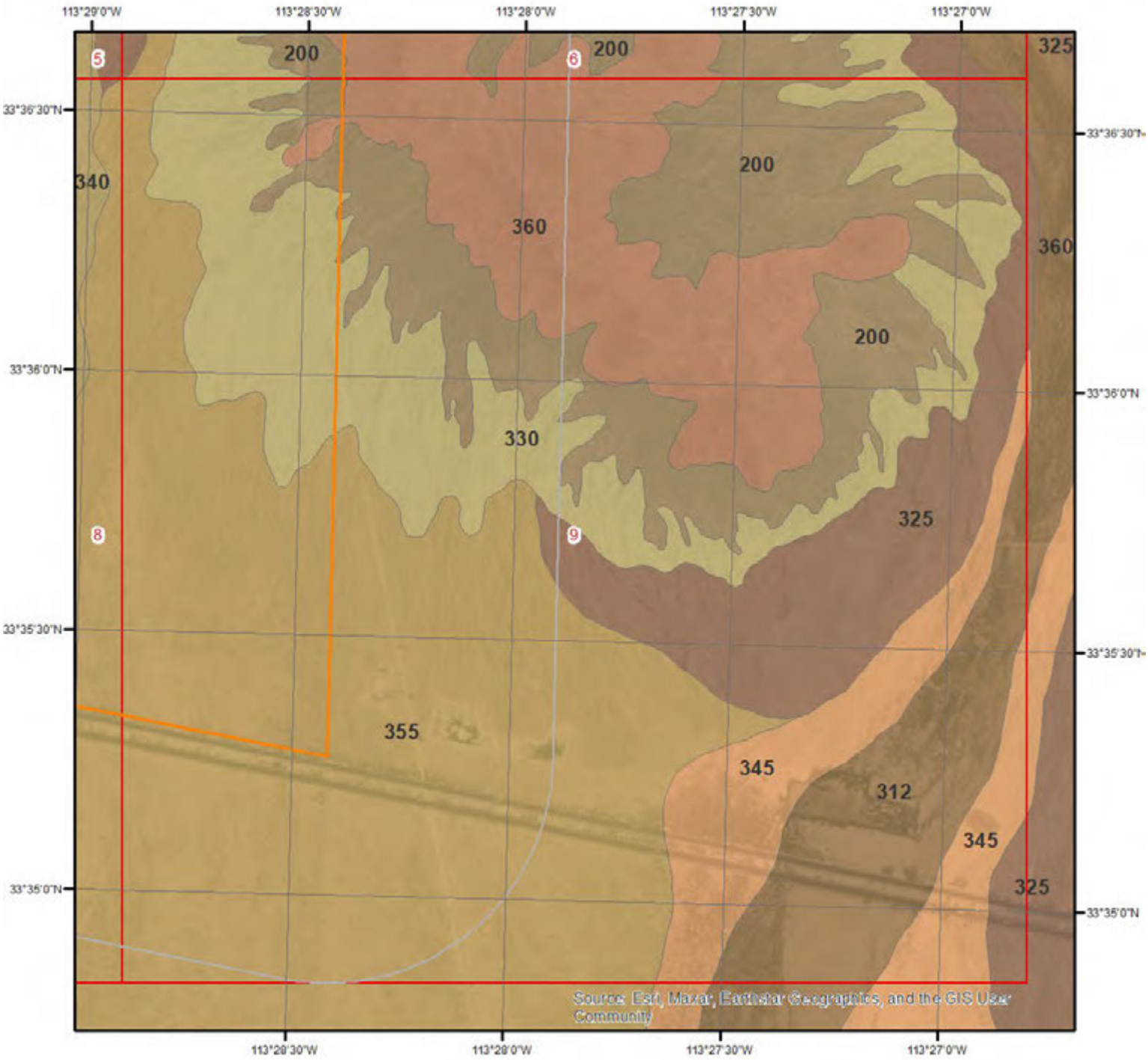
Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information



SSURGO Soils - Page 9

Miles
0 0.2 0.4

N

This maps shows SSURGO soil units around the target property. Please refer to the report for detailed soil descriptions.

ERIS

Soil Information

The previous page shows a soil map using SSURGO data from USDA Natural Resources Conservation Service. Detailed information about each unit is provided below.

Map Unit 200 (0.03%)

Map Unit Name:	Gunsight family-Pinamt complex, 1 to 15 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.
Major components are printed below	
Gunsight family(50%)	
horizon A(0cm to 10cm)	Very gravelly loam
horizon Bk1(10cm to 61cm)	Very gravelly loam
horizon Bk2(61cm to 102cm)	Extremely gravelly sandy loam
horizon Ck(102cm to 152cm)	Extremely gravelly coarse sand
Pinamt(40%)	
horizon A(0cm to 5cm)	Extremely gravelly loam
horizon Btk1(5cm to 36cm)	Extremely gravelly loam
horizon Btk2(36cm to 79cm)	Extremely gravelly loam
horizon Bk(79cm to 152cm)	Extremely gravelly sandy loam

Map Unit 205 (0.03%)

Map Unit Name:	Denure-Pahaka-Growler complex, 0 to 3 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.
Major components are printed below	
Denure(30%)	
horizon A(0cm to 8cm)	Sandy loam
horizon Bw(8cm to 114cm)	Sandy loam
horizon Bk(114cm to 152cm)	Gravelly sandy loam
Pahaka(30%)	
horizon A(0cm to 5cm)	Fine sandy loam
horizon Bw(5cm to 46cm)	Sandy loam
horizon Bkn(46cm to 81cm)	Loam
horizon 2Btknb1(81cm to 122cm)	Clay loam
horizon 2Btknb2(122cm to 152cm)	Loam
Growler(25%)	
horizon A(0cm to 5cm)	Fine sandy loam
horizon Bk(5cm to 20cm)	Fine sandy loam
horizon Btkn1(20cm to 43cm)	Loam
horizon Btkn2(43cm to 89cm)	Loam
horizon Btkn3(89cm to 135cm)	Fine sandy loam
horizon C(135cm to 152cm)	Fine sandy loam

Soil Information

Map Unit 220 (0.02%)

Map Unit Name:	Momoli-Carrizo family complex, 1 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Momoli(45%)

horizon A(0cm to 13cm)	Sandy loam
horizon Bk1(13cm to 114cm)	Extremely gravelly sandy loam
horizon Bk2(114cm to 152cm)	Extremely gravelly loamy coarse sand

Carrizo family(35%)

horizon C1(0cm to 20cm)	Gravelly fine sandy loam
horizon C2(20cm to 74cm)	Extremely gravelly coarse sand
horizon C3(74cm to 104cm)	Extremely gravelly loamy sand
horizon C4(104cm to 152cm)	Extremely gravelly sand

Map Unit 240 (0.01%)

Map Unit Name:	Beeline-Laposa complex, 2 to 45 percent slopes
Bedrock Depth - Min:	38cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Beeline(50%)

horizon A(0cm to 8cm)	Sandy loam
horizon Bk(8cm to 38cm)	Gravelly sandy loam
horizon Crk(38cm to 152cm)	Bedrock

Laposa(35%)

horizon A(0cm to 5cm)	Sandy loam
horizon Bk1(5cm to 36cm)	Gravelly sandy loam
horizon Bk2(36cm to 79cm)	Very gravelly sandy loam
horizon Crk(79cm to 152cm)	Bedrock

Map Unit 245 (0.0%)

Map Unit Name:	Hyder-Rock outcrop complex, 5 to 45 percent slopes
Bedrock Depth - Min:	30cm
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Hyder(55%)

horizon A(0cm to 3cm)	Very channery loam
horizon Ck(3cm to 30cm)	Extremely channery loam
horizon R(30cm to 152cm)	Bedrock

Soil Information

Map Unit 312 (0.12%)

Map Unit Name:	Gadsden-Glenbar complex, 0 to 2 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Gadsden(60%)

horizon C(0cm to 10cm)	Silty clay loam
horizon Ck1(10cm to 38cm)	Silty clay
horizon Ck2(38cm to 119cm)	Silty clay
horizon Ck3(119cm to 152cm)	Clay

Glenbar(35%)

horizon C(0cm to 15cm)	Silty clay loam
horizon Ck1(15cm to 58cm)	Silty clay loam
horizon Ck2(58cm to 109cm)	Silty clay loam
horizon Ck3(109cm to 152cm)	Silty clay loam

Map Unit 325 (0.01%)

Map Unit Name:	Dateland-Denure complex, 0 to 2 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	B - Soils in this group have moderately low runoff potential when thoroughly wet. Water transmission through the soil is unimpeded.

Major components are printed below

Dateland(55%)

horizon A(0cm to 10cm)	Fine sandy loam
horizon Bw(10cm to 41cm)	Fine sandy loam
horizon Bk1(41cm to 69cm)	Very fine sandy loam
horizon Bk2(69cm to 122cm)	Loam
horizon Bk3(122cm to 152cm)	Loam

Denure(30%)

horizon A(0cm to 15cm)	Sandy loam
horizon Bw(15cm to 56cm)	Sandy loam
horizon Bk(56cm to 152cm)	Sandy loam

Map Unit 330 (0.02%)

Map Unit Name:	Gunsight family-Rillito complex, 1 to 10 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	A - Soils in this group have low runoff potential when thoroughly wet. Water is transmitted freely through the soil.

Major components are printed below

Gunsight family(55%)

horizon A(0cm to 5cm)	Gravelly sandy loam
horizon Bk1(5cm to 46cm)	Very gravelly sandy loam
horizon Bk2(46cm to 152cm)	Extremely gravelly sandy loam

Rillito(35%)

horizon A(0cm to 3cm)	Gravelly sandy loam
horizon Bk1(3cm to 25cm)	Gravelly sandy loam
horizon Bk2(25cm to 53cm)	Very gravelly sandy loam
horizon Bk3(53cm to 152cm)	Gravelly sandy loam

Map Unit 340 (0.02%)

Map Unit Name:	Mohall-Contine complex, 1 to 5 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Mohall(50%)

horizon A1(0cm to 10cm)	Sandy loam
horizon A2(10cm to 23cm)	Sandy loam
horizon Btk1(23cm to 53cm)	Sandy clay loam
horizon Btk2(53cm to 152cm)	Sandy clay loam

Contine(40%)

horizon A1(0cm to 5cm)	Sandy loam
horizon A2(5cm to 15cm)	Sandy loam
horizon Btk1(15cm to 56cm)	Clay
horizon Btk2(56cm to 119cm)	Sandy clay
horizon Btk3(119cm to 152cm)	Gravelly sandy clay

Map Unit 355 (0.34%)

Map Unit Name:	Wintersburg-Laveen complex, 0 to 3 percent slopes
Bedrock Depth - Min:	null
Watertable Depth - Annual Min:	null
Drainage Class - Dominant:	Well drained
Hydrologic Group - Dominant:	C - Soils in this group have moderately high runoff potential when thoroughly wet. Water transmission through the soil is somewhat restricted.

