



Resolution Copper Mining, LLC Land Exchange Proposal

August 2015



Resolution Copper Mining, LLC Land Exchange Proposal

August 2015

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ACRONYMS AND ABBREVIATIONS

A.A.C.	Arizona Administrative Code
ACS	American Community Survey
Act	The Southeast Arizona Land Exchange and Conservation Act
ADEQ	Arizona Department of Environmental Quality
ADWR	Arizona Department of Water Resources
AGFD	Arizona Game and Fish Department
ALRIS	Arizona Land Resource Information Systems
amsl	above mean sea level
AMA	Active Management Area
ASLD	Arizona State Land Department
ASTM	American Society for Testing and Materials
bgs	below ground surface
BLM	Bureau of Land Management, US Department of the Interior
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CNF	Coconino National Forest
CO	carbon monoxide
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
FEMA	Federal Emergency Management Agency
Forest Service	Forest Service, US Department of Agriculture
Forest Plan	Tonto National Forest Land and Resource Management Plan
FPPA	Farmland Protection Policy Act
FR	Forest Road
FY	fiscal year
GPO	Resolution Copper Project General Plan of Operations
HDMS	Heritage Database Management System
H.R.	House of Representatives (as in H.R. 687)
IPaC	Information, Planning, and Conservation System
NAAQS	National Ambient Air Quality Standards
NOAA	National Oceanic & Atmospheric Administration
NO ₂	nitrogen dioxide
NRCS	Natural Resources Conservation Service
NWI	National Wetlands Inventory
O ₃	ozone
offered lands	lands to be conveyed to the federal government by Resolution Copper
OMB	Office of Management and Budget
Pb	lead
PILT	Payments in Lieu of Taxes
PL	Public Law
Proposal	Land Exchange Proposal—i.e. this document

Resolution Copper	Resolution Copper Mining, LLC
S.	Senate (as in S. 339)
selected lands	lands to be conveyed to Resolution Copper by the Forest Service
SIP	State Implementation Plan
SO ₂	sulfur dioxide
SPRNCA	San Pedro Riparian National Conservation Area
SR	State Route
TMDL	Total Maximum Daily Load
Town of Superior lands	lands to be conveyed to the Town of Superior by the federal government
TNF	Tonto National Forest
US	United States
USC	US Code
US 60	US Highway 60
USDA	US Department of Agriculture
USFWS	US Fish and Wildlife Service
WRCC	Western Regional Climate Center

UNITS

μm	micrometer(s)
cm	centimeter(s)
ft	foot/feet
gpm	gallons per minute
ha	hectare(s)
km	kilometer(s)
L-s	liters per second
m	meter(s)
mi	mile(s)
PM ^{2.5}	Particulates with an aerodynamic less than or equal to a nominal 2.5 micrometers
PM ¹⁰	Particulates with an aerodynamic less than or equal to a nominal 10
square mi	square mile(s)

1. INTRODUCTION

Resolution Copper Mining, LLC (Resolution Copper) is the operating company and project proponent for a proposed underground mine, ore processing operation, and associated facilities and infrastructure near the Town of Superior in Pinal County, Arizona. This project is described in the Resolution Copper Project General Plan of Operations (GPO; RCM 2014) The Southeast Arizona Land Exchange and Conservation Act (the Act), set forth in Section 3003 of House of Representatives bill 3979 (H.R. 3979), the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015. This bill was signed into law by President Obama on December 19, 2014 as Public Law (PL) 113-291. The Act authorizes, directs, facilitates, and expedites the exchange of land between Resolution Copper and the United States (US). When the land exchange is completed, the surface lands and mineral rights where the mine would be developed and operated would be conveyed into private ownership in exchange for conveying to the US 5,344 acres (2,163 ha) of high-priority conservation lands, which will be under federal stewardship. The language of the Act and associated maps are included in this document as **Appendix A**.

The purpose of this Land Exchange Proposal (the Proposal) is to provide the federal government with material information related to the land exchange. This Proposal was prepared following the standards described in the US Forest Service Land Acquisition Handbook (USFS 2004), US Forest Service Manual on Land Ownership and Exchanges (USFS 2003a), the Bureau of Land Management (BLM), US Department of the Interior Land Exchange Handbook (BLM 2005), and Title 36, Code of Federal Regulations [CFR], Part 254 – Land Ownership Adjustment, Subpart A – Land Exchange (36 CFR part 254, subpart A).

This document provides a review of available baseline data for the various parcels of land involved in the Proposal. These lands include those that would be conveyed to Resolution Copper by the US (the selected lands), those where title or reversionary interest would be conveyed to the Town of Superior by the Secretary of the US Department of Agriculture (Town of Superior lands), and those to be conveyed to the US by Resolution Copper (the offered lands). A portion of the offered lands would be administered by the Forest Service, US Department of Agriculture (Forest Service), whereas the remainder would be administered by the BLM.

The Proposal is organized into four sections and seven appendices as shown in **Table 1.0-1. Section 1** is this Introduction, which describes the purpose of the Proposal, the organization of the document and the project contact information. **Section 2** describes the Act, its conditions and provisions, and includes a listing of the lands involved in the land exchange. **Section 3** provides the available baseline data on the various parcels of selected, Town of Superior, and offered lands material to the land exchange. **Section 4** contains a list of references cited in this Proposal. The Proposal concludes with seven appendices: **Appendix A** contains the language of the Act and associated maps; **Appendix B** contains photographs of all lands involved in the land exchange; **Appendix C** contains mining claim information for those lands involved in the land exchange that contain mining claims; **Appendix D** contains surface water rights for all lands involved in the land exchange; **Appendix E** contains special status species and critical habitat information for all lands involved in the land exchange; **Appendix F** contains information on sensitive

species for all lands involved in the land exchange; **Appendix G** contains a list of encumbrances compiled from available title documents for the offered lands; **Appendix H** contains the available commitments for title insurance documents for the offered lands.

Table 1.0-1. Organization of the Land Exchange Proposal

Section	Explanation / Contents
Section 1. Introduction	The purpose of the Proposal, the organization of the document, and project contact information.
Section 2. The Southeast Arizona Land Exchange and Conservation Act of 2013	Describes the land exchange, lists the lands by whether they are federal (selected), Town of Superior, or non-federal (offered), and by recipient (Resolution Copper, US, Town of Superior). Those to be administered by the Forest Service are also described separately from those to be administered by the BLM.
Section 3. Selected and Offered Lands	Baseline Data on selected lands including Oak Flat. Baseline Data on Town of Superior lands including Fairview Cemetery, Superior Airport Contiguous Parcels, and Superior Airport. Baseline Data on offered lands including those to be administered by the Forest Service—Turkey Creek, Tangle Creek, Cave Creek, East Clear Creek, Apache Leap South End—and those to be administered by the Bureau of Land Management—Lower San Pedro River, Dripping Springs, and Appleton Ranch.
Section 4. References	References
Appendix A. Southeast Arizona Land Exchange and Conservation Act (Section 3003 of 113 H.R. ENR), with Maps	The full text of the land exchange legislation.
Appendix B. Photographs of Properties Involved in the Land Exchange	Photographs of all lands involved in the land exchange.
Appendix C. Mining Claims Information	Mining claim Information for all lands with mining claims that are involved in the land exchange.
Appendix D. Surface Water Rights Table	Table of surface water rights for the all lands involved in the land exchange.
Appendix E. US Fish and Wildlife Service Information, Planning, and Conservation System Online	Special status species and critical habitat information for all of the lands involved in the land exchange.
Appendix F. Arizona Game and Fish Department Heritage Data Management System Online Query	Information on Arizona Game and Fish sensitive species for all of the lands involved in the land exchange.
Appendix G. Encumbrances from Title Documents for Offered Lands	A compilation of encumbrances as found in available title documents for the offered lands.
Appendix H. Title Documents for Offered Lands	Commitments for title insurance documents on offered lands.

1.1. PROJECT CONTACT INFORMATION

The project proponent can be contacted at:

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2. THE SOUTHEAST ARIZONA LAND EXCHANGE AND CONSERVATION ACT

The Act authorizes, directs, facilitates, and expedites the exchange of land between Resolution Copper and the US. When the land exchange is completed, the surface lands and mineral rights where the mine would be developed and operated would be in private ownership held by Resolution Copper. Subject to the provisions of the Act, the land exchange involves three different categories of land that are classified here as selected, offered, and Town of Superior lands (**Figure 2.0-1**). The selected lands comprise the Forest Service lands in and around Oak Flat that would be conveyed to Resolution Copper. The offered lands comprise the privately owned lands that would be conveyed to the US by Resolution Copper. The Town of Superior lands comprise several parcels that would be conveyed to the Town of Superior by the US, along with the federal reversionary rights to another parcel of land already owned by the town. The conveyance of the federal reversionary interest removes current restrictions on this parcel that allow it to be used only for airport purposes.

Finally, the Act authorizes the creation and federal management of the Apache Leap Special Management Area. This area comprises mostly Forest Service-administered land but would also include three parcels of offered lands to be conveyed to the US by Resolution Copper as well as mineral claims that the company would forego.

2.1. BACKGROUND

Since 2005, various forms of the Southeast Arizona Land Exchange and Conservation Act have been submitted to Congress. The purpose of this Act in all its forms has been to consolidate the holdings of Resolution Copper in the area of the proposed mining operations. The most recent version of the Act, H.R. 687, was introduced to the US House of Representatives on February 14, 2013 by Representatives Paul Gosar, Ann Kirkpatrick, Matt Salmon, David Schweikert, and Trent Franks, where it was referred to the House Committee on Natural Resources. At the same time an identical bill, Senate (S.) 339, was introduced in the US Senate by Senators John McCain and Jeff Flake, and was referred to the Committee on Energy and Natural Resources. The House Committee on Natural Resources advanced H.R. 687, to the full US House of Representatives on May 15, 2013. The final version of the Act was passed by the 113th Congress as Section 3003 of H.R. 3979 – the Carl Levin and Howard P. "Buck" McKeon National Defense Authorization Act for Fiscal Year 2015. The US House of Representatives passed the bill on December 4, 2014; the US Senate passed it on December 12, 2014. President Obama signed the bill into law as part of PL 113-291 on December 19, 2014.

2.2. LANDS INVOLVED IN THE LAND EXCHANGE

The various parcels involved in the land exchange are listed in **Table 2.2-1** below, along with their size in acres, their location, their current and post-exchange land status, and their land exchange category.

Table 2.2-1. Land status, size and location of exchange parcels

Parcel	County	CURRENT Land Status	POST-EXCHANGE Land Status	Acres
SELECTED LANDS				
Oak Flat (Federal Land) Oak Flat Withdrawal Area (including the 50-acre Oak Flat Campground)	Pinal	Forest Service	Resolution Copper	760
Other Oak Flat Acreages	Pinal	Forest Service	Resolution Copper	1662
TOTAL US Land to Resolution Copper				2,422
TOWN OF SUPERIOR LANDS				
Fairview Cemetery	Pinal	Forest Service	Town of Superior	30
Superior Airport Contiguous Parcels	Pinal	Forest Service	Town of Superior	250
Superior Airport	Pinal	Town of Superior with federal reversionary interest	Town of Superior; reversionary interest conveyed to Town	265
TOTAL US Land and Reversionary Interest to the Town of Superior				545
OFFERED LANDS				
Turkey Creek (JX Ranch)	Gila	Resolution Copper	Forest Service	147
Tangle Creek (LX Bar Ranch)	Yavapai	Resolution Copper	Forest Service	148
Cave Creek (6L Ranch)	Maricopa	Resolution Copper	Forest Service	149
East Clear Creek	Coconino	Resolution Copper	Forest Service	640
Apache Leap South End	Pinal	Resolution Copper	Forest Service	110
Subtotal Private Lands to US for administration by the Forest Service				1,194
Lower San Pedro River (7B Ranch)	Pinal	Resolution Copper	BLM	3,050
Dripping Springs	Gila, Pinal	Resolution Copper	BLM	160
Appleton Ranch	Santa Cruz	Resolution Copper	BLM	940
Subtotal Private to US for administration by the BLM				4,150
TOTAL Private Lands to US				5,344
APACHE LEAP SPECIAL MANAGEMENT AREA				
Apache Leap Withdrawal Area ¹	Pinal	Forest Service	Forest Service all mining and other claims to be surrendered	697
Apache Leap South End ²	Pinal	Resolution Copper	Forest Service	110
TOTAL Apache Leap Special Management Area				807

¹ This is the part of Apache Leap that is already federal, but within which Resolution Copper would surrender all mining claims and interests. This parcel plus the 110 acres of the Apache Leap South End parcels would make up the Apache Leap Special Management Area.

² Apache Leap South End is included in Offered Lands.

2.3. SELECTED LANDS

The selected lands consist of the 2,422-acre (980-ha) Oak Flat parcel, currently owned by the Forest Service. In the Act, this parcel is referred to as the “federal land.” Resolution Copper holds unpatented mining claims that cover about 75 percent of the parcel. The remaining 25 percent consists of the 760-acre (308-ha) Oak Flat Withdrawal Area (**Figure 2.3-1; Appendix A, Map pages 1, 2, & 5–10 of 12**). Public Land Order 1229, which was signed on September 27, 1955, withdrew the Oak Flat Withdrawal Area and various other Forest Service lands in Arizona from “all forms of appropriation under the public land laws, including the mining but not the mineral-leasing laws” and reserved these lands for use as campgrounds, recreation areas, or for other public purposes (20 FR 7226 1955; Andahl 1955). Similar Public Land Orders were executed across the country at the same time to protect capital investments in campgrounds, lighthouses, airstrips, and other infrastructure. In 1971 Public Land Order 1229 was modified by Public Land Order 5132 (36 FR 19029), which opened up the withdrawn lands to all forms of appropriation applicable to Forest Service Lands, except under the US mining laws. In these documents, the Oak Flat Withdrawal Area is referred to as the “Oak Flat Picnic and Camp Ground [or Campground].”

The Oak Flat Withdrawal Area includes a 50-acre (20-ha) campground referred to in the Act as the “Oak Flat Campground,” that has 16 separate camp sites (**Figure 2.3-1; Appendix A, Map pages 1, 2, & 5–10 of 12**). The Act differentiates the campground from the Oak Flat Withdrawal Area as a whole because restrictions regarding permits and public access differ between the two areas. For example, Resolution Copper shall agree to provide access to the surface of the Oak Flat Campground to members of the public, including Indian tribes, to the maximum extent practicable, until it is no longer safe. A recreational access plan will be developed during NEPA to satisfy this provision of the Act. This provision and other differences between the two areas are discussed further under **Section 2.7**. The Act authorizes transfer of the entire Oak Flat parcel, including the Oak Flat Withdrawal Area (and therefore the 50-acre [20-ha] campground) to Resolution Copper.

2.4. TOWN OF SUPERIOR LANDS

The Town of Superior’s ability to expand is constrained because it is almost completely surrounded by public lands. In addition to the exchange of land between Resolution Copper and the US, approximately 280 acres (113 ha) of Forest Service-administered land would be conveyed to the Town of Superior, along with the federal reversionary interest to a 265-acre (107-ha) Superior Airport parcel that the Town of Superior already owns (**Figure 2.3-1; Appendix A, Map pages 1, 2, & 5–10 of 12**). The Forest Service-administered lands to be conveyed to the Town of Superior include a 30-acre (12-ha) parcel known as the Fairview Cemetery and 250 acres (101 ha) contained in four parcels known as the Superior Airport Contiguous Parcels. The Superior Airport parcel was originally owned by the federal government, was then deeded to Pinal County, and subsequently conveyed to Superior with the condition that it could only be used as an airstrip. Any other use would cause the property to revert to the US (the reversionary interest). As part of the land exchange, the federal reversionary interest would be removed, after which time the parcel could be used for non-airport purposes.

2.5. OFFERED LANDS

The Act would convey a total of 5,344 acres (2,163 ha) of privately owned land to the US (the offered lands). The offered lands include 1,194 acres (483 ha) to be conveyed to the Secretary of Agriculture for administration by the Forest Service, that include the Turkey Creek, Tangle Creek, Cave Creek, East Clear Creek, and Apache Leap South End parcels; and 4,150 acres (1,379 ha) to be conveyed to the Secretary of the Interior for administration by the BLM including the Lower San Pedro River, Dripping Springs, and Appleton Ranch parcels (**Figure 2.0-1; Table 2.2-1**).

2.5.1. LANDS TO BE ADMINISTERED BY THE FOREST SERVICE

The Turkey Creek property, also known as the JX Ranch, is a 147-acre (59-ha) parcel of privately owned land located about 8 mi (13 km) southeast of Pleasant Valley in Gila County, Arizona. The parcel is completely surrounded by TNF lands (**Figure 2.5-1; Appendix A, Map page 12 of 12**). The property contains an 1880s-era homestead, and in addition to this historical property is important for its varied wildlife, which includes elk, mule deer, bear, and native fish. Turkey Creek is within the proposed critical habitat for the Mexican spotted owl, and provides potential habitat for bald eagles and for the Chiricahua leopard frog, a federally listed threatened species.

The Tangle Creek property is a 148-acre (60-ha) parcel of privately owned land located in Bloody Basin about 35 mi (56.3 km) north of Cave Creek and Carefree in Yavapai County, Arizona. The property is completely surrounded by TNF lands (**Figure 2.5-2; Appendix A, Map page 11 of 12**). The property, which was homesteaded in the 1890s, features varied vegetation much of which is of considerable age, and provides opportunities for hiking, camping, and other recreational activities.

The Cave Creek property, also known as the 6L Ranch, is a 149-acre (60-ha) parcel of privately owned land located about 7 mi (11.3 km) north of Cave Creek in Maricopa County, Arizona. The property is completely surrounded by TNF lands (**Figure 2.5-3; Appendix A, Map page 3 of 12**). The Cave Creek riparian corridor, with its diverse vegetation and wildlife, runs through the center of the property. Prehistoric petroglyphs and grinding areas have been noted on the property, although very few formal archaeological surveys have been conducted.

The East Clear Creek property is a 640-acre (259-ha) parcel of privately owned land located north of Payson in Coconino County. The property is completely surrounded by Coconino Forest lands (**Figure 2.5-4; Appendix A, Map page 4 of 12**). The portion of East Clear Creek that runs through the property contains both riparian and aquatic ecosystems. Wildlife trails demonstrate that East Clear Creek Canyon and its secondary canyons provide wildlife transition zones between the plateau and riparian ecosystems.

The Apache Leap South End property is a 110-acre (45-ha) parcel of privately owned land located south east of the Town of Superior in Pinal County. The property is bounded on the east by TNF lands (**Figure 2.5-5; Appendix A, Map page 2 & 9 of 12**). The scenic Apache Leap escarpment above the Town of Superior runs through portions of the property.

2.5.2. LANDS TO BE ADMINISTERED BY THE BUREAU OF LAND MANAGEMENT

The Lower San Pedro River property (sometimes referred to as the 7B Ranch) comprises 3,050 acres (1,234 ha) of riparian habitat located along 7 mi (11.3 km) of the San Pedro River in Pinal County near Mammoth, Arizona (**Figure 2.5-6; Appendix A, Map page 1 of 3**). This property would transfer to the BLM and expand the conservation acreage along the river's northern corridor. Conservation areas are critical to preserving the San Pedro River, one of the most important riparian habitats in the Sonoran and Chihuahuan deserts. The property includes a high-quality mesquite bosque, believed to be one of the largest bosques remaining in the Southwest. Approximately 40 miles (64 km) encompassing 58,000 acres (23,472 ha) of the upper San Pedro corridor was designated as the San Pedro Riparian National Conservation Area (SPRNCA) by the US Congress in November of 1988. Bringing the Lower San Pedro River property under Federal protection and stewardship would expand the conservation acreage along San Pedro River's northern corridor, providing important habitat protection in these crucial lower reaches.

The Dripping Springs property is a 160-acre (65-ha) parcel of privately owned land located in Gila and Pinal counties near Tam O'Shanter Peak. The parcel is almost completely surrounded by BLM-owned lands, with some ASLD-administered state trust lands along the western portion of the parcel's southern boundary (**Figure 2.5-7; Appendix A, Map page 2 of 3**). This property could provide a significant rock climbing resource.

The Appleton Ranch property comprises a 940-acre parcel inside the Appleton-Whittell Research Ranch and Las Cienegas National Conservation Area in Santa Cruz County near Elgin, Arizona that would be conveyed to the BLM (**Figure 2.5-8; Appendix A, Map page 3 of 3**). The research ranch is a cooperative partnership among the National Audubon Society, Forest Service, BLM, and the Research Ranch Foundation. Las Cienegas National Conservation Area was established in December of 2000 by the US Congress. Incorporation of this 940-acre (380-ha) property under federal stewardship would eliminate private ownership of parcels within and adjacent to the conservation area. Ongoing studies on the research ranch in multiple disciplines are contributing to the preservation and responsible stewardship of grassland ecosystems across the Southwest.

2.6. APACHE LEAP SPECIAL MANAGEMENT AREA

Additional provisions of the Act include the creation of an 807-acre (327-ha) Apache Leap Special Management Area along the scenic escarpment above the Town of Superior (**Figure 2.5-5; Appendix A, Map page 2 of 12**). This management area would be made up of a 697-acre (282-ha) Apache Leap property already administered by the Forest Service (the Apache Leap Withdrawal Area), and a 110-acre (45-ha) Apache Leap South End parcel that would be conveyed to the Secretary of Agriculture for administration by the Forest Service by Resolution Copper. As a condition of the land exchange, Resolution Copper would surrender all rights held under mining and other laws to commercially extract

minerals under the 807-acre Apache Leap Special Management Area. The Apache Leap Special Management Area would be managed and protected by the Forest Service.

2.7. CONDITIONS AND PROVISIONS

Various federal laws and conditions and provisions of the Act govern how the land exchange will take place, and how the various properties will be managed before and after the exchange occurs. The most important provisions are summarized below; for a complete listing of conditions and provisions please see the text of the Act (**Appendix A**).

- Title to the offered lands must be in a form that is acceptable to the Secretary of the US Department of Agriculture or Secretary of the Interior as appropriate, and conform to the title approval standards of the US Attorney General applicable to land acquisitions by the federal government.
- An independent appraisal process will be followed for all properties involved in the land exchange that will be directed, managed, and approved by the US Secretary of Agriculture. Specific conditions governing the process, including the appropriate laws and statutes to be followed, the qualifications of the appraisers, and various other details are covered in the text of the Act.
- If the value of the federal lands (the selected lands) is determined to be higher than the value of the Resolution Copper lands (the offered lands), Resolution Copper will make up the difference, either through a payment to the US or a conveyance of additional lands. Any such amounts received by the US under would be deposited in the fund established under PL 90–171 (the “Sisk Act”; 16 US Code [U.S.C.] 484a) and would be made available to acquire land or interests in land in Region 3 of the Forest Service. If the value of the offered lands exceeds that of the selected lands, no payment would be made to Resolution Copper by the US, and the exceedance in value would be considered to be a donation to the US by Resolution Copper.
- The appraisal shall include a detailed income capitalization approach analysis of the market value of the federal land which shall be the basis for calculation of any payments under the Value Adjustment Payment to the US. In any year that the cumulative production of valuable locatable minerals produced in commercial quantities from the Oak Flat parcel exceeds the quantity of production used in the income capitalization approach, Resolution Copper shall pay to the US a value adjustment payment for the quantity of the excess production.
- The Secretary of the US Department of Agriculture shall engage in government-to-government consultation with affected Indian tribes concerning issues of concern to the affected Indian tribes related to the land exchange. Following these consultations, the Secretary of the US Department of Agriculture shall consult with Resolution Copper and seek to:
 - Find mutually acceptable measures to address the concerns of the affected Indian tribes; and

- Minimize the adverse effects on the affected Indian tribes resulting from mining and related activities on the selected lands.
- Subject to reasonable terms and conditions, Resolution Copper would be able to request and receive a special use permit to carry out mineral exploration activities under the Oak Flat Withdrawal Area from existing drill pads located outside the Area, if the activities would not disturb the surface of the Area, or to carry out mineral exploration activities within the Oak Flat Withdrawal Area (but not within the Oak Flat Campground), if the activities are conducted from a single exploratory drill pad located to reasonably minimize visual and noise impacts to the Campground. Authorization for such permits would continue until the Oak Flat Withdrawal Area is conveyed to Resolution Copper.
- Except as otherwise provided in the Act, the Secretary of the Department of Agriculture shall carry out the land exchange in accordance with the requirements of NEPA. Prior to conveying federal land under this section, the Secretary shall prepare a single environmental impact statement under NEPA, which shall be used as the basis for all decisions under federal law related to the proposed mine and the Resolution Copper mine plan of operations. Among other assessments, the environmental impact statement shall assess the effects of the mining and related activities on the selected land on cultural and archeological resources, and shall identify measures that may be taken, to the extent practicable, to minimize potential adverse impacts on those resources. Resolution Copper would pay all costs that are associated with the land exchange and any environmental review document.
- Subject to valid existing rights, Apache Leap and any land acquired by the US as part of the land exchange, are withdrawn from all forms of entry, appropriation, or disposal under the public land laws; location, entry, and patent under the mining laws; and disposition under the mineral leasing, mineral materials, and geothermal leasing laws.
- Lands acquired by the Secretary of the Department of Agriculture shall become part of the national forest in which the land is located. Land acquired by the Secretary of the Department of the Interior shall be managed as follows:
 - The Lower San Pedro property will be added to and administered as part of the San Pedro National Conservation Area. The management plan for the San Pedro National Conservation Area will be updated to reflect the requirements of the acquired land within two years.
 - The Dripping Springs property shall be managed in accordance with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) and applicable land use plans.
 - The Appleton Ranch property shall be added to and administered as part of the Las Cienegas National Conservation Area.
- The Apache Leap Special Management Area will be established by the Secretary of the Department of Agriculture to preserve the natural character of Apache Leap; to allow for

traditional uses of the area by Native American people; and to protect and conserve the cultural and archeological resources of the area. As a condition of the land exchange, Resolution Copper shall surrender to the US, without compensation, all rights held under the mining laws and any other law to commercially extract minerals under Apache Leap. Subject to any terms and conditions that the Secretary of the Department of Agriculture might require, authorized activities in the special management area include: the installation of seismic monitoring equipment to protect the resources within the area; installation of fences, signs, or other measures necessary to protect the health and safety of the public; and the operation of an underground tunnel and associated workings as described in the Resolution Copper mine plan of operations. In consultation with affected Indian Tribes, the Town of Superior, and Resolution Copper, the Secretary of the Department of Agriculture will prepare a management plan for the Apache Leap Special Management Area within three years.

- Resolution Copper may notify the Secretary of Agriculture in writing if it elects to withdraw from the land exchange pursuant to section 206(d) of the Federal Land Policy and Management Act of 1976, as amended (43 U.S.C. 1716(d)). As a condition of conveyance of the federal land, Resolution Copper shall agree to provide access to the surface of the Oak Flat Campground to members of the public, including Indian tribes, to the maximum extent practicable, consistent with health and safety requirements, until such time as the operation of the mine precludes continued public access for safety reasons, as determined by Resolution Copper.

Nothing described in the Act under the rights of Resolution Copper shall interfere with, limit, or otherwise impair, the unpatented mining claims or rights currently held by Resolution Copper on the selected lands, or in any way change, diminish, qualify, or otherwise impact Resolution Copper's rights and ability to conduct activities on the selected land under such unpatented mining claims and the general mining laws of the US, including the permitting or authorization of such activities.

3. SELECTED, TOWN OF SUPERIOR, AND OFFERED LANDS

3.1. INTRODUCTION

This section provides a summary of the best currently available baseline information regarding the selected, Town of Superior, and offered lands. A brief description of the methods used to compile the various types of data is provided below. Following the methods, the available data on climate and air quality; topography, physiography, and geology; water; soils; land use; wildlife; vegetation; cultural resources; hazardous materials, visual resources; and socioeconomic resources are presented for each property.

3.2. METHODS

3.2.1. CLIMATE AND AIR QUALITY

The National Oceanic & Atmospheric Administration's (NOAA) National Climatic Data Center and the Western Regional Climate Center (WRCC) maintain data records for weather stations in the region. Climate summaries for each parcel are presented using data from the WRCC website (WRCC 2015). Weather stations were selected to represent each parcel based on elevation and distance. Weather conditions in this region are strongly influenced by elevation; therefore, these data are primarily based on the weather station closest in elevation rather than closest by distance.

The Environmental Protection Agency (EPA) has issued National Ambient Air Quality Standards (NAAQS) for seven "criteria pollutants": carbon monoxide (CO), sulfur dioxide (SO₂), particulates with an aerodynamic diameter less than or equal to a nominal 10 µm (PM₁₀), particulates with an aerodynamic diameter less than or equal to a nominal 2.5 µm (PM_{2.5}), ozone (O₃), nitrogen dioxide (NO₂), and lead (Pb). The Clean Air Act requires that each state develop a State Implementation Plan (SIP) describing how these standards will be met. Geographic areas in which air quality meets the NAAQS set for each pollutant are considered in *attainment*, whereas areas where such standards are not met are designated as *nonattainment* areas. Once an area is redesignated to attainment, it then qualifies as a *maintenance* area. The state is required to document continued compliance of maintenance areas with NAAQS.

In addition to implementing NAAQS for criteria pollutants, EPA regulates stringent visibility standards for 156 national parks and wilderness areas designated by Congress as Class I areas (ADEQ 2011). The Clean Air Act mandates the reduction of man-made visibility impairment in all Class I areas for the protection of their scenic values. To reach national visibility goals, the EPA has adopted Regional Haze Rules requiring states to develop a SIP aimed at reducing emissions from sources that have the potential to contribute to visibility impairment in federal Class I areas (ADEQ 2011).

In Arizona, air permitting and the development of SIPs is generally regulated by the Arizona Department of Environmental Quality (ADEQ) under the EPA's delegation of authority to the states. All parcels were evaluated to determine their attainment, nonattainment, or maintenance status for the seven criteria

pollutants as defined geographically by the Air Quality Division of ADEQ. Parcels were also reviewed to ascertain if they were within a federal Class I park or wilderness area.

3.2.2. TOPOGRAPHY, PHYSIOGRAPHY, AND GEOLOGY

The geology summaries presented in this proposal are based on a review of topographic and geologic maps cited in each parcel's section. Detailed mapping and field sampling has been completed for the 2,422 acres of selected lands as detailed in the mine plan of operations (RCM 2014). Digital data for the geologic map review and map unit descriptions used in the text are based on the published state geologic map by Richard et al. (2000), unless otherwise noted.

3.2.2.1. *Mineral Resources*

A mineral assessment is required by the BLM as outlined in BLM Manual MS-3060.11 (BLM 1994), see also USFS 2004 for all non-federal and federal lands identified for acquisition or conveyance by the US. The mineral report generally documents the mineral potential of the federal land, estimates the value of the mineral resource, evaluates surface uses that would interfere with potential development of the mineral resource, and recommends action that should be taken toward disposal or retention of the federal mineral estate. Estimates of the value of the mineral resource from the mineral report should be considered in establishing market value in appraisals of land exchange property (BLM 1994). As noted in **Section 2.7** the conditions and provisions of the Act also state that the appraisal shall include a detailed income capitalization approach analysis of the market value of the federal land which shall be the basis for calculation of any payments under the Value Adjustment Payment to the US. In any year that the cumulative production of valuable locatable minerals produced in commercial quantities from the Oak Flat parcel exceeds the quantity of production used in the income capitalization approach, Resolution Copper shall pay to the US a value adjustment payment for the quantity of the excess production.

No mineral reports have been completed for any of the parcels to date, but will be, prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange (**Appendix A**).

Real property carries with it certain rights that can be owned. Two of these rights are commonly referred to as the surface estate and the mineral estate. For any given property, a single entity can own both estates, creating what is commonly referred to as *whole estate*, or different entities can own either estate independently of the other, creating what is commonly referred to as *split estate*.

A mining claim is a parcel of land for which the claimant has asserted a right of possession and the right to develop and extract a discovered, valuable, mineral deposit. Mining claims are staked on locatable minerals on public domain lands and recorded with the state and appropriate BLM state office. This creates a split estate of unpatented land, with the claim holder owning the mineral estate and the surface estate belonging to the US. A *patent* is a parcel of claimed mineral-rich public land which the federal government sold to the claim holder. A patent, or patented claim, is no longer public land; both the land and the minerals contained in it become the property of the patent holder. Owners of patented land own the whole estate (surface and mineral rights).

The Act stipulates that any lands acquired by the US through the land exchange (the offered lands) would be withdrawn from all forms of location, entry, and patent under the mining laws; and disposition under the mineral leasing, mineral materials, and geothermal leasing laws. For the selected lands, restrictions from mining to the Oak Flat Withdrawal Area would be lifted, and Resolution Copper would be allowed to mine in that area.

The BLM's Legacy Rehost System (LR2000; BLM 2015a) was queried over several days in March 2015 for information on active mining claims issued within each parcel. The database query returns all mining claims located in a specified geographic area, defined for this proposal using the Public Land Survey System. The precision of the query is not detailed enough to determine if the mining claim is definitively within a parcel's boundary; it only reports those claims that are located within the same section quadrant in which the parcel occurs. The only way to determine an actual claim location is to obtain the County Recorder Location Notice and amendments for the claim in question, study the mapped location, and then find the location marker on the ground. Therefore, all mining claim information presented in this proposal should be considered preliminary in nature and should be field verified.

3.2.3. WATER

3.2.3.1. *Surface Water*

Section 33.43c of the US Forest Service Land Acquisition Handbook, in reference to land exchange parcels, states "both federal and non-federal lands shall be inspected and evaluated for wetlands in accordance with Executive Order 11990 issued May 24, 1977 (E.O. 11990) and for floodplains in accordance with Executive Order 11988 issued May 24, 1977 (E.O. 11988) (Forest Service Manual 2527)" (USFS 2004).

Each parcel was evaluated for wetland and floodplain occurrence based on a review of topographic maps, the US Fish and Wildlife Service (USFWS) National Wetland Inventory (NWI) map, and a review of Federal Emergency Management Agency (FEMA) flood zone maps. Where noted, some parcels were evaluated in stand-alone floodplains and wetlands analysis reports that included field investigations in addition to NWI and FEMA flood zone map reviews.

3.2.3.1.1. *Surface Water Rights*

Surface water rights associated with each parcel were determined using the ADWR online query of surface water rights. These data are reproduced as **Appendix D**.

3.2.3.2. *Groundwater*

Groundwater conditions for selected lands are summarized from the Resolution Copper GPO (2014).

Groundwater descriptions for offered lands were prepared based on review of available data from the Arizona Department of Water Resources (ADWR). The well registry database (ADWR 2013) was used to obtain data within a 1-mi (1.6-km) buffer of parcel boundaries, unless otherwise noted. Well data were

of variable quality and completeness, but were used to find water level trends for each parcel. Groundwater quality descriptions were summarized if available.

3.2.4. SOILS

Soils information was drawn from two different sources, depending upon the most updated information available. For some properties the Arizona Land Resource Information System (ALRIS) General Soil Map was used. This map provides a compilation of US Department of Agriculture, Soil Conservation Services, and University of Arizona Experimental Station data (ALRIS 1975). Data from the digital General Soil Map were reviewed for each parcel and used to prepare a soil description summary. For other properties, the Web Soil Survey (WSS) was used (Soils Survey Staff 2015). The WSS provides soil data and information produced by the National Cooperative Soil Survey. It is operated by the USDA Natural Resources Conservation Service (NRCS).