Major components are printed below

Wintersburg(65%)

horizon A(0cm to 3cm)	Sandy loam
horizon Bw(3cm to 46cm)	Loam
horizon Bk1(46cm to 81cm)	Clay loam
horizon Bk2(81cm to 152cm)	Clay loam

Laveen(25%)

horizon A(0cm to 5cm)	Fine sandy loam
horizon Bk1(5cm to 46cm)	Fine sandy loam
horizon Bk2(46cm to 76cm)	Loam
horizon Bk3(76cm to 152cm)	Loam

Map Unit 360 (0.01%)

Map Unit Name:	Schenco-Chuichu-Rock outcrop complex, 3 to 45 percent slopes
Bedrock Depth - Min:	30cm
Watertable Depth - Annual Min:	null

Soil Information

Drainage Class - Dominant:	Somewhat excessively drained
Hydrologic Group - Dominant:	D - Soils in this group have high runoff potential when thoroughly wet. Water movement through the soil is restricted or very restricted.

Major components are printed below

Schenco(40%)

horizon A(0cm to 3cm)	Very gravelly sandy loam
horizon Ck(3cm to 30cm)	Extremely gravelly sandy loam
horizon Crk(30cm to 43cm)	Bedrock
horizon R(43cm to 152cm)	Bedrock

Chuichu(30%)

horizon A(0cm to 3cm)	Very gravelly loam
horizon Bt1(3cm to 15cm)	Extremely gravelly clay loam
horizon Bt2(15cm to 36cm)	Extremely gravelly loam
horizon Crt(36cm to 152cm)	Bedrock

Map Unit NOTCOM (99.39%)

Map Unit Name:	No Digital Data Available

No more attributes available for this map unit

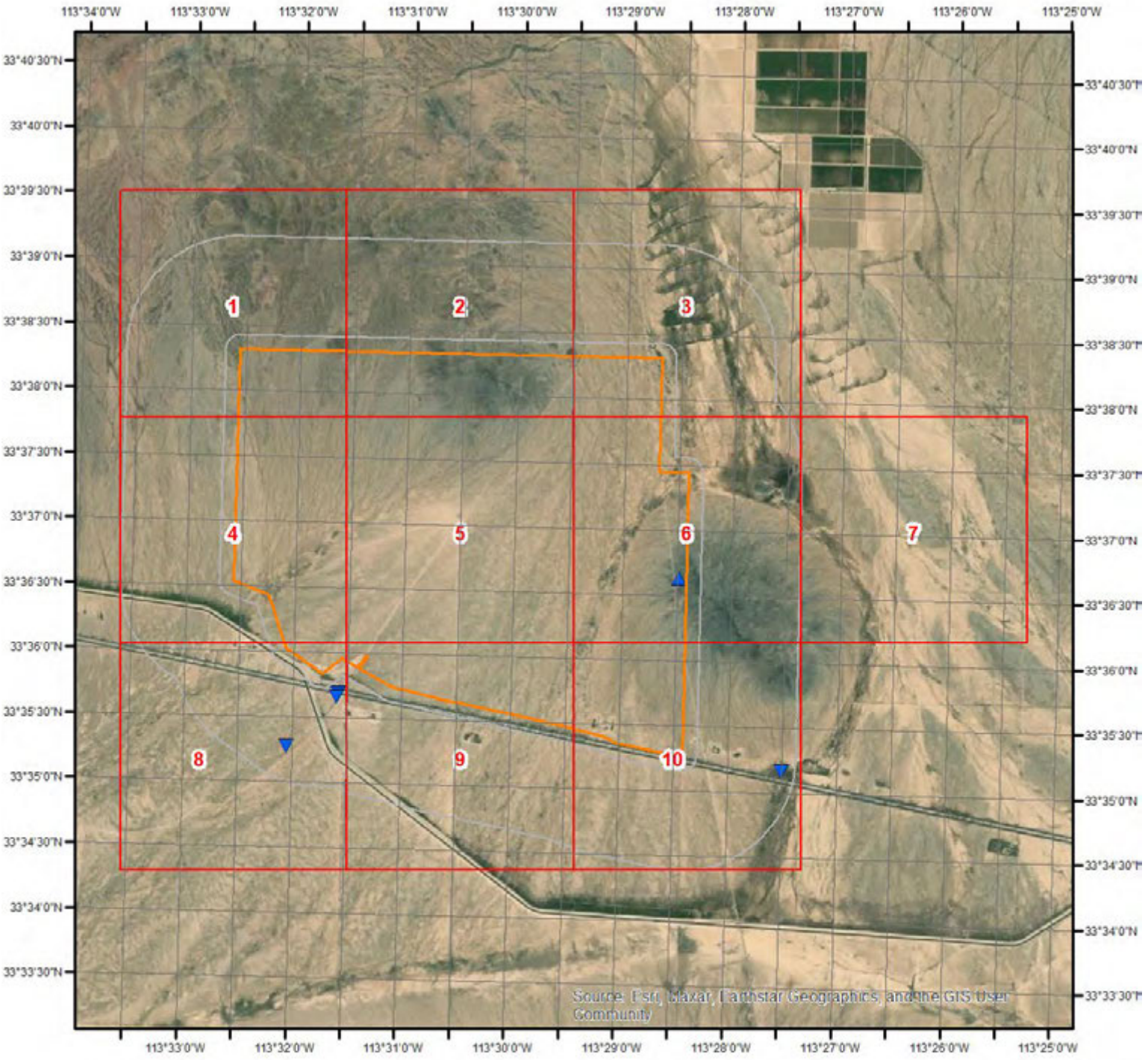
Component Description:

Minor map unit components are excluded from this report.

Map Unit: NOTCOM - No Digital Data Available

Component: NOTCOM (100%)
The NOTCOM component makes up 100 percent of the map unit. Slopes are Depth to a root restrictive layer is greater than 60 inches. Available water to a depth of 60 inches (or restricted depth) is very low. Shrink-swell potential is low. This soil is not flooded. It is not ponded. There is no zone of water saturation within a depth of 72 inches.

Wells and Additional Sources



Wells & Additional Sources

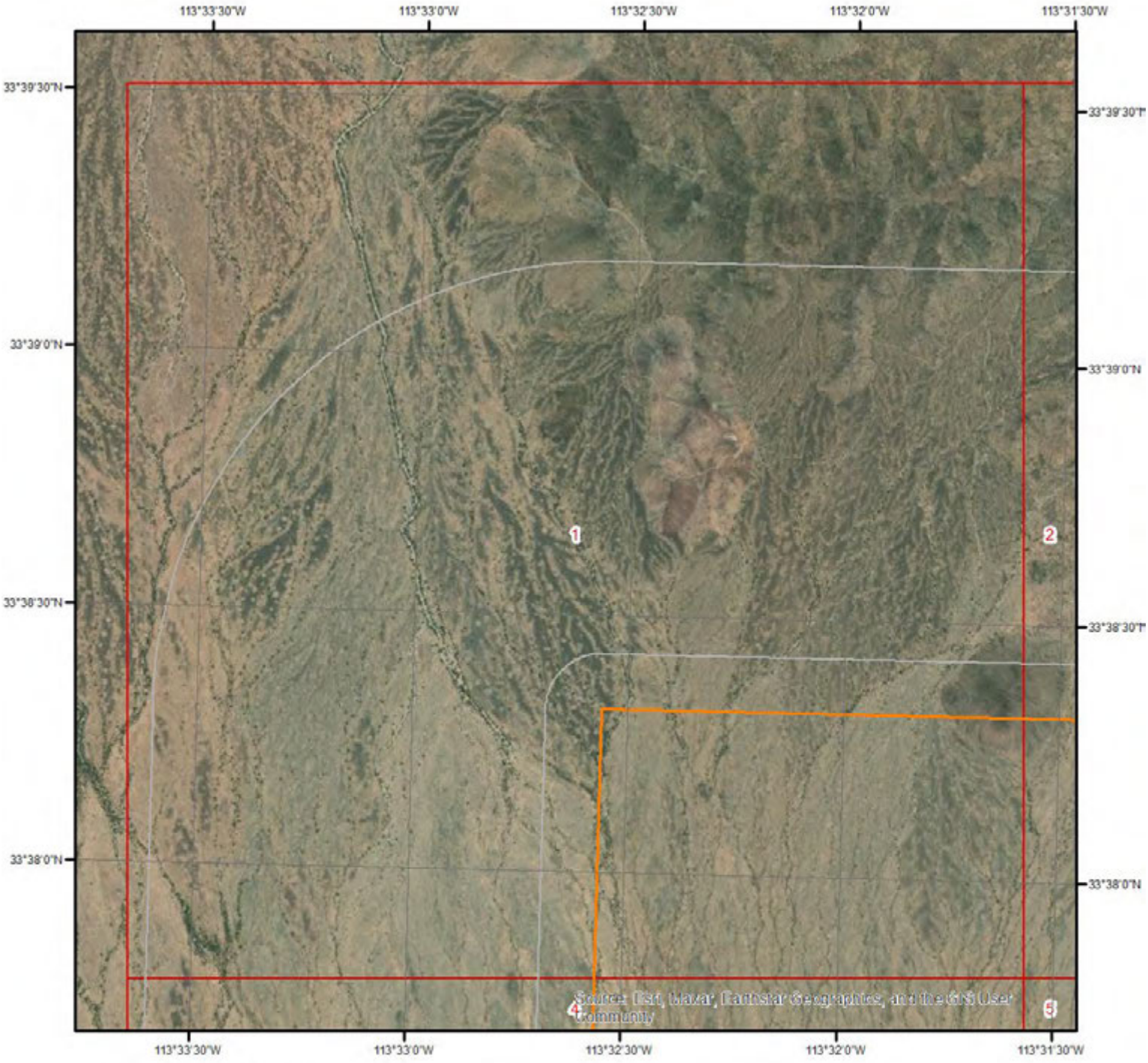
N

0 0.5 1 2 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



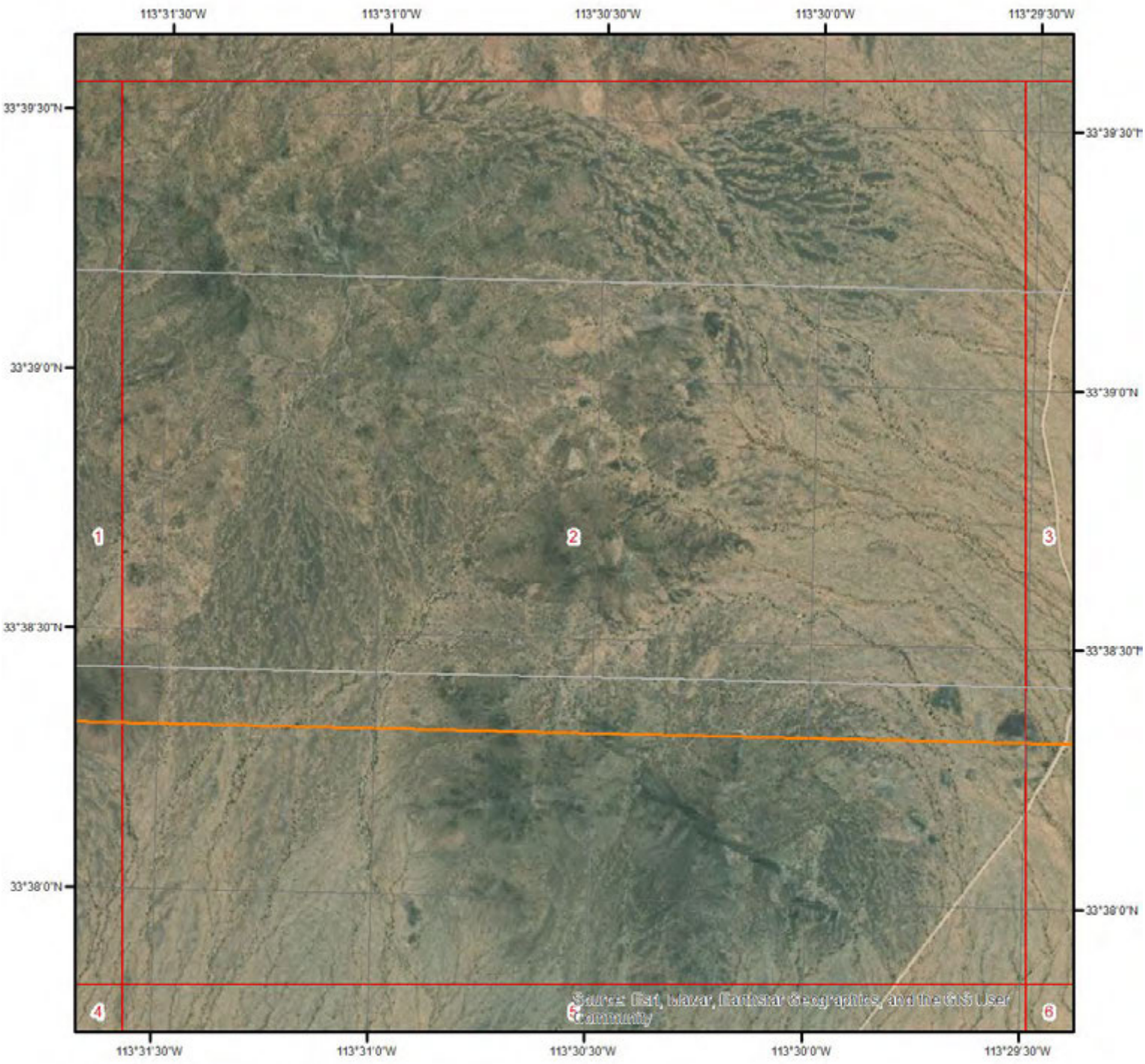
Wells & Additional Sources - Page 1

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



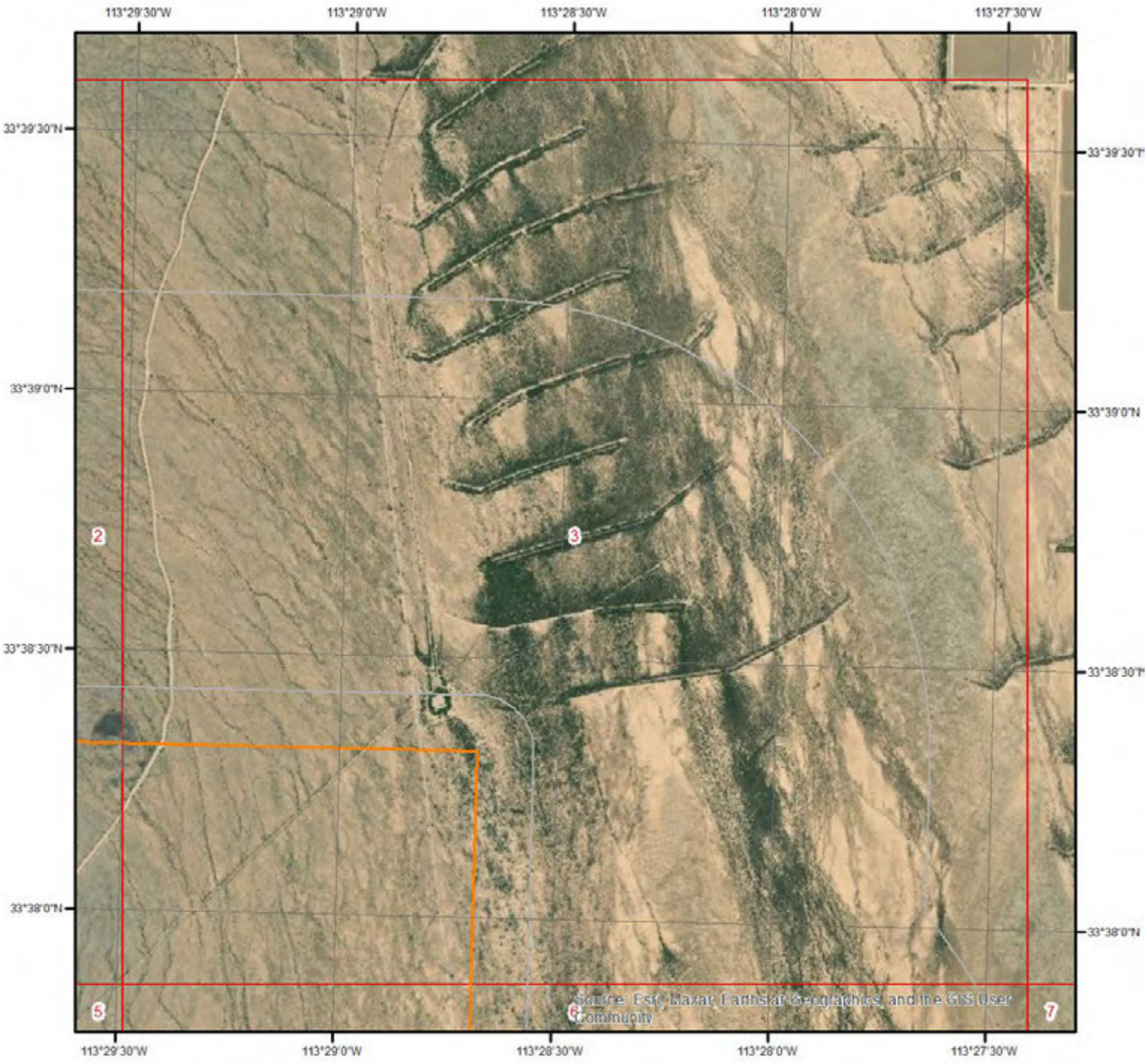
Wells & Additional Sources - Page 2

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 3

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources

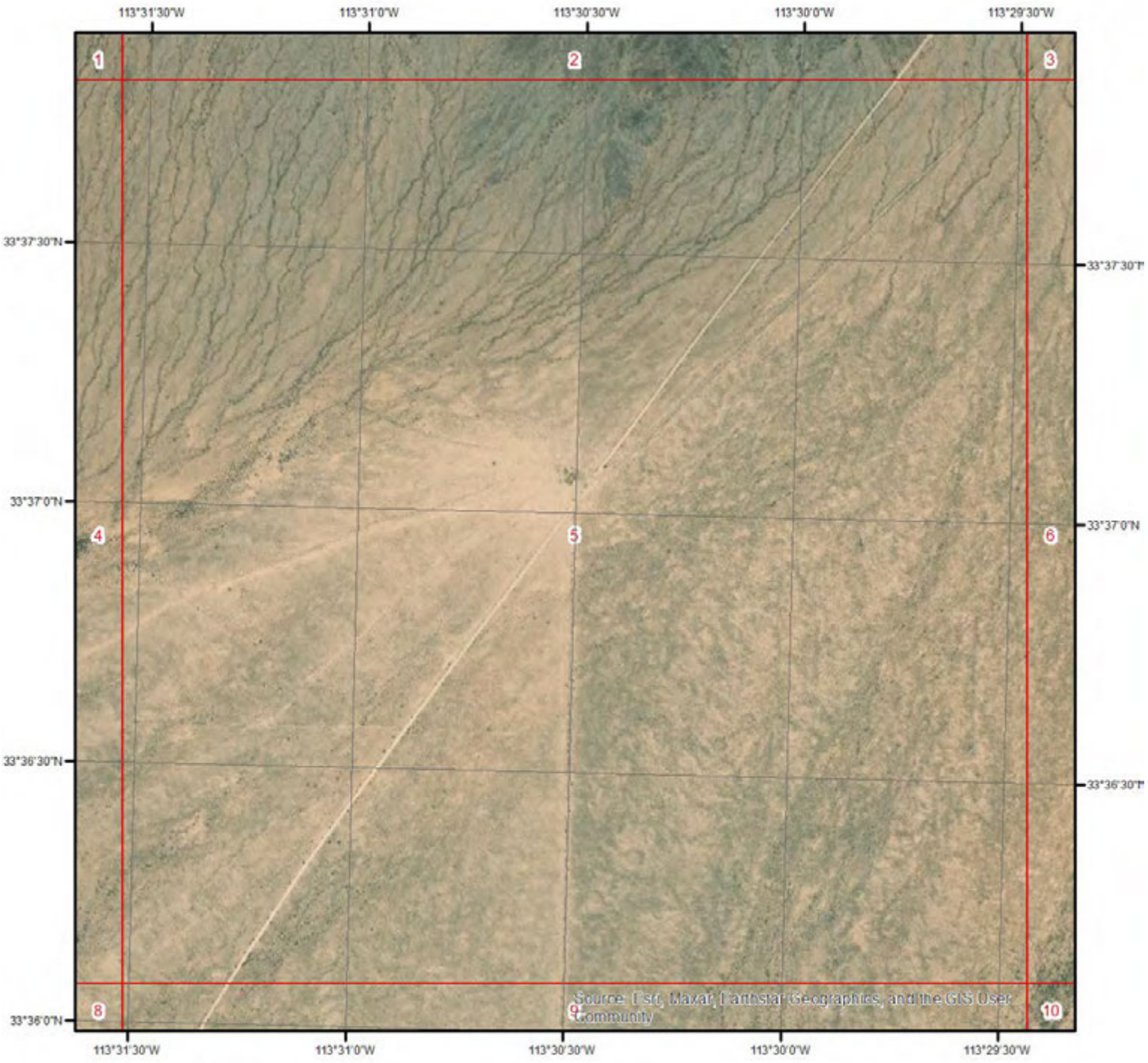
Wells & Additional Sources - Page 4

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



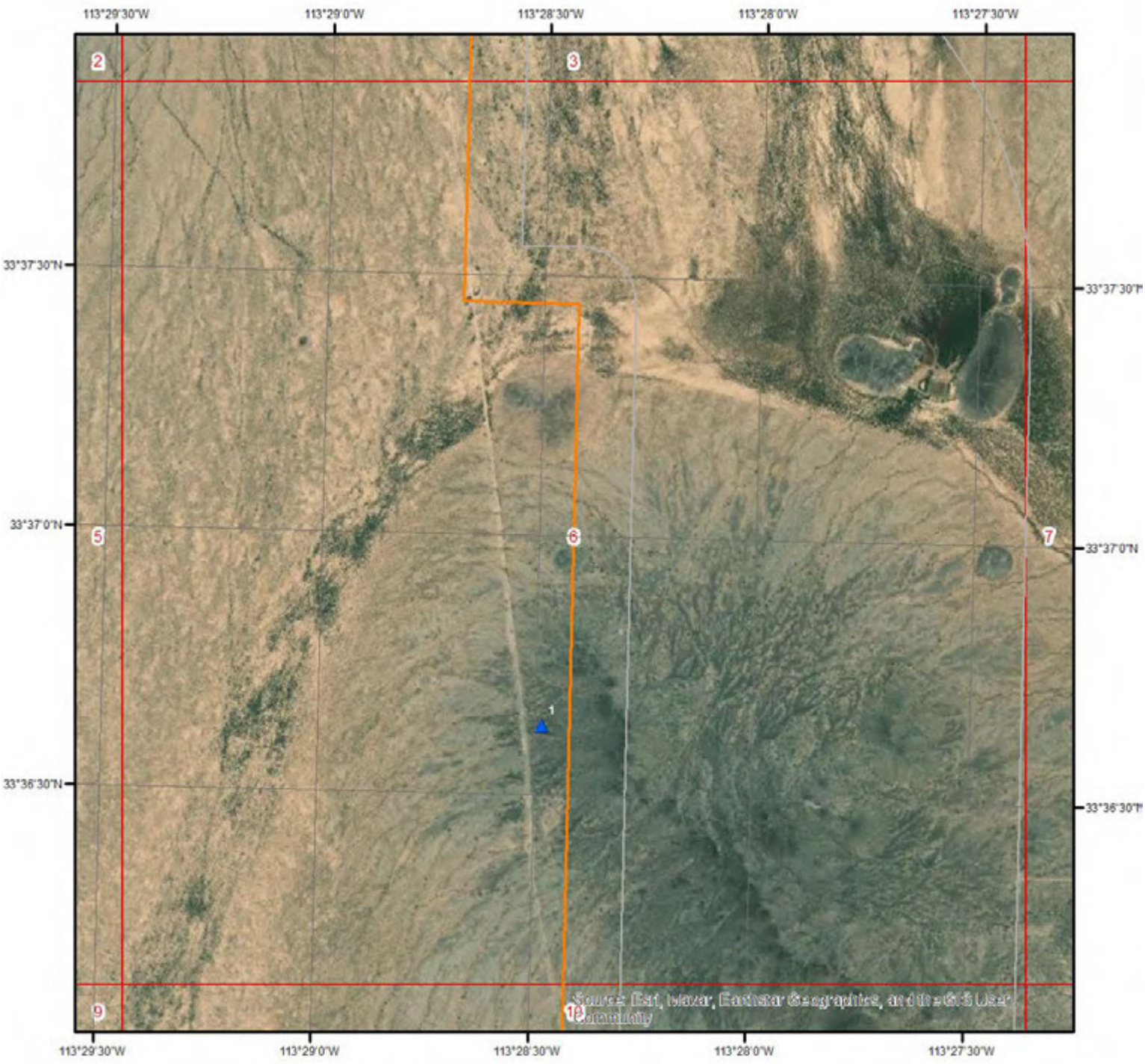
Wells & Additional Sources - Page 5

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



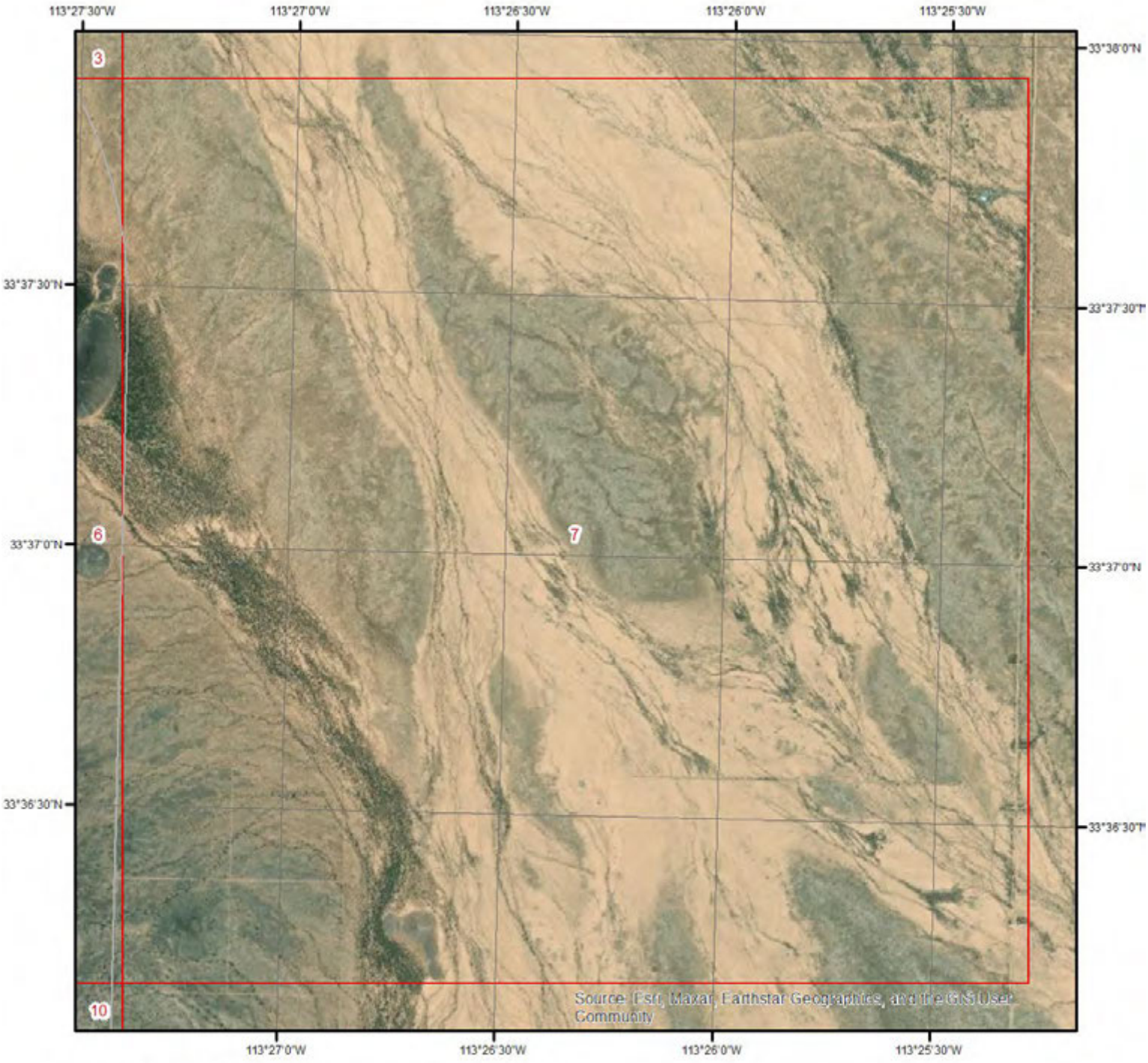
Wells & Additional Sources - Page 6

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



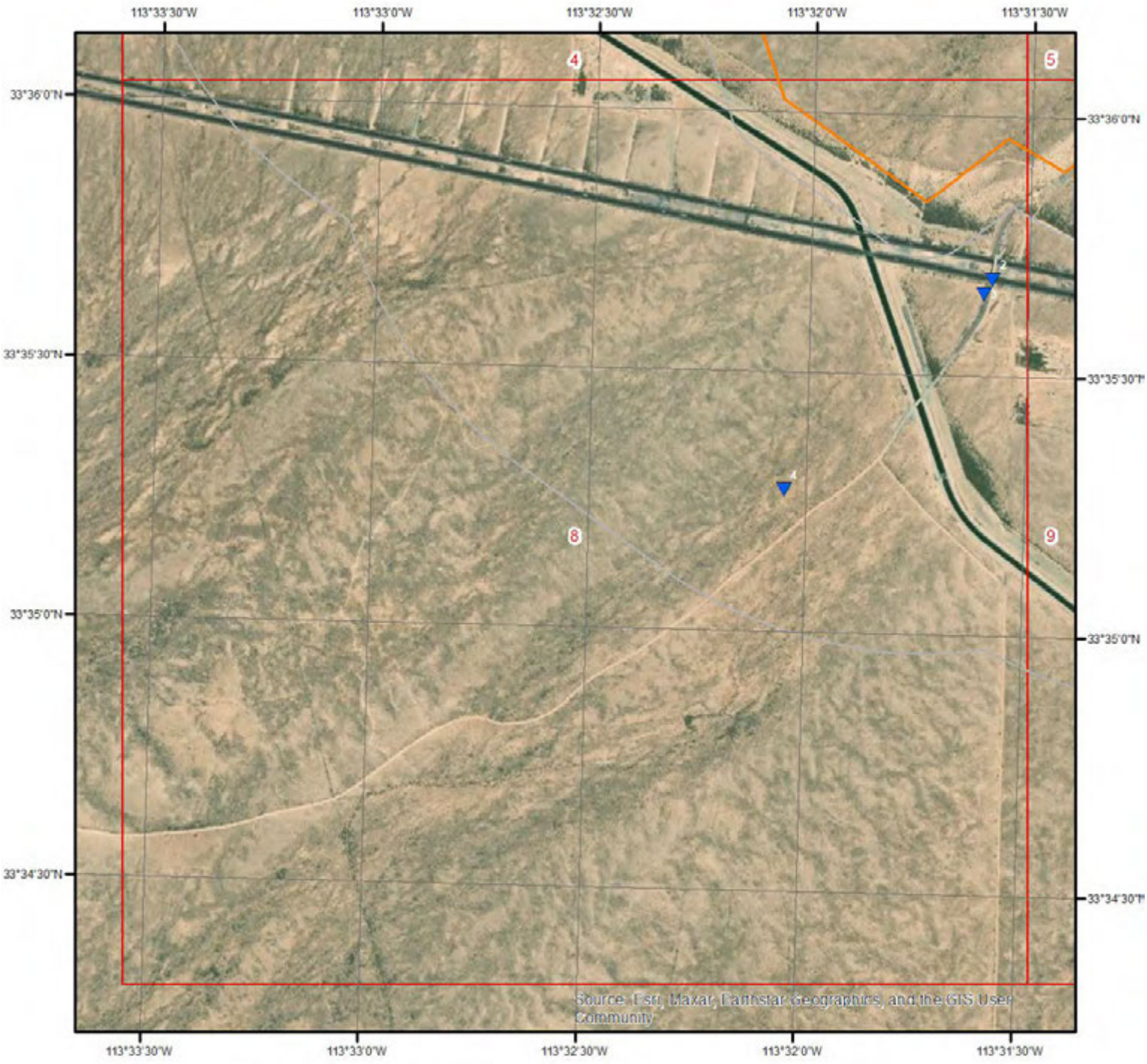
Wells & Additional Sources - Page 7

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources



Wells & Additional Sources - Page 8

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources

Wells & Additional Sources - Page 9

0 0.15 0.3 0.6 Miles

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources

Wells & Additional Sources - Page 10

Miles
0 0.15 0.3 0.6

- Sites with Higher Elevation
- Sites with Same Elevation
- Sites with Lower Elevation
- Sites with Unknown Elevation
- OGW Sites with Higher Elevation
- OGW Sites with Same Elevation
- OGW Sites with Lower Elevation
- OGW Sites with Unknown Elevation

ERIS

Wells and Additional Sources Summary

Federal Sources

Public Water Systems Violations and Enforcement Data

Map Key	ID	Distance (ft)	Direction
	No records found		

Safe Drinking Water Information System (SDWIS)

Map Key	ID	Distance (ft)	Direction
	No records found		

USGS National Water Information System

Map Key	Monitoring Loc Identifier	Distance (ft)	Direction
2	USGS-333541113313201	1200.55	SW

State Sources

Drywell Database

Map Key	ID	Distance (ft)	Direction
	No records found		

Historical Drywells

Map Key	ID	Distance (ft)	Direction
	No records found		

Oil and Gas Wells

Map Key	ID	Distance (ft)	Direction