3.2.5. LAND USE

3.2.5.1. *Access and Recreation*

Access to each parcel was described using a combination of online mapping services and GIS data available from ALRIS 2015, as well as written reports about each parcel, if available. The recreational opportunities associated with each parcel were determined using online searches of the respective BLM and Forest Service regional and district offices.

3.2.5.2. *Agriculture and Grazing*

The Farmland Protection Policy Act (FPPA) states that “the purpose of the Act is to minimize the extent to which federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses.” The FPPA requires identification of proposed actions that would affect any land classified as prime or unique farmland before federal agency approval of any activity that would convert farmland (7 C.F.R. § 658).

Prime farmland is land that has the best combination of physical and chemical characteristics for producing food, feed, forage, fiber, and oilseed crops, and is available for these uses (the land could be cropland, pastureland, rangeland, forestland, or other land, but not urban built-up land or water). Land used for a specific high-value food or fiber crop is classified as unique farmland (Soil Survey Staff 2015). The Natural Resources Conservation Service (NRCS), part of the US Department of Agriculture (USDA), administers the FPPA as it relates to protection of farmland.

Each of the parcels involved in the land exchange was researched to determine if it contained unique or prime farmlands. Areas of prime and unique farmland within each parcel were identified from soil survey data (Soil Survey Staff 2015). Parcels were also reviewed for the presence of water-delivery systems also associated with prime and unique farmland.

Grazing allotments in Arizona are managed by the BLM, Forest Service, and ASLD. Each of the offered and selected parcels was researched to determine if a grazing allotment was attached to the parcel. BLM allotments were researched through their online Rangeland Administration System (BLM 2015b), whereas Forest Service allotments were researched through the online Forest Service, Region 3, Regional GIS Coordinator (AGFD 2015b).

3.2.5.3. *Public Lands Management*

The public lands management within and surrounding each parcel was determined by viewing land ownership maps of each parcel and its vicinity. Land ownership and management before and after the land exchange was determined using a combination of online public records searches, the language in the Act, and online searches of the respective BLM and Forest Service management plans.

3.2.5.4. *Encumbrances*

Encumbrances associated with each parcel include easements, rights of way, and other deed restrictions. These were identified from title documents provided by Resolution Copper. Encumbrances are listed in **Appendix G**, and the title documents are provided as **Appendix H**.

3.2.6. WILDLIFE

The occurrence of potential wildlife linkages in the vicinity of each parcel was determined using the GIS database from CorridorDesign (Majka et al. 2007).

The potential for different wildlife species to occur on each parcel was determined by two methods:

1. For those parcels where a site visit had been conducted, the wildlife present on each of the offered and selected parcels was taken from the site visit report.
2. For those parcels where a site visit had not been conducted, the description of the wildlife with potential to be present was determined by using the description of that biotic community as described in Brown (1994).

Biotic communities are regional plant and animal associations within recognizable provinces that are characterized by particular species of plants and animals.

3.2.6.1. *Special Status Species*

A preliminary screening analysis was conducted to determine the potential for occurrence of any special status species in any of the selected or offered parcels. Special status species are those currently listed by the USFWS as endangered, threatened, proposed for listing, or candidate for listing (listed species) under the Endangered Species Act (ESA) or considered as sensitive species by the Forest Service or the BLM. Sensitive species on Forest Service lands are those species whose populations are of some concern because of overall declines or risks from land management activities in that region. These species are designated by the Regional Forester with the requirement that management activities do not contribute

to declines in the species that might affect population viability. Sensitive species on BLM lands are selected to focus management on species that may be declining or for which habitat may be limited or susceptible to alteration.

The screening analysis also determined if designated or proposed critical habitat for USFWS-listed species was located within or in the vicinity of each parcel (**Appendix E**).

The principal resources used to inform the screening analysis included: 1) the Official Species List from USFWS Information, Planning, and Conservation System (IPaC) tool to identify listed species that have the potential to occur (**Appendix E**); and 2) the results of an Arizona Game and Fish Department (AGFD) Heritage Database Management System (HDMS) on-line environmental review tool query to identify sensitive species that have the potential to occur (**Appendix F**).

This information was used in a screening analysis to identify species potentially occurring on or near the parcels for further evaluation, as well as to eliminate those that were unlikely to occur. Additional literature research was conducted and summarized for those species with known ranges and habitat requirements close to the parcels or which have a high likelihood of occurring there. A complete screening analysis for each of the offered and selected parcels would be conducted, where necessary, during the NEPA process. Species specific surveys may be recommended for some species to further evaluate potential for occurrence within each parcel.

3.2.7. VEGETATION

The vegetation present on each of the offered and selected parcels was described using the biotic community approach (Brown 1994). Biotic communities are regional plant and animal associations within recognizable provinces that are characterized by particular species of plants and animals. For those parcels where a site visit had been conducted, the description of the biotic communities present was taken from the site visit report. For those parcels where a site visit had not been conducted, the description of the biotic communities present was determined by first mapping the parcel onto the Biotic Community Map of Arizona (Brown and Lowe 1980), and then using the description of that biotic community as described in Brown (1994). For those properties with vegetation suspected to be disturbed, or to have non-native or landscaped vegetation, a Google™ image search was undertaken for that parcel, and the introduced vegetation was described from the photographs generated from that search. Special status plant species were researched and reported as described for special status wildlife species.

3.2.8. CULTURAL RESOURCES

Information on cultural resources for the parcels derives from archival research using the following data sources: archaeological survey reports; AZSITE archaeological site database; General Land Office plat maps; and historical USGS quadrangle maps. For the selected lands the USGS quadrangle maps include: the 1902 Florence 30' quadrangle, the 1949 Picketpost Mountain 7.5' quadrangle, and the 1949 Superior 7.5' quadrangle. For the offered lands the quadrangles include the 1948 Mammoth 15'

quadrangle, 1949 Mammoth 7.5' quadrangle, 1949 Lookout Mountain 7.5' quadrangle, 1948 and 1949 Clark Ranch 7.5' quadrangles, the 1910 Ray 15' quadrangle, the 1964 Hayden 7.5' quadrangle, the 1948 O'Donnell Canyon 7.5' quadrangle, and the 1948 Fort Huachuca SW 7.5' quadrangle.

Resolution Copper is offering three parcels of privately owned lands that would be administered by the BLM: Lower San Pedro River; Dripping Springs; and Appleton Ranch. The BLM *Land Exchange Handbook, H-2200-1* (H-2200-1; BLM 2005) requires an inventory of cultural resources of the non-Federal lands as well as federal lands to evaluate how the resources being gained compare to those that would be lost, and to comply with other laws.

The identification of cultural resources (including traditional cultural properties) within the Apache Leap Special Management Area will be a central part of the management plan to be developed for this area. The Act identifies the protection and conservation of cultural and archeological resources as one of the three main purposes for this area, and further specifies the necessity of determining whether additional measures are required to protect the cultural, archaeological, or historical resources of Apache Leap. The management plan is to be developed in consultation with affected Indian Tribes and other stakeholders.

3.2.9. HAZARDOUS MATERIALS

Section 33.43b of the US Forest Service Land Acquisition Handbook, in reference to land exchange parcels, states that both federal and non-federal lands shall be inspected for hazardous substances, materials, and petroleum products (USFS 2004).

Most, but not all, of the parcels have been inspected for potential hazardous substances through Phase I Environmental Site Assessments. In conformance with American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527, or with *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property*, E 2247. The assessment involves site reconnaissance, review of public agency records and applicable federal, state and local records, and personal interviews.

3.2.1. VISUAL RESOURCES

The BLM and Forest service must consider the scenic values of public land for use in land-use planning and management efforts, and require the inventory of scenic values based on scenic quality, viewer sensitivity, and distances of views. No formal analyses have been performed on any of the selected or offered lands to date. A formal visual analysis would be conducted following Forest Service and/or BLM guidelines as appropriate for each parcel as part of the NEPA process.

3.2.2. SOCIOECONOMIC RESOURCES

This section is intended to be descriptive rather than analytical and provides a general overview of the regional and local socioeconomic characteristics for each property designated as selected land in the Act. The Council on Environmental Quality (CEQ) guidance on environmental justice does not define the appropriate geographic reference to be used in a socioeconomic or environmental justice review (CEQ 1997). For the purposes of this Proposal, and to minimize the potential dilution or inflation of the presented data, the definition of the area of focus for each property will consist of the county in which the land is located. The State of Arizona will be used as the primary reference population unless otherwise stated. As the selected lands (the Oak Flat parcel) and all of the Town of Superior lands (the Fairview Cemetery, Superior Airport, and Superior Airport Contiguous Parcels) are located within Pinal County, Arizona, all of these properties will be considered together.

3.2.2.1. *Population Demographics*

This section describes the changes in overall population numbers for the selected county and the state of Arizona. Data for this section was supplied by the US Census Bureau's decennial census and the American Community Survey (ACS).

3.2.2.2. *Minority Groups and Low-Income Populations*

In 1997 the Office of Management and Budget (OMB) published a set of standards that defined race and ethnicity (origin) as two separate entities (OMB 1997). Race, as defined by the US Census Bureau, includes the following five categories at a minimum: "American Indian or Alaska Native," "Asian," "Black or African American," "Native Hawaiian or Other Pacific Islander," and "White." The US Census Bureau states the following based on ethnicity, "Persons who report themselves as Hispanic can be of any race and are identified as such in our data...." The OMB standards define a minimum of two categories based on ethnicity, "Hispanic or Latino" and "Not Hispanic or Latino" (OMB 1997). The CEQ guidance defines a minority population as being of any of the five listed race categories with the exception of "White"; the CEQ also defines those of Hispanic or Latino ethnicity as being a minority population (CEQ 1997). This Proposal follows the CEQ guidance for the definition of minority and low-income populations. Based on the data collection methods implemented by the US Census Bureau, race and ethnicity are considered separately.

The identification of a community with potential environmental justice populations is defined by EPA as one that has a greater percentage of minority or low-income populations than an identified reference community. The standard for identifying minority populations is either: 1) the minority population of the affected area exceeds 50 percent; or 2) the minority population percentage of the affected area is "meaningfully greater" than the minority population percentage in the general population or other appropriate unit of geographic analysis, such as a reference community (CEQ 1997). The EPA has not specified what percentage of the population can be characterized as "meaningfully greater."

This section describes racial demographics, Hispanic ethnicity, and age distribution for the selected county and the state of Arizona. Data for this section was supplied by the American Community Survey.

3.2.2.3. *Poverty, Education, and Employment*

Poverty is an important indicator of economic well-being. Following the OMB's Directive 14, the US Census Bureau uses a set of income thresholds that vary by family size and composition to define the thresholds for "poor." If the total income for a family or an unrelated individual falls below the relevant poverty threshold, then the family or an unrelated individual is classified as being in poverty. Poverty thresholds are derived by: 1) multiplying the cost of a 1963 minimum diet by three; 2) adjusting the figure for current prices; and 3) adjusting the figure for family size and composition. For example, the 2012 poverty threshold for a family of two adults and two children is \$22,283 (USCB 2012).

This section describes the poverty levels, educational attainment, and employment sectors for the selected county and the state of Arizona. Data for this section was supplied by the ACS.

3.2.2.4. *Land Ownership and Federal Land Payments*

This section describes land ownership, revenue sources, and federal land payments for the selected county and the state of Arizona. Data for this section was compiled by Headwaters Economics from select federal and state agencies.

3.3. SELECTED LANDS

3.3.1. OAK FLAT

3.3.1.1. *Climate and Air Quality*

Table 3.3-1 provides elevation and location information for the nearest weather stations to the selected lands. Locations of weather stations and selected lands are shown in **Figure 3.5-1**.

Table 3.3-1. Weather Stations near the Selected Lands

Weather Station	Elevation (ft [m]) amsl	Latitude	Longitude	Period of Record
Miami	3,560 (1,085)	33°24'N	110°52'W	2/1/1914 to 3/31/2013
Superior	2,859 (871)	33°18'N	111°06'W	7/12/1920 to 8/31/2006

Source: NOAA 2013

Table 3.3-2 presents a summary of the climatic conditions at the Miami weather station, which was selected to represent the climatic conditions at the Oak Flat parcel. The Miami weather station is approximately 11 mi (18 km) away, but its elevation is similar to that of the parcel. Weather conditions in this region are strongly influenced by elevation; therefore, these data are primarily based on the weather station closest in elevation rather than closest by distance. The data were derived from the Western Regional Climate Center (WRCC 2015).

Table 3.3-2. Annual Mean Daily Weather Conditions

Parcel	Elevation (ft [m]) amsl	Weather Station	Annual Mean Daily Average Temperature (°F)	Annual Mean Daily Maximum Temperature (°F)	Annual Mean Daily Minimum Temperature (°F)	Annual Mean Total Snow (in)	Annual Mean Total Precipitation (in)	Annual ET ¹ (in)
Oak Flat	3,100 to 4,648 (950 to 1,417)	Miami	64	77	51	2.6	18.8	55

¹ ET = Evapotranspiration

Resolution Copper currently operates two multi-parameter meteorological and air monitoring stations: a station on the Oak Flat parcel at the East Plant Site and a station near the town of Superior parcels at the West Plant Site (RCM 2014).

Table 3.3-3 details the attainment status of the Oak Flat parcel for each of the air quality criteria pollutants (**Section 3.2.1**). Most of the Oak Flat parcel is within the boundary of a designated PM₁₀ nonattainment area. It does not fall within any designated maintenance areas. A detailed discussion of criteria pollutants for Oak Flat can be found in the Resolution Copper GPO air quality section for East Plant Site (RCM 2014). An initial emission inventory for all sources with the potential to emit air pollutants can be found in Appendix D of the Resolution Copper GPO (RCM 2014).

Table 3.3-3. Attainment Status for Criteria Pollutants

Parcel	CO	SO ₂	PM _{2.5}	PM ₁₀	O ₃	NO ₂	Pb
Oak Flat parcel	Attainment	Attainment	Attainment	Non-attainment	Attainment	Attainment	Attainment

Source: ADEQ 2015b

The closest federal Class I area is the Superstition Wilderness Area located approximately 5 mi (8 km) north of the Oak Flat parcel (**Figure 3.3-1**). Ambient monitoring networks sponsored and/or operated by federal land managers are used to characterize the air quality in protected areas. The National Park Service has a long-term air quality dataset for the Tonto National Monument located approximately 22 mi (35 km) north of the parcel that serves to characterize the air quality in the Superstition Wilderness Area. In general, air quality for this area continues to be good, and air pollution levels are lower than in populated areas. The closest regulatory monitoring site to the parcel is located in Queen Valley (Air Quality System Site No. 04-021-8001), which is used to monitor ambient air for the Phoenix Metropolitan Area.

3.3.1.2. Topography, Physiography, and Geology

The Oak Flat parcel is located in the mountains immediately east of the Town of Superior in a transitional zone on the northeastern edge of the Basin and Range physiographic province. The northeastern edge of the province is a mountainous region that consists of belts of generally linear ridges and valleys in which the rugged ranges predominate over the valleys. Elevations range from 3,100 ft (950 m) above mean seas level (amsl) near Queen Creek to 4,648 ft (1,417 m) amsl at a high point on the Apache Leap escarpment that overlooks Superior. The western edge of this area is generally very steep, with the cliffs of the Apache Leap escarpment rising abruptly above Superior. East of Apache Leap, an area of parallel ridges and valleys trends to the northeast. The northeastern portion of the area is relatively flat, and most of the drainages flow toward Queen Creek; however, in the southern portion of the parcel, Rio Rancho Creek drains toward Devils Canyon to the east (**Figure 3.3-2**).

The region that includes the Oak Flat parcel has undergone multiple episodes of folding and faulting dating to the Precambrian. An old northeast- to east-northeast-trending structural fabric in east-central Arizona is indicated by the dominant foliation in Pinal Schist, the northeastern trend of the 1.4 billion-year-old Ruin Granite, and regional-scale magnetic anomalies (Hehnke et al. 2012 and references therein). Thrust faults, folding, and reverse faults typical of Laramide-aged deformation are well documented in the area.

The present-day geomorphology of Oak Flat and the Superior area can be attributed to north- to northwest-trending, down-to-the-west, Basin and Range-style normal faults with Tertiary to Quaternary movement (Hehnke et al. 2012). These faults include the Concentrator, Main, and Conley Springs faults. The Superior Basin is formed by a large east-tilting block bounded by the Elephant Butte fault to the west and the Concentrator fault to the east. Regional extension, normal faulting, and tilting ended after

Tertiary volcanism and during the deposition of conglomerate and sandstone (Spencer and Richard 1995).

Relatively few formations are exposed in the Oak Flat parcel. Apache Leap Tuff, the youngest consolidated formation in the area, underlies Oak Flat and forms the Apache Leap escarpment. Underlying Paleozoic sedimentary rocks and younger Precambrian sedimentary rocks are exposed at the foot of the escarpment. Tertiary Whitetail Conglomerate is present, with limited exposure below the Apache Leap Tuff west of Oak Flat and also at the toe of the slope on the western side of Apache Leap. A Quaternary alluvial deposit overlies the Apache Leap Tuff in a small area of northeast Oak Flat.

Apache Leap Tuff is a crystal-rich quartz latite ashflow tuff that overlies the Whitetail Conglomerate and forms the Apache Leap escarpment. The Whitetail Conglomerate forms a northeast-thickening succession of predominantly poorly sorted conglomerates. More detail about the geologic structure and lithology is available in Hehnke et al. (2012).

3.3.1.2.1. Mineral Resources

A mineral assessment for the Oak Flat parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994) and with the US Forest Service Land Acquisition Handbook (USFS 2004), prior to, or as part of, any required appraisals of the properties in the proposed land exchange (**Appendix A**). The Act also contains specific guidance on mineral evaluation (**Section 2.7**).

Most of the Oak Flat parcel is unpatented US Forest Service land with an inholding of private land owned by Resolution Copper. Resolution Copper holds active patented mining claims for the private land and active unpatented mining claims for the public land, as seen in **Figure 3.3-3. Appendix C** lists the active mining claims for the Oak Flat parcel. Under the conditions and provisions of the Act, current restrictions under the mining laws to the 760-acre (308-ha) Oak Flat Withdrawal Area would be removed.

3.3.1.3. Water

3.3.1.3.1. Surface Water Resources

Surface water in the Oak Flat parcel occurs in two watersheds—Upper Queen Creek and Devils Canyon—and is comprised generally of ephemeral washes and stock ponds (**Figure 3.3-4**). No springs were identified on the parcel. For a detailed description of surface water occurrence and quality in Oak Flat the section on surface water for the East Plant Site (RCM 2014).

The Federal Emergency Management Agency (FEMA) map panels show that the entirety of the Oak Flat Parcel is designated as Zone D, which is the designation for areas where FEMA has not conducted a flood hazard analysis and the potential flood hazard has not been determined (FEMA 2015; **Figure 3.3-5**). Onsite floodplain analysis for the Oak Flat parcel has not been completed.

Field reconnaissance for the presence of wetlands was conducted by WestLand that identified 11 wetland areas encompassing approximately 3.98 acres (1.6 ha) within the Oak Flat parcel (**Figure 3.3-6**). All of the identified features that exhibited wetland characteristics are man-made impoundments. The location of the wetland areas delineated by WestLand during field survey is generally consistent with available National Wetlands Inventory (NWI) mapping data of the area (USFWS 2015).

Surface water quality in the vicinity of the Oak Flat parcel has been monitored by Resolution Copper at 17 locations in the Devils Canyon Watershed and 14 locations in the Upper Queen Creek Watershed. In general, surface water quality in the Devils Canyon Watershed is in compliance with applicable regulations; however, concentrations of the following constituents have been observed to be out of compliance: cadmium, copper, dissolved oxygen, E. coli bacteria, iron, lead, and pH (RCM 2014). Similarly, surface water sampled in the upper part of Queen Creek Watershed (headwaters to the Town of Superior Waste Water Treatment Plant) is generally in compliance with applicable surface water standards with the following exceptions: arsenic, copper, dissolved oxygen, E. coli bacteria, iron, lead, pH, and selenium (RCM 2014).

Local Surface Water Occurrence

The surface water features in the Oak Flat parcel fall within the Gila River Basin, as shown in **Figure 3.3-4**. The parcel's surface hydrology can be subdivided into the Upper Queen Creek and Devils Canyon watersheds and is as described in detail under the East Plant Site in the Resolution GPO (RCM 2014).

Surface Water Rights

This parcel has active, registered surface water rights held by the TNF in the Upper Gila River watershed sourced from unnamed canyons (**Appendix D**).

3.3.1.3.2. Groundwater Resources

As described in the sections for the East Plant Site in the Resolution Copper GPO (RCM 2014), groundwater occurs in three separate local systems: a shallow groundwater system, the Apache Leap Tuff aquifer, and a deep groundwater system. Extensive characterization of the geology and hydrogeology in this area (RCM 2014) indicates that the Concentrator fault, located to the west, acts as a barrier to groundwater movement between the shallow and intermediate-depth groundwater systems. Based on a lack of water level response to mine dewatering activities and large differences in hydraulic head across the fault, the hydraulic connection of the deep groundwater systems across the Concentrator fault is limited to where legacy mine workings locally cross the fault.

Groundwater quality in the three groundwater systems generally meets EPA and State of Arizona groundwater quality standards, with a few exceptions. Several samples fell below the federal secondary standard for pH and slightly above the federal secondary standards for iron and manganese. In addition, several samples did not meet federal secondary standards for total dissolved solids and sulfate, and one

sample also exceeded federal and state primary standards for nitrate. Details of groundwater quality, including exceptions, can be found in the GPO (RCM 2014).

3.3.1.4. Soils

General soil survey data is from the Arizona General Soil Map (ALRIS 1975) and is presented in **Figure 3.3-7**. Very few soils data are available for the Oak Flat parcel. More than one-half of the mapped area in the northern portion is mapped as Mined Land. South and east of the Mined Land section is an area mapped as Rock outcrop-Woodcutter complex, tuff. The remainder of the southeastern portion is unmapped, but is presumed to be similar to the identified map units. A small area in the southeastern portion near Rancho Rio Creek is mapped as Rock outcrop-Lampshire complex, chaparral.

Mined Land is described as composed of mine spoil or earthy fill and/or igneous, metamorphic, and sedimentary rock. Rock outcrop-Woodcutter complex, tuff is composed of 50 percent Rock outcrop, tuff and 40 percent Woodcutter and similar soils. These soils form on mountains of loamy and gravelly slope alluvium and/or residuum weathered from tuff; they tend to be shallow with 6 to 18 in (15 to 46 cm) of soil over lithic bedrock; and well drained. Rock outcrop-Lampshire complex, chaparral is composed of 65 percent Rock outcrop, welded tuff and 30 percent Lampshire and similar soils. These soils form on mountains and hills from slope alluvium and/or residuum weathered from welded tuff; they tend to be shallow, with 6 to 20 in (15 to 51 cm) over bedrock; and well drained.

3.3.1.5. Land Use

3.3.1.5.1. Access and Recreation

The parcel is accessed by going south on Forest Road (FR) 469 (partially paved) and FR 315 (unpaved) from US Highway 60 (US 60) 3 mi (4.8 km) east of the town of Superior (**Figure 3.3-8**). The parcel includes the Oak Flat Campground, a year-round, no-fee, campground with 16 campsites, tables and fire-pit grills, and recreational vehicle access. Rock climbing, wildlife viewing, and picnicking are available recreational opportunities on the parcel.

The parcel is located within Arizona Game and Fish Department (AGFD) Management Unit 24A (**Figure 3.3-8**). Black bear, javelina, mule deer, whitetail deer, mountain lion, cottontail rabbit, elk, quail, and tree squirrel are commonly hunted game species in this unit (AGFD 2015a).

3.3.1.5.2. Agriculture and Grazing

The soils on this parcel are not considered suitable prime or unique farmland. The soils on this parcel are considered suitable for rangeland (Soil Survey Staff 2015). The parcel is currently included in the Devils Canyon grazing allotment owned by Resolution Copper, and includes the Southwest, Recreation, Oak Flat Trap, and Rancho Rio Trap pastures (AGFD 2015b; **Figure 3.3-8**).

3.3.1.5.3. Public Lands Management

This parcel is currently managed by TNF. The land exchange would transfer ownership of this parcel to Resolution Copper, and the parcel “shall be available for mining and related activities subject to and in accordance with applicable Federal, state and local laws pertaining to mining and related activities on land in private ownership” (**Appendix A**).

3.3.1.5.4. Encumbrances

There is no Title Policy available for this parcel. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated at that time.

3.3.1.6. Wildlife

Reptile and amphibian species observed on the parcel include: canyon tree frog (*Hyla arenicolor*), tiger salamander (*Ambystoma tigrinum*) (an introduced species), red spotted toad (*Bufo punctatus*), collared lizard (*Crotaphytus collaris*), regal homed lizard (*Phrynosoma solare*), ring-necked snake (*Diadophis punctatus*), black-necked garter snake (*Thamnophis cyrtopsis*), tiger rattlesnake (*Crotalus tigris*), and Clark’s spiny lizard (*Sceloporus c.f.clarkii*) (WestLand 2012a, 2014).

Raptors observed on this parcel include: Cooper's hawk (*Accipiter cooperii*), sharp-shinned hawk (*A. striatus*), red-tailed hawk (*Buteo jamaicensis*), zone-tailed hawk (*B. albonotatus*), common blackhawk (*Buteogallus anthracinus*), and turkey vulture (*Cathartes aura*) (WestLand 2012b, 2014). Fifty-three bird species have been recorded during formal survey, and another 19 species have been recorded incidentally in the Oak Flat area. A few of the observed birds include: canyon wren (*Catherpes mexicanus*), Gambel's quail (*Callipepla gambelii*), Verdin (*Auriparus flaviceps*), phainopepla (*Phainopepla nitens*), black phoebe (*Sayornis nigricans*), great blue heron (*Ardea herodias*), and Mexican jay (*Aphelocoma ultramarine*) (WestLand 2010, 2014).

Mammal species observed by wildlife cameras include white nosed coati (*Nasua narica*), rock squirrel (*Spermophilus variegates*), cottontail (*Sylvilagus* sp.), coyote (*Canis latrans*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), gray fox (*Urocyon cinereoargenteus*), and hog-nosed skunk (*Conepatus leuconotus*) (WestLand 2012c, 2014).

For a detailed discussion of the aquatic biology of the Oak Flat area, see the information given for the East Plant Site in the Resolution GPO (RCM 2014).

This parcel lies partially within the Superior-Miami US 60 potential wildlife linkage (Majka et al. 2007).

3.3.1.6.1. Special Status Wildlife Species

The following TNF sensitive species were identified as documented within 5 mi (8 km) of the Oak Flat parcel (**Appendix F**):

- American peregrine falcon (*Falco peregrinus anatum*)
- Lowland leopard frog (*Lithobates yavapaiensis*)
- Bezy's night lizard (*Xantusia bezyi*)

No American peregrine falcons have been detected during bird surveys within the Oak Flat parcel; however American peregrine falcons have been observed engaging in breeding behaviors and visiting a previously known eyrie just west of the parcel along Apache Leap in 2011, and a pair of adult American peregrine falcons were observed engaged in breeding behavior and visiting suspected nest sites near the confluence of Rancho Rio Creek and Devils Canyon south of the parcel in 2011 (WestLand 2012b).

No lowland leopard frogs were detected during amphibian surveys within the Oak Flat parcel, but lowland leopard frogs were observed outside of the parcel in Devils Canyon in 2003, and in stock tanks to the east of the parcel in 2010 and 2011 (WestLand 2012a).

No Bezy's night lizards have been detected during reptile surveys within the Oak Flat parcel (WestLand 2012a).

A formal screening analysis will be conducted as part of NEPA analysis.

There are no critical habitats within the parcel (**Appendix E**).

3.3.1.7. Vegetation

The upland vegetation on the Oak Flat parcel consists of three biotic communities: Interior Chaparral, Madrean Evergreen Woodland, and Arizona Upland Subdivision of Sonoran Desertscrub, and small areas of Interior Riparian Deciduous Forest in patches around stock ponds (Brown and Lowe 1980 with modifications by WestLand) (**Figure 3.3-9**). Interior Chaparral covers most of the parcel and is represented by manzanita (*Arctostaphylos pungens*) and shrub live oak (*Quercus turbinella*). Small areas of Madrean Evergreen Woodland represented by Emory oak (*Q. emoryi*), pinyon pine (*Pinus edulis*), one-seed juniper (*Juniperus monosperma*) and mountain mahogany (*Cercocarpus montanum*) occur as bands along the deeper alluvium and on the steeper north-facing slopes above Queen Creek. A small area of Arizona Upland Subdivision of Sonoran Desertscrub, represented by saguaro (*Carnegiea gigantea*) and hedgehog cactus (*Echinocereus fasciculatum*) occurs on a south-facing hillslope above Rancho Rio Creek in the southern portion of the parcel. Small areas of Interior Riparian Deciduous Forest, represented by Fremont cottonwood (*Populus fremontii*) and Goodding's willow (*Salix gooddingii*) occur in patches around stock ponds.

3.3.1.7.1. Special Status Plant Species

Of the special status species that were identified in the Information, Planning, and Conservation System (IPaC) queries (**Appendix E**) and HDMS queries (**Appendix F**), the following was identified as a listed species known to occur, or with potential to occur in the Oak Flat parcel:

- Arizona hedgehog cactus (*Echinocereus triglochidiatus* var. *arizonicus*) – Endangered

Arizona hedgehog cactus is known to occur within the Oak Flat parcel. Arizona hedgehog cactus was observed on the Oak Flat parcel during surveys conducted from 2004 to 2015 (WestLand 2015a *in prep*). A total of 19 Arizona hedgehog cactus, two of which are dead, have been observed within the Oak Flat parcel.

There are no critical habitats within the parcel (**Appendix E**).

3.3.1.8. Cultural Resources

The Oak Flat parcel is within the boundary of an extensive archaeological survey conducted in 2003 (Lindeman and Whitney 2005). Since that time, several other archaeological surveys have been conducted within the boundary of the original survey or along the margins (Deaver 2013) such that the entirety of lands in the Oak Flat parcel has been surveyed. The inventory of historic properties in the Oak Flat parcel is complete, though given the rugged terrain additional sites may be found during future archaeological studies. The surveys have identified 40 archaeological sites and the cultural resources identified cover a range of periods and cultures. Prehistoric Native American sites identified are attributed to the Archaic (6000 B.C.–A.D. 1), the Hohokam (A.D. 700–1150), and the Salado (A.D. 1150–1450) cultures. The Hohokam sites appear to represent small and perhaps short-term occupations in the area. The Salado sites tend to be relatively small, though a medium-sized settlement is located near the Oak Flat Campground. Several sites are attributed to Protohistoric (1450–1850) or Historic (A.D. 1850–present) Yavapai or Apache groups. The dominant Euroamerican resources identified are related to ranching during the early twentieth century, activities by the Civilian Conservation Corps to conserve and restore lands in the Queen Creek watershed, and the development of formal campgrounds and recreation in the national forest. Some mining sites are present in the Oak Flat parcel. A historic ranching site along Queen Creek at the northern edge of the Oak Flat parcel corresponds to the location of a structure as attributed to “Bellamy” on the 1906 General Land Office map for this township and range, suggesting that this location may be the site of the Bellamy family ranch along Queen Creek. Historic maps indicate a series of pack trails and roads through the Oak Flat area. These functioned as a means to connect the Superior mining area with the Globe mining area to the east, and likely to drive herds of cattle from the pastures in the Oak Flat area to markets at Miami, Globe, Silver King, Superior, and Pinal.

3.3.1.9. *Hazardous Materials*

The extent of hazardous or potentially hazardous materials at the Oak Flat parcel is currently unknown. A Phase I Environmental Site Assessment, in conformance with American Society for Testing and Materials (ASTM) *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E1527-13, will be completed during NEPA scoping to identify any recognized environmental conditions associated with potentially hazardous materials.

3.3.1.10. *Visual Resources*

A Visual Management System Analysis for Landscape Aesthetics has not been conducted for this parcel. A formal visual analysis will be performed according to *Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management Chapter 2380 - Landscape Management* (USFS 2003b) as part of the NEPA process.

3.3.1.11. *Socioeconomic Resources*

This section is intended to be descriptive rather than analytical and provides a general overview of the regional and local socioeconomic characteristics for the selected lands. As the Town of Superior lands as well as the Apache South End and Lower San Pedro River parcels are also in Pinal County, this section serves to describe the socioeconomic resources of those properties as well (**Sections 3.4.1.11, 3.5.5.11 and 3.5.6.11**).

3.3.1.11.1. *Population Demographics*

In 2013 there were an estimated 379,128 persons in Pinal County (USCB 2015). The most populous communities within Pinal County are San Tan Valley (81,321), Casa Grande (48,751), Maricopa (43,482), Apache Junction (35,840), and Florence (25,536; USCB 2010). The population of Pinal County grew by 445 percent from 1970 to 2013 with a 111 percent gain from 2000 to 2013 (**Table 3.3-4**). The growth rate for Pinal County has increased significantly since 1970. Population increased by 31 percent between 1970 and 1980, by 28 percent between 1980 and 1990, by 55 percent between 1989 and 2000, and by 109 percent between 2000 and 2013.

Table 3.3-4. Population Change in Pinal County and Arizona 1970 to 2013

Year	Pinal County	Arizona
1970	69,547	1,794,912
1980	91,342	2,737,774
1990	116,867	3,684,097
2000	181,280	5,160,586
2013	379,128	6,479,703

Source: 1970-2000 (USCB 2010); 2013 (USCB 2015)

3.3.1.11.2. Minority Groups and Low-Income Populations

Racial diversity in Pinal County is similar to what is found in Arizona; however, Pinal County is less racially diverse than the US (**Table 3.3-5**). Within the US, 74.0 percent of the population identifies as White, while 79.2 percent of the population in Arizona and 78.8 percent of the population in Pinal County identifies as White. The ACS indicates that 379,128 people were living in Pinal County in 2013. Racially, the population of Pinal County was made up primarily of the following categories: White (78.8 percent), Some Other Race (6.3 percent), American Indian (5.2 percent), and Black or African American (4.7 percent).

Table 3.3-5. Race composition in Pinal County, Arizona, and the US

Category	Population in Pinal County	Percentage of Population in Pinal County	Percentage of Population in Arizona	Percentage of Population in the US
Total Population	379,128			
White	298,828	78.8%	79.2%	74.0%
Black or African American	17,847	4.7%	4.2%	12.6%
American Indian	19,784	5.2%	4.4%	0.8%
Asian	6,052	1.6%	2.8%	4.9%
Native Hawaiian & Other Pacific Is.	1,707	0.5%	0.2%	0.2%
Some Other Race	24,064	6.3%	6.2%	4.7%
Two or More Races	10,846	2.9%	3.0%	2.8%

Source: USCB 2015

People of Hispanic origin or ethnicity can be of any race; therefore ethnicity is considered separately from race (USCB 2001). The ACS indicates that 28.8 percent of individuals within Pinal County were self-identified as Hispanic or Latino residents compared to 29.9 percent and 16.6 percent in Arizona and the US respectively (**Table 3.3-6**).

Table 3.3-6. Hispanic or Latino population demographics

Category	Pinal County	Arizona	US
Total Population	379,128	6,479,703	311,536,594
Hispanic or Latino	109,232	1,935,948	51,786,591
Percentage Hispanic or Latino	28.8%	29.9%	16.6%

Source: USCB 2015

The EPA identifies both older and younger population groups as potentially being more susceptible to environmental risks (EPA 1998). The percentage of the population under the age of 18 is 25.8 percent for Pinal County and 25.0 for Arizona (**Table 3.3-7**). The percentage of the population over the age of 65 is 15.1 percent for Pinal County and 14.4 percent for Arizona (**Table 3.3-7**).

Table 3.3-7. Age distribution for Pinal County and Arizona

Population Category	Pinal County	Percentage of Population Pinal County	Percentage of Population Arizona
Under 18 Years	97,938	25.8%	25.0%
18 to 34 Years	84,538	22.3%	23.4%
35 to 44 Years	51,085	13.5%	12.8%
45 to 64 Years	88,295	23.3%	24.5%
65 and over	57,272	15.1%	14.4%

Source: USCB 2015

3.3.1.11.3. Poverty, Education, and Employment

Poverty was defined using the method described in **Section 3.2.2.3**. The percentage of people living in poverty within Pinal County is 15.6 percent and the percentage of people living in poverty within the State of Arizona is 17.9 percent (**Table 3.3-8**).

Table 3.3-8. Poverty levels in Pinal County, Arizona, and the US

Population Category	Pinal County	Arizona	US
People (number)	353,747	6,333,791	303,692,076
Families (number)	89,831	1,563,121	76,744,358
People below poverty	55,245	1,131,901	46,663,433
Families below poverty	9,757	202,622	8,666,630
Percent Below Poverty Level			
People	15.6%	17.9%	15.4%
Families	10.9%	13.0%	11.3%

Source: USCB 2015

Over 84 percent of the residents in Pinal County have a high school diploma and 18.0 percent have a bachelor's degree or higher (**Table 3.3-9**). Within Arizona 85.7 percent of the residents have a high school diploma and 26.9 percent have a bachelor's degree or higher (**Table 3.3-9**).

Table 3.3-9. Educational attainment for Pinal County, Arizona, and the US

Educational Level	Pinal County	Arizona	US
Total population 25 years or older	250,120	4,211,194	206,587,852
No high school diploma	15.3%	14.3%	14.0%
High school graduate	84.7%	85.7%	86.0%
Associate's degree	9.3%	8.3%	7.8%
Bachelor's degree	18.0%	26.9%	28.8%
Graduate or professional	11.8%	17.0%	18.0%

Source: USCB 2015

In 2013, Pinal County's resident employed population numbered 133,161 persons (**Table 3.3-10**). Educational services, health care, and social assistance (20.3 percent), retail trade (12.2 percent) and manufacturing were the largest employers by field in Pinal County (**Table 3.3-10**). Employment figures for all fields are presented in **Table 3.3-10**.

Table 3.3-10. Pinal County employment by industry

Sector	Number Employed	Percent
Agriculture, forestry, fishing, hunting, and mining	5,051	3.8%
Construction	8,994	6.8%
Manufacturing	13,149	9.9%
Wholesale trade	2,616	2.0%
Retail trade	16,216	12.2%
Transportation, warehousing, and utilities	6,286	4.7%
Information	2,787	2.1%
Finance, insurance, real estate, rental, and leasing	8,861	6.7%
Professional, scientific, management, administrative, and waste management services	11,852	8.9%
Educational services, health care, and social assistance	27,077	20.3%
Arts, entertainment and recreation, accommodation, and food services	12,855	9.7%
Other services, except public administration	5,469	4.1%
Public administration	11,951	9.0%
Total	133,164	

Source: USCB 2015

3.3.1.11.4. Land Ownership and Federal Land Payments

The total area for Pinal County is 3,439,308 acres (1,391,813 ha). Within Pinal County, the State of Arizona is the largest land owner, holding 34.6 percent of all land in the county (**Table 3.3-11**). Private land owners hold 25.6 percent, federal sources hold 19.5 percent and tribal entities hold 20.3 percent of the land in Pinal County.

Table 3.3-11. Land ownership in Pinal County

Ownership Entity	Acres	Percent of Total Area in Pinal County
Total Area	3,439,308	
Private Lands	880,227	25.6%
Conservation Easement	242	0.0%
Federal Lands	671,350	19.5%
Forest Service	219,314	6.4%
BLM	384,396	11.2%
National Park Service	601	0.0%
Military	27,041	0.8%
Other Federal	39,998	1.2%
State Lands	1,189,946	34.6%
State Trust Lands	1,152,788	33.5%
Other State	37,158	1.1%
Tribal Lands	696,541	20.3%
City, County, Other	1,244	0.0%

Source: USGS 2012

Federal land payments can be a significant income source particularly in rural communities with small populations and fewer private tax sources. In fiscal year (FY) 2007 federal land payments to Pinal County totaled \$1,093,000 and were 0.3 percent of the total general revenue for the county¹ (**Table 3.3-12**).

Table 3.3-12. Summary of Revenue Sources for Pinal County in FY 2007

Sources of General Revenue	Amount Received in FY 2007 ¹	Percent of Total Revenue
Taxes	159,707,000	41.7%
Intergovernmental Revenue	107,674,000	28.1%
Total Charges	89,384,000	23.3%
All Other Miscellaneous	26,102,000	6.8%
Federal Land Payments	1,093,000	0.3%
Total General Revenue	382,866,000	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

¹ FY 2007 Revenue dollars are reported in 2013 dollars.

In 2013 federal land payments to Pinal County increased to \$1,668,592 with \$1,153,625 coming from the federal Payment in Lieu of Taxes (PILT) program, data and sources shown in **Table 3.3-13**.

Table 3.3-13. Summary of Federal Land Payments for Pinal County in FY 2013

Origin of Federal Land Payments	Federal Land Payments in FY 2013	Percent of Total
Payments in Lieu of Taxes (PILT)	1,153,625	69.1%
Forest Service Payments	422,758	25.3%
BLM Payments	92,210	5.5%
USFWS Refuge Payments	0	0%
Federal Mineral Royalties	0	0%
Total Federal Land Payments	1,668,592	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

The primary beneficiary of federal land payments in Pinal County was the county government, which received 84.4 percent of the total payments (**Table 3.3-14**).

Table 3.3-14. Summary of Federal Land Payment Disbursements for Pinal County in FY 2013

Distribution of Federal Land Payments	Disbursements in FY 2013	Percent of Total
County Government	1,408,344	84.4%
Local School Districts	169,103	10.1%
Resource Advisory Councils	63,414	3.8%
Grazing Districts	27,731	1.7%
Total Federal Land Payments	1,668,592	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

¹ The dollar value for federal land payments in Pinal County in 2007 has been converted to the equivalent of 2013 dollars for comparison purposes.

3.4. TOWN OF SUPERIOR LANDS

3.4.1. FAIRVIEW CEMETERY, SUPERIOR AIRPORT CONTIGUOUS PARCELS, AND SUPERIOR AIRPORT

The Town of Superior lands are all located in proximity to one another, and within a relatively small area. These properties are therefore discussed together throughout this section rather than individually.

3.4.1.1. *Climate and Air Quality*

Table 3.4-1 presents a summary of the climatic conditions near the town of Superior parcels based on data from the Superior Airport weather station, located approximately 1.5 mi (2.4 km) away and at a similar elevation (**Figure 3.3-1**). The data were derived from the WRCC (2015).

Table 3.4-1. Annual Mean Daily Weather Conditions

Parcel	Elevation (ft [m])	Weather Station	Annual Mean Daily Average Temperature (°F)	Annual Mean Daily Maximum Temperature (°F)	Annual Mean Daily Minimum Temperature (°F)	Annual Mean Total Snow (in)	Annual Mean Total Precipitation (in)	Annual ET ¹ (in)
Town of Superior parcels	2,680 to 3,400 (820 to 1,037)	Superior	69	79	59	1.4	18.3	63

¹ ET = Evapotranspiration

No parcels are currently located within a designated maintenance or nonattainment area for the criteria pollutants. A detailed discussion of criteria pollutants can be found in the air quality section of the Resolution GPO; an initial emission inventory for all sources with the potential to emit air pollutants can be found in Appendix D of the Resolution GPO (RCM 2014).

The closest federal Class I area is the Superstition Wilderness Area located approximately 8 mi (13 km) north of the town of Superior parcels (**Figure 3.3-1**). In general, air quality for this area continues to be good, and air pollution levels are lower than in populated areas.

3.4.1.2. *Topography, Physiography, and Geology*

The Superior Basin is formed by a large east-tilting block bounded by the Elephant Butte fault to the west and the Concentrator fault to the east. The Elephant Butte fault is a major west-side-down normal fault that is located along the western side of Gonzales Pass; it crosses Queen Creek east of Queen Valley near Whitlow Ranch Dam (Ferguson and Skotnicki 1995). Regional extension, normal faulting, and tilting ended after Tertiary volcanism and during the deposition of conglomerate and sandstone (Spencer and Richard 1995).

The majority of the parcels lie on Quaternary alluvial deposits, with a small area of undifferentiated Quaternary and Tertiary gravel and conglomerate in the north and Tertiary volcanic rocks in the western portion (**Figure 3.3-2**).

3.4.1.2.1. Mineral Resources

Mineral assessments for each parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

The Fairview Cemetery is located on public lands administered by the Forest Service, for which there are no active mining claims recorded with the BLM (BLM 2015a). The Superior Airport Contiguous Parcels are also located on public lands administered by the Forest Service; active mining claims are listed in **Appendix C** (BLM 2015a). The Superior Airport parcel is owned by the Town of Superior and has no active mining claims (BLM 2015a).

3.4.1.3. Water

3.4.1.3.1. Surface Water Resources

The surface water features in the town of Superior parcels, based on review of recent aerial photography and topographic mapping, are comprised generally of unnamed ephemeral washes that fall within the Upper Queen Creek watershed of the Gila River Basin, as shown in **Figure 3.3-4**. In addition, the Superior Airport Contiguous Parcels include a very small ephemeral reach of Queen Creek itself, as well as what is likely an effluent-dependent drainage supported by discharges from the Superior Waste Water Treatment Plant.

With regard to water quality, Queen Creek from its headwaters to Whitlow Canyon is impaired for copper (ADEQ 2012). Development of a Total Maximum Daily Load (TMDL) for copper is in progress for Queen Creek from its headwaters to Potts Canyon.

Most of the Fairview Cemetery and Superior Airport parcels have been mapped by FEMA as Zone X, denoting areas of minimal flood hazard (**Figure 3.3-5**). A small portion of the Superior Airport parcels are mapped as Zone A, denoting a 1-percent annual chance flood hazard of 100-year flood. The majority of the Superior Airport Contiguous parcels have been mapped as Zone D, denoting areas where FEMA has not conducted a flood hazard analysis and the potential flood hazard has not been determined (FEMA 2015). Onsite floodplain analysis for the town of Superior parcels has not been completed.

The NWI map identifies approximately 3.5 acres (1.4 ha) of wetlands (USFWS 2015) within the town of Superior parcels, associated with the effluent-dependent drainage downstream of the Superior Waste Water Treatment Plant. Field verification of this information will be completed during NEPA analysis.

Local Surface Water Rights

The Upper Queen Creek watershed originates on the slopes of Peachville Mountain and Kings Crown Peak north and northwest of the Town of Superior. There is no perennial surface water flow in this portion of Queen Creek. On the western side of Superior, Queen Creek is considered intermittent due to the presence of riparian vegetation that depends on a shallow water table for maintenance. Downstream from the Town of Superior Wastewater Treatment Plant, Queen Creek is effluent-dependent due to discharge from the treatment plant.

Surface Water Rights

There are no surface water rights attached to these parcels (ADWR 2015f).

3.4.1.3.2. Groundwater Resources

Groundwater west of the Concentrator fault in the Superior Basin occurs primarily in floodplain alluvium along Queen Creek, but also in the poorly permeable basin-fill sediments and deeper geologic units in the vicinity of the town of Superior. Extensive characterization (RCM 2014) indicates that the Concentrator fault, located to the east, acts as a barrier to groundwater movement between the shallow and intermediate-depth groundwater systems.

Depth to groundwater in the alluvium is on the order of 10 ft (3 m) below ground surface (bgs) (RCM 2014); in the Apache Leap Tuff, it is approximately 130 ft (40 m) bgs.

3.4.1.4. Soils

Soil data provided by the National Cooperative Soil Survey through Web Soil Survey (Soil Survey Staff 2015) indicate that the Town of Superior parcels are located within seven soil complexes (**Figure 3.3-7**).

The Fairview Cemetery is on the Urban land and Haplic Torriarents soil complex with slopes of 2 to 15 percent. Haplic Torriarents soils are well drained and occur on fan terraces. Permeability is moderately high to high (Soils Survey Staff 2015).

The Airport Contiguous parcels are within six soil complexes, listed in **Table 3.4-2**. The Deloro-Andrada-Sasabe deep complex contains shallow and very shallow, well-drained Deloro and Andrada soils formed in alluvium and residuum from sandstone, shale, and conglomerate. These soils have slow permeability and can produce rapid runoff. This complex also contains very deep, well-drained Sasabe soils formed in fan alluvium from mixed source (Soils Survey Staff 2015).

The stream bottom of the effluent-dependent reach of Queen Creek contains Oxyaquic Torrifluvents-Riverwash-Water complex. The soils of this complex are recently deposited soils of alluvial plains which are periodically flooded. Riverwash is unstabilized sandy, silty, clayey, or gravelly sediment that is flooded, washed, and reworked frequently by rivers. This complex consists of 40 percent Oxyaquic Torrifluvents, 35 percent Riverwash, and 15 percent water.

Steeper portions of the Superior Airport parcels are within the Rock outcrop-Lampshire complex. The Rock outcrop-Lampshire soil complex consists of very shallow and shallow, well-drained soils occurring on hillslopes. The complex consists of 50 percent Rock outcrop and approximately 40 percent Lampshire soils. These soils have low available water capacity and moderate permeability (Hendricks 1985).

Terraces are mapped as Tenneco-Bodecker complex. Tenneco-Bodecker complex consists of very deep, well-drained soils that formed in mixed fan or stream alluvium. They are on flood plains and alluvial fans with slopes that range from 0 to 3 percent. The complex is comprised of 50 percent Tenneco soils and approximately 35 percent Bodecker soils.

Table 3.4-2. Soil complexes in Superior Airport Contiguous Parcels

Soil Complex	Percent of Parcel Area
No data available	52
Deloro-Andrada-Sasabe deep complex, 2 to 5 percent slopes	41
Mined land	4
Oxyaquic Torrifluvents-Riverwash-Water complex, 0 to 5 percent slopes	1.6
Rock outcrop-Lampshire complex, 5 to 40 percent slopes	1.1
Tenneco-Bodecker complex	0.5
Dumps	<1

The Superior Airport parcels are within six soil complexes (**Figure 3.3-7**). Soil descriptions are similar to those for the Airport Contiguous parcels described above, with the addition of the Bodecker soils and Riverwash complex. The Bodecker series consists of very deep, excessively drained soils that formed in fan or stream alluvium. These soils are on alluvial fans and floodplains and have slopes of 0 to 5 percent. They have rapid permeability and are prone to flooding (Soils Survey Staff 2015).

3.4.1.5. *Land Use*

3.4.1.5.1. *Access and Recreation*

Access to Fairview Cemetery is either from the west side of the town of Superior south from US 60 on Mary Drive and north one block on Telegraph Canyon Road, or from the east side of Superior west on West Sunset Drive and north one block on Telegraph Canyon Road (**Figure 3.3-8**).

The Superior Airport Contiguous Parcels are located north and south of US 60 at the west end of Superior. Access to the parcels north of US 60 is from the west side of Superior north from US 60 on Silver King Mine Road. Access to the parcels south of US 60 is from the west side of Superior south from US 60 on Apache Tear Road.

Located on the north side of the airport adjacent to US 60, the Superior Airport parcel is accessible from the west side of the town of Superior south from US 60 on Apache Tear Road.

All of the town of Superior lands are located within AGFD Management Unit 24A (**Figure 3.3-8**). Black bear, javelina, mule deer, whitetail deer, mountain lion, cottontail rabbit, elk, quail, and tree squirrel are

commonly hunted game species in this unit (AGFD 2015a). However, because Fairview Cemetery is an extant cemetery, and Superior Airport is an extant airport, it is unlikely that these parcels would be utilized by hunters.

3.4.1.5.2. Agriculture and Grazing

The soils on these parcels are not considered suitable prime or unique farmland; however, they are considered suitable for rangeland (Soil Survey Staff 2015). Fairview Cemetery is excluded from grazing and the Superior Airport Contiguous Parcels and Superior Airport are partially excluded from grazing. The portions of these latter two parcels that are not excluded from grazing are within the Superior grazing allotment (AGFD 2015b; **Figure 3.3-8**).

3.4.1.5.3. Public Lands Management

While Fairview Cemetery and the Superior Airport Contiguous Parcels, currently administered by TNF, would transfer ownership to the Town of Superior according to the conditions and provisions of the Act, the Superior Airport parcel is owned by the Town of Superior with a reversionary interest held by the US. The land exchange would remove the reversionary interest and any reserved mineral interest would be conveyed to the Town of Superior (**Appendix A**)

3.4.1.5.4. Encumbrances

There are no Title Policies available for these parcels. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated at that time.

3.4.1.6. Wildlife

Common wildlife species expected to occur in this biotic community include: rock squirrel, cottontail, coyote, raven (*Corvus corax*), and cactus wren (*Campylorhynchus brunneicapillus*), Sonoran desert tortoise (*Gopherus morafkai*), tiger rattlesnake (*Crotalus tigris*), and collared lizard (*Crotaphytus collaris*) (Brown 1994).

There are no perennial aquatic features capable of supporting aquatic biology on these parcels.

These parcels lie within the Superior-Miami US 60 potential wildlife linkage (Majka et al. 2007).

3.4.1.6.1. Wildlife Management

Wildlife within this parcel will be managed by the AGFD.

3.4.1.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following special status species was identified that may occur in the town of Superior lands:

- Sonoran desert tortoise (*Gopherus morafkai*) - Candidate

There are no critical habitats within the parcel (**Appendix E**).

The following TNF sensitive species were identified as documented within 5 mi (8 km) of the town of Superior lands (**Appendix F**):

- American peregrine falcon (*Falco peregrinus anatum*)
- Lowland leopard frog (*Lithobates yavapaiensis*)
- Bezy's night lizard (*Xantusia bezyi*)

A formal screening analysis will be conducted as part of the NEPA process.

3.4.1.7. **Vegetation**

Natural vegetation on these parcels consists of one biotic community: Arizona Upland Subdivision of Sonoran Desertscrub (Brown and Lowe 1980; **Figure 3.3-9**). This community is represented at Superior Airport Contiguous Parcels and Superior Airport by foothill palo verde (*Parkinsonia microphylla*), triangle-leaf bursage (*Ambrosia deltoidea*), velvet mesquite (*Prosopis velutina*), cat-claw acacia (*Senegalia greggii*), and prickly pear (*Opuntia* sp.).

Much of the Fairview Cemetery parcel is developed and Arizona Upland Subdivision of Sonoran Desertscrub only occurs on the northern portion of the parcel, represented by saguaro, velvet mesquite, palo verde (*Parkinsonia* sp.), prickly pear, and triangle-leaf bursage. Other vegetation on the developed portion of the parcel consists of non-native plants including Italian cypress (*Cupressus sempervirens*), agave (*Agave americana*), and Mexican fan palm (*Washingtonia robusta*), among others. After completion of the Land Exchange, vegetation and noxious weeds within this parcel will be managed by the Town of Superior.

3.4.1.7.1. **Special Status Plant Species**

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following TNF sensitive species was identified as documented within 5 mi (8 km) of the town of Superior parcels (**Appendix F**):

- Pima Indian mallow (*Abutilon parishii*)

There are no critical habitats within the parcel (**Appendix E**).

A formal screening analysis will be conducted as part of the NEPA process.

3.4.1.8. *Cultural Resources*

The town of Superior lands fall within the projected culture areas of the prehistoric Archaic (8500 B.C.–A.D. 150), Hohokam (A.D. 700–1150), and Salado (A.D. 1150–1450) cultures, and within the territories of the Protohistoric (1450–1850) or Historic (A.D. 1850–present) Apache and Yavapai peoples.

3.4.1.8.1. *Fairview Cemetery*

The Fairview Cemetery parcel was included in the *Superior Proposed Base for Exchange (South Half) Archaeological Survey* conducted by the TNF in 1976 (Wood 1979). No archaeological sites were identified within the parcel; however, the cemetery itself is historic and includes the gravesites of people with family names associated with geological features or mines on historical maps of the area. These family names include Arnett, Barnett, Benson, Bray, Bomboy, Gonzales, Whitford, and Whitlow. Whether or not these individuals are related to the pioneering families that settled in the Superior area during the late 1800s and early 1900s and the persons for whom the landscape features are named is not known. Historical maps also show an electrical transmission line crossing the parcel. This line conveys electrical power from the Superior Substation to the Belmont Mine on Apache Leap. This line is part of the historic Salt River Project Eastern Mining Area electrical transmission line network. The 1912 General Land Office map of the section including the Fairview Cemetery parcel shows that the road from Superior to Ray passed through the parcel, but this map does not indicate that the cemetery is present. Although the Fairview Cemetery parcel was included within the 1976 archaeological survey of the Superior Proposed Base for Land Exchange, it is evident that not all of the archaeological resources have been identified. The survey did not identify the electrical transmission line or the road as archaeological sites, and also did not evaluate the Fairview Cemetery as a historic property. Further archaeological studies of the Fairview Cemetery parcel would be necessary to complete the historic properties inventory.

3.4.1.8.2. *Superior Airport Contiguous Parcels*

The Superior Airport Contiguous Parcels include four separate land parcels surrounding the Superior Airport parcel discussed below. The two parcels in Section 9 south of the Superior Airport parcel, and the parcel in Section 5 were examined in their entirety by several large- and small-scale projects conducted by the TNF. These include the *Superior Proposed Base for Exchange (South Half) Archaeological Survey* that was conducted in 1976 (Wood 1979); the Kennecott Drilling Exploration #2 Survey in 1995 (Herkenhoff 1995), the *Transamerica Land Exchange* (Green 1974); and the *Lakeside Land Exchange Superior Parcel* (Wood 1976) and several smaller projects. Only portions of the Section 4 parcel have been surveyed for cultural resources. Portions of this parcel were examined as part of a recent survey of the Magma Arizona Railroad right-of-way (Buckles et al. 2012), as well as by several linear surveys and small-scale internal TNF projects spanning the past several decades. These surveys have identified 23 archaeological sites throughout these parcels. These represent a broad range of prehistoric Native American and historic Euroamerican site types. The prehistoric Native American sites represent Hohokam and Salado settlement. Some of the identified sites are characterized as the largest

of their kind in the area (Wood 1979). The historic Euroamerican sites include portions of the narrow- and standard-gauge routes of the Magma Arizona Railroad, segments of the Pinal to Silver King roads, a portion of the historic Superior Town Dump, utility lines, and perhaps outlying structures related to the Pinal Townsite. The inventory of historic properties in these parcels is incomplete, and further archaeological studies would be required to complete the inventory.

3.4.1.8.3. Superior Airport

A small fraction of the Superior Airport parcel has been archaeologically surveyed. Most of the surveys are focused on a narrow strip along the US 60 highway. Fourteen archaeological sites have been identified representing prehistoric Hohokam and Salado settlements, along with portions of the historic Pinal Townsite, historic residences, roads, and utility lines. Several of the sites within the US 60 realignment corridor were recently excavated as part of the Arizona Department of Transportation's US 60 Section 106 compliance program. The 1912 General Land Office map indicates that the original Florence to Superior road passed through this parcel, as did a segment of the Florence to Superior telephone line. Segments of the roads between the Silver King Mine and the Pinal Townsite crossed through this parcel, and structures that were part of Pinal Townsite are indicated in what would be the far southwestern margin of the parcel. Also shown on the 1912 map is the "Bellamy Pasture." The Bellamy family moved to the Superior area in 1891 and prospected and ranched in the Superior and Oak Flat areas until 1921 (Deaver 2013). The "Bellamy Pasture" straddles Queen Creek and may be the site of "Bellamy Park," a pioneer camp occupied by the Bellamy family and other early pioneers and prospectors in the area. The inventory of historic properties in this parcel is incomplete and further archaeological studies would be necessary to complete the historic properties inventory.

3.4.1.9. Hazardous Materials

The extent of hazardous or potentially hazardous materials at the town of Superior parcels is currently unknown. A Phase I Environmental Site Assessment, in conformance with ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E1527-13, will be completed during NEPA scoping to identify any recognized environmental conditions associated with potentially hazardous materials.

3.4.1.10. Visual Resources

A Visual Management System Analysis for Landscape Aesthetics has not been conducted for these parcels. Formal analyses will be conducted as part of NEPA analysis.

3.4.1.11. Socioeconomic Resources

The socioeconomic analysis for the Town of Superior lands was done at the county level, and is therefore the same as is described above under Selected Lands (**Section 3.3.1.11**).

3.5. OFFERED LANDS

3.5.1. TURKEY CREEK

3.5.1.1. *Climate and Air Quality*

Climatic data for the Turkey Creek parcel or immediate vicinity were not available. The closest weather station to the parcel is located at the Sierra Ancha Experimental Forest, approximately 20 mi (32 km) southeast of, and at a lower elevation of 5,100 ft (1,554 m) amsl than, the parcel (**Figure 3.3-1**). The average annual temperatures in the area range from a low of 45.6 to a high of 72.2 degrees Fahrenheit (7.6 to 22.3 degrees Celsius) with average precipitation of approximately 26.52 inches (67.4 cm) per year (WRCC 2015). Actual onsite temperature ranges are expected to be lower and precipitation may be higher, given that the parcel is 60 to 480 ft (18 to 146 m) higher in elevation than the Sierra Ancha Experimental Forest weather station.

The Turkey Creek parcel is not currently located within a designated nonattainment area or maintenance area for air quality criteria pollutants (ADEQ 2015b). The closest federal Class I area is the Sierra Ancha Wilderness Area located approximately 10 mi (16 km) east of the parcel (**Figure 3.3-1**).

3.5.1.2. *Topography, Physiography, and Geology*

The Turkey Creek parcel is located within the streambed and adjacent upland areas along Turkey Creek and Rock Creek in the Sierra Ancha Mountains. Topographically, the parcel includes gently sloping areas within and along the stream, moderate to steep slopes along the northern canyon side, and vertical cliffs in selected areas of exposed bedrock along Rock Creek (WestLand 2004g). Elevations range from a high of approximately 5,580 ft (1,700 m) amsl at the western boundary down to approximately 5,160 ft (1,573 m) amsl along the northern boundary in the stream bed (**Figure 3.5-1**).

The parcel lies within the Central Highlands physiographic province, a transitional zone between the Basin and Range and the Colorado Plateau provinces. Exposed geologic surfaces on the parcel include Tertiary conglomerate on the canyon's upper slopes, middle Proterozoic Dripping Springs quartzite adjacent to the stream bed in the northeastern portion (i.e., exposed cliff faces), and Quaternary (Holocene) alluvium within the canyon bottom (Skotnicki 1999) (**Figure 3.5-1**). The alluvium exhibits granite and quartzite clasts, and ranges in size from sand and gravel up to small boulders. The stream channel is clearly active, with recent and aged erosion and accretion evident throughout (WestLand 2004g).

3.5.1.2.1. *Mineral Resources*

A mineral assessment for this parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

The Turkey Creek parcel is unpatented private land and, therefore, has no active mining claims (BLM 2015a).

3.5.1.3. *Water*

3.5.1.3.1. *Surface Water Resources*

The dominant drainage feature in the parcel is Turkey Creek, which has intermittent to perennial flow within the parcel (WestLand 2004g). The volume of flow in this stream is unknown. The surface water features in the Turkey Creek parcel are comprised of ephemeral channels that are tributary to Turkey Creek in the Salt River's watershed (**Figure 3.5-2**).

Turkey Creek has not been identified by the ADEQ as impaired for any designated uses by that agency's surface water monitoring program. Tonto Creek, approximately 21 river miles (33.8 km) downstream of the parcel, has been given a draft impaired status by the EPA for mercury in fish tissue (ADEQ 2015a).

The Turkey Creek parcel has been mapped by FEMA as Zone D, an area of undetermined flood hazard (**Figure 3.5-3**). Based on observations by WestLand (2004i), the floodplain on the site follows Turkey and Rock creeks for a total length of approximately 1.4 mi (2.2 km) within the parcel, averaging approximately 0.06 mile (0.1 km) in width. Thus, the floodplain on this site is estimated to encompass 0.08 square mi (0.22 square km), equaling 0.005 acres (0.002 ha).

The NWI map for the Turkey Creek parcel identifies no wetlands within the parcel (USFWS 2015). Mesoriparian habitat is present along the Turkey Creek stream channel (WestLand 2004i). Facultative wetlands species were present, but minimal obligate wetlands species (a few introduced willows) and no hydric soils were observed. No wetlands were identified on this parcel.

Local Surface Water Occurrence

The parcel is located along Turkey Creek, which roughly follows the southern and eastern parcel boundaries. Turkey Creek is reportedly perennial in this reach, although WestLand's observations suggest intermittent flow. The parcel extends north and west from Turkey Creek onto the northern side of Turkey Creek canyon; several unnamed ephemeral tributaries to the stream cross this slope. From the south, the stream in Bear Head Canyon reaches a confluence with Turkey Creek near the southeastern corner of the parcel; this stream also appears to be intermittent. Downstream of this confluence (and continuing along the eastern parcel boundary), the stream is identified as Rock Creek (WestLand 2004g). Rock Creek flows generally north to Spring Creek, which flows north and west before discharging into Tonto Creek.

Surface Water Rights

This parcel has an active, registered surface water right in the Salt River watershed sourced from the J/X Spring (**Appendix D**).

3.5.1.3.2. Groundwater Resources

The Turkey Creek parcel is located in the Salt River Lakes sub-basin within the larger Salt River groundwater basin. This basin covers approximately 200 square mi (518 square km) within Gila County. The region is bounded on the west and southwest by the Sierra Ancha and Superstition mountains. Groundwater flow direction has not been characterized in the Salt River Lakes sub-basin.

The groundwater basin is predominantly drained by Turkey Creek and other perennial tributaries. Unconsolidated sands and gravels within the floodplains of these streams and washes form an alluvial aquifer that is generally quite productive. Recharge to the aquifer occurs primarily along mountain fronts and from streams and lake infiltration (ADWR 2015a).

The Arizona Department of Water Resources (ADWR) Well Registry database contained data for six wells within a 5-mi (8-km) radius of the parcel (ADWR 2013); **Figure 3.5-2**. Water levels in this area are relatively shallow, at less than 100 ft (30.5 m) below the surface. The median well yield from large wells (greater than 10-inch [25.4-cm] diameter) is 170 gpm (10.7 L-s).

The only water quality measurements available are in the southern area of the sub-basin near the Globe-Miami area. The most commonly exceeded drinking water standard was cadmium, although other metals and fluoride concentrations were also elevated in some wells. It is believed that mining activities in the area have impacted water quality in the alluvial aquifer along Pinal Creek and Miami Wash (ADWR 2015a).

3.5.1.4. Soils

The Arizona Land Resource Information Systems (ALRIS) General Soil Map indicates that the Turkey Creek parcel (**Figure 3.5-4**) is within the Roundtop-Tortugas-Jacks soil association (ALRIS 1975). Soils of this association are described as well-drained and occur on limestone and sandstone mountains just south of the Mogollon Rim. Roundtop soils make up about 35 percent, Tortugas soils 35 percent, Jacks soils 15 percent, and minor areas of rock outcrop and associated soils 15 percent. Soils of this association have good potential for woodland and rangeland wildlife habitat and are characterized as having shallow and moderate depths to bedrock, slow permeability in the Roundtop and Jacks soils, and steep slopes in some areas of all soils (Hendricks 1985).

3.5.1.5. Land Use

3.5.1.5.1. Access and Recreation

The Turkey Creek parcel is located in the highlands of the Sierra Ancha, on the eastern side of the crest of the range in Turkey and Rock Creek canyons, principally on the northern and western slopes but extending to the canyon floor. The nearest large metropolitan community is Phoenix, Arizona, located approximately 80 km (50 mi) west of the parcel (WestLand 2004c).

The parcel is accessed by going east and north from State Route (SR) 188 on FR 71, FR 609, and FR 416, which reaches the western corner of the parcel (**Figure 3.5-5**). A primitive road (“jeep trail”) crosses the parcel, leading from FR 416 down the slope to Turkey Creek, and thereafter roughly following the course of Turkey and Rock creeks (WestLand 2004g).

Adjoining lands are administered by TNF. The parcel lies north of Roosevelt Lake. There are no developed campgrounds in the vicinity of the parcel, but nature viewing, hiking, camping, and picnicking are some of the available recreational opportunities in the public lands surrounding the parcel.

The parcel is located within AGFD Management Unit 23 (**Figure 3.5-5**). Black bear, javelina, mule deer, whitetail deer, mountain lion, elk, Merriam’s turkey, band-tailed pigeon, dove, quail, and tree squirrel are commonly hunted game species in this unit (AGFD 2015a).

3.5.1.5.2. Agriculture and Grazing

This parcel is not mapped as suitable prime or unique farmland (Soil Survey Staff 2015). The parcel is currently surrounded by the Tonto Basin grazing allotment (AGFD 2015b; **Figure 3.5-5**), however Resolution Copper does not own the grazing lease and has not paid grazing fees for the 10 years it has owned the parcel (pers. comm Dan Mead).

3.5.1.5.3. Public Lands Management

The Turkey Creek parcel is a private in-holding within the TNF owned by Resolution Copper. The land exchange would transfer ownership of this parcel to the US, and it would be managed under the aegis of the Tonto National Forest Land and Resource Management Plan (Forest Plan; TNF 1985a), which guides the long-term management of National Forest System lands on the TNF.

3.5.1.5.4. Encumbrances

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on February 8, 2004, exceptions were noted in Schedule B – Section II (**Appendix H**). These have been compiled and can be found in **Appendix G**. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated, if necessary, at that time.

3.5.1.6. Wildlife

Wildlife species observed on the Turkey Creek parcel include elk (*Cervus elaphus*), deer (*Odocoileus* spp.), Stellar's jay (*Cyanocitta stelleri*), Mexican jay (*Aphelocoma wollweberi*), raven (*Corvus corax*), wild turkey (*Meleagris gallopavo*), White-breasted nuthatch (*Sitta carolinensis*), sapsucker (*Sphyrapicus* sp.), northern flicker (*Colaptes auratus*), Hutton's vireo (*Vireo huttoni*), dark-eyed junco (*Junco hyemalis*), and caddisfly (species in the order Trichoptera). Field reconnaissance on this parcel was conducted in February 2004. Wildlife activity is relatively low during this time of year, and migratory birds are not

present. Wintering birds were noted. Field reconnaissance conducted in the spring or fall would be expected to return a more extensive wildlife inventory (WestLand 2004b).

No surveys have been conducted to determine which aquatic biology might occur on the parcel. Turkey Creek is intermittent throughout the parcel (**Figure 3.5-2**).

The East-West Sierra Ancha SR 288 potential wildlife linkage is 8 mi (12.9 km) to the east of Turkey Creek (Majka et al. 2007).

3.5.1.6.1. Wildlife Management

Under the conditions and provisions of the Land Exchange, wildlife and habitat within this parcel will be managed under the Tonto National Forest Plan (TNF 1985a), in coordination with the AGFD.

3.5.1.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as listed species known to occur, or with potential to occur in the Turkey Creek parcel:

- Headwater chub (*Gila nigra*) – Candidate
- Roundtail chub (*Gila robusta*) – Candidate
- Northern Mexican gartersnake (*Thamnophis eques megalops*) – Threatened
- Mexican spotted owl (*Strix occidentalis lucida*) – Threatened
- Yellow-billed cuckoo (*Coccyzus americanus*) – Threatened
- Southwestern willow flycatcher, (*Empidonax traillii extimus*) – Endangered

Final designated critical habitat for Mexican spotted owl lies fully or partially within the parcel (**Appendix E**).