	No records found		

Wells 55 Registry

Map Key	Registry ID	Distance (ft)	Direction
1	229877	0.00	-
3	547147	1282.48	SW
4	603144	3769.87	SW
5	633430	4669.13	SE

Wells and Additional Sources Detail Report

USGS National Water Information System

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
2	SW	0.23	1,200.55	1,419.97	FED USGS

Organiz Identifier:	USGS-AZ	Formation Type:	
Organiz Name:	USGS Arizona Water Science Center	Aquifer Name:	
Well Depth:	577	Aquifer Type:	
Well Depth Unit:	ft	Country Code:	US
Well Hole Depth:	577	Provider Name:	NWIS
W Hole Depth Unit:	ft	County:	LA PAZ
Construction Date:	196504	Latitude:	33.59475569000000
Source Map Scale:	24000	Longitude:	-113.5263133000000
Monitoring Loc Name:	B-03-12 19AAA		
Monitoring Loc Identifier:	USGS-333541113313201		
Monitoring Loc Type:	Well		
Monitoring Loc Desc:			
HUC Eight Digit Code:	15030105		
Drainage Area:			
Drainage Area Unit:			
Contrib Drainage Area:			
Contrib Drainage Area Unit:			
Horizontal Accuracy:	10		
Horizontal Accuracy Unit:	seconds		
Horizontal Collection Mthd:	Interpolated from MAP.		
Horiz Coord Refer System:	NAD83		
Vertical Measure:	1410.		
Vertical Measure Unit:	feet		
Vertical Accuracy:	5		
Vertical Accuracy Unit:	feet		
Vertical Collection Mthd:	Interpolated from topographic map.		
Vert Coord Refer System:	NGVD29		

Wells 55 Registry

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
1	-	0.00	0.00	1,504.51	WELLS

Registry ID:	229877	Whole Town:	
Rgr Pump D:	NO	Half Towns:	
Well Type:	SPCL - CATHODIC PROTECTION	North South:	
Well Type 2:	OTHER	Whole Range:	
DLIC No:		Half Range:	
Approved:	16-Jan-2019	East West:	

Wells and Additional Sources Detail Report

Installed:		Section:	
Well Depth:	410	Quarter 16:	
Water Level:	0.0	Q Acre 160 Dir:	
Casing Depth:	410	Quarter 40:	
Casing Diameter:	12.0	Q Acre 40 Dir:	
Casing Type:	PLASTIC OR PVC	Quarter 10:	
Pump Type:		Q Acre 10 Dir:	
Pump Power:		UTM X Meter:	270404.9
Pump Rate:	0	UTM Y Meter:	3721723.0
Tested Rate:	0	Application:	15-Jan-2019
Draw Down:	0	Address 1:	931 W. GILA BEND HWY, SUITE 2
Completion:		Address 2:	
Drill Log:	X	City:	CASA GRANDE
Well Cance:		State:	AZ
Cadastral:	B03012010DDD	ZIP:	85122
County:		ZIP 4:	