The following Forest Service sensitive species were identified as documented within 5 mi (8 km) of the Turkey Creek parcel (**Appendix F**):

- Northern goshawk (*Accipiter gentilis*)
- Bald eagle - Sonoran Desert population (*Haliaeetus leucocephalus*)
- Lowland leopard frog (*Lithobates yavapaiensis*)
- Desert sucker (*Catostomus clarkii*)

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.1.7. Vegetation

The upland vegetation on the Turkey Creek parcel consists of three biotic communities: Petran Montane Conifer Forest, Madrean Evergreen Woodland, and Interior Chaparral (Brown and Lowe 1980), whereas

Montane Riparian Wetland occurs along Turkey Creek (**Figure 3.5-6**). The Petran Montane Conifer Forest, represented by Ponderosa pine (*Pinus ponderosa*), occurs on north-facing slopes, while the south-facing slopes are a transition between Madrean Evergreen Woodland, represented by alligator juniper (*Juniperus deppeana*), and Interior Chaparral, represented by manzanita (*Arctostaphylos* sp.) with grasses also present. Riparian vegetation along Turkey Creek includes narrowleaf cottonwood (*Populus angustifolia*), New Mexican locust (*Robinia neomexicana*), Arizona sycamore (*Platanus wrightii*), and Gambel oak (*Quercus gambelii*).

Forest fires in the early 2000s burned approximately one-third of the vegetation on the parcel. The south-facing slopes experienced a greater loss of vegetative cover than the more mesic north-facing slopes and canyon bottoms. Some areas burned intensely, with the resulting loss of complete stands of one-seed juniper, Ponderosa pine, and manzanita. Several of the riparian tree species that were burned in the forest fires showed evidence of resprouting at the base of the trunk in 2004 (WestLand 2004b).

Under the conditions and provisions of the Land Exchange, vegetation and noxious weeds within this parcel will be managed under the Tonto National Forest Plan (TNF 1985a).

3.5.1.7.1. Special Status Plant Species

There are no special status plant species with potential to occur on the parcel.

There are no critical habitats within the parcel (**Appendix E**).

3.5.1.8. Cultural Resources

This parcel includes the area known as the J Slash X Ranch. The Turkey Creek parcel has never been surveyed for archaeological resources. What is known derives from archaeological surveys and research in the broader Sierra Ancha area. The Turkey Creek parcel is located within the projected areas of the Paleoindian (11,500–8500 B.C.), Archaic (8500 B.C.–A.D. 150), Hohokam (A.D. 700–1150), Mogollon (A.D. 300–1300), and Salado (A.D. 1150–1450) archaeological cultures. The parcel is also within the ethnohistoric territories of the Apache and Yavapai peoples. Euroamerican ranching in the area began around 1850. The region of the Sierra Anchas has long been a subject of archaeological study. The southeastern portion of the range is the home to extensive and elaborate cliff dwellings attributed to the Salado culture that have been studied by researchers since the late nineteenth century. The area of the Turkey Creek parcel was not subjected to mapping by the General Land Office in the early part of the twentieth century, but historical USGS quadrangle maps from that time period and from more recent decades show a structure in the vicinity of the J Slash X Ranch, as well as a series of pack trails following the nearby canyons. A landing strip is shown northwest of the parcel on the later historical maps. The inventory of historic properties in this parcel is incomplete and further archaeological studies are required to complete the inventory.

3.5.1.9. *Hazardous Materials*

A Phase I Environmental Site Assessment for potential environmental liability of the Turkey Creek parcel was conducted in 2004 (WestLand 2004g), in conformance with ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-00. The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the parcel or adjoining properties.

3.5.1.10. *Visual Resources*

A Visual Management System Analysis for Landscape Aesthetics has not been conducted for the Turkey Creek parcel. A formal visual analysis will be performed according to *Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management Chapter 2380 - Landscape Management* (USFS 2003b) as part of NEPA analysis.

3.5.1.11. *Socioeconomic Resources*

The Turkey Creek parcel is located within Gila County, Arizona. Dripping Springs, a parcel of offered lands to be conveyed to the BLM, is also located within Gila County. As the level of analysis for socioeconomic resources is at the county level, the following section pertains to both of these properties; see also **Section 3.5.7.5**.

3.5.1.11.1. *Population Demographics*

In 2013 there were an estimated 53,335 persons in Gila County (**Table 3.5-1**). The most populous communities within Gila County are Payson (15,301), Globe (7,532), San Carlos (4,038), Central-Heights –Midland City (2,534), and Star Valley (2,310; USCB 2010).

The population of Gila County grew by 82 percent from 1970 to 2013 with a 4 percent gain from 2000 to 2013 (**Table 3.5-1**). The population of Gila County has increased sporadically since 1970. The population of Gila County increased by 27 percent between 1970 and 1980, by 8 percent between 1980 and 1990, by 28 percent between 1989 and 2000, and by 4 percent between 2000 and 2013.

Table 3.5-1. Population Change in Gila County and Arizona 1970 to 2013.

Year	Gila County	Arizona
1970	29,255	1,794,912
1980	37,080	2,737,774
1990	40,216	3,684,097
2000	51,335	5,160,586
2013	53,335	6,479,703

Source: 1970-2000 (USCB 2010); 2013 (USCB 2015).

3.5.1.11.2. *Minority Groups and Low-Income Populations*

Racial diversity in Gila County is similar to what is found in the State of Arizona and less diverse than what is found overall in the US (**Table 3.5-2**). Within Gila County, 79.6 percent of the population

identifies as White, whereas 79.2 percent of the population in Arizona and 74.0 percent of the population in the US identify as White (**Table 3.5-2**). The ACS indicates that 53,335 people were living in Gila County in 2013. Racially, the population of Gila County was made up primarily of the following categories: White (79.6 percent) and American Indian (14.8 percent).

Table 3.5-2. Race composition in Gila County, Arizona, and the US

Category	Population in Gila County	Percentage of Population in Gila County	Percentage of Population in Arizona	Percentage of Population in the US
Total Population	53,335			
White	42,459	79.6%	79.2%	74.0%
Black or African American	306	0.6%	4.2%	12.6%
American Indian	7,910	14.8%	4.4%	0.8%
Asian	194	0.4%	2.8%	4.9%
Native Hawaiian & Other Pacific Is.	16	0.0%	0.2%	0.2%
Some Other Race	1,275	2.4%	6.2%	4.7%
Two or More Races	1,175	2.2%	3.0%	2.8%

Source: USCB 2015

People of Hispanic origin or ethnicity can be of any race; ethnicity is therefore considered separately from race (USCB 2001). The ACS indicates that 18.2 percent of individuals within Gila County were self-identified as Hispanic or Latino residents compared to 29.9 percent and 16.6 percent in Arizona and the US respectively (**Table 3.5-3**).

Table 3.5-3. Hispanic or Latino population demographics

Category	Gila County	Arizona	US
Total Population	53,335	6,479,703	311,536,594
Hispanic or Latino	9,702	1,935,948	51,786,591
Percentage Hispanic or Latino	18.2%	29.9%	16.6%

Source: USCB 2015

The EPA identifies both older and younger population groups as potentially being more susceptible to environmental risks (EPA 1998). The percentage of the population under the age of 18 is 25.1 percent for Gila County and 25.0 for Arizona (**Table 3.5-4**). The percentage of the population over the age of 65 is 19.8 percent for Gila County and 14.4 percent for Arizona (**Table 3.5-4**).

Table 3.5-4. Age distribution for Gila County and Arizona

Population Category	Gila County	Percentage of Population Gila County	Percentage of Population Arizona
Under 18 Years	12,890	25.1%	25.0%
18 to 34 Years	8,006	15.6%	23.4%
35 to 44 Years	6,704	13.1%	12.8%
45 to 64 Years	13,576	26.4%	24.5%
65 and over	10,159	19.8%	14.4%

Source: USCB 2015

3.5.1.11.3. Poverty, Education, and Employment

The percentage of people living in poverty within Gila County is 21.6 percent and the percentage of people living in poverty within the State of Arizona is 17.9 percent (**Table 3.5-5**).

Table 3.5-5. Poverty levels in Gila County, Arizona, and the US

Population Category	Gila County	Arizona	US
People (number)	52,403	6,333,791	303,692,076
Families (number)	13,546	1,563,121	76,744,358
People below poverty	11,301	1,131,901	46,663,433
Families below poverty	1,813	202,622	8,666,630
Percent Below Poverty Level			
People	21.6%	17.9%	15.4%
Families	13.4%	13.0%	11.3%

Source: USCB 2015

Over 84 percent of the residents in Gila County have a high school diploma and 16.1 percent have a bachelor's degree or higher (**Table 3.5-6**). Within Arizona 85.7 percent of the residents have a high school diploma and 26.9 percent have a bachelor's degree or higher (**Table 3.5-6**).

Table 3.5-6. Educational attainment for Gila County, Arizona, and the US

Educational Level	Gila County	Arizona	US
Total population 25 years or older	38,494	4,211,194	206,587,852
No high school diploma	15.7%	14.3%	14.0%
High school graduate	84.3%	85.7%	86.0%
Associate's degree	8.8%	8.3%	7.8%
Bachelor's degree	16.1%	26.9%	28.8%
Graduate or professional	9.1%	17.0%	18.0%

Source: USCB 2015

In 2013, Gila County's resident employed population numbered 18,378 persons (**Table 3.5-7**). Educational services, health care, and social assistance (25.1 percent); arts, entertainment and recreation, accommodation, and food service (12.1); and retail trade (11.4 percent) were the largest employers by field in Gila County (**Table 3.5-7**). Employment figures for all fields are presented in **Table 3.5-7**.

Table 3.5-7. Gila County employment by industry

Sector	Number Employed	Percent
Agriculture, forestry, fishing, hunting, and mining	1,868	10.2%
Construction	1,245	6.8%
Manufacturing	591	3.2%
Wholesale trade	145	0.8%
Retail trade	2,092	11.4%
Transportation, warehousing, and utilities	899	4.9%
Information	183	1.0%
Finance, insurance, real estate, rental, and leasing	944	5.1%
Professional, scientific, management, administrative, and waste management services	1,317	7.2%
Educational services, health care, and social assistance	4,618	25.1%
Arts, entertainment and recreation, accommodation, and food services	2,219	12.1%
Other services, except public administration	725	3.9%
Public administration	1,532	8.3%
Total	18,378	

Source: USCB 2015

3.5.1.11.4. Land Ownership and Federal Land Payments

The total area for Gila County is 3,069,101 acres (1,242,021 ha). Within Gila County the US is the largest land owner, holding 57.2 percent of all land in the county (**Table 3.5-8**). Private land owners hold 4 percent, Arizona holds 1 percent and tribal entities hold 37.3 percent of the land in Gila County.

Table 3.5-8. Land ownership in Gila County

Ownership Entity	Acres	Percent of Total Area in Gila County
Total Area	3,069,101	
Private Lands	123,196	4.0%
Conservation Easement	n/a	n/a
Federal Lands	1,756,339	57.2%
Forest Service	1,688,731	55.0%
BLM	66,281	2.2%
National Park Service	1,121	0.0%
Military	n/a	n/a
Other Federal	206	0.0%
State Lands	31,463	1.0%
State Trust Lands	31,197	1.0%
Other State	266	0.0%
Tribal Lands	1,158,102	37.7%
City, County, Other	n/a	n/a

Source: USGS 2012

Federal land payments can be a significant income source particularly in rural communities with small populations and fewer private tax sources. In 2007 federal land payments to Gila County totaled \$2,494,000 and were 3.8 percent of the total general revenue for the county (**Table 3.5-9**).

Table 3.5-9. Summary of Revenue Sources for Gila County in 2007

Sources of General Revenue	Amount Received ¹	Percent of Total Revenue
Taxes	20,960,000	32.1%
Intergovernmental Revenue	32,237,000	49.4%
Total Charges	4,054,000	6.2%
All Other Miscellaneous	7,947,000	12.2%
Federal Land Payments	2,494,000	3.8%
Total General Revenue	65,199,000	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

¹ FY 2007 Revenue dollars are reported in 2013 dollars.

In 2013 federal land payments to Gila County increased to \$5,042,314, with \$3,197,536 coming from the federal PILT program (**Table 3.5-10**).

Table 3.5-10. Summary of Federal Land Payments for Gila County

Origin of Federal Land Payments	Gila County FY 2013	Percent of Total Revenue
Payments in Lieu of Taxes (PILT)	3,197,536	63.4%
Forest Service Payments	1,837,221	36.4%
BLM Payments	7,557	0.1%
USFWS Refuge Payments	0	0%
Federal Mineral Royalties	0	0%
Total Federal Land Payments	5,042,314	63.4%

Sources: (USFS 2007; BLM 2009; USDI 2009; USFS 2009; ONRR 2012; USCB 2014)

¹ FY 2007 Revenue dollars are reported in thousands of 2013 dollars.

The primary beneficiary of federal land payments in Gila County was the county government which received 78 percent of the total payments (**Table 3.5-11**).

Table 3.5-11. Summary of Federal Land Payment Disbursements for Gila County in FY 2013

Distribution of Federal Land Payments	Disbursements in FY 2013	Percent of Total
County Government	3,932,424	78.0%
Local School Districts	734,888	14.6%
Resource Advisory Councils	367,444	7.3%
Grazing Districts	7,557	0.1%
Total Federal Land Payments	5,042,314	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

3.5.2. TANGLE CREEK

3.5.2.1. *Climate and Air Quality*

Climate data is not available in the immediate vicinity of the parcel. According to the Childs, Arizona weather station data, average annual temperatures in the area range from a low of 47.5 to a high of 81.1 degrees Fahrenheit (8.6 to 27.3 degrees Celsius) with average precipitation of approximately 18.11 inches (46 cm) per year (WRCC 2015). The Childs weather station is located approximately 14.5 mi (23 km) from the parcel at an elevation of 2,650 ft (808 m) amsl (**Figure 3.3-1**). Actual temperatures for the parcel may be lower and precipitation higher, given that the parcel is approximately 250 ft (76 m) higher in elevation than the weather station.

The Tangle Creek parcel is not located within a designated nonattainment area or maintenance area for air quality criteria pollutants (ADEQ 2015b). The closest federal Class I area is the Mazatal Wilderness Area located approximately 4 mi (6 km) east of the parcel (**Figure 3.3-1**).

3.5.2.2. *Topography, Physiography, and Geology*

The Tangle Creek parcel includes approximately 1 mi (1.6 km) of Tangle Creek, and is surrounded by TNF-administered lands. Tangle Creek is tributary to the Verde River, which flows perennially north-to-south about 12 miles (19 km) east of the parcel. It lies within the Bloody Basin, a broad valley with gently sloping to rolling hills with few rugged areas. Rugged terrain is present only at the ridge near the northwestern boundary (**Figure 3.5-7**). Steep eroded cliffs are present along sections of Tangle Creek (WestLand 2004h).

The Tangle Creek parcel is located within the Central Highlands physiographic province, a transitional zone between the Basin and Range and the Colorado Plateau provinces. Elevation ranges from approximately 2,900 ft (884 m) amsl in the southeastern corner of the property sloping gradually upwards to 3,000 ft (914.5) amsl at the northwestern boundary. The Tangle Creek valley in this area is a broad basin surrounded by peaks ranging from 4,000 to 6,000 ft (1,219 to 1,829 m) amsl in elevation. The extended Bloody Basin area is a graben, bounded to the west by the eastern flank of Cooks Mesa and to the east by the Mazatzal Mountains (Brand and Stump 2005). The surface geology of the entire parcel is mapped as Pliocene to Middle Miocene Deposits (Richard et al. 2000) and is presented in **Figure 3.5-7**.

3.5.2.2.1. **Mineral Resources**

A mineral assessment for this parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

The Tangle Creek parcel is unpatented private land and, therefore, has no active mining claims (BLM 2015a).

3.5.2.3. *Water*

3.5.2.3.1. **Surface Water Resources**

Located within the Bloody Basin of the TNF, the Tangle Creek parcel is dominated by Tangle Creek, a substantial tributary to the Verde River located approximately 10 river miles (16 km) downstream of the parcel (**Figure 3.5-8**). Although ephemeral within the subject parcel, Tangle Creek is presumed to be spatially intermittent to perennial in other reaches because of its designated use for warm water aquatic and wildlife use (18 Arizona Administrative Code [A.A.C.] 11: Appendix B).

Tangle Creek has not been identified by ADEQ as impaired for any designated uses by that agency's surface water monitoring program (ADEQ 2012, 2015a).

Most of the Tangle Creek parcel is identified by FEMA as Zone X (minimal flood hazard), with portions denoted as Zone A (1-percent annual chance flood hazard of 100-year flood), and Zone D (undetermined flood hazard) (**Figure 3.5-9**).

The NWI map for the Tangle Creek parcel identifies no wetlands within the parcel (USFWS 2015). Based on observations and data review by WestLand (2004i), Tangle Creek (and its tributaries) is an ephemeral watercourse for the 10,500-ft (3,200-m) reach passing through the property. Meso- and xeroriparian habitat is present along the stream channels. No obligate or facultative species, or hydric soils, were observed on this site. No wetlands were identified at this site.

Surface Water Occurrence

The parcel is located in the Bloody Basin of the TNF along a 1.6-km (1-mile) long portion of Tangle Creek, an intermittent tributary of the Verde River that flows perennially north-to-south about 19 km (12 miles) east of the parcel (WestLand 2004h).

One spring has been identified in the vicinity, the LX Spring; the location of the spring is shown in **Figure 3.5-8**.

Surface Water Rights

This parcel has active, registered surface water rights in the Verde River watershed sourced from the LX Ranch spring (**Appendix D**).

3.5.2.3.2. **Groundwater Resources**

The Tangle Creek parcel is located in the Verde Canyon sub-basin within the larger Verde River groundwater basin. This basin covers approximately 400 square mi (1,036 square km) within Gila County. The region is bounded on the east by the Mogollon Rim. Groundwater recharge originates primarily along the crest of the Mogollon Rim, where precipitation and snowmelt percolate through permeable volcanic, limestone, or sandstone units. Spring discharge and stream base flow appear to be the largest component of aquifer outflow (ADWR 2015b).

The ADWR Well Registry database contained data for two wells within a 1-mi (1.6-km) radius of the parcel (ADWR 2013; **Figure 3.5-8**). Water levels in this area vary greatly. In the nearby Payson area, water levels range from 115 to 3,399 ft (35 to 1,036 m) bgs. Groundwater is primarily withdrawn from fractured and faulted granite.

Water quality is generally good in the sub-basin although the drinking water standards for arsenic, beryllium, cadmium, lead, selenium, and organics have been equaled or exceeded in wells in the Payson area.

3.5.2.4. Soils

The ALRIS General Soil Map indicates that the Tangle Creek parcel (**Figure 3.5-10**) is within the Continental-Latene-Pinaleno soil association (ALRIS 1975). The soils of this association are well-drained and occur on dissected old terraces and alluvial fans. Continental soils make up about 30 percent, Latene soils 25 percent, Pinaleno soils 25 percent, and several minor soils make up the other 20 percent of the association. This soil association has fair potential for rangeland and wildlife habitat and is characterized as having slow permeability and high shrink-swell in Continental soils, slope and high gravel content in Pinaleno soils, and high lime content in the substrata of Latene soils (Hendricks 1985).

3.5.2.5. Land Use

3.5.2.5.1. Access and Recreation

Access to the Tangle Creek parcel is via FR 24 from the south or FR 269 (Bloody Basin Road) from the west (WestLand 2004d; **Figure 3.5-11**).

Adjoining lands are administered by TNF. The parcel lies east of the Seven Springs Recreation Area, Cave Creek Campground and Trailhead, and CCC Campground, and west of Horseshoe Reservoir. Available recreational opportunities on the public lands surrounding the parcel are fishing, boating, swimming, nature viewing, outdoor learning, hiking, camping, and picnicking.

The parcel is located within AGFD Management Unit 21 (**Figure 3.5-11**). Antelope, black bear; mule deer, whitetail deer, elk, javelin, and quail are commonly hunted game species in this unit (AGFD 2015a).

3.5.2.5.2. Agriculture and Grazing

This parcel is not mapped as suitable prime or unique farmland (Soil Survey Staff 2015). The parcel is currently surrounded by the Red Creek grazing allotment (AGFD 2015b; **Figure 3.5-11**), however Resolution Copper does not own the grazing lease and has not paid grazing fees for the 10 years it has owned the parcel (pers. comm Dan Mead).

3.5.2.5.3. Public Lands Management

The Tangle Creek parcel is a private in-holding within the TNF owned by Resolution Copper. The land exchange would transfer ownership of this parcel to the US and it would be managed under the aegis of

the TNF Forest Plan (TNF 1985a) which guides the long-term management of National Forest System lands on the TNF.

3.5.2.5.4. Encumbrances

In the Commitment for Title Insurance issued by Chicago Title Insurance Company on December 1, 2004, special exceptions were noted in Schedule B (**Appendix H**). These have been compiled and can be found in **Appendix G**. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated, if necessary, at that time.

3.5.2.6. Wildlife

Wildlife species observed on the parcel include black phoebe (*Sayornis nigricans*), Rufous-crowned sparrow (*Aimophila ruficeps*), mule deer (*Odocoileus hemionus*), deer mouse (*Peromyscus maniculatus*), and pack rat (*Neotoma albigula*). Field reconnaissance on this parcel was conducted in February of 2004. Wildlife activity is relatively low during this time of year, and migratory birds are not present. Wintering birds were noted. Field reconnaissance conducted in the spring or fall would be expected to return a more extensive wildlife inventory (WestLand 2004b).

Tangle Creek is ephemeral throughout the parcel, but there is a spring on the parcel with potential to support aquatic biology (**Figure 3.5-8**). No surveys have been conducted to determine which aquatic biology might occur on the parcel.

There are no potential wildlife linkages within 1 mile of the parcel (Majka et al. 2007).

3.5.2.6.1. Wildlife Management

Under the conditions and provisions of the Land Exchange, wildlife and habitat within this parcel will be managed under the Tonto National Forest Plan (TNF 1985a), in coordination with the AGFD.

3.5.2.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix G**), the following were identified as listed species known to occur, or with potential to occur in the Tangle Creek parcel:

- Page springsnail (*Pyrgulopsis morrisoni*) – Candidate
- Chiricahua leopard frog (*Lithobates chiricahuensis*) – Threatened
- Yellow-billed cuckoo (*Coccyzus americanus*) – Threatened
- Southwestern willow flycatcher, (*Empidonax traillii extimus*) – Endangered

There are no critical habitats within the parcel (**Appendix E**).

The following Forest Service sensitive species were identified as documented within 5 mi (8 km) of the Tangle Creek parcel (**Appendix F**):

- Parker's cyloepus riffle beetle (*Cylloepus parkeri*)
- Bald eagle - winter population (*Haliaeetus leucocephalus*)
- Bald eagle - Sonoran Desert population (*Haliaeetus leucocephalus*)
- Lowland leopard frog (*Lithobates yavapaiensis*)
- Desert sucker (*Catostomus clarkii*)

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.2.7. *Vegetation*

The upland vegetation on the Tangle Creek parcel is an interdigitating assemblage of three biotic communities: the Great Basin Conifer Woodland, the Arizona Upland Subdivision of the Sonoran Desertscrub, and the Semidesert Grassland. The Sonoran Deciduous Riparian Forest occurs in a defined corridor in and along the floodplains of Tangle Creek (**Figure 3.5-12**). Both the Great Basin Conifer Woodland, represented by one-seed juniper and the Semidesert Grassland, represented by a number of grass species including the locally dominant side-oats grama (*Bouteloua curtipendula*) occur throughout the property. The Arizona Upland Subdivision of Sonoran Desertscrub represented by saguaro occurs only on the cliffs of exposed lacustrine sediments in the northwestern portion of the property.

The Tangle Creek parcel has been grazed in the past. The bare, grassless stream terraces and the lack of sapling Arizona sycamore and ash (*Fraxinus* spp.) trees may be related to at least a century of cattle grazing. Historical use of the site as a residence and, more recently, transient worker housing has resulted in a modest amount of land disturbance, including agricultural land clearing. In 2004, the property was vacant, disturbance had largely ceased, and natural vegetation was gradually returning (WestLand 2004b).

Under the conditions and provisions of the Land Exchange, vegetation and noxious weeds within this parcel will be managed under the Tonto National Forest Plan (TNF 1985a).

3.5.2.7.1. *Special Status Plant Species*

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following Forest Service sensitive species were identified as documented within 5 mi (8 km) of the Tangle Creek parcel (**Appendix F**):

- Arizona giant sedge (*Carex ultra*)
- Eastwood alum root (*Heuchera eastwoodiae*)

There are no critical habitats within the parcel (**Appendix E**).

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.2.8. *Cultural Resources*

The Tangle Creek parcel includes the area known as the LX Bar Ranch. The Tangle Creek parcel is located within the defined areas of the Paleoindian (11,500–8500 B.C.) and Archaic (8500 B.C.–A.D. 150) archaeological cultures; on the periphery of defined area for the Hohokam (A.D. 700–1150), Mogollon (A.D. 300–1300), Sinagua (A.D. 500–1425) and Salado (A.D. 1150–1450) archaeological cultures; and within the ethnohistoric territories of the Yavapai and Apache peoples. Euroamerican occupation related to ranching in the area began in the mid-19th century. Archival records show that the Tangle Creek parcel has not been surveyed for archaeological resources. Similarly, very little of the surrounding vicinity has been surveyed. One known site south of the parcel is a prehistoric masonry pueblo. Large prehistoric pithouse and masonry pueblo sites are known to exist in the vicinity of the Perry Mesa Archaeological District (listed on the NRHP in 1975 #75000364) located west of the parcel (Wood 1999). Extensive petroglyph sites are also found in this area (Wood 1999). The earliest USGS Topographic maps from the late nineteenth century show no features in the vicinity of or within the Tangle Creek parcel. The General Land Office map from the late 1940s shows a road crossing the parcel, another road labeled “To Phoenix” southwest of the parcel, and a structure labeled “Shed” west of the parcel. More recent USGS quadrangles show the abovementioned road crossing the parcel, as well as a series of transmission lines through the parcel. The inventory of historic properties in this parcel is incomplete and further archaeological studies as detailed above are required to complete the inventory.

3.5.2.9. *Hazardous Materials*

A Phase I Environmental Site Assessment for potential environmental liability of the Tangle Creek parcel was conducted in 2004 (WestLand 2004h) in conformance with ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-00. The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the parcel or adjoining properties.

However, the report noted that five 55-gallon drums, four of which contained Number 2 diesel, were present on the parcel. The limited evidence of soil staining (a few square feet) observed in the vicinity of the drums did not appear to present a material threat to public health and the environment; therefore the presence of these drums was considered a housekeeping issue that was not a recognized environmental condition. Also, two automobile batteries were observed near the homesite (WestLand 2004h).

In addition to the drums, three waste disposal sites (one concentrated household waste disposal site and two other smaller areas of waste disposal), several pallets of cement blocks, as well as decaying agricultural equipment were present on the parcel at the time of the site reconnaissance (WestLand 2004h). Again, these are not considered recognized environmental conditions but rather housekeeping issues.

The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the Tangle Creek parcel. As described above, soil staining observed at the former homestead site is considered to be a *de minimis* issue, not posing a threat to human health or the environment.

3.5.2.10. *Visual Resources*

A Visual Management System Analysis for Landscape Aesthetics has not been conducted for this parcel. A formal visual analysis will be performed according to *Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management Chapter 2380 - Landscape Management* (USFS 2003b) as part of NEPA analysis.

3.5.2.11. *Socioeconomic Resources*

The Tangle Creek parcel is located within Yavapai County.

3.5.2.11.1. *Population Demographics*

In 2013 there were an estimated 211,968 persons in Yavapai County (**Table 3.5-12**). The most populous communities within Yavapai County are Peoria (154,065), Prescott (39,843), Prescott Valley (38,822), Verde Village (11,605), and Cottonwood (11,265; USCB 2010).

The population of Yavapai County grew by 473 percent from 1970 to 2013, with a 27 percent gain from 2000 to 2013 (**Table 3.5-12**). Although the population of Yavapai County has increased significantly since 1970, the growth rate has steadily declined. The population of Yavapai County increased by 84 percent between 1970 and 1980, by 58 percent between 1980 and 1990, by 56 percent between 1989 and 2000, and by 27 percent between 2000 and 2013.

Table 3.5-12. Population Change in Yavapai County and Arizona 1970 to 2013

Year	Yavapai County	Arizona
1970	37,005	1,794,912
1980	68,145	2,737,774
1990	107,714	3,684,097
2000	167,517	5,160,586
2013	211,968	6,479,703

Source: 1970-2000 (USCB 2010); 2013 (USCB 2015)

3.5.2.11.2. *Minority Groups and Low-Income Populations*

Yavapai County is less diverse than the State of Arizona and the US (**Table 3.5-13**). Within Yavapai County, 91.9 percent of the population identifies as White, whereas 79.2 percent of the population in Arizona and 74.0 percent of the population in the US identify as White (**Table 3.5-13**). The ACS indicates that 211,968 people were living in Yavapai County in 2013. Racially, the population of Yavapai County was made up primarily of the following categories: White (91.9 percent), Some Other Race (2.3 percent), Two or More Races (2.2 percent), and American Indian (2.1 percent).

Table 3.5-13. Race composition in Yavapai County, Arizona, and the US

Category	Population in Yavapai County	Percentage of Population in Yavapai County	Percentage of Population in Arizona	Percentage of Population in the US
Total Population	211,968			
White	194,869	91.9%	79.2%	74.0%
Black or African American	1,293	0.6%	4.2%	12.6%
American Indian	4,475	2.1%	4.4%	0.8%
Asian	1,715	0.8%	2.8%	4.9%
Native Hawaiian & Other Pacific Is.	46	0.0%	0.2%	0.2%
Some Other Race	4,918	2.3%	6.2%	4.7%
Two or More Races	4,652	2.2%	3.0%	2.8%

Source: USCB 2015

People of Hispanic origin or ethnicity can be of any race; ethnicity is therefore considered separately from race (USCB 2001). The ACS indicates that 13.7 percent of individuals within Yavapai County were self-identified as Hispanic or Latino residents compared to 29.9 percent and 16.6 percent in Arizona and the US respectively (**Table 3.5-14**).

Table 3.5-14. Hispanic or Latino population demographics

Category	Yavapai County	Arizona	US
Total Population	211,968	6,479,703	311,536,594
Hispanic or Latino	29,107	1,935,948	51,786,591
Percentage Hispanic or Latino	13.7%	29.9%	16.6%

Source: (USCB 2015)

The EPA identifies both older and younger population groups as potentially being more susceptible to environmental risks (EPA 1998). The percentage of the population under the age of 18 is 18.6 percent for Yavapai County and 25.0 for Arizona (**Table 3.5-15**). The percentage of the population over the age of 65 is 25.3 percent for Yavapai County and 14.4 percent for Arizona (**Table 3.5-15**).

Table 3.5-15. Age distribution for Yavapai County and Arizona

Population Category	Yavapai County	Percentage of Population Yavapai County	Percentage of Population Arizona
Under 18 Years	39,392	18.6%	25.0%
18 to 34 Years	33,466	15.8%	23.4%
35 to 44 Years	19,919	9.4%	12.8%
45 to 64 Years	65,525	30.9%	24.5%
65 and over	53,666	25.3%	14.4%

Source: USCB 2015

3.5.2.11.3. Poverty, Education, and Employment

The percentage of people living in poverty within Yavapai County is 15.8 percent and the percentage of people living in poverty within the State of Arizona is 17.9 percent (**Table 3.5-16**).

Table 3.5-16. Poverty levels in Yavapai County, Arizona, and the US

Population Category	Yavapai County	Arizona	US
People (number)	208,864	6,333,791	303,692,076
Families (number)	56,865	1,563,121	76,744,358
People below poverty	33,026	1,131,901	46,663,433
Families below poverty	6,118	202,622	8,666,630
Percent Below Poverty Level			
People	15.8%	17.9%	15.4%
Families	10.8%	13.0%	11.3%

Source: USCB 2015

Over 90 percent of the residents in Yavapai County have a high school diploma, and 24.2 percent have a bachelor's degree or higher (**Table 3.5-17**). Within Arizona 85.7 percent of the residents have a high school diploma and 26.9 percent have a bachelor's degree or higher (**Table 3.5-17**).

Table 3.5-17. Educational attainment for Yavapai County, Arizona, and the US

Educational Level	Yavapai County	Arizona	US
Total population 25 years or older	157,797	4,211,194	206,587,852
No high school diploma	9.8%	14.3%	14.0%
High school graduate	90.2%	85.7%	86.0%
Associate's degree	8.9%	8.3%	7.8%
Bachelor's degree	24.2%	26.9%	28.8%
Graduate or professional	15.6%	17.0%	18.0%

Source: USCB 2015

In 2013, Yavapai County's resident employed population numbered 82,623 persons (**Table 3.5-18**). Educational services, health care, and social assistance (23.7 percent); arts, entertainment and recreation, accommodation, and food services (14.5); and retail trade (12.5 percent) were the largest employers by field in Yavapai County (**Table 3.5-18**). Employment figures for all fields are presented in **Table 3.5-18**.

Table 3.5-18. Yavapai County employment by industry

Sector	Number Employed	Percent
Agriculture, forestry, fishing, hunting, and mining	2,117	2.6%
Construction	6,658	8.1%
Manufacturing	4,345	5.3%
Wholesale trade	1,886	2.3%
Retail trade	10,363	12.5%
Transportation, warehousing, and utilities	3,337	4.0%
Information	1,326	1.6%
Finance, insurance, real estate, rental, and leasing	4,672	5.7%
Professional, scientific, management, administrative, and waste management services	7,149	8.7%
Educational services, health care, and social assistance	19,583	23.7%
Arts, entertainment and recreation, accommodation, and food services	11,947	14.5%
Other services, except public administration	5,173	6.3%
Public administration	4,067	4.9%
Total	82,623	

Source: USCB 2015

3.5.2.11.4. Land Ownership and Federal Land Payments

The total area for Yavapai County is 5,201,845 acres (2,105,112 ha). Within Yavapai County the US is the largest land owner, holding 46 percent of all land in the county (**Table 3.5-19**). Private land owners hold 29.4 percent, Arizona holds 24.6 percent and tribal entities hold 0.1 percent of the land in Yavapai County.

Table 3.5-19. Land ownership in Yavapai County

Ownership Entity	Acres	Percent of Total Area in Yavapai County
Total Area	5,201,845	
Private Lands	1,529,676	29.4%
Conservation Easement	n/a	n/a
Federal Lands	2,391,849	46.0%
Forest Service	1,760,638	33.8%
BLM	629,995	12.1%
National Park Service	1,216	0.0%
Military	n/a	n/a
Other Federal	n/a	n/a
State Lands	1,277,124	24.6%
State Trust Lands*	1,262,620	24.3%
Other State	14,504	0.3%
Tribal Lands	3,092	0.1%
City, County, Other	103	0.0%

Source: USGS 2012

Federal land payments can be a significant income source particularly in rural communities with small populations and fewer private tax sources. In 2007 federal land payments to Yavapai County totaled \$2,570,000 and were 1.4 percent of the total general revenue for the county² (**Table 3.5-20**).

Table 3.5-20. Summary of Revenue Sources for Yavapai County in FY 2007

Sources of General Revenue	Amount Recieved ¹	Percent of Total Revenue
Taxes	69,238,000	37.8%
Intergovernmental Revenue	96,216,000	52.5%
Total Charges	5,238,000	2.9%
All Other Miscellaneous	12,554,000	6.9%
Federal Land Payments	2,570,000	1.4%
Total General Revenue	183,246,000	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

¹ FY 2007 Revenue dollars are reported in 2013 dollars.