Watershed:		Latitude:	33.6105632788933
Basin Name:		Longitude:	-113.474661786771
Sub Basin Name:		Program:	
AMA Description:		Owner Name:	EL PASO NATURAL GAS CO. LLC., A KINDER MORGAN COMPANY
Quad Code:			

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
3	SW	0.24	1,282.48	1,417.07	WELLS

Registry ID:	547147	Whole Town:	
Rgr Pump D:	NO	Half Towns:	
Well Type:	EXEMPT	North South:	
Well Type 2:	EXEMPT	Whole Range:	
DLIC No:		Half Range:	
Approved:		East West:	
Installed:	07-Jan-1995	Section:	
Well Depth:	523	Quarter 16:	
Water Level:	380.0	Q Acre 160 Dir:	
Casing Depth:	523	Quarter 40:	
Casing Diameter:	6.0	Q Acre 40 Dir:	
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING	Quarter 10:	
Pump Type:	SUBMERSIBLE	Q Acre 10 Dir:	
Pump Power:	ELECTRIC MOTOR 1 - 5 HP	UTM X Meter:	265537.1
Pump Rate:	32	UTM Y Meter:	3720033.0
Tested Rate:	32	Application:	30-Dec-1994
Draw Down:	5	Address 1:	1616 W ADAMS
Completion:	X	Address 2:	
Drill Log:	X	City:	PHOENIX
Well Cance:		State:	AZ

Cadastral:	B03012019AAA	ZIP:	85007
County:		ZIP 4:	
Watershed:		Latitude:	33.59427472775
Basin Name:		Longitude:	-113.526640209464
Sub Basin Name:		Program:	
AMA Description:		Owner Name:	AZ STATE LAND DEPT,
Quad Code:			

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
4	SW	0.71	3,769.87	1,396.91	WELLS

Registry ID:	603144	Whole Town:	
Rgr Pump D:	NO	Half Towns:	
Well Type:	NON-EXEMPT	North South:	
Well Type 2:	NON-EXEMPT	Whole Range:	
DLIC No:		Half Range:	
Approved:		East West:	
Installed:	01-Jan-1965	Section:	
Well Depth:	588	Quarter 16:	
Water Level:	518.0	Q Acre 160 Dir:	
Casing Depth:	588	Quarter 40:	
Casing Diameter:	10.0	Q Acre 40 Dir:	
Casing Type:	STEEL - PERFORATED OR SLOTTED CASING	Quarter 10:	
Pump Type:	NO PUMP CODE LISTED	Q Acre 10 Dir:	
Pump Power:	NO POWER CODE LISTED	UTM X Meter:	264824.6
Pump Rate:	0	UTM Y Meter:	3719338.0
Tested Rate:	0	Application:	27-Jan-1982
Draw Down:	0	Address 1:	PO BOX 753
Completion:		Address 2:	
Drill Log:		City:	SALOME
Well Cance:	Yes	State:	AZ
Cadastral:	B03012019000	ZIP:	85348
County:		ZIP 4:	
Watershed:		Latitude:	33.5878553217055
Basin Name:		Longitude:	-113.534128536352
Sub Basin Name:		Program:	
AMA Description:		Owner Name:	K LAZY B RANCH,
Quad Code:			

Map Key	Direction	Distance (mi)	Distance (ft)	Elevation (ft)	DB
5	SE	0.88	4,669.13	1,419.86	WELLS

Registry ID:	633430	Whole Town:	
Rgr Pump D:	NO	Half Towns:	
Well Type:	EXEMPT	North South:	

Wells and Additional Sources Detail Report

Well Type 2:	EXEMPT	Whole Range:	
DLIC No:		Half Range:	
Approved:		East West:	
Installed:		Section:	
Well Depth:	0	Quarter 16:	
Water Level:	0.0	Q Acre 160 Dir:	
Casing Depth:	0	Quarter 40:	
Casing Diameter:	8.0	Q Acre 40 Dir:	
Casing Type:	NO CASING CODE LISTED	Quarter 10:	
Pump Type:	NO PUMP CODE LISTED	Q Acre 10 Dir:	
Pump Power:	NO POWER CODE LISTED	UTM X Meter:	271850.1
Pump Rate:	35	UTM Y Meter:	3718969.0
Tested Rate:	0	Application:	09-Apr-1982
Draw Down:	0	Address 1:	2323 N CENTRAL #2102
Completion:		Address 2:	
Drill Log:		City:	PHOENIX
Well Cance:		State:	AZ
Cadastral:	B03012023DA0	ZIP:	85004
County:		ZIP 4:	
Watershed:		Latitude:	33.5860570636677
Basin Name:		Longitude:	-113.458392781498
Sub Basin Name:		Program:	
AMA Description:		Owner Name:	HI-WAY ELECTRIC CO,
Quad Code:			

Radon Information

This section lists any relevant radon information found for the target property.

Federal EPA Radon Zone for *LA PAZ* County: **2**

Zone 1: Counties with predicted average indoor radon screening levels greater than 4 pCi/L
Zone 2: Counties with predicted average indoor radon screening levels from 2 to 4 pCi/L
Zone 3: Counties with predicted average indoor radon screening levels less than 2 pCi/L

Federal Area Radon Information for *LA PAZ* County

No Measures/Homes:	2
Geometric Mean:	0.2
Arithmetic Mean:	0.3
Median:	0.3
Standard Deviation:	0.4
Maximum:	0.5
% >4 pCi/L:	0
% >20 pCi/L:	0
Notes on Data Table:	TABLE 1. Screening indoor radon data from the EPA/State Residential Radon Survey of Arizona conducted during 1987-88. Data represent 2-7 day charcoal canister measurements from the lowest level of each home tested.

Appendix

Federal Sources

FEMA National Flood Hazard Layer — **FEMA FLOOD**

The National Flood Hazard Layer (NFHL) data incorporates Flood Insurance Rate Map (FIRM) databases published by the Federal Emergency Management Agency (FEMA), and any Letters Of Map Revision (LOMRs) that have been issued against those databases since their publication date. The FIRM Database is the digital, geospatial version of the flood hazard information shown on the published paper FIRMs. The FIRM Database depicts flood risk information and supporting data used to develop the risk data. The FIRM Database is derived from Flood Insurance Studies (FISs), previously published FIRMs, flood hazard analyses performed in support of the FISs and FIRMs, and new mapping data, where available.

Indoor Radon Data — **INDOOR RADON**

Indoor radon measurements tracked by the Environmental Protection Agency(EPA) and the State Residential Radon Survey.

Public Water Systems Violations and Enforcement Data — **PWSV**

List of drinking water violations and enforcement actions from the Safe Drinking Water Information System (SDWIS) made available by the Drinking Water Protection Division of the US EPA's Office of Groundwater and Drinking Water. Enforcement sensitive actions are not included in the data released by the EPA. Address information provided in SWDIS may correspond either with the physical location of the water system, or with a contact address.

Radon Zone Level — **RADON ZONE**

Areas showing the level of Radon Zones (level 1, 2 or 3) by county. This data is maintained by the Environmental Protection Agency (EPA).

Safe Drinking Water Information System (SDWIS) — **SDWIS**

The Safe Drinking Water Information System (SDWIS) contains information about public water systems as reported to US Environmental Protection Agency (EPA) by the states. Addresses may correspond with the location of the water system, or with a contact address.

Soil Survey Geographic database — **SSURGO**

The Soil Survey Geographic database (SSURGO) contains information about soil as collected by the National Cooperative Soil Survey at the Natural Resources Conservation Service (NRCS). Soil maps outline areas called map units. The map units are linked to soil properties in a database. Each map unit may contain one to three major components and some minor components.

U.S. Fish & Wildlife Service Wetland Data — **US WETLAND**

The U.S. Fish & Wildlife Service Wetland layer represents the approximate location and type of wetlands and deepwater habitats in the United States.

USGS Current Topo — **US TOPO**

US Topo topographic maps are produced by the National Geospatial Program of the U.S. Geological Survey (USGS). The project was launched in late 2009, and the term "US Topo" refers specifically to quadrangle topographic maps published in 2009 and later.

USGS Geology — **US GEOLOGY**

Seamless maps depicting geological information provided by the United States Geological Survey (USGS).

USGS National Water Information System — **FED USGS**

The U.S. Geological Survey (USGS)'s National Water Information System (NWIS) is the nation's principal repository of water resources data. This database includes comprehensive information of well-construction details, time-series data for gage height, streamflow, groundwater level, and precipitation and water use data.

State Sources

Drywell Database — **DRYWELLS**

The Drywell database contains information regarding drywells in Arizona. This database is maintained by

the Arizona Department of Environmental Quality (ADEQ).

Historical Drywells **DRYWELLS HIST**

Historical listing of registered drywells once maintained and made available by the Arizona Department of Environmental Quality (ADEQ) Water Quality Division. As of May 2018, ADEQ stopped accepting paper forms and will no longer be updating this list.

Oil and Gas Wells **OGW**

List of Oil and Gas wells in the State of Arizona that have been permitted by the State Oil and Gas Conservation Commission (OGCC). Gas wells include natural gas, helium, and carbon dioxide wells. This data was provided by Arizona Geological Survey.

Wells 55 Registry **WELLS**

The Wells 55 Registry lists wells registered in the state, including NOIs to drill, modify, abandon, or deepen, registrations, driller reports, completion reports, change of well information, change of ownership, notice of well capping, and abandonment completion reports. The database was created in 1980 to store registration information submitted by well owners and drillers. Data made available by the Arizona Department of Water Resources.

Liability Notice

Reliance on information in Report: The Physical Setting Report (PSR) DOES NOT replace a full Phase I Environmental Site Assessment but is solely intended to be used as a review of environmental databases and physical characteristics for the site or adjacent properties.

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Appendix E Owner & User Questionnaires

AZTEC TYPSA

AZTEC Phase I ESA Report Owner Interview

To: AZTEC Engineering Group, Inc.

From: Ray Moore

Of: Arizona State Land Dept.

Phone: 602-364-1126

Email: Rmoore@Azland.gov

Site Name/Address: Atlas North Utility-Scale Solar Development near Sore Finger Road and I-10

You have been selected to complete this questionnaire as owner or owner representative for the Subject Property for this Phase I Environmental Site Assessment (ESA). Please fill out this form to the best of your ability. For any questions where the answer is "**yes**," please provide additional information in the column to the right or on a separate sheet. If you do not know the answer to a question or it is not applicable, please respond with 'N/A'. If you have any questions or require clarification on any of questions asked, please contact Steven Sutherland of AZTEC for assistance (ssutherland@aztec.us or 602-290-4774).

Interview Question	Response/Discussion
What sort of business operations are conducted at the Site? How is the Site used?	The site is vacant and used for grazing
How long have you been/were you connected with the Site? From when to when?	1912 to present
What are the ages of the buildings or structures on the Site?	There are no structures
Who provides the utilities (if any)?	Electricity: Gas: no utilities provided Water: Sewer:
Does the Site have a water well or septic tank?	The well is listed as a monitoring well - no Tanks

Is there an electrical transformer at the Site?	no
Are there floor drains? Where do they discharge to?	no
Is there a sand trap, oil-water separator, or grease trap? If so, where do they discharge to?	no
What type of heating system is present at the Site?	none
Do you know of any spills, leaks, or environmental incidents that have occurred at the Site?	no
Are there any underground storage tanks or above-ground storage tanks currently in use at the Site? Were there any in the past?	none
If there are tanks currently at the Site, are they compliant with current regulations? When was the last time a leak detection test was performed?	no Tanks
Do you/did you store or use any petroleum products (gasoline, oils), chemicals, cleaners, solvents, paints etc. at the Site?	no
Are there any wastes generated at the Site (including solid waste)? If yes, how are they disposed of? Is there a dumpster on the Site?	no
Who was or were the prior owner(s)?	The United States
What did the prior owner use the Site for?	no known use

Do you know the former or historical use of the surrounding properties?	not for certain
Have any adjacent properties been used as a gas station, auto repair shop, commercial printer, dry cleaner, photo development lab, junkyard, or landfill?	no
Have you ever noticed any runoff, wastewater or stormwater entering the Site from adjacent properties, or noticed any unusual odors?	no
Has fill dirt been brought onto the Site? If yes, where was it from? Where was it placed on the Site?	no
Are there any liens, violations, administrative actions, or lawsuits relating to environmental issues at the Site?	no
Have you or others previously completed a Phase I ESA or other type of environmental activities at the Site?	no
Are there any pertinent environmental reports and/or other documents available for review?	no
From an environmental assessment standpoint, are there any other potential conditions that you think we should know about, either on Site or from a neighboring property?	no

AZTEC TYPSA

Ray Moore
Name (Print)

7/28/2022
Date

Ray Moore
Signature

7/28/2022
Title

AZTEC Phase I ESA User Questionnaire

To: Stephanie Lauer

From: Steven Sutherland

Of: AZTEC Engineering Group, Inc.