In 2013 federal land payments to Yavapai County increased to \$5,570,313 with \$2,960,656 coming from the federal PILT program (**Table 3.5-21**).

Table 3.5-21. Summary of Federal Land Payments for Yavapai County in FY 2013

Origin of Federal Land Payments	Federal Land Payments in FY 2013	Percent of Total
Payments in Lieu of Taxes (PILT)	2,960,656	53.2%
Forest Service Payments	2,543,488	45.7%
BLM Payments	66,169	1.2%
USFWS Refuge Payments	0	0%
Federal Mineral Royalties	0	0%
Total Federal Land Payments	5,570,313	

Sources: (USFS 2007; BLM 2009; USDI 2009; USFS 2009; ONRR 2012; USCB 2014)

The primary beneficiary of federal land payments in Yavapai County was the county government which received 74.6 percent of the total payments (**Table 3.5-22**).

Table 3.5-22. Summary of Federal Land Payment Disbursements for Yavapai County in FY 2013

Distribution of Federal Land Payments	Disbursements in FY 2013	Percent of Total
County Government	4,156,095	74.6%
Local School Districts	1,017,395	18.3%
Resource Advisory Councils	330,653	5.9%
Grazing Districts	66,169	1.2%
Total Federal Land Payments	5,570,313	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

² The dollar value for federal land payments in Pinal County in 2007 has been converted to the equivalent of 2013 dollars for comparison purposes.

3.5.3. CAVE CREEK

3.5.3.1. *Climate and Air Quality*

Climatic data for the Cave Creek parcel or immediate vicinity were not available. The weather station in Carefree, Arizona was selected to represent climate at the parcel; it is located approximately 8 mi (13 km) away at an elevation of 2,530 ft (771 m) amsl, 30 ft (9 m) lower than the parcel (**Figure 3.3-1**). The average annual temperatures in the area range from a low of 56.8 to a high of 82.3 degrees Fahrenheit (13.8 to 27.9 degrees Celsius) with average precipitation of approximately 12.71 inches (32.28 cm) per year (WRCC 2015). As is true for much of central Arizona, precipitation is almost evenly divided between the monsoon season (July-October) and winter (December-March).

The Cave Creek parcel is located within the boundary of a designated ozone nonattainment area (**Figure 3.3-1**). It does not fall within any designated maintenance areas (ADEQ 2015b). The closest federal Class I area is the Mazatal Wilderness Area located approximately 16 mi (26 km) east of the parcel (**Figure 3.3-1**).

3.5.3.2. *Topography, Physiography, and Geology*

The Cave Creek parcel is located along the canyon floor and adjacent upland areas of Cave Creek, with elevations ranging from 2,560 to 2,800 ft (780 to 853 m) amsl (**Figure 3.5-13**). Cave Creek drains the southern portion of the New River Mountains, a rugged range defining the eastern extent of the Agua Fria River valley. Notable peaks surrounding Cave Creek Canyon in the vicinity of the parcel include Skull Mesa (rising to 4,436 ft [1,352 m] amsl) immediately east of the parcel, Sugarloaf Mountain (rising to 3,875 ft [1,181 m] amsl) southwest of the parcel, and Black Mesa (rising to 4,745 ft [1,446 m] amsl) west and north of the parcel.

The parcel lies in the Central Highlands physiographic province. The New River Mountains are comprised of Quaternary and Tertiary basalt-covered tablelands cut by mountain-fed streams through Precambrian metamorphic rocks (Chronic 1983). The surface geology of the majority of the parcel is mapped as Middle Miocene to Oligocene Volcanic and Sedimentary Rocks, Undivided (**Figure 3.5-13**). A small portion of the northern and southern tips of the parcel are mapped as Early Proterozoic Metavolcanic Rocks (Richard et al. 2000).

3.5.3.2.1. **Mineral Resources**

A mineral assessment for this parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

The Cave Creek parcel is unpatented private land and, therefore, has no active mining claims (BLM 2015a).

3.5.3.3. *Water*

3.5.3.3.1. **Surface Water Resources**

Cave Creek (**Figure 3.5-14**) originally flowed south toward the Salt River in Phoenix. Cave Creek drains the southern portion of the New River Mountains, a range defining the eastern extent of the Agua Fria River valley. Cave Creek is ephemeral to intermittent, with some perennial reaches in the vicinity of the parcel. Its flow to the Salt River is intercepted by the Cave Creek Dam in the northern Phoenix Metropolitan Area and the canal system in Phoenix, which divert the stream to discharge to the Agua Fria River (WestLand 2004e).

This reach of Cave Creek has been identified by ADWR (2015c) as “Inconclusive” regarding attainment of designated uses (Fish Consumption, Full Body Contact, Agricultural Livestock Watering, and Aquatic and Wildlife [warm water]). Additional sampling for a suite of parameters has been recommended.

The Cave Creek parcel has been mapped by FEMA as Zone D, an area of undetermined flood hazard (**Figure 3.5-15**). Based on field observations, the floodplain on the site follows the stream channel for the 1.5-mi (2.3-km) reach passing through the parcel, averaging approximately 0.15 mi (0.25 km) wide. Thus, the floodplain on this site is estimated to encompass 0.2 square mi (0.58 square km) (WestLand 2004i).

The NWI map for the Cave Creek parcel identifies no wetlands within this parcel. Based on observations and data review by WestLand (2004i), Cave Creek appears to be intermittent along the 7,500-ft (2,300-m) reach passing through the parcel, with some perennial pools. Hydriparian and mesoriparian habitat is present along the stream channel. Facultative and obligate wetland species, and (to a limited extent) hydric soils, were present surrounding the perennial pools and intermittently along the stream channel. Based on these observations, an area of approximately 1 acre (0.4 ha) of wetlands occurs along Cave Creek at this parcel.

Surface Water Occurrence

Based on observations and data review by WestLand (2004i), Cave Creek appears to be intermittent along the 7,500-ft (2,300-m) reach passing through the parcel, with some perennial pools.

Surface Water Rights

This parcel has active, registered surface water rights in the Salt River watershed sourced from the 6L Ranch spring, and another sourced from Cave Creek (**Appendix D**).

3.5.3.3.2. **Groundwater Resources**

The Cave Creek parcel is located in the Carefree sub-basin within the larger Phoenix Active Management Area (AMA) groundwater basin. This basin covers approximately 140 square mi (363 square km) within Maricopa County. The region is bounded on the west by the Bradshaw Mountains and on the east by the New River Mountains. Groundwater flow direction for this sub-basin is to the west-southwest

(ADWR 2015c). The groundwater basin is predominately drained by Cave Creek and other perennial tributaries in the area. Recharge to the aquifer occurs primarily along mountain fronts and from streambed recharge. The major aquifers consist of recent stream alluvium and basin fill. Some groundwater is found in the sedimentary rock in the area (ADWR 2015c).

The ADWR Well Registry database contained data for nine wells within a 1-mi (1.6-km) radius of the parcel (ADWR 2013; **Figure 3.5-14**). Water levels in this area are relatively consistent, between 200 and 300 ft (61 and 91 m) bgs. The well yield data in the region showed that half of the wells were between 100 and 500 gpm (6.3 and 31.5 L-s), and the other half were between 500 and 1,000 gpm (31.5 and 63.1 L-s).

No water quality data is available in this sub-basin.

3.5.3.4. Soils

The ALRIS General Soils Map indicates that the Cave Creek parcel (**Figure 3.5-16**) lies within the Lithic Torriorthents-Lithic Haplustolls-Rock Outcrop soil association (ALRIS 1975). The soils of this association are well-drained, shallow soils and rock outcrops that occur on semiarid, mid-elevation hills and mountains. These soils formed in residuum weathered from many rock types including granite, gneiss, rhyolite, andesite, tuffs, limestone, sandstone, and basalt. Lithic Torriorthents make up about 30 percent, Lithic Haplustolls 25 percent, rock outcrop about 25 percent, and Haplargids, Torrifluvents, and other minor soils make up the other 20 percent of the association. Smoother areas of this soil association have good potential for livestock grazing. Characteristics of these soils that limit their use include steep slopes, shallow depth to bedrock, and rock fragments on the surface (Hendricks 1985).

3.5.3.5. Land Use

3.5.3.5.1. Access and Recreation

The Cave Creek parcel and surrounding area is comprised of rugged canyons and mesas formerly used for cattle grazing, and largely devoid of development. Currently the parcel is an unused vacant land (WestLand 2004e). The parcel is accessed by going north from Cave Creek Road on Spur Cross Road and FR 48 (**Figure 3.5-17**).

The Cave Creek parcel lies north of the Spur Cross Ranch Conservation Area managed by Maricopa County. Areas surrounding the parcel are federal lands managed by TNF that are currently used for dispersed recreational activities including hunting, camping, nature viewing, and hiking.

The parcel is located within AGFD Management Unit 21 (**Figure 3.5-17**). Antelope, black bear, mule deer, whitetail deer, elk, javelina, and quail are commonly hunted game species in this unit (AGFD 2015a).

3.5.3.5.2. Agriculture and Grazing

This parcel is not mapped as suitable prime or unique farmland (Soil Survey Staff 2015). The parcel is currently surrounded by the Cartwright grazing allotment (AGFD 2015b; **Figure 3.5-17**), however Resolution Copper does not own the grazing lease and has not paid grazing fees for the 10 years it has owned the parcel (pers. comm Dan Mead).

3.5.3.5.3. Public Lands Management

The parcel is a private in-holding within the TNF owned by Resolution Copper. The land exchange would transfer ownership of this parcel to the US and it would be managed under the aegis of the TNF Forest Plan (TNF 1985a), which guides the long-term management of National Forest System lands on the TNF.

3.5.3.5.4. Encumbrances

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on March 10, 2004, exceptions were noted in Schedule B – Section II (**Appendix H**). These have been compiled and can be found in **Appendix G**. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated, if necessary, at that time.

3.5.3.6. Wildlife

Wildlife species observed on the parcel include mule deer, coyote (*Canis latrans*), grey fox (*Urocyon cinereoargenteus*), skunk (species unknown), raccoon (*Procyon lotor*), rock squirrel (*Spermophilus variegatus*), pack rat, Gambel's quail (*Callipepla gambelii*), great blue heron (*Ardea herodias*), cactus wren (*Campylorhynchus brunneicapillus*), curve-billed thrasher (*Toxostoma curvirostre*), Gila woodpecker (*Melanerpes uropygialis*), turkey vulture (*Cathartes aura*), Phainopepla (*Phainopepla nitens*), gilded flicker (*Colaptes chrysoides*), mourning dove (*Zenaida macroura*), raven, green sunfish (*Lepomis cyanellus*), and Sonoran mud turtle (*Kinosternon sonoriense*) (WestLand 2004b).

No surveys have been conducted to determine which aquatic biology might occur on the parcel. Cave Creek is ephemeral to intermittent, with some perennial reaches in the vicinity of the parcel (**Figure 3.5-14**); there is also a spring on the parcel with potential to support aquatic biology.

There are no potential wildlife linkages within 1 mi of the parcel (Majka et al. 2007).

3.5.3.6.1. Wildlife Management

Under the conditions and provisions of the land exchange, wildlife and habitat within this parcel will be managed under the Tonto National Forest Plan (TNF 1985a), in coordination with the AGFD.

3.5.3.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as listed species known to occur, or with potential to occur in the Cave Creek parcel:

- Lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*) – Endangered
- Sprague's pipit (*Anthus spragueii*) – Candidate
- Yellow-billed cuckoo (*Coccyzus americanus*) – Threatened
- Southwestern willow flycatcher, (*Empidonax traillii extimus*) – Endangered
- Sonoran desert tortoise (*Gopherus morafkai*) – Candidate

There are no critical habitats within the parcel (**Appendix E**).

The following Forest Service sensitive species were identified as documented within 5 mi (8 km) of the Cave Creek parcel (**Appendix F**):

- American peregrine falcon (*Falco peregrinus anatum*)
- Western red bat (*Lasiurus blossevillii*)
- Lowland leopard frog (*Lithobates yavapaiensis*)

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.3.7. Vegetation

The upland vegetation on the Cave Creek parcel consists of two biotic communities: Interior Chaparral and Arizona Upland Subdivision of Sonoran Desertscrub (Brown and Lowe 1980); Deciduous Riparian Forest occurs along Cave Creek (**Figure 3.5-18**). Arizona Upland, represented by saguaro, foothill palo verde, and ironwood (*Olneya tesota*), occurs on both the slopes and terraces of the parcel, with elements of Interior Chaparral, represented by barberry (*Mahonia haematocarpa*) and buckbrush (*Ceanothus* sp.) present on the terraces. Riparian vegetation along Cave Creek includes Arizona sycamore, velvet ash (*Fraxinus velutina*), and Goodding's willow.

The Cave Creek watershed is over 50 square mi (12,950 ha) in area with much of it bare bedrock or shallow soils, conditions favorable for frequent high-water flood events in the stream above the parcel. Perhaps because of mortality from high-water floods, large riparian trees are infrequent in this otherwise well-watered drainage. Non-native tamarisk (*Tamarix ramosissima*), where abundant elsewhere along channels in the Southwest, was infrequent along this portion of Cave Creek in 2004 (WestLand 2004b). Under the conditions and provisions of the Land Exchange, vegetation and noxious weeds within this parcel will be managed under the Tonto National Forest Plan (TNF 1985a).

3.5.3.7.1. Special Status Plant Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following Forest Service sensitive species were identified as documented within 5 mi (8 km) of the Cave Creek parcel (**Appendix F**):

- Hohokam agave (*Agave murpheyi*)
- Eastwood alum root (*Heuchera eastwoodiae*)

There are no critical habitats within the parcel (**Appendix E**).

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.3.8. Cultural Resources

The Cave Creek parcel is located within the projected culture areas of the Paleoindian (11,500–8500 B.C.) and Archaic (8500 B.C.–A.D. 150) archaeological cultures, and along the peripheries of the Hohokam (A.D. 700–1150), Salado (A.D. 1150–1450), and Sinagua (A.D. 500–1425) archaeological cultures. This region is also within the ethnohistoric territories of the Pima, Maricopa, and Apache peoples. Euroamerican occupation in the area began in the mid-nineteenth century, and includes sites related to ranching and mining. Few archaeological studies have been conducted within the Cave Creek parcel and vicinity. Two small archaeological survey projects intersect the parcel, and one archaeological site, a series of bedrock mortars and more than 100 petroglyph elements, is located within the parcel. Nearby archaeological sites outside the parcel include pithouse settlements, small to large pueblos, and additional petroglyphs attributed either to the Hohokam culture, a southern extension of the Sinagua culture, or a western extension of the Salado culture. The earliest historical map of the area is a USGS quadrangle from 1939. This map shows a trail along Cave Creek leading through the parcel to an area named Lewis Ranch to the north of the parcel. The General Land Office map of this area filed in 1964 shows the vicinity of the Cave Creek parcel as “unsurveyed”; however, a road leading north from Section 28 is indicated as continuing through the parcel. A USGS quadrangle map from 1965 shows a “Jeep Trail” through the parcel along Cave Creek. This is presumably the same road as the prior General Land Office map. Mining features are also depicted south of the parcel on the most recent historical map. The inventory of historic properties in this parcel is incomplete and further archaeological studies are required to complete the inventory.

3.5.3.9. Hazardous Materials

A Phase I Environmental Site Assessment for potential environmental liability of the Cave Creek parcel was conducted in 2004 (WestLand 2004e) in conformance with ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-00. The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the parcel or adjoining properties.

3.5.3.10. *Visual Resources*

A Visual Management System Analysis for Landscape Aesthetics has not been conducted for this parcel. A formal visual analysis will be performed according to *Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management Chapter 2380 - Landscape Management* (USFS 2003b) as part of NEPA analysis.

3.5.3.11. *Socioeconomic Resources*

The Cave Creek is parcel located within Maricopa County, Arizona.

3.5.3.11.1. *Population Demographics*

In 2013 there were an estimated 3,889,161 persons in Maricopa County (**Table 3.5-23**). The most populous communities within Maricopa County are Phoenix (1,445,632), Mesa (439,041), Chandler (236,123), Glendale (226,721) and Scottsdale (217,386; USCB 2010).

The population of Maricopa County grew by 300 percent from 1970 to 2013, with a 27 percent gain from 2000 to 2013 (**Table 3.5-23**). The population of Maricopa County increased at a steady rate from 1970 to 2000, after which the rate of increase slowed. The population of Maricopa County increased by 55 percent between 1970 and 1980, by 41 percent between 1980 and 1990, by 45 percent between 1989 and 2000, and by 27 percent between 2000 and 2013.

Table 3.5-23. Population Change in Maricopa County and Arizona 1970 to 2013

Year	Maricopa County	Arizona
1970	971,228	1,794,912
1980	1,509,175	2,737,774
1990	2,122,101	3,684,097
2000	3,072,149	5,160,586
2013	3,889,161	6,479,703

Source: 1970-2000 (USCB 2010); 2013 (USCB 2015)

3.5.3.11.2. *Minority Groups and Low-Income Populations*

Racial diversity in Maricopa County is similar to what is found in the State of Arizona and less diverse than what is found overall in the US (**Table 3.5-24**). Within Maricopa County, 80.7 percent of the population identifies as White, while 79.2 percent of the population in Arizona and 74.0 percent of the population in the US identify as White (**Table 3.5-24**). The ACS indicates that 3,889,161 people were living in Maricopa County in 2013. Racially, the population of Maricopa County was made up primarily of the following categories: White (80.7 percent), Some Other Race (5.7 percent), Black or African American (5.1 percent), and Asian (3.6 percent).

Table 3.5-24. Race composition in Maricopa County, Arizona, and the US

Category	Population in Maricopa County	Percentage of Population in Maricopa County	Percentage of Population in Arizona	Percentage of Population in the US
Total Population	3,889,161			
White	3,137,012	80.7%	79.2%	74.0%
Black or African American	199,310	5.1%	4.2%	12.6%
American Indian	72,913	1.9%	4.4%	0.8%
Asian	138,405	3.6%	2.8%	4.9%
Native Hawaiian & Other Pacific Is.	7,790	0.2%	0.2%	0.2%
Some Other Race	221,937	5.7%	6.2%	4.7%
Two or More Races	111,794	2.9%	3.0%	2.8%

Source: USCB 2015

People of Hispanic origin or ethnicity can be of any race; ethnicity is therefore considered separately from race (USCB 2001). The ACS indicates that 29.7 percent of individuals within Maricopa County were self-identified as Hispanic or Latino residents compared to 29.9 percent and 16.6 percent in Arizona and the US respectively (**Table 3.5-25**).

Table 3.5-25. Hispanic or Latino population demographics

Category	Maricopa County	Arizona	US
Total Population	3,889,161	6,479,703	311,536,594
Hispanic or Latino	1,155,592	1,935,948	51,786,591
Percentage Hispanic or Latino	29.7%	29.9%	16.6%

Source: USCB 2015

The EPA identifies both older and younger population groups as potentially being more susceptible to environmental risks (EPA 1998). The percentage of the population under the age of 18 is 27.0 percent for Maricopa County and 25.0 for Arizona (**Table 3.5-26**). The percentage of the population over the age of 65 is 11.7 percent for Maricopa County and 14.4 percent for Arizona (**Table 3.5-26**).

Table 3.5-26. Age distribution for Maricopa County and Arizona

Population Category	Maricopa County	Percentage of Population Maricopa County	Percentage of Population Arizona
Under 18 Years	828,003	27.0%	25.0%
18 to 34 Years	801,694	26.1%	23.4%
35 to 44 Years	475,907	15.5%	12.8%
45 to 64 Years	607,566	19.8%	24.5%
65 and over	358,979	11.7%	14.4%

Source: USCB 2015

3.5.3.11.3. Poverty, Education, and Employment

The percentage of people living in poverty within Maricopa County is 16.7 percent and the percentage of people living in poverty within the State of Arizona is 17.9 percent (**Table 3.5-27**).

Table 3.5-27. Poverty levels in Maricopa County, Arizona, and the US

Population Category	Maricopa County	Arizona	US
People (number)	3,839,007	6,333,791	303,692,076
Families (number)	930,395	1,563,121	76,744,358
People below poverty	639,233	1,131,901	46,663,433
Families below poverty	113,890	202,622	8,666,630
Percent Below Poverty Level			
People	16.7%	17.9%	15.4%
Families	12.2%	13.0%	11.3%

Source: USCB 2015

Over 86 percent of the residents in Maricopa County have a high school diploma and 29.8 percent have a bachelor's degree or higher (**Table 3.5-28**). Within Arizona 85.7 percent of the residents have a high school diploma and 26.9 percent have a bachelor's degree or higher (**Table 3.5-28**).

Table 3.5-28. Educational attainment for Maricopa County, Arizona, and the US

Educational Level	Maricopa County	Arizona	US
Total population 25 years or older	2,497,802	4,211,194	206,587,852
No high school diploma	13.6%	14.3%	14.0%
High school graduate	86.4%	85.7%	86.0%
Associate's degree	8.3%	8.3%	7.8%
Bachelor's degree	29.8%	26.9%	28.8%
Graduate or professional	19.2%	17.0%	18.0%

Source: USCB 2015

In 2013, Maricopa County's resident employed population numbered 1,734,641 persons (**Table 3.5-29**). Educational services, health care, and social assistance (21.2 percent); professional, scientific, management, administrative, and waste management services (12.8); and retail trade (12.2 percent) were the largest employers by field Maricopa County (**Table 3.5-29**). Employment figures for all fields are presented in **Table 3.5-29**.

Table 3.5-29. Maricopa County employment by industry

Sector	Number Employed	Percent
Agriculture, forestry, fishing, hunting, and mining	10,746	0.6%
Construction	116,069	6.7%
Manufacturing	139,514	8.0%
Wholesale trade	47,134	2.7%
Retail trade	211,807	12.2%
Transportation, warehousing, and utilities	88,809	5.1%
Information	34,154	2.0%
Finance, insurance, real estate, rental, and leasing	165,175	9.5%
Professional, scientific, management, administrative, and waste management services	222,834	12.8%
Educational services, health care, and social assistance	367,711	21.2%
Arts, entertainment and recreation, accommodation, and food services	170,914	9.9%
Other services, except public administration	83,247	4.8%
Public administration	76,527	4.4%
Total	1,734,641	

Source: USCB 2015

3.5.3.11.4. Land Ownership and Federal Land Payments

The total area for Maricopa County is 5,903,622 acres (502,628 ha). Within Maricopa County the US is the largest land owner, holding 52.9 percent of all land in the county (**Table 3.5-30**). Private land owners hold 29.0 percent, Arizona holds 12.7 percent, and tribal entities hold 4.6 percent of the land in Maricopa County.

Table 3.5-30. Land ownership in Maricopa County

Ownership Entity	Acres	Percent of Total Area in Maricopa County
Total Area	5,903,622	
Private Lands	1,709,714	29.0%
Conservation Easement	2	0.0%
Federal Lands	3,124,419	52.9%
Forest Service	650,428	11.0%
BLM	1,715,353	29.1%
National Park Service	n/a	n/a
Military	751,162	12.7%
Other Federal	7,476	0.1%
State Lands	748,372	12.7%
State Trust Lands	643,407	10.9%
Other State	104,965	1.8%
Tribal Lands	269,748	4.6%
City, County, Other	51,369	0.9%

Source: USGS 2012

Federal land payments can be a significant income source particularly in rural communities with small populations and fewer private tax sources. In 2007 federal land payments to Maricopa County totaled \$2,332,000 and were 0.1 percent of the total general revenue for the county (**Table 3.5-31**).

Table 3.5-31. Summary of Revenue Sources for Maricopa County in FY 2007

Sources of General Revenue	Amount Recieved ¹	Percent of Total Revenue
Taxes	781,192,000	33.6%
Intergovernmental Revenue	1,190,505,000	51.3%
Total Charges	65,336,000	2.8%
All Other Miscellaneous	284,931,000	12.3%
Federal Land Payments	2,332,000	0.1%
Total General Revenue	2,321,964	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

¹ FY 2007 Revenue dollars are reported in 2013 dollars.

In 2013 federal land payments to Maricopa County increased to \$3,503,210 with \$2,781,842 coming from the federal PILT program (**Table 3.5-32**).

Table 3.5-32. Summary of Federal Land Payments for Maricopa County in FY 2013

Origin of Federal Land Payments	Federal Land Payments in FY 2013	Percent of Total
Payments in Lieu of Taxes (PILT)	2,781,842	79.4%
Forest Service Payments	504,802	14.4%
BLM Payments	216,567	6.2%
USFWS Refuge Payments	0	0%
Federal Mineral Royalties	0	0%
Total Federal Land Payments	3,503,210	

Sources: (USFS 2007; BLM 2009; USDI 2009; USFS 2009; ONRR 2012; USCB 2014)

The primary beneficiary of federal land payments in Maricopa County was the county government which received 91.5 percent of the total payments (**Table 3.5-33**).

Table 3.5-33. Summary of Federal Land Payment Disbursements for Maricopa County in FY 2013

Distribution of Federal Land Payments	Disbursements in FY 2013	Percent of Total
County Government	3,206,770	91.5%
Local School Districts	214,541	6.1%
Resource Advisory Councils	40,384	1.2%
Grazing Districts	41,515	1.2%
Total Federal Land Payments	3,503,210	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

3.5.4. EAST CLEAR CREEK

3.5.4.1. *Climate and Air Quality*

Climatic data for the East Clear Creek parcel or immediate vicinity were not available. The weather station at the Chevelon Ranger Station is located 10 mi (16 km) away at an elevation of 7,010 ft (2,137 m) amsl (**Figure 3.5-1**). The average annual temperatures in the area range from a low of 35.4 to a high of 61.7 degrees Fahrenheit (1.9 to 16.5 degrees Celsius) with average precipitation of approximately 18.6 inches (47.2 cm) per year (WRCC 2015). Actual onsite temperature ranges are expected to be higher and precipitation may be lower, given that the East Clear Creek parcel is 190 ft (58 m) lower in elevation than the weather station. The highest average seasonal rainfall occurs in summer (July through September).

The East Clear Creek parcel is not currently located within a designated nonattainment area or maintenance area for air quality criteria pollutants (ADEQ 2015b). The closest federal Class I area is the Mazatal Wilderness Area located approximately 30 mi (48 km) west of the parcel (**Figure 3.3-1**).

3.5.4.2. *Topography, Physiography, and Geology*

The parcel is located along the canyon floor and adjacent upland areas of East Clear Creek, with elevations ranging from 6,200 to 6,820 (1,890 to 2,079 m) amsl (**Figure 3.5-19**). East Clear Creek flows to the east-northeast towards the Little Colorado River and the general gradient of the topography is sloping down towards the north.

The East Clear Creek parcel lies in the Colorado Plateau physiographic province, which is bounded on the south by the Mogollon Rim and is characterized by nearly horizontal, stratified sedimentary rocks that have been eroded into numerous canyons, plateaus and scarps (Nations and Stump 1996). Canyon walls rise steeply from East Clear Creek, and upland areas are rugged. The entire parcel is mapped as Permian Sedimentary Rocks (Richard et al. 2000) and is shown in **Figure 3.5-19**.

3.5.4.2.1. **Mineral Resources**

A mineral assessment for this parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

The East Clear Creek parcel is unpatented private land and, therefore, has no active mining claims (BLM 2015a).

3.5.4.3. *Water*

3.5.4.3.1. **Surface Water Resources**

The dominant surface water feature in this parcel is East Clear Creek, a substantial perennial tributary of the Little Colorado River located approximately 71 river miles (114.3 km) downstream (generally

northeast) of the subject parcel (**Figure 3.5-20**). The parcel also includes additional minor tributaries that are likely ephemeral to intermittent.

Designated uses for East Clear Creek include Fish Consumption, Full Body Contact, Agricultural Livestock Watering, Agricultural Irrigation, and Aquatic and Wildlife (cold water) (18 A.C.C. 11: Appendix B). This reach of Cave Creek has been identified by ADWR (2015d) as “Inconclusive” regarding attainment of designated uses; additional sampling has been recommended.

The East Clear Creek parcel has been mapped by FEMA as Zone X, an area of minimal flood hazard (**Figure 3.5-21**). The NWI map for this parcel identifies approximately 14.15 acres (5.7 ha) of wetlands within this parcel (USFWS 2015). Field verification of this information will be completed during NEPA scoping.

Surface Water Occurrence

The section of East Clear Creek that crosses the subject property supported a perennial flow in 2005 (Golder Associates 2005).

Surface Water Rights

This parcel has active, registered instream flow surface water rights in the Little Colorado River watershed sourced from East Clear Creek (**Appendix D**).

3.5.4.3.2. Groundwater Resources

The East Clear Creek parcel is located in the Little Colorado River groundwater basin, which covers an extremely large swath of land in Coconino, Navajo, and Apache counties. Groundwater flow direction is from south to north in this portion of the basin.

The parcel is located within the regional C-aquifer. This aquifer is located in sedimentary formations of sandstone and limestone that are stacked and separated by impermeable shales and siltstones. Recharge to the aquifer occurs primarily along mountain fronts along the southern periphery of the basin (ADWR 2015d).

The ADWR Well Registry database contained data for 47 wells within a 1-mi (1.6-km) radius of the parcel (ADWR 2013; **Figure 3.5-20**). Water levels generally ranged between 500 and 700 ft (152 and 213 m) bgs. The average depth to water is 582 ft (177 m). The median well yield from large wells (greater than 10-inch [25.4-cm] diameter) is 500 gpm (31.5 L-s) for the entire basin.

No water quality data was available for the parcel.

3.5.4.4. Soils

Soil data provided by the National Cooperative Soil Survey through Web Soil Survey (Soil Survey Staff 2015) indicate that the East Clear Creek parcel is located within six soil complexes, as shown in

Figure 3.5-22. The soil complexes occur on high mountainous areas of the Coconino and Colorado Plateaus. Limestone and sandstone rock comprise 80 percent of the parcel's acreage.

Wildcat soils formed in residuum weathered from Coconino sandstone or Kaibab formation. Wildcat soils are on upland exposures of sandstone with slopes that range from 1 to 15 percent. They are gravelly fine sandy loam and are somewhat poorly drained, with slow to very slow permeability.

The Jacks-Tortugas complex is well drained with moderate to low permeability. Jacks soils comprise 30 percent and Tortugas soils approximately 25 percent of this complex. The Jacks series consists of deep, well-drained soils on uplands. Slopes are dominantly 0 to 15 percent and range from 0 to 45 percent. Permeability is slow. The Tortugas series consists of very shallow and shallow, well-drained, moderately rapid permeable soils formed from limestone, calcareous sandstone, and shale on gently rolling ridges to very steep hills. Slopes are 0 to 75 percent.

The other soil complexes shown in **Figure 3.5-22** each comprise less than 2 percent of the parcel's acreage (Soil Survey Staff 2015).

3.5.4.5. Land Use

3.5.4.5.1. Access and Recreation

The East Clear Creek parcel consists of an approximately 640-acre (259-ha) parcel of essentially undeveloped land located within the Coconino National Forest (CNF). Recreation and logging are the only known current and historical uses of the parcel, which is composed of a rugged upland cut by East Clear Creek (Golder 2005).

The parcel is accessed from the south via FR 1376, from the east via FR 137E, and from the north via FR139 and several unnamed dirt roads, including the historical trail from Mack's Crossing on East Clear Creek (Golder 2005; **Figure 3.5-23**). Designated pack trails are present on Forest Service land south and east of the property. Hiking, fishing, nature viewing, and camping are available recreational opportunities on the public lands surrounding the parcel.

The parcel is located within AGFD Management Unit 5A (**Figure 3.5-23**). Antelope, black bear, deer, mountain lion, cottontail rabbit, elk, Merriam's turkey, band-tailed pigeon, and tree squirrel are commonly hunted game species in this unit (AGFD 2015a).

3.5.4.5.2. Agriculture and Grazing

The soils on this parcel are not considered suitable prime or unique farmland. The soils on this parcel are considered suitable for rangeland (Soil Survey Staff 2015). The parcel is within the Bar T Bar grazing allotment (AGFD 2015b; **Figure 3.5-23**), however Resolution Copper does not own the grazing lease and has not paid grazing fees for the 10 years it has owned the parcel (pers. comm Dan Mead).

3.5.4.5.3. Public Lands Management

The East Clear Creek parcel is a private in-holding within the Coconino National Forest (CNF) owned by Resolution Copper. The land exchange would transfer ownership of this parcel to the US and it would be managed under the aegis of the CNF Land and Resource Management Plan (CNF 1987), which guides the long-term management of National Forest System lands on the CNF.

3.5.4.5.4. Encumbrances

In the Commitment for Title Insurance issued by Transnation Title Insurance Company on April 15, 2005, exceptions were noted in Schedule B – Section II (**Appendix H**). These have been compiled and can be found in **Appendix G**. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated, if necessary, at that time.

3.5.4.6. Wildlife

Common wildlife species known to occur in these biotic communities include tassel-eared squirrel (*Sciurus aberti*), Eastern cottontail (*Sylvilagus floridanus*), bat (*Myotis* spp.), chipmunk (*Eutamias* spp.), shrew (*Sorex* spp.), Stellar's jay, Western bluebird (*Sialia mexicana*), short-horned lizard (*Phrynosoma douglassi*), and gopher snake (*Pituophis melanoleucus*) (Brown 1994).

No surveys have been conducted to determine which aquatic biology might occur on the parcel. East Clear Creek is intermittent throughout the parcel, and there is also a spring on the parcel with potential to support aquatic biology (**Figure 3.5-20**).

The East-West Mogollon Plateau potential wildlife linkage is 0.5 mi (0.8 km) to the northwest of East Clear Creek (Majka et al. 2007).

3.5.4.6.1. Wildlife Management

Under the conditions and provisions of the land exchange, wildlife and habitat within this parcel will be managed under the Coconino National Forest Plan (CNF 1987), in coordination with the AGFD.

3.5.4.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as wildlife species with potential to occur (WestLand 2015d *in prep*) in the East Clear Creek parcel (**Appendix E**):

- Mexican spotted owl (*Strix occidentalis lucida*) – Threatened
- Little Colorado spinedace (*Lepidomeda vittata*) – Threatened
- Roundtail chub (*Gila robusta*) – Candidate

Final designated critical habitats for Mexican spotted owl and Little Colorado spinedace (*Lepidomeda vittata*) lie fully or partially within the parcel (**Appendix E**).

Of the Forest Service sensitive species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as wildlife species present or with potential to occur (WestLand 2015d *in prep*) in the East Clear Creek parcel (**Appendix F**):

- Little Colorado sucker (*Catostomus* sp. 3)
- American peregrine falcon (*Falco peregrinus anatum*)
- Northern goshawk (*Accipiter gentilis*)
- Bald eagle - winter population (*Haliaeetus leucocephalus*)

3.5.4.7. **Vegetation**

The upland vegetation on the East Clear Creek parcel is mapped as one biotic community: Petran Montane Conifer Forest (Brown 1982). However, during field reconnaissance vegetation characteristic of Interior Riparian Deciduous forest and Great Basin Conifer Woodland (Brown 1994) was also observed (WestLand 2015d *in prep*). (**Figure 3.5-24**). The upland vegetation is dominated by second-growth Ponderosa pine with Gambel oak and New Mexico locust on north-facing slopes, while south-facing slopes are generally scrub live oak woodland with juniper (*Juniperus* spp.) and pinyon pine (Golder 2005). Along East Clear Creek patches of, boxelder (*Acer negundo*), cottonwood, Arizona alder (*Alnus oblongifolia*) and Bonpland's willow (*Salix bonplandiana*) occur (WestLand 2015d *in prep*). Under the conditions and provisions of the Land Exchange, vegetation and noxious weeds within this parcel will be managed under the Coconino National Forest Plan (CNF 1987).