Phone: 602-290-4774

Email: ssutherland@aztec.us

Site Name/Address: Atlas North Solar Property, Sore Finger Road, La Paz, County, Arizona

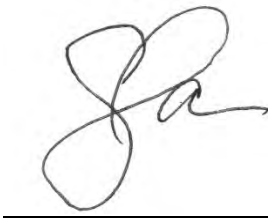
The person/municipality who will use or rely upon this Phase I ESA must provide the information outlined below. Please fill out this form to the best of your ability. For any questions where the answer is "**yes**," please provide additional information in the column to the right or on a separate sheet. Without the answers to these questions, AZTEC's Phase I ESA report will note that the report is incomplete, and your Landowner Liability Protections could be at risk. If you have any questions, please contact AZTEC for assistance.

User Question	User Provided Information
What is the purpose of the Phase I ESA? Is it for a loan?	Requirement of the Arizona State Land Department. Not for a loan.
What is the planned use of the Site?	Renewable energy facility.
Did a search of recorded land title records identify any environmental liens filed or recorded against the Site under federal, tribal, state, or local law?	No.
Did a search of recorded land title records identify any activity use limitations (AULs), such as engineering controls, land use restrictions, or institutional controls the Site under federal, tribal, state, or local law?	No.
Do you have any specialized knowledge or experience related to the Site or nearby properties?	No.

User Question	User Provided Information
Does the purchase price for this property reasonably reflect the fair market value of the Site? Note that this question does not require an appraisal of the property, but is based on the experience of the user.	Not applicable. Not purchasing the property, pursuing a lease.
If you answered "no" to the above question, have you considered whether the lower purchase price is because contamination is known or believed to be present at the Site?	Not applicable.
Do you know the past uses of the Site?	Rangeland.
Do you know of specific chemicals that are present or once were present at the Site?	No.
Do you know of spills or other chemical releases that have taken place at the Site?	No.
Do you know of any environmental cleanups that have taken place at the Site?	No.
Based on your knowledge and experience related to the Site, are there any obvious indicators that point to the presence or likely presence of releases at the Site?	No.

Completed by: Stephanie Lauer, Environmental Permitting Manager

Name Date July 7, 2022



Signature

Title

Appendix F Resumes

EXPERIENCE

2018 - Present (AZTEC)
25 Years Other Firms

EDUCATION

MS, Environmental Management/ International Environmental Management & Sustainability, Arizona State University, 2006

BA, Geography (Environmental Emphasis), University of Texas – San Antonio, 1993

BS, Geology (Environmental Emphasis), University of Texas – San Antonio, 1993

REGISTRATIONS

Registered Geologist / Arizona / #33269

Professional Geologist / Texas / #12102

CERTIFICATIONS/PERMITS

Certified Environmental Manager (CEM)/ Nevada #2393

Candidate for Certified Hazardous Materials Manager (CHMM)

RCRA Hazardous Waste & Non-Hazardous Waste Management Training Certificate

EPA AHERA Asbestos Building Inspector/ Management Planner, with updates

EPA Lead Inspector

TRAINING

OSHA 40-Hour HAZWOPER

AZTEC TYPSA Group

STEVEN SUTHERLAND, RG, PG, CEM

Hazardous Materials Lead

BACKGROUND

Steve is a Registered Geologist, Certified Environmental Manager, qualified Environmental Professional, AHERA building inspector, and US Environmental Protection Agency Lead Paint Inspector, with over 26 years of experience working in the State of Arizona and Mexico. He is also HAZWOPER and Site Supervisor-certified, and has experience conducting and managing activities in a wide variety of transportation, environmental/ hazardous materials, water resources, and safety-related fields. He is experienced in conducting and managing Phase I/II ESAs following ASTM protocols and has conducted numerous Phase III remedial actions based upon the findings of Phase I/II ESAs. As a portion of his duties, he manages the Due Diligence practice for AZTEC. He also is experienced in brownfields investigations; asbestos, lead-based paint (LBP) and regulated building materials surveys; Resource Conservation and Recovery Act (RCRA) waste determinations and hazardous waste management; Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)/state Superfund investigations & remediation (WQARF); Underground Storage Tank (UST) removal investigations (experienced with new ADEQ reimbursement process); LUST investigations and remediation/risk assessment to closure; environmental compliance audits; management of site safety and generation of health & safety and other plans; surface water and groundwater investigations; various air, soil and groundwater sampling requirements; Indoor Air Quality (IAQ), silica, and mold investigations; data analysis and interpretation; client and regulatory liaison; and report preparation and completion. He has also participated in and managed teams in multiple emergency response actions for hazardous materials spills and railroad derailments.

Mr. Sutherland currently serves as Hazardous Materials Manager for construction of the State Route 202L South Mountain Freeway, a $1.7 Billion-dollar project and the largest single construction project in the history of Arizona.

RELEVANT EXPERIENCE

SR202L South Mountain Freeway P3; Phoenix, AZ (ADOT) 2016 – Present: Hazardous Materials Manager. Mr. Sutherland is currently the Hazardous Materials Manager for the construction of the South Mountain Freeway, with primary tasks associated with pre-construction preparation. This project involves construction of a 22-mile freeway that requires the acquisition of multiple parcels of land. Half of the parcels (11 miles) are developed with residential properties, commercial properties, gas stations, light industrial properties, and heavy industrial properties. To date, work has included: over 120 Phase I ESAs, 8 Phase II ESAs, nearly 40 Demolition Building Surveys (asbestos-LBP-regulated building materials), 40 drywell investigations and closures, two UST removal investigations, two LUST site investigations and remediation (both opened and closed in less than one year), three Phase III remedial investigations (RIs) and site closures, fifteen emergency response actions/spills, and many other related activities that have been managed and conducted by Mr. Sutherland and other staff under his direction. Mr. Sutherland also wrote the project management plans for asbestos, lead-based paint, hazardous materials management and emergency response, and the SPCC plan. As part of Mr. Sutherland's duties, he also conducts SPCC inspections monthly as required.

Cost: $1,754,000 to date (Hazardous Materials activities only)
Reference: Stacy Davis, Pre-Construction Manager, stacy.davis@fluor.com, 703.789.4982

TRAINING CONTINUED

OSHA 8-Hour HAZWOPER Site Supervisor

ID and Safe Transportation of Hazardous Materials (DOT) 49CFR 172

FEMA: Intro to Incident Command Systems (ICS); National Incident Management Systems (NIMS); Advanced Incident Management /Unified Command

AFFILIATIONS

Environmental Professionals of Arizona (EPAZ)

Arizona Hydrological Society (AHS) – Corporate Board Member

Arizona Association of Environmental Professionals (AZAEP) – Phoenix and National

***7th Street and Missouri Avenue WQARF Site Preliminary Investigation (PI), Remedial Investigation (RI), & Early Response Action (ERA); Phoenix, AZ (ADEQ) 2012 - 2018:** Senior Geologist and Arizona Technical Lead. Mr. Sutherland conducted work associated with this site from 2012 to December 2018, where he managed and completed PI field activities and completion of the PI report, documenting the identified source of the contaminants of concern (PCE) beneath a four-story structure with three sub-floor parking levels (a former drycleaner). As part of the PI, multiple monitoring wells were installed and sampled, passive and active soil-gas sampling was conducted on the lowest sub-floor and beyond, soil samples were analyzed, and indoor air quality (IAQ) samples were collected. The site was added to the WQARF registry and remedial investigation activities commenced, building upon the findings during the PI. Primary investigative activities were completed in late 2018, where Mr. Sutherland managed and completed the installation of additional wells in 2017-2018, sampling of the well network using PDB samplers, and conducting additional IAQ sampling. An ERA was also initiated for the impacted soils beneath the structure, where in 2018 Mr. Sutherland managed and oversaw the installation of multiple SVE wells in the sub-floor of the structure using specialized drilling equipment. Significantly PCE-impacted soil and soil vapor was identified during SVE well installs, and Mr. Sutherland oversaw the installation of the SVE system, with system startup in August 2018. Mr. Sutherland conducted regular O&M visits through December 2018.

Cost: $1,235,000
Reference: Arianne Godwin, Project Manager, godwin@pinyon-env.com, 720.974.7711

***Highway 260 and Johnson Lane WQARF Site Remedial Investigation (RI); Pinetop-Lakeside, AZ (ADEQ) 2014 - 2018:** Senior Geologist and Arizona Technical Lead. Mr. Sutherland conducted work associated with this site from 2014 to December 2018, where he managed and completed investigative activities for a PCE-impacted plume associated with a former dry-cleaning operation. This project required significant public outreach, since the majority of activities were conducted offsite and affected both residential and commercial properties. Multiple rounds of IAQ sampling was conducted to evaluate for risk to sensitive populations, and the groundwater sampling network consisted primarily of privately-owned wells. Each well had its unique issues for sample collection, and required multiple methods to obtain samples. Some wells were also still used for drinking water purposes and point of use treatment systems were installed at these select properties, where additional sampling requirements were added to the groundwater sampling events. The geology of the area was also complex, with volcanic-based soils over shallow basaltic bedrock. A well records search did not identify useful geological information. Therefore, in 2018 Mr. Sutherland conducted the installation of two monitoring wells into the basalt and identified that fracture-flow was not the predominant regime for plume migration, but variable highly vesicular basalt allowed the plume to spread. Primary remedial field activities were completed in 2018, and Mr. Sutherland was responsible for technical review of the RI report.

Cost: $547,000
Reference: Arianne Godwin, Project Manager, godwin@pinyon-env.com, 720.974.7711

**Completed at previous firm*

BRENDAN LEACH

ENVIRONMENTAL SCIENTIST

EXPERIENCE
2019 - Present AZTEC

EDUCATION
BS, Environmental Resource Management, Arizona State University, 2019

CERTIFICATIONS/PERMITS
EPA AHERA Asbestos Building Inspector

EPA Lead Inspector

TRAINING
OSHA 40-Hour HAZWOPER

AFFILIATIONS
Environmental Professionals of Arizona (EPAZ)

Arizona Association of Environmental Professionals (AZAEP) – Phoenix and National

BACKGROUND

Mr. Leach is an Environmental Scientist who started his career in 2019 after graduating from Arizona State University with Bachelor of Science in Environmental Resource Management. He has the 40hr- HAZWOPER, AHERA Asbestos Building Inspector and EPA Lead-Based Paint Inspector certifications. He has experience with conducting PISA and Hazmat surveys and reports, asbestos and lead sampling. Mr. Leach also has experience with conducting soil and water sampling. Brendan has conducted several Phase I Environmental Site Assessments for Pima and Maricopa Counties following ATSM protocols.

RELEVANT EXPERIENCE

City of Phoenix Six - Intersections PISA and HAZMAT Surveys
Mr. Leach has completed the City of Phoenix PISA and Hazmat surveys and reports for the six-intersection project where he took samples of concrete and paint and had each sample tested at a National Voluntary Laboratory Accreditation Program. He has also completed several PISA and Hazmat surveys and reports for the Arizona Department of Transportation and the City of Phoenix.

Pima County Phase I Environmental Site Assessment
Mr. Leach completed Phase I Environmental Site Assessments for Pima County land acquisition for the Cypress Climate property where he completed the Site reconnaissance and report.

Arizona Department of Transportation Gila River Bridge PISA and HAZMAT Surveys
Mr. Leach Gila River Bridge Project. For this project, he completed the sampling and evaluation of the samples as well has the report itself.

Arizona Department of Transportation SR-24 Phase I Environmental Site Assessment
Mr. Leach completed a Phase I Environmental Site Assessment for the SR-24 highway expansion. For this project, he conducted the site reconnaissance and completed the phase I Environmental Site Assessment Report.

Arizona Department of Transportation Blue Beacon Phase I Environmental Site Assessment and Building Survey
Mr. Leach completed the “Blue Beacon” Asbestos and Lead-Based Paint Demolition Building Survey for Arizona Department of Transportation (ADOT). For the Building Survey, Mr. Leach Conducted the Site reconnaissance, sampling and reporting of the Site. He also completed Phase I Environmental Site assessment. For the Phase I, he conducted the site reconnaissance and wrote the report.

AZTEC TYPSA Group

Vehicle Detection, Traffic Signal Controllers, Data Improvements, and TMC Central Systems Upgrades - McDowell Road/Litchfield Road/Estrella-Pebble Creek Parkway, Goodyear, AZ

Brendan conducted a PISA and HAZMAT survey for 46 intersections for the City of Goodyear, Arizona. The intersections are a part of the City of Goodyears ITS Strategic Plan, with improvements planned at signalized intersections under three separate projects along McDowell Road, Litchfield Road, and Estrella/Pebble Creek Parkway. The PISA report included A Site reconnaissance of the subject intersections and adjacent properties, reviewing relevant State and Federal environmental databases, generating photographic logs, and the completion of the PISA report. The HAZMAT survey was conducted in the field simultaneously with the reconnaissance for the PISA, and included the collection of samples from those materials anticipated to be impacted as part of the planned improvements and the analysis of the samples for the presence of asbestos-containing materials (ACMs) and Lead-Based Paint (LBP). Mr. Leach's work entailed conducting the site reconnaissance for each intersection, collection of samples for ACM and LBP analysis, data review and interpretation, figure generation, and report completion (separate PISA and HAZMAT reports).

Soil Waste Characterization - Lewis Electrical Substation, Mesa, AZ

Brendan conducted pre-construction soil waste characterization and concrete pad sampling activities at the City of Mesa Lewis Electrical Substation. Mr. Leach collected 14 waste soil determination samples in-situ using a hand auger, compositing soil from 0-3 feet below ground surface from each borehole for the sample collection. The soil samples were collected for waste profiling and eventual disposal of potentially contaminated soil anticipated to be generated from excavations associated with upcoming improvements at the substation. Concrete samples were also collected from large transformer concrete pads and an associated concrete-lined retention basin that will be demolished as part of the planned improvements. The soil and concrete samples were suspected of being impacted by Polychlorinated Biphenyls (PCBs). Mr. Leach's work entailed conducting the site reconnaissance for the substation, collection of soil samples for PCB analysis, collection of concrete samples for PCB analysis, data review and interpretation, figure generation, and report completion.

**Work Completed with Previous Firm*

PREVIOUS WORK EXPERIENCE

Mr. Leach has also worked for Arizona Center for Algae Technology and Innovation (AZCATI) while going to school for his Bachelor of Science in Environmental Resource Management at Arizona State University. While working for Arizona Center for Algae Technology and Innovation (AZCATI), he managed caustic substances such as bleach and hydrochloric acid (HCl).

**Work Completed with Previous Firm*

Appendix G Glossary of Terms

AAI	All Appropriate Inquiry
ACBM	Asbestos Containing Building Material. Any surfacing, thermal systems insulation or miscellaneous material found in or on interior structural members that contains more than one percent asbestos.
ACM	Asbestos Containing Material
ACGIH	American Conference of Governmental Industrial Hygienists
ADEQ	Arizona Department of Environmental Quality
ADFBLS	Arizona Department of Fire, Building, and Life Safety
ADOT	Arizona Department of Transportation
ADWR	Arizona Department of Water Resources
AHERA	Asbestos Hazard Emergency Response Act
AP	Advanced Purchase – Full acquisition of a parcel prior to issuance of the Record of Decision
ASHARA	Asbestos School Hazard Abatement Re-Authorization Act
AST	Above-ground Storage Tank
AUL	Activity and Use Limitation
AZGS	Arizona Geologic Survey
BFPP	Bona Fide Prospective Purchaser
bgs	below ground surface
BTEX	Benzene, Toluene, Ethylbenzene, and Total Xylenes
CAA	Clean Air Act
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act; commonly referred to as Superfund.
CERCLIS	Comprehensive Environmental Response, Compensation and Liability Information System
CESQG	Conditionally Exempt Small Quantity Generator
CORRACTS	RCRA Corrective Action Site

COT	Chain of Title
CREC	Controlled Recognized Environmental Condition
CWA	Clean Water Act
EC	Engineering Control
EPA	Environmental Protection Agency
EPCRA	Emergency Planning and Community Right-to-Know Act
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FEMA	Federal Emergency Management Agency
FIFRA	Federal Insecticide, Fungicide and Rodenticide Act
Hazardous Materials	Hazardous material means any substance, waste, or material determined by any state, federal or local governmental authority to be capable of posing a risk of injury to health, safety and property, including, but not limited to, all substances, wastes and materials designated, defined or listed as hazardous, extremely hazardous or toxic pursuant to the Clean Water Act, 33 USC Sec. 1251, et seq.; Resource Conservation and Recovery Act, 42 USC Sec. 6901 et. seq.; the Comprehensive Environmental Response, Compensation and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 USC Sec. 9601, et. seq.; the United States Department of Transportation Hazardous Material Table, 49 CFR Part 172; regulations of the Environmental Protection Agency, 40 CFR Part 302; or such substances, materials and wastes that are or become regulated under any applicable local, state or federal law, and including any asbestos, petroleum and any petroleum fractions, urea formaldehyde foam insulation, chlorofluorocarbons (CFCs), or polychlorinated biphenyls (PCBs).
Hazardous Substance	Defined by CERCLA. Includes substances designated for special consideration under the CAA, the CWA, or the TSCA, and any hazardous wastes defined under RCRA. EPA can designate additional substances as hazardous if they present substantial danger to health and the environment.
Hazardous Waste	Waste defined in RCRA, which, due to its quantity, concentration, or physical, chemical or infectious characteristics, may present a hazard to human health or the environment.

HREC	Historical Recognized Environmental Condition
LBP	Lead-Based Paint
LLP	Landowner Liability Protections
LQG	Large Quantity Generator. Refers to a generator who generates more than 1,000 kilograms of hazardous waste in a calendar month.
LUST	Leaking Underground Storage Tank
mg/Kg	milligram per kilogram
mg/L	milligram per liter
msl	mean sea level
NESHAP	National Emission Standard for Hazardous Air Pollutants
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NIOSH	National Institute for Occupational Safety and Health
NPDES	National Pollutant Discharge Elimination System
NPL	National Priority List (Superfund sites)
NVLAP	National Voluntary Laboratory Accreditation Program
OTHERHW	Listed RCRA Facilities but do not fit into category of CORRACTS, TSDs, or Generators; includes Transporters, Non-Notifiers, former Generators, and others.
OSHA	Occupational Safety and Health Administration
OU	Operable Unit
PA/SI	Preliminary Assessment/Site Investigation (CERCLA study)
PCB	Polychlorinated biphenyl
pCi/L	Picocurie per liter
PDEQ	Pima County Department of Environmental Quality
PE	Permanent Easement

PEL	Permissible Exposure Limit
PLM	Polarized Light Microscopy, a method of analyzing bulk samples for asbestos.
ppb	Parts-per-billion
ppm	Parts-per-million
RBSL	Risk-Based Screening Level
RECs	Recognized Environmental Conditions
RCRA	Resource Conservation and Recovery Act
RCRA-Viol	RCRA facilities with a reported violation
RCRIS	Resource Conservation and Recovery Information System
RCRIS- TSDC	RCRA TSD facilities subject to corrective action
RFA	RCRA Facility Assessment (RCRA study).
RFI	RCRA Facility Investigation (RCRA study).
RI/FS	Remedial Investigation/Feasibility Study (CERCLA study).
ROD	Record of Decision
ROW	Right-of-Way
RW	Right-of-Way – Full or partial acquisition, typically purchased after the Record of Decision
SCL	State CERCLIS Equivalent Site
SCR	Site Characterization Report
SDWA	Safe Drinking Water Act
SEMS	Superfund Enterprise Management System – replaces CERCLIS Database
SEMSARCH	Superfund Enterprise Management System Archive – replaces CERCLIS NFRAP database
SPILLS	State spills list and federal ERNS list.
SPL	State NPL Equivalent Site

SQG	Small Quantity Generator. Refers to a generator who generates between 100 and 1,000 kilograms of hazardous waste in a calendar month.
SWLF	Solid Waste Landfill
TE	Temporary Easement
TPH	Total Petroleum Hydrocarbons
TRIS	Toxic Release Inventory System
TLV	Threshold Limit Value
TSCA	Toxic Substance Control Act
TSD	Treatment, Storage or Disposal (refers to RCRA facilities).
µg/Kg	microgram per kilogram
µg/L	microgram per liter
USDA	United States Department of Agriculture
USEPA	United States Environmental Protection Agency
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
Viol/Enf	Violations/Enforcement Actions (RCRA)
VSQ	Very Small Quantity Generator