3.5.4.7.1. **Special Status Plant Species**

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following plant species was identified as a Forest service sensitive species with potential to occur (WestLand 2015d *in prep*) in the East Clear Creek parcel:

- Rock fleabane (*Erigeron saxatilis*)

3.5.4.8. **Cultural Resources**

The East Clear Creek parcel is located within the projected culture areas of the Paleoindian (11,500–8500 B.C.), Archaic (8500 B.C.–A.D. 150), and Ancestral Pueblo (A.D. 1-1528) archaeological cultures. Sites recorded in the vicinity of the parcel have also been attributed to the Sinagua culture (A.D. 500-1425), though this is not typically considered to be within their traditional range. The parcel also falls within the ethnohistoric territories of the Hopi, and Apache peoples. Historic period occupation of this area began with the Spanish in the sixteenth century; Euroamerican ranching commenced in the mid-nineteenth century. No archaeological projects have examined the East Clear Creek parcel, and no sites are known to be within its boundaries. State Route 87, a historic route that has been recorded as a site, is located

northeast of the parcel. Additionally, several small sites including rock shelters, petroglyphs, pit structures, and artifact scatters have been identified in the broader area surrounding the parcel. No historical features are depicted within the parcel on the 1896 General Land Office map for the East Clear Creek parcel, though a “Log House” is noted in an adjacent parcel to the north. Later USGS quadrangle maps similarly depict no features within the parcel, though a “Pack Trail” and an area labeled “Mack’s Crossing” are located in the adjacent section. The inventory of historic properties in this parcel is incomplete and further archaeological studies as detailed above are required to complete the inventory.

3.5.4.9. Hazardous Materials

A Phase I Environmental Site Assessment for potential environmental liability of the East Clear Creek parcel was conducted in 2005 (Golder 2005) in conformance with ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property*, E 2247-02. The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the parcel or adjoining properties. Historical logging activities may potentially have included fuel and lubricant spills that would likely be considered a *de minimis* issue, not posing a threat to human health or the environment.

3.5.4.10. Visual Resources

A Visual Management System Analysis for Landscape Aesthetics has not been conducted for the East Clear Creek parcel. A formal visual analysis will be performed according to *Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management Chapter 2380 - Landscape Management* (USFS 2003b) as part of NEPA analysis.

3.5.4.11. Socioeconomic Resources

The East Clear Creek parcel is located within Coconino County, Arizona.

3.5.4.11.1. Population Demographics

In 2013 there were an estimated 134,795 persons in Coconino County (**Table 3.5-34**). The most populous communities within Coconino County are Flagstaff (65,870), Sedona (10,031), Tuba City (8,611), Page (7,247), and Doney Park (5,395; USCB 2010).

The population of Coconino County grew by 179 percent from 1970 to 2013 with a 16 percent gain from 2000 to 2013 (**Table 3.5-34**). Although the population of Coconino County has increased significantly since 1970 the growth rate has steadily declined. Population increased by 55 percent between 1970 and 1980, by 29 percent between 1980 and 1990, by 20 percent between 1989 and 2000, and by 16 percent between 2000 and 2013.

Table 3.5-34. Population Change in Coconino County and Arizona 1970 to 2013

Year	Coconino County	Arizona
1970	48,326	1,794,912
1980	75,008	2,737,774
1990	96,591	3,684,097
2000	116,320	5,160,586
2013	134,795	6,479,703

Source: 1970-2000 (USCB 2010); 2013 (USCB 2015)

3.5.4.11.2. Minority Groups and Low-Income Populations

Coconino County is more racially diverse than the State of Arizona and the US (**Table 3.5-35**). Within Coconino County, 62.1 percent of the population identifies as White, whereas 79.2 percent of the population in Arizona and 74.0 percent of the population in the US identify as White. The ACS indicates that 134,795 people were living in Coconino County in 2013. Racially, the population of Coconino County was made up primarily of the following categories: White (62.1 percent), American Indian (27.1 percent), and Some Other Race (4.3 percent).

Table 3.5-35. Race composition in Coconino County, Arizona, and the US

Category	Population in Coconino County	Percentage of Population in Coconino County	Percentage of Population in Arizona	Percentage of Population in the US
Total Population	134,795			
White	83,712	62.1%	79.2%	74.0%
Black or African American	1,846	1.4%	4.2%	12.6%
American Indian	36,510	27.1%	4.4%	0.8%
Asian	1,929	1.4%	2.8%	4.9%
Native Hawaiian & Other Pacific Is.	152	0.1%	0.2%	0.2%
Some Other Race	5,821	4.3%	6.2%	4.7%
Two or More Races	4,825	3.6%	3.0%	2.8%

Source: USCB 2015

People of Hispanic origin or ethnicity can be of any race; ethnicity is therefore considered separately from race (**Table 3.5-36**). The ACS indicates that 13.7 percent of individuals within Coconino County were self-identified as Hispanic or Latino residents compared to 29.9 percent and 16.6 percent in Arizona and the US, respectively (**Table 3.5-36**).

Table 3.5-36. Hispanic or Latino population demographics

Category	Coconino County	Arizona	US
Total Population	134,795	6,479,703	311,536,594
Hispanic or Latino	18,415	1,935,948	51,786,591
Percentage Hispanic or Latino	13.7%	29.9%	16.6%

Source: USCB 2015

The EPA identifies both older and younger population groups as potentially being more susceptible to environmental risks (EPA 1998). The percentage of the population under the age of 18 is 23.1 percent for Coconino County and 25.0 for Arizona (**Table 3.5-37**). The percentage of the population over the age of 65 is 9.4 percent for Coconino County and 14.4 percent for Arizona (**Table 3.5-37**).

Table 3.5-37. Age distribution for Coconino County and Arizona

Population Category	Coconino County	Percentage of Population Coconino County	Percentage of Population Arizona
Under 18 Years	31,159	23.1%	25.0%
18 to 34 Years	42,881	31.8%	23.4%
35 to 44 Years	15,323	11.4%	12.8%
45 to 64 Years	32,716	24.3%	24.5%
65 and over	12,716	9.4%	14.4%

Source: USCB 2015

3.5.4.11.3. Poverty, Education, and Employment

The percentage of people living in poverty within Coconino County is 23.0 percent and the percentage of people living in poverty within the State of Arizona is 17.9 percent (**Table 3.5-38**).

Table 3.5-38. Poverty levels in Coconino County, Arizona, and the US

Population Category	Coconino County	Arizona	US
People (number)	126,967	6,333,791	303,692,076
Families (number)	29,860	1,563,121	76,744,358
People below poverty	29,171	1,131,901	46,663,433
Families below poverty	4,638	202,622	8,666,630
Percent Below Poverty Level			
People	23.0%	17.9%	15.4%
Families	15.5%	13.0%	11.3%

Source: USCB 2015

Over 87 percent of the residents in Coconino County have a high school diploma and 31.1 percent have a bachelor's degree or higher (**Table 3.5-39**). Within Arizona 85.7 percent of the residents have a high school diploma and 26.9 percent have a bachelor's degree or higher (**Table 3.5-39**).

Table 3.5-39. Educational attainment for Coconino County, Arizona, and the US

Educational Level	Coconino County	Arizona	US
Total population 25 years or older	78,523	4,211,194	206,587,852
No high school diploma	12.4%	14.3%	14.0%
High school graduate	87.6%	85.7%	86.0%
Associate's degree	8.9%	8.3%	7.8%
Bachelor's degree	31.1%	26.9%	28.8%
Graduate or professional	17.9%	17.0%	18.0%

Source: USCB 2015

In 2013, Coconino County's resident employed population numbered 64,440 persons (**Table 3.5-40**). Educational services, health care, and social assistance (27.4 percent); arts, entertainment and recreation, accommodation, and food services (17.6 percent); and retail trade (12.2 percent) were the largest employers by field in Coconino County (**Table 3.5-40**). Employment figures for all fields are presented in **Table 3.5-40**.

Table 3.5-40. Coconino County employment by industry

Sector	Number Employed	Percent
Agriculture, forestry, fishing, hunting, and mining	1,163	1.8%
Construction	4,073	6.3%
Manufacturing	4,019	6.2%
Wholesale trade	957	1.5%
Retail trade	7,864	12.2%
Transportation, warehousing, and utilities	3,165	4.9%
Information	605	0.9%
Finance, insurance, real estate, rental, and leasing	2,535	3.9%
Professional, scientific, management, administrative, and waste management services	4,377	6.8%
Educational services, health care, and social assistance	17,649	27.4%
Arts, entertainment and recreation, accommodation, and food services	11,367	17.6%
Other services, except public administration	2,503	3.9%
Public administration	4,163	6.5%
Total	64,440	

Source: USCB 2015

3.5.4.11.4. Land Ownership and Federal Land Payments

The total area for Coconino County is 11,941,017 acres (4,832,358 ha). Within Coconino County, the US is the largest land owner, holding 39.9 percent of all land in the county (**Table 3.5-41**). Private land owners hold 13.5 percent, the State of Arizona holds 9.4 percent and Tribal entities hold 37.2 percent of the land in Coconino County.

Table 3.5-41. Land ownership in Coconino County

Ownership Entity	Acres	Percent of Total Area in Coconino County
Total Area	11,941,017	
Private Lands	1,612,090	13.5%
Conservation Easement	2,234	0.0%
Federal Lands	4,759,645	39.9%
Forest Service	3,223,309	27.0%
BLM	621,570	5.2%
National Park Service	800,879	6.7%
Military	28,694	0.2%
Other Federal	85,193	0.7%
State Lands	1,121,278	9.4%
State Trust Lands	1,111,127	9.3%
Other State	10,151	0.1%
Tribal Lands	4,447,921	37.2%
City, County, Other	85	0.0%

Source: USGS 2012

Federal land payments can be a significant income source particularly in rural communities with small populations and fewer private tax sources. In 2007 federal land payments to Coconino County totaled \$5,671,000 and were 3.6 percent of the total general revenue for the county³ (**Table 3.5-42**).

Table 3.5-42. Summary of Revenue Sources for Coconino County in FY 2007

Sources of General Revenue	Amount Recieved ¹	Percent of Total Revenue
Taxes	53,628,000	34.1%
Intergovernmental Revenue	73,501,000	46.7%
Total Charges	15,317,000	9.7%
All Other Miscellaneous	15,005,000	9.5%
Federal Land Payments	5,671,000	3.6%
Total General Revenue	157,451,000	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

¹ FY 2007 Revenue dollars are reported in 2013 dollars.

In 2013 federal land payments to Coconino County increased to \$5,875,716 with \$4,266,554 coming from the Forest Service (**Table 3.5-43**).

³ The dollar value for federal land payments in Pinal County in 2007 has been converted to the equivalent of 2013 dollars for comparison purposes.

Table 3.5-43. Summary of Federal Land Payments for Coconino County in FY 2013

Origin of Federal Land Payments	Federal Land Payments in FY 2013	Percent of Total
Payments in Lieu of Taxes (PILT)	1,572,295	26.8%
Forest Service Payments	4,266,554	72.6%
BLM Payments	36,868	0.6%
USFWS Refuge Payments	0	0%
Federal Mineral Royalties	0	0%
Total Federal Land Payments	5,875,716	

Sources: (USFS 2007; BLM 2009; USDI 2009; USFS 2009; ONRR 2012; USCB 2014)

The primary beneficiary of federal land payments in Coconino County was the county government which received 63 percent of the total payments (**Table 3.5-44**).

Table 3.5-44. Summary of Federal Land Payment Disbursements for Coconino County in FY 2013

Distribution of Federal Land Payments	Disbursements in FY 2013	Percent of Total
County Government	3,698,773	63.0%
Local School Districts	1,813,285	30.9%
Resource Advisory Councils	341,324	5.8%
Grazing Districts	22,334	0.4%
Total Federal Land Payments	5,875,716	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

3.5.5. APACHE LEAP SOUTH END

3.5.5.1. *Climate and Air Quality*

Average annual temperatures in the area of the Apache Leap South End parcels range from 51 to 77 degrees Fahrenheit (10.6 to 25 degrees Celsius), with an annual mean temperature of 64 degrees Fahrenheit (17.8 degrees Celsius). Average precipitation is approximately 18.8 inches (47.8 cm) per year, based on data from the Miami weather station (WRCC 2015). The Miami weather station is located approximately 14.5 mi (23 km) northeast of the parcels and is at an elevation of 3,560 ft (1,085 m); 120 ft (37 m) lower than the parcels (**Figure 3.3-1**).

The Apache Leap South End parcels are currently not within the boundary of any designated nonattainment or maintenance areas for air quality criteria pollutants (ADEQ 2015b). The closest federal Class I area is the Superstition Wilderness Area located approximately 6 mi (10 km) north of the parcel (**Figure 3.3-1**).

3.5.5.2. *Topography, Physiography, and Geology*

The Apache Leap South End parcels are located in the mountains immediately east and south of the town of Superior in a transitional zone on the northeastern edge of the Basin and Range physiographic province. Elevations range from 3,680 ft (1,122 m) amsl to 4,720 ft (1,439 m) amsl at a high point on the Apache Leap escarpment that overlooks Superior. The western edge of this area is generally very steep, with the cliffs of the Apache Leap escarpment rising abruptly above Superior. East of the Apache Leap escarpment, an area of parallel ridges and valleys trends to the northeast (**Figure 3.3-2**).

The present-day topography of the area is dominated by the Apache Leap escarpment, a west-facing escarpment that shows up to 1,970 ft (600 m) of vertical displacement. East of the escarpment is an upland capped by welded tuff (Apache Leap Tuff) (**Figure 3.3-2**). West of the escarpment, rough terrain at lower elevations was formed by erosion acting on faulted basement blocks. The town of Superior is located in a down-dropped, fault-formed basin.

The geomorphology of the area can be attributed to north- to northwest-trending, down-to-the-west, Basin and Range-style normal faults with Tertiary to Quaternary movement (Hehnke et al. 2012). These faults include the Concentrator, Main, and Conley Springs. Relative downward movement of a structural block west of the Concentrator fault has formed the Superior basin, and exposed the thick sequence of sedimentary rocks and tuff along Apache Leap. South of the Conley Spring fault, between the Concentrator fault and the upland capped with Apache Leap Tuff, the layered rocks are tilted eastward and cut by a complex of major faults that are subsidiary to the Concentrator fault. West of the Concentrator fault, the down-dropped Superior basin is filled with horizontal to eastward-dipping volcanic flows, tuffaceous sediments, and alluvium (Hammer and Webster 1962). Regional extension, normal faulting, and tilting ended after Tertiary volcanism and during the deposition of conglomerate and sandstone (Spencer and Richard 1995).

Apache Leap Tuff, the youngest consolidated formation in the area, forms the Apache Leap escarpment (**Figure 3.3-2**). Underlying Paleozoic sedimentary rocks and younger Precambrian sedimentary rocks are exposed at the foot of the escarpment. Tertiary Whitetail Conglomerate is present, with limited exposure at the toe of the slope on the western side of Apache Leap. A Quaternary alluvial deposit overlies the Apache Leap Tuff in a small area in the southwestern portion of the parcels. More detail about the geologic structure, local geologic column, and lithology is available in Hehnke et al. (2012).

3.5.5.2.1. Mineral Resources

A mineral assessment for the Apache Leap South End parcels will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

The Apache Leap South End parcels are patented land owned by Resolution Copper. The active mining claims for the parcels (BLM 2015a) are shown in **Figure 3.3-3** and listed in **Appendix C**.

The Act stipulates that any land acquired by the US would be withdrawn from all forms of location, entry, and patent under the mining laws; and disposition under the mineral leasing, mineral materials, and geothermal leasing laws (**Appendix A**).

A provision of the Act is the establishment the Apache Leap Special Management Area, which includes the Apache Leap South End parcel as well as the 697-acres (282-ha) federal parcel that is already administered by the Forest Service. As a condition of the land exchange, Resolution Copper would surrender all rights held under the mining laws for lands within the Apache Leap Special Management Area (**Section 2.6; Appendix A**). Currently, Resolution Copper holds active mining claims on the Forest Service-administered land, here called the Apache Leap Withdrawal Area. These mining claims are shown in **Figure 3.3-3** and listed in **Appendix C**.

3.5.5.3. Water

3.5.5.3.1. Surface Water Resources

Based on review of recent aerial photography and topographic mapping, along with a field reconnaissance, there appear to be no surface water features in the Apache Leap South End parcels, with the exception of minor ephemeral headwater drainage features (**Figure 3.3-4**). The Apache Leap South parcels have been mapped by FEMA as Zone X, an area of minimal flood hazard (**Figure 3.3-5**). The NWI map identifies no wetlands within these parcels (USFWS 2015).

Surface Water Occurrence

There are no springs or stock ponds within the parcel.

Surface Water Rights

This parcel has an active, registered surface water right in the Upper Gila River watershed sourced from an unnamed wash (**Appendix D**).

3.5.5.3.2. Groundwater Resources

The Apache Leap South End parcels are within the Phoenix AMA groundwater basin. Groundwater occurs in three separate local systems: a shallow groundwater system, the Apache Leap Tuff aquifer, and a deep groundwater system. Extensive characterization of the geology and hydrogeology in the vicinity (RCM 2014) indicates that the Concentrator fault, located to the west, acts as a barrier to groundwater movement between the shallow and intermediate depth groundwater systems. Less information is available on the deep groundwater systems, but based on a lack of water level response to mine dewatering activities and large differences in hydraulic head across the fault, the hydraulic connection of the deep groundwater systems across the Concentrator fault is limited to where legacy mine workings locally cross the fault.

There are no registered wells within the parcels, but 23 wells were identified within a 1-mile radius of the parcels. Reported depth to groundwater levels for these wells is only available for 7 of the 23 well sites and ranges between 320 and 797 ft (97.5 and 243m) bgs (ADWR 2013), excluding an outlier with reported depth to groundwater of 4,667 ft (1,422.5 m), which may be an error. Groundwater flow direction at the Property likely follows surface gradient. The nearest spring, Bored Spring, has an elevation of 2,880 ft (879 m) amsl (**Figure 3.3-4**).

Resolution Copper started hydrochemical sampling of the groundwater in the vicinity (primarily East Plant Site and West Plant Site) in 2004 (RCM 2014), but no sampling of groundwater has occurred within the Apache Leap South End parcels. Groundwater quality in the three groundwater systems generally meets EPA and state of Arizona groundwater quality standards, with a few exceptions. Details of groundwater quality, including exceptions, can be found in the GPO (RCM 2014).

3.5.5.4. Soils

Soil data provided by the National Cooperative Soil Survey through Web Soil Survey (Soil Survey Staff 2015) indicate that the Apache Leap South End parcels are located within two soil complexes, as shown in **Figure 3.3-7**. The soil complexes are well drained and occur on mountainous areas. No data is available for 14 percent of the parcel.

The Rock outcrop-Woodcutter complex is comprised of 50 percent Rock outcrop (tuff) and 40 percent Woodcutter soils. The Woodcutter series consists of very shallow and shallow, well-drained soils that formed slope alluvium and is typically weathered from granite and metamorphic rock. These soils are on hills and mountains with slopes ranging from 15 to 50 percent. Permeability is very low to low.

The Rock outcrop-Mabray-Pantak complex is comprised of 40 percent Rock outcrop, 35 percent Mabray soils, and approximately 15 percent Pantak soils. The Mabray series consists of shallow and very

shallow, well-drained soils formed in slope alluvium. Mabray soils are on hills and mountains and have slopes of 3 to 75 percent. Permeability is moderate. The Pantak series consists of very shallow and shallow, well-drained soils formed in mixed slope alluvium, colluvium, and residuum from igneous rock. Pantak soils are on pediments, hills and mountains with slopes of 5 to 60 percent. Permeability is moderate (Soil Survey Staff 2015).

3.5.5.5. Land Use

3.5.5.5.1. Access and Recreation

The Apache Leap South End parcels are accessible from Arizona State Route 177, Apache Leap Road, and unimproved roads or trails. The TNF road and trail network accesses the parcels from the west, but does not enter the Apache Leap South End parcels. A dirt road in Belmont Canyon and trails in Donkey Canyon and Pacific Canyon lead from Apache Leap Road through the foothills to the parcels. There is no road or trail access to the Apache Leap South End parcels from the east. The parcels are surrounded by TNF-administered lands; hiking, rock climbing, and nature viewing are some of the available recreational opportunities on the public lands surrounding the parcel.

The parcels are located within AGFD Management Unit 24A (**Figure 3.3-8**). Black bear, javelina, mule deer, white-tailed deer, mountain lion, quail, cottontail rabbit, elk and, tree squirrel are commonly hunted game species in this unit (AGFD 2015a).

3.5.5.5.2. Agriculture and Grazing

The soils on the Apache Leap South End parcels are not considered suitable prime or unique farmland. The soils on these parcels are considered suitable for rangeland (Soil Survey Staff 2015). The parcels are currently surrounded by the Superior and Devils Canyon grazing allotments (AGFD 2015b; **Figure 3.3-8**); however Resolution Copper does not own the grazing lease and has not paid grazing fees for the 10 years it has owned the parcel (pers. comm Dan Mead).

3.5.5.5.3. Public Lands Management

The Apache Leap South End parcels are private in-holdings within the TNF owned by Resolution Copper. The land exchange would transfer ownership of the parcels to the US and they would become part of the Apache Leap Special Management Area.

3.5.5.5.4. Encumbrances

There is no Title Policy available for the Apache Leap South End parcels, and the Warranty Deed (Pinal 2005) makes no mention of encumbrances. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated at that time.

3.5.5.6. *Wildlife*

Common wildlife species known to occur in this biotic community include coyote, black-tailed jackrabbit (*Lepus californicus*), desert cottontail (*Sylvilagus auduboni*), kangaroo rat (*Dipodomys* spp.), cactus wren (*Campylorhynchus brunneicapillus*), Gila woodpecker (*Melanerpes uropygialis*), and western diamondback (*Crotalus atrox*) (Brown 1994). Bird species observed during field reconnaissance include black-throated sparrow (*Amphispiza bilineata*), cactus wren (*Campylorhynchus brunneicapillus*), canyon wren (*Catherpes mexicanus*), Costa's hummingbird (*Calypte costae*), curve-billed thrasher (*Toxostoma curvirostre*), house finch (*Haemorhous mexicanus*), phainopepla (*Phainopepla nitens*), Scott's oriole (*Icterus parisorum*), and turkey vulture (*Cathartes aura*).

There are no perennial aquatic features capable of supporting aquatic biology on this parcel.

The Superior-Miami US 60 potential wildlife linkage is just to the north of the Apache Leap South End parcels (Majka et al. 2007).

3.5.5.6.1. *Wildlife Management*

Under the conditions and provisions of the Land Exchange, wildlife and habitat within this parcel will be managed by the TNF as part of the Apache Leap Special Management Area. Further, the Act stipulates that not later than three years after the date of enactment of the Land Exchange, the Secretary of the USDA, in consultation with affected Indian tribes, the town of Superior, Resolution Copper, and other interested members of the public, shall prepare a management plan for the Apache Leap Special Management Area.

3.5.5.6.2. *Special Status Wildlife Species*

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as wildlife species with potential to occur (WestLand 2015b *in prep*) in the Apache Leap South End parcels:

- Sonoran desert tortoise (*Gopherus morafkai*) – Candidate

There are no critical habitats within the parcel (**Appendix E**).

Of the TNF sensitive species that were identified in the HDMS (**Appendix F**), the following were identified as wildlife species with potential to occur (WestLand 2015b *in prep*) in the Apache Leap South End parcels:

- American peregrine falcon (*Falco peregrinus anatum*)
- Bezy's night lizard (*Xantusia bezyi*).

3.5.5.7. Vegetation

The upland vegetation on the Apache Leap South End parcels is mapped as one biotic community: Arizona Upland Subdivision of the Sonoran Desertscrub (Brown and Lowe 1980; **Figure 3.3-9**). However during field reconnaissance it was noted that the north facing slopes include plants that more closely resemble the Interior Chaparral biotic community (WestLand 2015b *in prep*). Common plants of the Arizona Upland biotic community on the parcel include saguaro, pencil cholla (*Cylindropuntia arbuscula*), jojoba (*Simmondsia chinensis*), prickly pear (*Opuntia engelmannii*), foothill palo verde, brittlebush (*Encelia farinosa*), globemallow (*Sphaeralcea* sp.), and fairyduster (*Calliandra eriophylla*). Common plants of the Interior Chaparral biotic community on the parcel include scrub live oak, sugar sumac (*Rhus ovata*), barberry, and desert spoon (*Dasyllirion wheeleri*) (WestLand 2015b *in prep*).

Also noted were several plant species frequently found on calcareous substrate including crucifixion thorn (*Canotia holocantha*), California rosewood (*Vauquelinia californica*), sandpaper bush (*Mortonia scabrella*), and mariola (*Parthenium incanum*) (WestLand 2015b *in prep*).

The xeric washes on the parcels support no riparian vegetation other than greater density of velvet mesquite and catclaw mimosa (*Mimosa aculeaticarpa*).

Under the conditions and provisions of the land exchange, vegetation and noxious weeds within this parcel will be managed by the TNF as part of the Apache Leap Special Management Area. Further, the Act stipulates that not later than three years after the date of enactment of the Land Exchange, the Secretary of Agriculture, in consultation with affected Indian tribes, the town of Superior, Resolution Copper, and other interested members of the public, shall prepare a management plan for the Apache Leap Special Management Area.

3.5.5.7.1. Special Status Plant Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following was identified as a plant species with potential to occur (WestLand 2015b *in prep*) in the Apache Leap South End parcels:

- Arizona hedgehog cactus (*Echinocereus arizonicus* var. *arizonicus*) – Endangered

There are no critical habitats within the parcel (**Appendix E**).

3.5.5.8. Cultural Resources

The Apache Leap South End includes three separate land parcels near the escarpment known as Apache Leap. These specific parcels have never been examined for cultural resources. What is known about the cultural resources of the area derives from a series of archaeological surveys of the proposed Oak Flat Land Exchange parcel north and east of the Apache Leap South End parcels (Deaver 2013; Lindeman and Whitney 2005). The Apache Leap South End parcels are located within the defined culture areas of the Archaic (8500 B.C.–A.D. 150), Hohokam (A.D. 700–1150), and Salado (A.D. 1150–1450) archaeological

cultures, and within the ethnohistoric territories of the Apache and Yavapai peoples. Euroamerican occupation in the area beginning in the 1850s is related to mining and ranching. No historical features are depicted within the Apache Leap South End parcels on the 1912 GLO map; however, Oak Flat and environs were settled and ranched from the late 1800s until about 1921 (Deaver 2013; Lindeman and Whitney 2005). Trails, corrals, and other structures related to the ranching have been documented across the broad area surrounding these parcels. The archaeological surveys of Oak Flat and the northern portion of the Apache Leap also have identified widely scattered features related to historical mining, and the historical Belmont mine is located nearby to the west. Given the rugged terrain, large-scale prehistoric habitation sites are not expected for this area, however, small scale-limited activity sites attributable to archaeological Native American cultures, or ethnohistoric Apache and Yavapai cultures may be present. Archaeological resources related to historical ranching, mining, and associated activities also may be present. The inventory of historic properties in these parcels is incomplete and further archaeological studies are required to complete the inventory.

3.5.5.9. Hazardous Materials

A Phase I Environmental Site Assessment to assess potential environmental liability of the Apache Leap South End parcel is in draft and the majority of the inquiry has been completed (WestLand 2015e *in prep*). This assessment is being conducted in conformance with American Society for Testing Materials (ASTM) E 2247-08 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural Property*. To date, the Environmental Site Assessment has revealed no evidence of recognized environmental conditions in connection with the parcel.

The report does, however, note the presence of historic mine features at the parcels and on adjoining land. The Apache Leap South End parcels are located just to the east and north of the main entrances to the old Belmont and Grand Pacific mines on lands patented under federal mining law. The parcels are located entirely or partially within patented lode claims, all of which date to the early 1900s. The claims have been explored historically for the presence of economic minerals using surface (e.g. open cuts) and underground methods (e.g. shafts, tunnels, etc.)—in a few cases, exploration appears to have led to actual development of the mineral resource.

In addition to field reconnaissance efforts, WestLand used historical Mineral Survey plats and composite underground level maps to assess the presence/absence of surface and underground mining features within the three Apache Leap South End parcels. The research determined that surface and underground mining features are located within all three sub-parcels. This includes small open cuts, shafts, tunnels, raises, crosscuts, and more extensive underground workings extending from the Grand Pacific and Belmont mines. There is some potential for such historic mine features to produce acid mine drainage or impact groundwater if water accumulates in mineralized rock or waste rock. However, there was no discoloration or distressed vegetation noted around existing surface mining features, and accumulation of water in underground mining features is speculative. Although historic mining features

provide some potential for impacts to surface or ground water by contact with mineralized rock, acid mine drainage is not known to be present at the parcel and is not considered likely.

3.5.5.10. *Visual Resources*

A Visual Management System Analysis for Landscape Aesthetics has not been conducted for these parcels. A formal visual analysis will be performed according to *Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management Chapter 2380 - Landscape Management* (USFS 2003b) as part of NEPA analysis.

3.5.5.11. *Socioeconomic Resources*

The Apache Leap South End parcel is located within Pinal County, Arizona. The Socioeconomic Resources discussed above for Oak Flat in **Section 3.3.1.11** also therefore provides the information required for the Apache Leap South End parcels.

3.5.6. LOWER SAN PEDRO RIVER

3.5.6.1. *Climate and Air Quality*

Average annual temperatures in the area of the Lower San Pedro River parcel range from 47 to 82 degrees Fahrenheit (8.3 to 27.8 degrees Celsius), with an annual mean temperature of 65 degrees Fahrenheit (18.3 degrees Celsius). Average precipitation is approximately 13.58 inches (34.5 cm) per year, based on data from the Winkleman 6S weather station (WRCC 2015). The weather station is located approximately 10 mi (22.5 km) from the parcel and is at an elevation of 2,080 ft (634 m) amsl (**Figure 3.3-1**). Actual onsite temperature ranges are expected to be lower and precipitation may be higher, given that the parcel is at a higher elevation (200 ft [61 m]) than the weather station.

The Lower San Pedro River parcel is within the boundary of a designated sulfur dioxide nonattainment area (**Figure 3.3-1**). It does not fall within any designated maintenance areas (ADEQ 2015b). The closest federal Class I area is the Galiuro Wilderness Area located approximately 10 mi (16 km) east of the parcel (**Figure 3.3-1**).

3.5.6.2. *Topography, Physiography, and Geology*

The Lower San Pedro River parcel is located within the Basin and Range physiographic province. The province is characterized by elongated mountain ranges trending northwest-southeast, separated by broad alluvial valleys. The parcel is located within one of the broad alluvial valleys with the Galiuro Mountains to the east and the Santa Catalina Mountains to the south (**Figure 3.5-25**).

The gradient of the San Pedro River streambed is very gradual and down to the northwest. The primary stream channel meanders along the riverbed. Upland slopes facing the river are typically steeper on the north side of the river and generally gentler on the south side of the river. On both sides, however, the bluffs are deeply incised by numerous washes, both named and unnamed (WestLand 2003b). The majority of the surface geology of the parcel is Holocene River Alluvium (**Figure 3.5-25**). An upland area in the eastern portion of the parcel is mapped as Pliocene to Middle Miocene Deposits, and the extreme southwestern corner of the parcel is mapped as Quaternary Surficial Deposits, undivided (Richard et al. 2000).

3.5.6.2.1. **Mineral Resources**

A mineral assessment for this parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

The Lower San Pedro River parcel is patented private land for which Swift Land and Cattle LLC, a subsidiary of Resolution Copper, holds active mining claims, listed in **Appendix C** (BLM 2015a).

The Act stipulates that any land acquired by the US would be withdrawn from all forms of location, entry, and patent under the mining laws; and disposition under the mineral leasing, mineral materials, and geothermal leasing laws (**Section 2.7 and Appendix A**).

3.5.6.3. Water

3.5.6.3.1. Surface Water Resources

The Lower San Pedro River parcel is located in the northern portion of the San Pedro River basin and includes portions of the river itself, the adjoining floodplain, and adjacent upland areas (**Figure 3.5-26**). The northern boundary of the parcel is approximately 20 mi (32 km) upstream from the San Pedro's confluence with the Gila River. The San Pedro River is one of only two major rivers that flow north out of Mexico into the US, and is one of the few remaining free-flowing rivers in the Southwest. Through the parcel, the river is ephemeral to intermittent (WestLand 2003a).

Designated uses for the San Pedro River through the parcel include Fish Consumption, Full Body Contact, Agricultural Livestock Watering, and Aquatic and Wildlife (warm water) (A.C.C. Title 18, Chapter 11: Appendix B). This reach of the river has been identified by ADEQ (2012, 2015a) as "Inconclusive" regarding attainment of designated uses; additional sampling has been recommended.

Within the Lower San Pedro River parcel, FEMA has identified four zones of flood hazard, including an area of regulatory floodway (Zone AE; **Figure 3.5-27**).

The NWI map for the Lower San Pedro River parcel identifies 1,766 acres (715 ha) of variably classified wetlands (USFWS 2015). Based on field observations and data review, the San Pedro River is an ephemeral watercourse along the approximately 53,800-ft (16,400-m) reach passing through the parcel. Mesoriparian and xeroriparian habitat is present along the stream channel. Facultative wetland species were present. No obligate wetland species or hydric soils were observed along the stream channel (WestLand 2004i). However a small wetland has formed around a free-flowing artesian well and obligate and facultative wetland vegetation are present including willow (*Salix* sp.), ash (*Fraxinus* sp.), watercress (*Rorippa* sp.), and spike-rush (*Eleocharis* sp.; Nature Conservancy in Arizona 2010).

Surface Water Occurrence

There are several large washes on the parcel, including Copper, Mammoth, and Turtle washes, all tributary to the San Pedro River (**Figure 3.5-26**). Surface water flows along the reach of the San Pedro River that traverses the parcel are intermittent.

Surface Water Rights

This parcel has active, registered surface water rights in the San Pedro River watershed sourced from the San Pedro River and another unnamed wash and canyon (**Appendix D**).

3.5.6.3.2. Groundwater Resources

The Lower San Pedro River parcel is located within the Mammoth sub-basin within the larger Lower San Pedro groundwater basin. In this region the groundwater flow direction is from the mountains toward the valley floor of the San Pedro River and associated pumping centers.

The aquifer in the Mammoth sub-basin is made up of four water-bearing units: the floodplain aquifer, unconfined basin-fill, confined basin-fill, and the fractured and faulted portions of hardrock. The most productive of these is the floodplain aquifer that parallels the major waterways and is composed of gravel, sand, silt, and clay. An artesian aquifer may be encountered in wells drilled deeper than 500 ft (152 m). The primary recharge in the area occurs from surface flows in the San Pedro River (ADEQ 2002).

The ADWR Well Registry database contained data for 22 wells for the parcel (ADWR 2013; **Figure 3.5-26**). This well data indicate that water levels are very shallow at less than 60 ft (18.2 m) below the ground surface. Two wells onsite that are monitored by the Nature Conservancy of Arizona indicate that groundwater levels were less than 35 ft (10.7 m) below the ground surface during the monitoring period of January to October 2010 (Nature Conservancy in Arizona 2010).

According to a baseline study conducted by ADEQ in 2000, the water from the artesian aquifers is suitable for domestic and irrigation purposes in the southern portion of the basin. However, groundwater found near Mammoth has high sulfate and sodium concentrations. Additionally, high fluoride concentrations that exceed water quality standards are present in this region. The floodplain aquifer that is found in close association with the major waterways is considered to be a chemically open hydrologic system. Finally, the groundwater collected from the unconfined basin-fill aquifer and from hardrock areas has the fewest water quality standard exceedances (ADEQ 2002).

3.5.6.4. Soils

Soil data provided by the National Cooperative Soil Survey through Web Soil Survey (Soil Survey Staff 2015) indicate that the Lower San Pedro parcel is located within 11 soil complexes, as shown in **Figure 3.5-28**. The soil complexes are generally well-drained and occur on fan terraces, floodplains, and channels.

The Agustin-Kokan-Queencreek complex consists of very deep, well-drained, moderately to rapidly permeable soils formed in mixed fan alluvium. Agustin soils make up approximately 55 percent, Kokan soils 25 percent, and Queencreek soils about 15 percent of this complex. These nearly level to moderately sloping soils are on fan remnants and floodplains. Slopes range from 0 to 8 percent.

The Cascabel soils-Wetrock soils-Riverwash complex consists of very deep, moderately well-drained soils that formed from mixed stream alluvium. This soil complex is on flood plains and channels and has slopes of 0 to 5 percent.

The Gila-Vinton complex consists of deep, well-drained soils formed in stratified or mixed alluvium. Gila soils comprise 45 percent and Vinton soils approximately 40 percent of this complex. These soils are on alluvial fans and flood plains and have slopes of 0 to 5 percent.

The Glendale-Hantz complex consists of very deep, well-drained soils that formed in stratified mixed alluvium. Glendale soils comprise 50 percent and Hantz soils approximately 40 percent of this complex. These soils are on alluvial fans, flood plains, and stream terraces and have slopes of 0 to 5 percent.

The Haplogypsids-Whitecliff-Bandlands complex consists of very deep, well-drained soils that formed from gypsiferous and calcareous lacustrine deposits. Haplogypsids soils comprise 45 percent, Whitecliff soils 25 percent, and Badlands soils approximately 20 percent of this complex. These soils are on alluvial fans and fan terraces and have slopes of 0 to 5 percent typically, but can range up to 80 percent.

The remaining six soil complexes in the Lower San Pedro parcel each comprise less than 12 percent of the parcel's acreage (Soil Survey Staff 2015) and are shown in **Figure 3.5-28**.

3.5.6.5. Land Use

3.5.6.5.1. Access and Recreation

Several improved (paved) and unimproved (dirt) public roads cross the parcel. On the northeast side of the river, River Road is paved from its intersection with SR 77 southeast through the property and adjacent properties, turning to dirt farther southeast (**Figure 3.5-29**). Copper Creek Road crosses the property from the northeast side of the river to Mammoth; it is paved except where it crosses the streambed. Camino Rio Road accesses the property and adjacent parcels on the southwest side of the river northwest of Mammoth. A dirt road southeast of Mammoth, on the southwest side of the river, is depicted on maps but was reportedly abandoned years ago. Vestiges of this road are present in some locations along the property. Numerous unimproved dirt roads and trails cross the property as well; these appear to have been formed by the general public as convenient access to the river or upland areas. Much of the property is not fenced (WestLand 2003a).

Recreational/undeveloped land surrounds the property in all other areas. Recreational use of the land is largely informal: off-road vehicles use the San Pedro River stream bed and the numerous informal roads and trails that cross the property and adjacent properties to access the stream bed. A town park is present in Mammoth adjacent to the property; the park includes a baseball diamond and picnicking facilities (WestLand 2003a).

The parcel is located within AGFD Management Units 32 and 37B (**Figure 3.5-29**). Antelope, black bear, mule deer, whitetail deer, javelina, elk, cottontail rabbit, quail, and dove are commonly hunted game species in Unit 32. Javelina, mule deer, cottontail rabbit, quail, and dove are commonly hunted game species in Unit 37B (AGFD 2015a).

3.5.6.5.2. Agriculture and Grazing

There are three soil complexes that occur on this parcel that are considered “prime farmland if irrigated and either protected from flooding or not frequently flooded during the growing season” (Soil Survey Staff 2015). The soil complexes include approximately 370 acres (150 ha) of Gila-Vinton, 356 acres (144 ha) of Glendale-Hantz, and 355 acres (143.7 ha) of Ugy-Whitecliff complex. However since the parcel has not been farmed for over 50 years and no adequate and dependable water-delivery irrigation system is in place (Pers. comm Celeste Andresen) it does not meet the criteria of prime farmland. The rest of the parcel is considered rangeland (Soil Survey Staff 2015).

The parcel is currently surrounded by the Tiger, Dry Camp, and Hot Well grazing allotments (BLM 2015b; **Figure 3.5-29**), however Resolution Copper does not own the grazing leases and has not paid grazing fees for the 10 years it has owned the parcel (pers. comm Celeste Andresen).

3.5.6.5.3. Public Lands Management

The Lower San Pedro River parcel is private land owned by Resolution Copper. The land exchange would transfer ownership of this parcel to the US, after which it would be added to, and administered as part of, the BLM San Pedro National Conservation Area in accordance with the laws (including regulations) applicable to the Conservation Area (**Appendix A**).

3.5.6.5.4. Encumbrances

In the Commitment for Title Insurance issued by First American Title Insurance Company on March 26, 2004, exceptions were noted in Schedule B – Section II (**Appendix H**). These have been compiled and can be found in **Appendix G**. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated, if necessary, at that time.

3.5.6.6. Wildlife

Wildlife species observed on the Lower San Pedro River parcel include spadefoot toads (*Scaphiopus couchii* and *Spea multiplicata*), red-spotted toad (*Anaxyrus punctatus*), Sonoran desert tortoise (*Gopherus morafkai*), cactus wren, curve-billed thrasher, Gambel's quail, hooded oriole (*Icterus cucullatus*), mourning dove, phainopepla, red-tailed hawk (*Buteo jamaicensis*), road runner (*Geococcyx californianus*), turkey vulture, vermilion flycatcher (*Pyrocephalus rubinus*), Wilson's warbler (*Wilsonia pusilla*), black-tailed jackrabbit, coyote, grey fox, desert cottontail, desert mule deer (*O. hemionus crooki*), javelina (*Tayassu tajuca*), as well as several species of skunks and rats (WestLand 2004b) As one of Arizona's Important Bird Areas is present within the property, numerous common and more rare bird species have been documented on site (Audubon 2010).

The San Pedro River is ephemeral along the approximately 53,800-ft (16,400-m) reach passing through the parcel. However a 1,500-foot-deep, free-flowing artesian well has formed a 1/3-acre wetland stretching about 140 yards (**Figure 3.5-26**). Due to management actions to remove nonnative frog and

fish species, that wetland provides aquatic habitat for lowland leopard frog and longfin dace (Nature Conservancy in Arizona 2010).

The Santa Catalina-Galiuro potential wildlife linkage is just southeast of Lower San Pedro Ranch (Majka et al. 2007).

3.5.6.6.1. Wildlife Management

Under the conditions and provisions of the Land Exchange, wildlife and habitat within this parcel will be managed as part of the San Pedro National Conservation Area, in coordination with the BLM and the AGFD.

3.5.6.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as listed species known to occur, or with potential to occur in the Lower San Pedro River parcel:

- Ocelot (*Leopardus pardalis*) – Endangered
- Lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*) – Endangered
- Mexican spotted owl (*Strix occidentalis lucida*) – Threatened
- Yellow-billed cuckoo (*Coccyzus americanus*) – Threatened
- Southwestern willow flycatcher, (*Empidonax traillii extimus*) – Endangered
- Northern Mexican gartersnake (*Thamnophis eques megalops*) – Threatened
- Sonoran desert tortoise (*Gopherus morafkai*) – Candidate

Several of the above species have been observed on the parcel. Yellow-billed Cuckoo was detected twice within the Lower San Pedro River parcel in 2010 during Audubon's Important Bird Areas Program) surveys (Audubon 2010).

The southwestern willow flycatcher (*Empidonax traillii extimus*) is present in high densities along the lower San Pedro River corridor, but has not been detected on the parcel during Audubon's Important Bird Areas surveys (Audubon 2010).

Final designated critical habitat for Southwestern willow flycatcher and proposed critical habitats for Yellow-billed cuckoo and Northern Mexican gartersnake lie fully or partially within the parcel (**Appendix E**).

The following BLM sensitive species were identified as documented within 5 mi (8 km) of the Lower San Pedro River parcel (**Appendix F**):

- Desert box turtle (*Terrapene ornata luteola*)
- Lowland leopard frog (*Lithobates yavapaiensis*)

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.6.7. *Vegetation*

The vegetation on the Lower San Pedro River parcel consists of two biotic communities: Arizona Upland Subdivision of Sonoran Desertscrub and Sonoran Deciduous Riparian Forest (**Figure 3.5-30**). The Arizona Upland Subdivision of Sonoran Desertscrub occurs on *bajadas* above the San Pedro River floodplain and is represented by saguaro, velvet mesquite, creosote bush (*Larrea tridentata*), several species of cholla cacti (*Cylindropuntia* spp.), and foothill palo verde (WestLand 2004b).

The riparian vegetation that lines the river corridor includes one of the rarest of riparian habitats in Arizona, a remarkable mesquite *bosque* (Spanish for forest) that stretches for approximately 2.8 mi (4.5 km) on the east side of the San Pedro River in the center of the property. Other riparian species present include velvet mesquite, desert willow (*Chilopsis linearis*), Goodding's willow, graythorn (*Ziziphus obtusifolia*), Fremont cottonwood, and the non-native tamarisk (WestLand 2004b). Under the conditions and provisions of the Land Exchange, vegetation and noxious weeds within this parcel will be managed by the BLM as part of the San Pedro National Conservation Area.

3.5.6.7.1. *Special Status Plant Species*

There are no special status plant species with potential to occur within the parcel, nor are there any critical habitats within the parcel (**Appendix E and F**).

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.6.8. *Cultural Resources*

The Lower San Pedro River parcel has not been fully surveyed for cultural resources. The AZSITE database documents nine archaeological surveys that are wholly or partially within the Lower San Pedro River parcel. Most of these are linear surveys associated with the inventory of road or utility line corridors. One important archaeological survey not referenced in the AZSITE database is an extensive survey of the lower San Pedro River terraces to identify late prehistoric settlements (Clark and Lyons 2012).

The Lower San Pedro River parcel falls within the projected culture areas for the prehistoric Paleoindian (11,500–8500 B.C.), Archaic (8500 B.C.–A.D. 150), Hohokam (A.D. 700–1150), and Salado (A.D. 1150–1450) cultures, and within the territories of ethnohistoric Sobaipuri (A.D. 1600–1775) and Apache (A.D. 1700–1870) peoples. The area was settled by Euroamerican pioneers after the establishment of Camp Grant at the confluence of Aravaipa Creek and the San Pedro River north of the parcel. The General Land Office plat maps filed in 1878, 1892, and 1927 indicate the presence of Euroamerican homesites and roads within or near the Lower San Pedro River parcel the late 1800s.

The few archaeological surveys in the parcel, as well as earlier reconnaissance by professional and avocational archaeologists, have identified 24 archaeological sites that are wholly or partially within the Lower San Pedro River parcel. Most of the known archaeological sites represent occupation and use of

the area by the prehistoric Hohokam and Salado cultures. Many of these sites represent locations of permanent settlement along the terraces overlooking the San Pedro River floodplain. Another important prehistoric site type identified is the upland or dryland agricultural fields. These typically consist of rock piles, check dams, and terraces constructed on the upper valley floors above the river bottomlands. Also present are a few sites with components attributed to the ethnohistoric Sobaipuri peoples that occupied the valley at the time of Spanish contact. Only one site is attributed to the Historic Euroamerican settlement along the river, the historic alignment of SR 77. The inventory of cultural properties in the Lower San Pedro River parcel is incomplete and further archaeological are required to complete the inventory.

3.5.6.9. Hazardous Materials

A Phase I Environmental Site Assessment for potential environmental liability of the Lower San Pedro River parcel was conducted in 2003 (WestLand 2003b) in conformance with ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-00. The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the parcel or adjoining properties.

The report did, however, note that several 55-gallon drums and smaller containers were present throughout the parcel at the time of the investigation. Limited evidence of soil staining (a few tens of square feet) was observed in the vicinity of the containers at the parcel. In no cases were hazardous wastes observed during the site reconnaissance. The materials in the drums and containers, and the limited soil staining observed, did not appear to present a material threat to public health and the environment (WestLand 2003b).

In addition to the drums, the Environmental Site Assessment included observations of several abandoned automobiles as well as decaying agricultural equipment at the parcel. Wildcat dumping sites (consisting of trash, miscellaneous wrecked automobiles, and additional drums) were located throughout the parcel. No evidence of hazardous waste disposal was observed at any of the dump sites, although small quantities of regulated materials may have been present in the abandoned cars. It should be noted that, due to the size of the parcel and limited accessibility, not all drums or containers likely present onsite were found or evaluated for the presence of hazardous substances (WestLand 2003b).

No offsite sources of known recognized environmental conditions impacting the parcel were identified in the Environmental Site Assessment. Several potential sources were present, including underground storage tank sites, mine and smelter facilities, and a sewage treatment plant, all of which were upgradient and/or upstream from the property. The report identified the San Manuel Mine plant site and associated tailings piles as sources for potential contamination to groundwater in the region. Even though direct evidence for groundwater contamination has not been documented by ADEQ or ADWR, the report noted that the potential for groundwater contamination exists. However, no specific evidence of discharges to the property, either from the site reconnaissance or from regulatory agency

databases, suggested that the property had been impacted by adjoining or nearby property waste (WestLand 2003b).

The Phase I Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the Lower San Pedro River parcel. As described above, soil staining observed in the vicinity of drums and containers is considered to be a *de minimis* issue, not posing a threat to human health or the environment. Extensive historical mining and processing activities have occurred upgradient and upstream of the property.

3.5.6.10. *Visual Resources*

A Visual Resource Contrast Rating has not been conducted for this parcel. A formal visual analysis will be performed on this parcel according to *BLM Manual 8400, Chapter 8431* (BLM 1986) as part of NEPA analysis.

3.5.6.11. *Socioeconomic Resources*

The socioeconomic analysis for the Lower San Pedro parcel was done at the county level, and is therefore the same as is described for the Oak Flat parcel (**Section 3.3.1.11**).

3.5.7. DRIPPING SPRINGS

3.5.7.1. *Climate and Air Quality*

Average annual temperatures in the area range from 47 to 82 degrees Fahrenheit (8.3 to 27.8 degrees Celsius), with an annual mean temperature of 65 degrees Fahrenheit (18.3 degrees Celsius). Average precipitation is approximately 13.58 inches (34.5 cm) per year, based on data from the Winkelman 6S weather station (WRCC 2015). The weather station is located approximately 14 mi (22.5 km) from the parcel and is at an elevation of 2,080 ft (634 m) amsl (**Figure 3.3-1**). Actual onsite temperature ranges are expected to be lower and precipitation may be higher, given that the parcel is at a higher elevation (1,400 ft [427 m]) than the weather station.

The Dripping Springs parcel is within the boundary of a designated sulfur dioxide nonattainment area and a designated PM₁₀ nonattainment area. It does not fall within any designated maintenance areas (ADEQ 2015b). The closest federal Class I area is the Superstition Wilderness Area located approximately 22 mi (35 km) north of the parcel (**Figure 3.3-1**).

3.5.7.2. *Topography, Physiography, and Geology*

The Dripping Springs parcel is located in the Dripping Spring Mountains northeast of Kearny, Arizona. Elevations range from 3,480 to 4,360 ft (1,061 to 1,329 m) amsl within the parcel. It is located in a rugged upland area northeast of the Gila River, which is the main drainage feature for the area. Notable peaks in the vicinity of the parcel include Steamboat Mountain (rising to 3,373 ft [1,028 m] amsl) immediately west of the parcel and Tam O'Shanter Peak (rising to 4,633 ft [1,412 m] amsl) southeast of the parcel (**Figure 3.5-31**).

The Dripping Springs parcel is located within the Basin and Range physiographic province. The province is characterized by elongated mountain ranges trending northwest-southeast, separated by broad alluvial valleys. The Dripping Spring Mountains have extensive and complex fault systems and are composed of tilted fault blocks. The surface geology of the parcel is shown in **Figure 3.5-31** and is predominantly Middle Proterozoic Sedimentary Rocks. A fault bisects the parcel and defines the boundary between two tilted fault blocks. The western portion of the parcel is mapped as Mississippian, Devonian, and Cambrian Sedimentary Rocks (Richard et al. 2000).

3.5.7.2.1. **Mineral Resources**

A mineral assessment for this parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

This parcel is unpatented private land and, therefore, has no active mining claims (BLM 2015a).

3.5.7.3. Water

3.5.7.3.1. Surface Water Resources

Based on review of recent aerial photography and topographic mapping, along with a field reconnaissance, there appear to be no surface water features in the Dripping Springs parcel, with the exception of minor ephemeral headwater drainage features that are tributary to the Gila River (**Figure 3.5-32**).

The Dripping Springs parcel has been mapped by FEMA primarily as Zone D (**Figure 3.5-33**), denoting areas where FEMA has not conducted a flood hazard analysis and the potential flood hazard has not been determined. A small portion of the parcel has been mapped as Zone X, an area of minimal flood hazard. The NWI map identifies no wetlands within this parcel (USFWS 2015).

Surface Water Occurrence

There are no springs or stock ponds within the parcel.

Surface Water Rights

This parcel does not have any active surface water rights (ADWR 2015f).

3.5.7.3.2. Groundwater Resources

The Dripping Springs parcel is located within the Mammoth sub-basin within the larger Lower San Pedro groundwater basin. In this basin near the parcel, the groundwater flow direction is from the mountains toward the valley floor of the Gila River and then north.

The aquifer in the Mammoth sub-basin is made up of four water-bearing units: the floodplain aquifer, unconfined basin-fill, confined basin-fill, and the fractured and faulted portions of hardrock. The most productive of these is the floodplain aquifer which parallels the major waterways and is composed of gravel, sand, silt, and clay. An artesian aquifer maybe encountered in wells drilled deeper than 500 ft (152 m). The primary recharge in the area occurs from mountain front recharge and streambed infiltration (ADEQ 2002).

The ADWR Well Registry database contained data for 2 wells within a 1-mi (1.6-km) radius of the parcel (ADWR 2013; **Figure 3.5-32**). The water level trends in these wells showed that the groundwater is relatively shallow at less than 30 ft (9.1 m) below the ground surface.

According to a baseline study conducted by ADEQ in 2000, the water from the artesian aquifers is suitable for domestic and irrigation purposes in the southern portion of the basin. However, groundwater found near Mammoth has high sulfate and sodium concentrations. Additionally, high fluoride concentrations that exceed water quality standards are present, with elevated levels of cadmium found in the vicinity of Hayden and Dudleyville. The floodplain aquifer that is found in close association with the major waterways is considered to be a chemically open hydrologic system. Finally,

the groundwater collected from the unconfined basin-fill aquifer and from hardrock areas has the fewest water quality standard exceedances (ADEQ 2002).

3.5.7.4. Soils

Soil data provided by the National Cooperative Soil Survey through Web Soil Survey (Soil Survey Staff 2015) indicate that the Dripping Springs parcel is located within three soil complexes, as shown in **Figure 3.5-34**. The soil complexes are generally well-drained and occur on mountains and fan terraces.

The Chiricahua-Deloro-Leyte complex comprises 92 percent of the parcel and consists of shallow, well-drained soils formed in alluvium. Soils are on pediments, hills and mountains. Slopes range from 10 to 50 percent. Permeability is very low to moderately low.

The Stagecoach-Delnorte complex comprises approximately eight percent of the parcel and consists of well-drained soils on fan terraces. The complex is approximately 55 percent Stagecoach soils and 35 percent Delnorte soils. The Stagecoach series consists of very deep, well-drained soils formed in mixed alluvium with slopes of 0 to 60 percent. Permeability is moderately rapid. The Delnorte series consists of soils that are very shallow and shallow to a petrocalcic horizon. They are well-drained soils that are moderately rapidly permeable above and below a very slowly permeable petrocalcic horizon. They formed in calcareous loamy materials containing igneous gravel. These soils are on nearly level hilly uplands, fan piedmonts, and fan remnants. Slope ranges from 0 to 30 percent. Permeability is moderately rapid above and below the very slowly permeable petrocalcic horizon (Soil Survey Staff 2015).

The Holguin-Rock Outcrop complex comprises less than one percent of the Dripping Springs parcel. The Holguin series consists of very shallow and shallow, well-drained, low to moderately low permeability soils formed on mountains. Rock outcrop comprises 35 percent of this soil complex (Soil Survey Staff 2015).

3.5.7.5. Land Use

3.5.7.5.1. Access and Recreation

The Dripping Springs parcel is located in the Dripping Springs Mountains just north of Tam O'Shanter Peak and consists of rugged terrain with considerable vertical relief, composed largely of exposed rock faces, boulders of various sizes, rocky slopes, and generally exhibiting poor or little soil development.

There is no designated access into the parcel. The Dripping Springs parcel is accessible from Arizona State Route 177 in Kearny, Arizona, via Hammond Drive, a dirt road from Kearny, to the northeast approximately 3.4 miles (5.5 km) up Steamboat Wash, and then overland approximately 1.2 miles (2 km) to the parcel (**Figure 3.5-35**) (WestLand 2015f). There are several significant rock climbing resources within the parcel, and other well-known sites in the near vicinity (WestLand 2006).

The parcel is located within AGFD Management Unit 37B (**Figure 3.5-35**). Javelina, mule deer, cottontail rabbit, dove, and quail are commonly hunted game species in this unit (AGFD 2015a).

3.5.7.5.2. Agriculture and Grazing

The soils on the Dripping Springs parcel are not considered suitable prime or unique farmland. The soils on this parcel are considered suitable for rangeland (Soil Survey Staff 2015). The parcel is currently surrounded by the Dripping Springs, Steamboat Mountain, and Hidalgo grazing allotments (BLM 2015b; **Figure 3.5-35**), however Resolution Copper does not own the grazing leases and has not paid grazing fees for the 10 years it has owned the parcel (pers. comm Dan Mead).

3.5.7.5.3. Public Lands Management

The Dripping Springs parcel is private land owned by Resolution Copper. The land exchange would transfer ownership of this parcel to the US, and it would be managed by the BLM in accordance with the Federal Land Policy and Management Act of 1976 and applicable land use plans (**Appendix A**).

3.5.7.5.4. Encumbrances

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on February 5, 2007, exceptions were noted for the Dripping Springs parcel in Schedule B – Part II (**Appendix H**). These have been compiled and can be found in **Appendix G**. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated, if necessary, at that time.

3.5.7.6. Wildlife

Common wildlife species known to occur in Interior Chaparral include Eastern cottontail, pack rat, mule deer, white-footed mouse (*Peromyscus leucopus*), canyon wren (*Catherpes mexicanus*), side-blotch lizard (*Uta stansburiana*), Arizona night lizard (*Xantusia arizonae*), and whipsnake (*Masticophis* spp.). Common wildlife species known to occur in Semidesert Grassland include black-tailed jackrabbit, kangaroo rat, coyote, Swainson's hawk (*Buteo swainsoni*), mocking bird (*Mimus polyglottos*), and road runner (*Geococcyx californianus*) (Brown 1994).

Common wildlife species observed on the parcel include javelina, white-throated woodrat, and tree lizard (*Urosaurus ornatus*). Birds noted during field reconnaissance include black-throated sparrow, Anna's hummingbird, American kestrel (*Falco sparverius*), cactus wren, canyon wren, common raven (*Corvus corax*), Costa's hummingbird, curve-billed thrasher, ash-throated flycatcher (*Myiarchus cinerascens*), Gila woodpecker (*Melanerpes uropygialis*), gilded flicker (*Colaptes chrysoides*), Gambel's quail (*Callipepla gambelii*), greater roadrunner (*Geococcyx californianus*), mourning dove (*Zenaida macroura*), northern cardinal (*Cardinalis cardinalis*), phainopepla, Scott's oriole, turkey vulture, and verdin (*Auriparus flaviceps*) (WestLand 2015c *in prep*).

There are no perennial aquatic features capable of supporting aquatic biology on this parcel.

The Gila River-El Capitan potential linkage is 0.35 mi (0.56 km) southwest of Dripping Springs (Majka et al. 2007).

3.5.7.6.1. Wildlife Management

Under the conditions and provisions of the land exchange, wildlife and habitat within this parcel will be managed in accordance with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.), in coordination with the BLM and the AGFD.

3.5.7.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as wildlife species with potential to occur (WestLand 2015c *in prep*) in the Dripping Springs parcel:

- Sonoran desert tortoise (*Gopherus morafkai*) – Candidate

There are no critical habitats within the parcel (**Appendix E**).

Of the BLM sensitive species that were identified in the HDMS (**Appendix F**), the following were identified as wildlife species with potential to occur (WestLand 2015c *in prep*) in the Dripping Springs parcel:

- Golden eagle (*Aquila chrysaetos*)
- California leaf-nosed bat (*Macrotus californicus*)
- Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*)

3.5.7.7. Vegetation

The vegetation of the Dripping Springs parcel is comprised of two biotic communities: Arizona Upland subdivision of the Sonoran Desertscrub and Semidesert Grassland (Brown and Lowe 1980) (**Figure 3.5-36**). The western portion of the parcel is an ecotone between the two biotic communities, while the eastern portion is wholly Semidesert Grassland. The Arizona Upland subdivision occurs on the south facing slopes of the western portion of the parcel and is represented by plant species including saguaro, paloverde, jojoba, velvet mesquite, desert hackberry (*Celtis pallida*) hopbush (*Dodonaea viscosa*), and brittle bush (*Encelia farinosa*). A variety of cholla (*Cylindropuntia* spp.) and prickly pear cacti (*Opuntia* spp.) contribute significantly to this biotic community. The Semidesert Grassland occurs on the north facing slopes of the western portion of the parcel and on the whole of the eastern portion of the parcel. It is represented by plant species including desert spoon, Palmer's agave (*Agave palmeri*), catclaw acacia, scrub live oak, beargrass (*Nolina microcarpa*), one-seed juniper, threeawn grasses (*Aristida* spp.), sideoats grama grass (*Bouteloua curtipendula*), black grama grass (*B. eriopoda*), curly mesquite grass (*Hilaria belangeri*), bullgrass (*Muhlenbergia emersleyi*), and broom snakeweed (*Gutierrezia sarothroides*).

Also noted were groupings of limestone endemics including sandpaper bush (*Mortonia scabrella*), mariola (*Parthenium incanum*), crucifixion thorn, desert zinnia (*Zinnia acerosa*), and beebush (WestLand 2015c *in prep*).

The xeric washes on the parcels support no riparian vegetation other than greater density of velvet mesquite and catclaw mimosa.

Under the conditions and provisions of the land exchange, vegetation and noxious weeds within this parcel will be managed by the BLM in accordance with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.).

3.5.7.7.1. Special Status Plant Species

Of the BLM sensitive species that were identified in the HDMS (**Appendix E**), the following were identified as plant species with potential to occur (WestLand 2015c *in prep*) in the Dripping Springs parcel (**Appendix F**):

- Pima Indian mallow (*Abutilon parishii*)

There are no critical habitats within the parcel (**Appendix F**).

3.5.7.8. Cultural Resources

No archaeological surveys have been conducted within the Dripping Springs parcel or within the vicinity, and no archaeological sites are known within the parcel. The only known archaeological site within a 3-mi (5-km) radius of the parcel is a historic homesite situated along Steamboat Wash about 1.2 mi (2 km) to the northwest. The Dripping Springs parcel falls within the projected culture areas for the prehistoric Paleoindian (11,500–8500 B.C.), Archaic (8500 B.C.–A.D. 150), Hohokam (A.D. 700–1150), and Salado (A.D. 1150–1450) cultures. Known Hohokam and Salado settlements are clustered along the margins of the Gila River floodplains and Salado settlements are known in the Dripping Springs Valley to the northeast. The parcel is located within the ethnohistoric territory of Apache bands (A.D. 1700–1870) who ranged across the Pinal Mountain Highlands. Historic period sites in the Pinal Highlands relate to prospecting, mining, and settlement. Neither the 1921 General Land Office map of the area, nor subsequent USGS quadrangles show any homesites, mines, or other features within the parcel or the surrounding area. The inventory of cultural properties in this parcel is incomplete and further archaeological studies would be required to complete the inventory.

3.5.7.9. Hazardous Materials

A Phase I Environmental Site Assessment to assess potential environmental liability of the Dripping Springs parcel is presently in preparation (WestLand 2015f). This assessment is being conducted in conformance with American Society for Testing Materials (ASTM) E 2247-08 *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process for Forestland or Rural*

Property. The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the parcel.

The report did, however, note the presence of historic mine features at the parcel. During the site reconnaissance, WestLand noted two mine adits at the Dripping Springs parcel. It is possible additional adits are present. The extent of the two adits observed during the site reconnaissance, including any vertical components, is unknown. There is some potential for such historic mine features to produce acid mine drainage or impact groundwater if water accumulates in mineralized rock or waste rock. However, there was no discoloration or distressed vegetation noted around existing surface mining features, and accumulation of water in underground mining features is speculative. While historic mining features provide some potential for impacts to surface or ground water by contact with mineralized rock, acid mine drainage is not known to be present at the parcel and is not considered likely.

3.5.7.10. *Visual Resources*

A Visual Resource Contrast Rating has not been conducted for the Dripping Springs parcel. A formal visual analysis will be performed on this parcel according to *BLM Manual 8400, Chapter 8431* (BLM 1986) as part of the NEPA process.

3.5.7.11. *Socioeconomic Resources*

The socioeconomic analysis for Dripping Springs was done at the county level, and is therefore the same as is described for Turkey Creek (**Section 3.5.1.11**).

3.5.8. APPLETON RANCH

3.5.8.1. *Climate and Air Quality*

Average annual temperatures in the area range from 40.9 to 74.1 degrees Fahrenheit (4.9 to 23.4 degrees Celsius), with an annual mean temperature of 57.5 degrees Fahrenheit (14.2 degrees Celsius). Average precipitation is approximately 18.21 inches (46.25 cm) per year, based on data from the Canelo 1 NW weather station (WRCC 2015). The weather station is located approximately 1.5 mi (2.4 km) away at an elevation of 5,010 ft (1,527 m) amsl (**Figure 3.3-1**).

The Appleton Ranch parcels are not currently located within a designated nonattainment area or maintenance area for air quality criteria pollutants (ADEQ 2015b). The closest federal Class I area is the Saguaro Wilderness Area located approximately 34 mi (55 km) north of the parcel (**Figure 3.3-1**).

3.5.8.2. *Topography, Physiography, and Geology*

Appleton Ranch is comprised of a set of three private parcels within the larger 8,000-acre (3,237-ha) Appleton-Whittell Research Ranch. The parcels are located along the streambeds and adjacent upland areas of Post, Vaughn, and O'Donnell canyons (all of which flow north-northeast toward the Babocomari River) (**Figure 3.5-37**). The Babocomari River is an ephemeral to perennial tributary to the perennial San Pedro River, approximately 20 miles (32 km) east of the parcels.

The upland areas drained by the three onsite streams are known as the Canelo Hills, a rolling terrain that in the immediate vicinity of the Appleton Ranch parcels ranges in elevation from 4,635 to 5,051 ft (1,413 to 1,540 m) amsl. Bald Hill, centrally located on the Research Ranch (and near the midpoint of the three parcel groups), represents the high point of this elevational range. The Canelo Hills reach their peak elevation at Lookout Knob, 6,175 ft (1,882 m) amsl, about 7 miles (11 km) south-southeast of the parcels (**Figure 3.5-37**).

The Canelo Hills are in the southern Basin and Range physiographic province and are comprised of volcanic and sedimentary rocks. These hills are cut by northwest-striking steep faults that are splays of the Sawmill Canyon-Kino Springs fault system (Bultman 1999). A thin to moderately thick veneer of soil overlies the bedrock on the upland areas; eroded material has accumulated in canyon bottoms as alluvium. The easternmost parcel's surface geology is mapped as predominantly Early Pleistocene to Latest Pliocene Surficial Deposits, with the western portion mapped as Pliocene to Middle Miocene Deposits, and the southeastern corner mapped as Middle Miocene to Oligocene Sedimentary Rocks (**Figure 3.5-37**). The other two parcels are mapped entirely as Pliocene to Middle Miocene Deposits (Richard et al. 2000).

3.5.8.2.1. Mineral Resources

A mineral assessment for the Appleton Ranch parcel will be performed, in accordance with BLM Manual MS-3060 *Mineral Reports - Preparation and Review* (BLM 1994), prior to, or as part of, any required appraisals of the land exchange properties in the proposed land exchange.

This parcel is unpatented private land and, therefore, has no active mining claims (BLM 2015a).

3.5.8.3. Water

3.5.8.3.1. Surface Water Resources

Named drainages associated with the Appleton Ranch parcels include Vaughn Canyon, Post Canyon, and O'Donnell Canyon (**Figure 3.5-38**), the last being the most significant. All three of these drainages were observed to be dry in 2004 and are presumed currently to be ephemeral (WestLand 2004a). O'Donnell Canyon flows generally northeast into the Babocomari River, which then flows east and discharges into the San Pedro River approximately 24 river miles (38.6 km) downstream of the subject parcels. In addition, three earthen stock ponds (Finley, Telles, and Vaughn tanks) are located on the parcels, utilized for livestock watering and supported by groundwater from nearby wells. Each of these tanks is relatively small (less than 1 acre [0.5 ha]) and shallow (less than 10 ft [3 m] deep).

None of the named drainages within the subject parcels have been identified by ADEQ as impaired for any designated uses by that agency's surface water monitoring program (ADEQ 2012, 2015a).

The majority of Appleton Ranch is identified by FEMA as Zone A, areas with 1-percent annual chance flood hazard (**Figure 3.5-39**), with a small area denoted as Zone X (minimal flood hazard). The NWI map for the Appleton Ranch identifies no wetlands within the parcels. Based on observations and data review by WestLand (2004i), the three onsite streams are ephemeral watercourses totaling approximately 26,900 ft (8,200 m) in length. Mesoriparian and xeroriparian habitat is present along the stream channels. No facultative or obligate wetlands species, and no hydric soils, were observed along the stream channels. Several man-made impoundments (stock ponds) with perennial water are present. These surface water bodies are bordered by hydro-riparian habitat, with hydric soils and obligate wetland species. Based on those observations, WestLand (2004) estimated an area of 0.1 acre (0.04 ha) of wetlands surrounding the impoundments at this site.

Surface Water Occurrence

The parcels are located along the streambeds and adjacent upland areas of Post, Vaughn, and O'Donnell canyons (all of which flow north-northeast toward the Babocomari River, approximately 1.5 mi [2 km] north of the closest parcel boundary) (**Figure 3.5-38**). The Babocomari River is an ephemeral to perennial tributary to the perennial San Pedro River (about 20 mi [32 km] east; WestLand 2004f).

Surface Water Rights

The Appleton Ranch parcels have active, registered surface water rights in the San Pedro River watershed sourced from Finley Spring, Toby Canyon, Mesa Canyon, Grace Spring, O'Donnell Canyon, the southwest fork of Post Canyon, and other unnamed washes and tributaries (**Appendix D**).

3.5.8.3.2. Groundwater Resources

The Appleton Ranch parcels are in the Sierra Vista sub-basin within the larger Upper San Pedro groundwater basin. The parcels cover 940 acres (380 ha) and are near the Huachuca Mountains on the southern side. In general, the groundwater flow in the area is from south to north.

The major aquifers in the basin consist of younger basin fill, older basin fill, basal conglomerate, and recent stream alluvium. The primary recharge in the area is mountain-front recharge and streambed infiltration (ADWR 2015e).

The ADWR Well Registry database contained data for 25 wells within a 1-mi (1.6-km) radius of the parcels (ADWR 2013; **Figure 3.5-38**). The level trends in these wells showed that the groundwater depth ranges from 100 to 400 ft (30.5 to 122 m) bgs. The median well yield for the basin is 600 gpm (37.9 L-s).

No water quality data is available for these parcels.

3.5.8.4. Soils

Soil data provided by the National Cooperative Soil Survey through Web Soil Survey (Soil Survey Staff 2015) indicate that the Appleton Ranch parcels are located within five soil complexes, as shown in **Figure 3.5-40**. The soil complexes are generally well-drained and occur on fan terraces.

The Bernardino-Hathaway association is comprised of 55 percent Bernardino soils and approximately 25 percent Hathaway soils. The Bernardino series consists of very deep, well-drained soils that formed in fan alluvium from igneous and sedimentary rock. Bernardino soils are on fan terraces and have slopes of 0 to 30 percent. Permeability of the soil series is moderately low to moderately high. The Hathaway series consists of very deep, well-drained soils that formed in fan alluvium from mixed sources. Hathaway soils are on fan remnants and have dominant slopes of 10 to 40 percent. Permeability is moderately high to high.

White House gravelly loam consists of very deep, well-drained soils that formed in fan alluvium from mixed sources. White House soils are gravelly loam on fan terraces and have slopes of 0 to 10 percent. Permeability is moderately high.

The Pima series consists of deep, well-drained soils formed in stream alluvium. Pima soils are on alluvial fans and flood plains and have slopes of 0 to 3 percent. Permeability is moderately high.

The Hathaway series consists of very deep, well-drained soils that formed in fan alluvium from mixed sources. This soil series has slopes of 20 to 50 percent, and has moderately high to high permeability.

White House gravelly loam is mapped as a separate soil unit where it occurs on slopes of 10 to 35 percent (Soil Survey Staff 2015). It is a well-drained soil that formed in fan alluvium with moderately high permeability.

3.5.8.5. Land Use

3.5.8.5.1. Access and Recreation

The Appleton Ranch parcels are located along the streambeds and adjacent upland areas of Post, Vaughn, and O'Donnell canyons (**Figure 3.5-41**). Lands surrounding the parcels are federal and state, managed by the Coronado National Forest, BLM, and ASLD, and private lands owned by the National Audubon Society and by private individuals.

Access to the Appleton Ranch parcels is east and then south from the Elgin-Canelo Road on Research Ranch Road. The federal and state lands surrounding the parcels are used principally for cattle grazing, as well as dispersed recreational activities including hunting, camping, off road vehicle use, and hiking. There are several unimproved (unpaved) roads allowing public access to the surrounding areas (WestLand 2004f).

The parcels are located within AGFD Management Unit 35A (**Figure 3.5-41**). Antelope, black bear, javelina, mule deer, white-tailed deer, turkey, dove, quail, rabbit, ducks, tree squirrel, predators, and furbearers are commonly hunted game species in this unit (AGFD 2015a).

3.5.8.5.2. Agriculture and Grazing

Within the Appleton Ranch parcel, there are approximately 123 acres (50 ha) of Pima soil along O'Donnell Canyon, and 15 acres (6 ha) of Pima soil along Post Canyon that are considered "prime farmland if irrigated." As the parcel has not been farmed for over 50 years, and as no adequate and dependable water-delivery irrigation system is in place (Pers. comm Linda Kennedy), these areas do not meet the criteria of prime farmland. The rest of the Appleton Ranch parcel is considered rangeland (Soil Survey Staff 2015).

The parcel has no grazing allotments surrounding it (BLM 2015b; **Figure 3.5-41**) and for the 10 years Resolution Copper has owned the parcel, it has not paid grazing fees (pers. comm. Dan Mead). The Appleton Ranch was used for cattle grazing until 1969 when the property owner ceased ranching operations and entered into an agreement to utilize the property to study grassland ecology (WestLand 2004f).

3.5.8.5.3. Public Lands Management

The Appleton Ranch parcel is private land owned by Resolution Copper. The land exchange would transfer ownership of this parcel to the US and it would be added to, and administered as part of, the BLM Las Cienegas National Conservation Area in accordance with the laws (including regulations) applicable to the Conservation Area (**Appendix A**).

3.5.8.5.4. Encumbrances

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on February 2, 2004, exceptions were noted in Schedule B – Section II (**Appendix H**). These have been compiled and can be found in **Appendix G**. New Commitments for Title Insurance will be issued when the land exchange is enacted as a result of the change in ownership. Encumbrances would be updated, if necessary, at that time.

3.5.8.6. Wildlife

Wildlife species observed on the Appleton Ranch include whitetail deer (*Odocoileus virginianus*), mule deer, pronghorn antelope (*Antilocapra americana*), javelina, coyote, mountain lion (*Felis concolor*), skunk (species uncertain), non-native goldfish (*Carassius auratus*), desert pupfish (*Cyprinodon macularius*), gilded flicker, Mexican jay, meadowlark (*Sturnella* sp.), mourning dove, raven, Cassin's sparrow (*Aimophila cassinii*), and white-crowned sparrow (*Zonotrichia atricapilla*) (WestLand 2004b).

Post Canyon has an intermittent reach through the parcel, with some perennial tinajas (rock lined pools) (**Figure 3.5-38**). Aquatic biology documented on the parcel includes green sunfish (*Lepomis cyanellus*), native Sonora mud turtle (*Kinosternon sonoriense*), tiger salamander (*Ambystoma mavortium*), American bullfrog (*Lithobates catesbeianus*), and Mexican gartersnake (*Thamnophis eques*) (Cogan 2012).

The Appleton Ranch parcels lie within the Las Cienegas-Huachuca potential linkage (Majka et al. 2007).

3.5.8.6.1. Wildlife Management

Under the conditions and provisions of the land exchange, wildlife and habitat within these parcels will be managed as part of the Las Cienegas National Conservation Area, in coordination with the BLM and the AGFD.

3.5.8.6.2. Special Status Wildlife Species

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as listed species known to occur, or with potential to occur in the Appleton Ranch:

- Huachuca springsnail (*Pyrgulopsis thompsoni*) – Candidate
- Desert pupfish (*Cyprinodon macularius*) – Endangered

- Arizona treefrog (*Hyla wrightorum*) – Candidate
- Chiricahua leopard frog (*Lithobates chiricahuensis*) – Threatened
- Sonora tiger salamander (*Ambystoma tigrinum stebbinsi*) – Threatened
- Northern Mexican gartersnake (*Thamnophis eques megalops*) – Threatened
- Mexican spotted owl (*Strix occidentalis lucida*) – Threatened
- Yellow-billed cuckoo (*Coccyzus americanus*) – Threatened
- Southwestern willow flycatcher, (*Empidonax traillii extimus*) – Endangered
- Sprague's Pipit (*Anthus spragueii*) – Candidate
- Jaguar (*Panthera onca*) – Endangered
- Ocelot (*Leopardus pardalis*) – Endangered
- Lesser long-nosed bat (*Leptonycteris curasoae yerbabuenae*) – Endangered

Of the above species, Northern Mexican gartersnake has been observed on the parcel, Chiricahua leopard frog is believed to be extirpated on the parcel while Arizona treefrog, and Sonora tiger salamander, have not been observed on the parcels (Cogan 2011). The Yellow-billed cuckoo appears on the bird checklist as a summer migrant, while Sprague's pipit appears as a winter migrant. Mexican spotted owl has not been observed on the parcel (Audubon 2014). Lesser long-nosed bat, jaguar and ocelot are suspected but not confirmed on the parcels (Audubon 2007).

Final designated critical habitat for jaguar and proposed critical habitat for Northern Mexican gartersnake lie fully or partially within the parcels (**Appendix E**).

The following BLM sensitive species were identified as documented within 5 mi (8 km) of the Appleton Ranch parcels (**Appendix F**):

- Desert sucker (*Catostomus clarkia*)
- Huachuca springsnail (*Pyrgulopsis thompsoni*)
- Sonora sucker (*Catostomus insignis*)
- Gila longfin dace (*Agosia chrysogaster chrysogaster*)
- Slevin's bunchgrass lizard (*Sceloporus slevini*)
- Desert box turtle (*Terrapene ornata luteola*)
- Lowland leopard frog (*Lithobates yavapaiensis*)
- Arizona grasshopper sparrow (*Ammodramus savannarum ammoregus*)
- Pale Townsend's big-eared bat (*Corynorhinus townsendii pallescens*)
- Mexican long-tongued bat (*Choeronycteris mexicana*)
- Cave myotis (*Myotis velifer*)

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.8.7. *Vegetation*

The vegetation of the Appleton Ranch is comprised of two biotic communities: Semidesert Grassland and Madrean Evergreen Oak Woodland (**Figure 3.5-42**). The Semidesert Grassland occurs in the Vaughn Canyon and O'Donnell Canyon tracts; the Madrean Evergreen Oak Woodland occurs in the Post Canyon Tract. Grasslands are much more extensive than are the oak woodlands. The grassland varies markedly in species composition, density, and structure in the northern part of the Appleton Ranch, with short-grass grasslands found on south-facing slopes, medium-sized grass stands in swales and north-facing ridges, and tall-grass stands of sacaton (*Sporobolus wrightii*) in the broader floodplains along several of the washes. Woody vegetation is present in some upland areas as juniper woodlands, and along watercourses as mesquite bosques with stands of cottonwood and desert willow.

Past grazing by cattle has affected the grassland when large areas were contour plowed in the 1940s and 1950s and then seeded with two African grasses – Lehmann lovegrass (*Eragrostis lehmanniana*) and Boer lovegrass (*E. chlorometas*). The populations that established at the time of seeding persist and continue to spread today. Boer lovegrass, although occupying less of the grassland than Lehmann lovegrass, is more troublesome because it has displaced native grasses to form a nearly continuous monotypic stand of grass. Conversely, Lehmann lovegrass on the Appleton Ranch is usually part of a heterogeneous community of native forbs and grasses (WestLand 2004b).

Under the conditions and provisions of the land exchange, vegetation and noxious weeds within these parcels will be managed by the BLM as part of the Las Cienegas National Conservation Area.

3.5.8.7.1. *Special Status Plant Species*

Of the special status species that were identified in the IPaC (**Appendix E**) and HDMS queries (**Appendix F**), the following were identified as listed species known to occur, or with potential to occur in the Appleton Ranch:

- Canelo Hills lady's tresses (*Spiranthes delitescens*)
- Huachuca water-umbel (*Lilaeopsis schaffneriana* var. *recurva*)

Of the above species Canelo Hills lady's tresses and Huachuca water-umbel are not listed in the floral checklist of the parcels (Appleton Flora; McLaughlin et al. 2001).

There are no critical habitats for special status plant species within the parcel (**Appendix E**).

A formal screening analysis will be conducted as part of NEPA analysis.

3.5.8.8. *Cultural Resources*

There are no archaeological surveys within the Appleton Ranch parcels or within the immediate vicinity. There are also no known archaeological sites within the parcels or in the immediate vicinity. The Appleton Ranch parcels fall within the projected culture areas for the prehistoric Paleoindian (11,500–

8500 B.C.) and Archaic (8500 B.C.–A.D. 150) cultural traditions. The parcels are also located within a region occupied in later prehistory when peoples produced pottery. These sites are difficult to attribute to a single cultural group during the period A.D. 700–1150 because they are located in a hinterland region between the Hohokam (A.D. 700–1150), Trincheras (A.D. 700–1500), and San Simon Mogollon (A.D. 1–1150) cultures. The latest prehistoric sites show an affinity with the Babocomari (A.D. 1150–1450) cultural tradition, which itself shows influence from the Casas Grandes culture of northern Chihuahua, Mexico. The Appleton Ranch parcels also fall within the territories of the ethnohistoric Sobaipuri (A.D. 1600–1775) and Apache (A.D. 1700–1870) bands. The earliest GLO plat map of the area was filed in 1915. This map shows that by that time the area was settled by Euroamericans. The Appleton Ranch parcels are crossed by telephone lines, roads, and fences that are linked to settlement and ranching in the area. No homesites or structures are shown within the Appleton Ranch parcels, but homesites attributed to W.M. Roth, T.B. Titus, and Fenderson are located among the parcels in the approximate locations of the Swinging H and Clark ranches as shown on recent USGS quadrangle maps. The Appleton Ranch parcel falls with the Appleton Whittel Research Ranch. A history of land ownership of the lands within the research ranch has been conducted (Collins 2008) that covers the historical cadastral survey of the lands. The inventory of cultural properties in this parcel is incomplete and further archaeological studies would be required to complete the inventory.

3.5.8.9. Hazardous Materials

A Phase I Environmental Site Assessment for potential environmental liability of the Appleton Ranch parcels was conducted in 2004 (WestLand 2004f) in conformance with ASTM *Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process*, E 1527-00. The Environmental Site Assessment revealed no evidence of recognized environmental conditions in connection with the parcels or adjoining properties.

3.5.8.10. Visual Resources

A Visual Resource Contrast Rating has not been conducted for the Appleton Ranch parcel. A formal visual analysis will be performed on this parcel according to *BLM Manual 8400, Chapter 8431* (BLM 1986) as part of NEPA analysis.

3.5.8.11. Cultural Resources

The Appleton Ranch parcels are located within the upper reaches of the Babocomari River watershed along O'Donnell and Vaughn canyons. There are no archaeological surveys within the parcels or within the immediate vicinity. There are also no known archaeological sites within the parcels or in the immediate vicinity. The Appleton Ranch parcels fall within the projected culture areas for the prehistoric Paleoindian (11,500–8500 B.C.) and Archaic (8500 B.C.–A.D. 150) cultural traditions. The parcels are also located within a region occupied in later prehistory when peoples produced pottery. These sites are difficult to attribute to a single cultural group during the period A.D. 700–1150 because they are located in a hinterland region between the Hohokam (A.D. 700–1150), Trincheras (A.D. 700–1500), and San

Simon Mogollon (A.D. 1–1150) cultures. The latest prehistoric sites show an affinity with the Babocomari (A.D. 1150–1450) cultural tradition, which itself shows influence from the Casas Grandes culture of northern Chihuahua, Mexico. The Appleton Ranch parcels also fall within the territories of the ethnohistoric Sobaipuri (A.D. 1600–1775) and Apache (A.D. 1700–1870) bands. The earliest GLO plat map of the area was filed in 1915. This map shows that by that time the area was settled by Euroamericans. The Appleton Ranch parcels are crossed by telephone lines, roads, and fences that are linked to the settlement and ranching in the area. No homesites or structures are shown within the Appleton Ranch parcels, but homesites attributed to W.M. Roth, T.B. Titus, and Fenderson are located amongst the parcels in the approximate locations of the Swinging H and Clark ranches as shown on recent USGS quadrangle maps. The Appleton Ranch parcel falls with the Appleton Whittel Research Ranch. A history of land ownership of the lands within the research ranch has been conducted (Collins 2008) that covers the historical cadastral survey of the lands. The inventory of cultural properties in this parcel is incomplete and further archaeological studies would be required prior to the exchange to comply with federal laws.

3.5.8.12. Socioeconomic Resources

The Appleton Ranch parcel is located within Santa Cruz County.

3.5.8.12.1. Population Demographics

In 2013 there were an estimated 47,122 persons in Santa Cruz County (**Table 3.5-45**). The most populous communities within Santa Cruz County are Nogales (20,837), Rio Rico (18,962), Tubac (1,191), Patagonia (913), and Sonoita (818; USCB 2010).

The population of Santa Cruz County grew by 237 percent from 1970 to 2013 with a 23 percent gain from 2000 to 2013 (**Table 3.5-45**). Although the population of Santa Cruz County has increased significantly since 1970, the growth rate has steadily declined. The population of Santa Cruz County increased by 46 percent between 1970 and 1980, by 45 percent between 1980 and 1990, by 29 percent between 1989 and 2000, and by 23 percent between 2000 and 2013.

Table 3.5-45. Population Change in Santa Cruz County and Arizona 1970 to 2013

Year	Santa Cruz County	Arizona
1970	13,966	1,794,912
1980	20,459	2,737,774
1990	29,676	3,684,097
2000	38,381	5,160,586
2013	47,122	6,479,703

¹ Source: 1970-2000 (USCB 2010); 2013 (USCB 2015)

3.5.8.12.2. Minority Groups and Low-Income Populations

Racial diversity in Santa Cruz County is similar to what is found in the US and more diverse than what is found in Arizona. (**Table 3.5-46**). Within Santa Cruz County, 74.6 percent of the population identifies as

White, whereas 79.2 percent of the population in Arizona and 74.0 percent of the population in the US identify as White (**Table 3.5-46**). The ACS indicates that 47,122 people were living in Santa Cruz County in 2013. Racially, the population of Santa Cruz County was made up primarily of the following categories: White (80.7 percent) and Some Other Race (22.0 percent).

Table 3.5-46. Race composition in Santa Cruz County, Arizona, and the US

Category	Population in Santa Cruz County	Percentage of Population in Santa Cruz County	Percentage of Population in Arizona	Percentage of Population in the US
Total Population	47,122			
White	35,147	74.6%	79.2%	74.0%
Black or African American	259	0.5%	4.2%	12.6%
American Indian	97	0.2%	4.4%	0.8%
Asian	329	0.7%	2.8%	4.9%
Native Hawaiian & Other Pacific Is.	29	0.1%	0.2%	0.2%
Some Other Race	10,368	22.0%	6.2%	4.7%
Two or More Races	893	1.9%	3.0%	2.8%

Source: USCB 2015

People of Hispanic origin or ethnicity can be of any race; ethnicity is therefore considered separately from race (USCB 2015). The ACS indicates that 82.7 percent of individuals within Santa Cruz County were self-identified as Hispanic or Latino residents compared to 29.9 percent and 16.6 percent in Arizona and the US respectively (**Table 3.5-47**).

Table 3.5-47. Hispanic or Latino population demographics

Category	Santa Cruz County	Arizona	US
Total Population	47,122	6,479,703	311,536,594
Hispanic or Latino	38,978	1,935,948	51,786,591
Percentage Hispanic or Latino	82.7%	29.9%	16.6%

Source: USCB 2015

The EPA identifies both older and younger population groups as potentially being more susceptible to environmental risks (EPA 1998). The percentage of the population under the age of 18 is 29.9 percent for Santa Cruz County and 25.0 percent for Arizona (**Table 3.5-48**). The percentage of the population over the age of 65 is 13.9 percent for Santa Cruz County and 14.4 percent for Arizona (**Table 3.5-48**).

Table 3.5-48. Age distribution for Santa Cruz County and Arizona

Population Category	Santa Cruz County	Percentage of Population Santa Cruz County	Percentage of Population Arizona
Under 18 Years	14,108	29.9%	25.0%
18 to 34 Years	9,115	19.3%	23.4%
35 to 44 Years	5,623	11.9%	12.8%
45 to 64 Years	11,725	24.9%	24.5%
65 and over	6,551	13.9%	14.4%

Source: USCB 2015

3.5.8.12.3. Poverty, Education, and Employment

The percentage of people living in poverty within Santa Cruz County is 26.3 percent and the percentage of people living in poverty within the State of Arizona is 17.9 percent (**Table 3.5-49**).

Table 3.5-49. Poverty levels in Santa Cruz County, Arizona, and the US

Population Category	Santa Cruz County	Arizona	US
People (number)	46,780	6,333,791	303,692,076
Families (number)	11,376	1,563,121	76,744,358
People below poverty	12,285	1,131,901	46,663,433
Families below poverty	2,418	202,622	8,666,630
Percent Below Poverty Level			
People	26.3%	17.9%	15.4%
Families	21.3%	13.0%	11.3%

Source: USCB 2015

Over 72 percent of the residents in Santa Cruz County have a high school diploma and 19.8 percent have a bachelor's degree or higher (**Table 3.5-50**). Within Arizona 85.7 percent of the residents have a high school diploma and 26.9 percent have a bachelor's degree or higher (**Table 3.5-50**).

Table 3.5-50. Educational attainment for Santa Cruz County, Arizona, and the US

Educational Level	Santa Cruz County	Arizona	US
Total population 25 years or older	28,729	4,211,194	206,587,852
No high school diploma	27.5%	14.3%	14.0%
High school graduate	72.5%	85.7%	86.0%
Associate's degree	6.7%	8.3%	7.8%
Bachelor's degree	19.8%	26.9%	28.8%
Graduate or professional	13.4%	17.0%	18.0%

Source: USCB 2013

In 2013, Santa Cruz County's resident employed population numbered 17,334 persons (**Table 3.5-51**). Retail trade (19.3); educational services, health care, and social assistance (19.0 percent); and wholesale trade (9.5 percent) were the largest employers by field in Santa Cruz County (**Table 3.5-51**). Employment figures for all fields are presented in **Table 3.5-51**.

Table 3.5-51. Santa Cruz County employment by industry

Sector	Number Employed	Percent
Agriculture, forestry, fishing, hunting, and mining	421	2.4%
Construction	717	4.1%
Manufacturing	912	5.3%
Wholesale trade	1,643	9.5%
Retail trade	3,348	19.3%
Transportation, warehousing, and utilities	1,307	7.5%
Information	193	1.1%
Finance, insurance, real estate, rental, and leasing	507	2.9%
Professional, scientific, management, administrative, and waste management services	1,384	8.0%
Educational services, health care, and social assistance	3,302	19.0%
Arts, entertainment and recreation, accommodation, and food services	1,327	7.7%
Other services, except public administration	697	4.0%
Public administration	1,576	9.1%
Total	17,334	

Source: USCB 2015

3.5.8.12.4. Land Ownership and Federal Land Payments

The total area for Santa Cruz County is 776,260 acres (314,141 ha). Within Santa Cruz County, the US is the largest land owner, holding 55.9 percent of all land in the county (**Table 3.5-52**). Private land owners hold 36 percent, and Arizona holds 8.1 percent of the land in Santa Cruz County.

Table 3.5-52. Land ownership in Santa Cruz County

Ownership Entity	Acres	Percent of Total Area in Santa Cruz County
Total Area	776,260	
Private Lands	279,424	36.0%
Conservation Easement	16,133	2.1%
Federal Lands	433,776	55.9%
Forest Service	416,988	53.7%
BLM	16,428	2.1%
National Park Service	360	0.0%
Military	n/a	n/a
Other Federal	n/a	n/a
State Lands	63,059	8.1%
State Trust Lands	54,645	7.0%
Other State	8,414	1.1%
Tribal Lands	n/a	n/a
City, County, Other	1	0.0%

Source: USGS 2012

Federal land payments can be a significant income source particularly in rural communities with small populations and fewer private tax sources. In 2007 federal land payments to Santa Cruz County totaled \$742,000 and were 1.1 percent of the total general revenue for the county⁴ (**Table 3.5-53**).

Table 3.5-53. Summary of Revenue Sources for Santa Cruz County in FY 2007

Sources of General Revenue	Amount Recieved ¹	Percent of Total Revenue
Taxes	27,595,000	40.5%
Intergovernmental Revenue	33,080,000	48.6%
Total Charges	4,593,000	6.7%
All Other Miscellaneous	2,838,000	4.2%
Federal Land Payments	742,000	1.1%
Total General Revenue	68,107,000	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

¹ FY 2007 Revenue dollars are reported in 2013 dollars.

In 2013 federal land payments to Santa Cruz County increased to \$1,544,779 with \$910,527 coming from the federal PILT program (**Table 3.5-54**).

Table 3.5-54. Summary of Federal Land Payments for Santa Cruz County in FY 2013

Origin of Federal Land Payments	Federal Land Payments in FY 2013	Percent of Total
Payments in Lieu of Taxes (PILT)	910,527	58.9%
Forest Service Payments	632,289	40.9%
BLM Payments	1,962	0.1%
USFWS Refuge Payments	0	0%
Federal Mineral Royalties	0	0%
Total Federal Land Payments	1,544,779	

Sources: (USFS 2007; BLM 2009; USDI 2009; USFS 2009; ONRR 2012; USCB 2014)

The primary beneficiary of federal land payments in Santa Cruz County was the county government which received 75.3 percent of the total payments (**Table 3.5-55**).

Table 3.5-55. Summary of Federal Land Payment Disbursements for Santa Cruz County in FY 2013

Distribution of Federal Land Payments	Disbursements in FY 2013	Percent of Total
County Government	1,163,443	75.3%
Local School Districts	252,916	16.4%
Resource Advisory Councils	126,458	8.2%
Grazing Districts	1,962	0.1%
Total Federal Land Payments	1,544,779	

Sources: (USFWS 2007, BLM 2009, PILT 2009, USFS 2009, ONRR 2012, USCB 2014)

⁴ The dollar value for federal land payments in Pinal County in 2007 has been converted to the equivalent of 2013 dollars for comparison purposes.

4. REFERENCES

- Andahl, Fred G. 1955. "Reserving Lands within National Forests for Use of the Forest Service as Camp Grounds, Recreation Areas, or for other Public Purposes." Public Land Order 1229 – Arizona. F.R. Doc 55-7926. September 27, 1955.
- Arizona Department of Environmental Quality. (ADEQ). 2002. Ambient Groundwater Quality of the Lower San Pedro Basin: A 2000 Baseline Study.
- _____. 2011. Arizona State Implementation Plan (SIP). Regional Haze Under 308 of the Federal Regional Haze Rule. Air Quality Division. January 2012.
- _____. 2012. 2010 Status of Water Quality Arizona's Integrated 305(b) Assessment and 303(d) Listing Report. June 2012.
- _____. 2015a. 2012/2014 Draft Status of Water Quality Arizona's Integrated 305(b) Assessment and 303(d) Listing Report. January 2015.
- _____. 2015b. E Maps. Map of Nonattainment, Attainment Areas, and Maintenance Areas. Online data retrieved at <http://gisweb.azdeq.gov/arcgis/emaps>. Accessed March 13, 2015.
- Arizona Department of Water Resources (ADWR). 2013. Well Registry (Wells55). ADWR GIS Data & Maps. Online data retrieved and downloaded from <http://www.azwater.gov/azdwr/gis/>. Accessed March 2, 2013.
- _____. 2015a. Groundwater Hydrology of the Salt River Basin. Online data retrieved at <http://www.azwater.gov/AzDWR/StatewidePlanning/WaterAtlas/CentralHighlands/Hydrology/SaltRiver.htm>. Accessed March 12, 2015.
- _____. 2015b. Groundwater Hydrology of the Verde River Basin. Online data retrieved at <http://www.azwater.gov/AzDWR/StatewidePlanning/WaterAtlas/CentralHighlands/Hydrology/VerdeRiver.htm>. Accessed March 12, 2015.
- _____. 2015c. Phoenix AMA Groundwater Conditions. Online data retrieved at <http://www.azwater.gov/AzDWR/StatewidePlanning/WaterAtlas/ActiveManagementAreas/Groundwater/PhoenixAMA.htm>. Accessed March 12, 2015.
- _____. 2015d. Groundwater Conditions in the Little Colorado River Plateau Basin. Online data retrieved at <http://www.azwater.gov/AzDWR/StatewidePlanning/WaterAtlas/EasternPlateau/Groundwater/LittleColoradoRiver.htm>. Accessed March 12, 2015.
- _____. 2015e. Groundwater Conditions in the Upper San Pedro Basin. Online data retrieved at <http://www.azwater.gov/AzDWR/StatewidePlanning/WaterAtlas/SEArizona/Groundwater/UpperSanPedro.htm>. Accessed March 12, 2015.

- _____. 2015f. Online query of surface water rights. Online data retrieved at <http://www.azwater.gov/querycenter/query.aspx?qrysessionid=ABBBE0BF2A6A326CE040000A16005CA1>. Accessed February 25, 2015.
- Arizona Game & Fish Department. (AGFD). 2015a. GIS Program, 20110101, Game Management Units: Hunting and Trapping Regulations 2010-2011, Arizona Game and Fish Department, Phoenix, AZ. Online data retrieved at http://habimap.org/habimap/metadata/HTML/gamemanagementunits_updated20130717.htm. Accessed on May 25, 2015.
- _____. 2015b. AGFD 20110922, Forest Service Grazing Allotments, General Resource Areas and Wild Horse & Burro Territories in Arizona: Arizona Game and Fish Department, Phoenix, AZ. Online data retrieved at <http://habimap.org/habimap/metadata/HTML/usfsallotments.htm>. Accessed May 25, 2015.
- Arizona Land Resource Information System (ALRIS). 1975. Regional Soils: GIS Cover. Online data retrieved at <http://www.azland.gov/alris/layers.html>. Accessed March 13, 2015.
- Audubon Society (Audubon). 2007. Mammals of the Research Ranch. National Audubon Society. November 11, 2007.
- _____. 2010. Avian surveys conducted by Audubon Arizona IBA Program at 7B Ranch, lower San Pedro River, Mammoth, Arizona, 2006-2010, by Audubon's Important Bird Areas Program, Avian Science Initiative, Tucson Audubon Society.
- _____. 2014. Appleton-Whitsell Research Ranch of the National Audubon Society. Revised June 2014.
- Brand, P.K., and Stump, E. 2005. Tertiary Extension and Fault-Block Rotation in the Transition Zone, Cedar Mountains Area, Arizona v. 1.1: Arizona Geological Survey Contributed Map CM-11-A.
- Brown, D. E., and C. Lowe. 1980. Biotic Communities – Southwestern United States and Northwestern Mexico [Map]. General Technical Report RM-78, Rocky Mountain Forest and Range Experiment Station, Forest Service, U. S. Department of Agriculture. Reprinted 1994 by University of Utah Press, Salt Lake City, Utah.
- Brown, D.E. (ed). 1982. Biotic Communities of the American Southwest - United States and Mexico. Special Issue. University of Utah Press. Salt Lake City.
- Brown, D.E. (ed). 1994. Biotic Communities Southwestern United States and Northwestern Mexico. University of Utah Press. Salt Lake City.
- Buckles, Avi, Christine Jerla, and Christopher Dore. 2012. A Cultural Resources Inventory of the Magma Railroad Right-of-Way Pinal County, Arizona. Cultural Resources Report 2012-18. May 15, 2012.

- Bultman, Mark W. 1999. Geometry, Structure, and Concealed Lithology of the San Rafael Basin, Southeastern Arizona. USGS Open-File Report 99-399. <http://pubs.usgs.gov/of/1999/0399/>.
- Bureau of Land Management (BLM). 1986. BLM Manual 8400, Chapter 8431 Visual Resource Contrast Rating. Rel. 8-30. Updated Jan 17, 1986. Washington, D.C.
- _____. 1994. BLM Manual MS-3060 Mineral Reports - Preparation and Review. Rel. 3-284. Updated April 7, 1994. Washington, D.C.
- _____. 2005. Bureau of Land Management Land Exchange Handbook, H 2200-1 (Public). Updated December 16, 2005. Washington D.C.
- _____. 2009. Washington, D.C., Compiled using EPS-HDT; Headwaters Economics. March 18 2015.
- _____. 2015a. Land and Mineral Legacy Rehost 2000 System—LR2000. Online data retrieved at <http://blm.gov/lr2000/>. Accessed March 11, 2015.
- _____. 2015b. Rangeland Administration System. Online data retrieved at <http://www.blm.gov/ras/index.htm>. Accessed March 10, 2015.
- Chronic, Halka. 1983. Roadside Geology of Arizona. Mountain Press Publishing Co. Missoula.
- Clark, Jeffry J. and Patrick D. Lyons. 2012. Migrants and Mounds: Classic Period Archaeology of the Lower San Pedro River Valley. Anthropological Papers No. 45. Archaeology Southwest, Tucson, Arizona.
- Cogan, Roger C. 2011. Herpetofauna Species list for the Appleton-Whittell Research Ranch of the National Audubon Society. July 2011.
- _____. 2012. Herpetofauna of the Appleton-Whittell Research Ranch. National Audubon Society. November 2012.
- Collins, Glendon E. 2008. A History of the Lands in the National Audubon Society's Research Ranch near Elgin, in Santa Cruz County, Arizona. Appleton-Whittell Research Ranch. June 2008.
- Council on Environmental Quality (CEQ). 1997. Environmental Justice: Guidance under the National Environmental Policy Act. Washington, D.C. December 10, 1997.
- Deaver, William L. 2013. The Resolution Project: Reconnaissance and Evaluation of Archaeological Resources in the Oak Flat Area. Cultural Resources Report No. 2012-11. February 18, 2013.
- Federal Emergency Management Agency (FEMA). 2015. FEMA Flood Hazard Zones. Online data retrieved at <https://hazards.fema.gov/gis/nfhl/services>. Accessed Q1 2015.

- Ferguson, C. A. and S. J. Skotnicki. 1996. Geologic Map of the Florence Junction and Southern Portion of the Weavers Needle 7.5' Quadrangles, Pinal County, Arizona (revised 1996). Arizona Geological Survey, Open File Report 95 10.
- Golder Associates, Inc. (Golder). 2005. Phase I Environmental Site Assessment Forested Land T14N, R12E, Section 9 Coconino County, Arizona Submitted to The Trust for Public Land Western Region - Southwest Office. May 23, 2005.
- Green, Dee F. 1974. An Archaeological Survey of the Transamerica Land Exchange A-7877 Apache Sitgreaves, Coconino, and Tonto National Forests, Arizona. United States Forest Service Southwestern Region. June 1974.
- Hammer, D.H. and Webster, R.N. 1962. Some geologic features of the Superior area, Pinal County, Arizona, in Weber, R.H. and Peirce, H.W. (eds). 13th Annual Fall Field Conference Guidebook: New Mexico Geological Society, Mogollon Rim Region (East-Central Arizona).
- Headwaters Economics. 2015. A Profile of Demographics. Compiled Data Using Economic Profile System-Human Dimensions Toolkit (EPS-HDT). March 18, 2015.
- Hehnke, C., Ballantyne, G., Martin, H., Hart, W., Schwartz, A., and Stein, H. 2012. Geology and Exploration Progress at the Resolution Porphyry Cu Mo Deposit: Society of Economic Geologists, Inc. Special Publication 16, pp. 147 156.
- Hendricks, David M. Arizona Soils. Tucson, AZ: College of Agriculture, University of Arizona, 1985. Print.
- Herkenhoff, Ryan. 1995. Kennecott Drilling Exploration #2. United States Forest Service Report Number 95 12 126. September 28, 1995.
- Lindeman, Michael W., and Gregory J. Whitney. 2005. The Resolution Project: Results of an Archaeological Survey in Pinal County, Arizona - Technical Report No. 2003-10. Desert Archaeology, Inc. September 2005.
- Majka, D., J. Jenness, and P. Beier. 2007. CorridorDesigner: ArcGIS tools for designing and evaluating corridors. Online data retrieved at <http://corridordesign.org> on March 10, 2015.
- McLaughlin, Steven P., Erika L. Geiger, and Janice E. Bowers. 2001. Flora of the Appleton-Whittell Research Ranch, northeastern Santa Cruz County, Arizona. Journal of the Arizona-Nevada Academy of Science, Volume 33, No. 2, 2001, pp. 113-131.
- National Oceanic and Atmospheric Administration (NOAA). 2013. National Climatic Data Center. Station Details. Online data retrieved at <http://www.ncdc.noaa.gov/cdo web/>. Accessed July 23, 2013.
- Nations, D. and Stump, E. 1996. Geology of Arizona. Second Edition. Kendall/Hunt Publishing Co., Dubuque, Iowa.

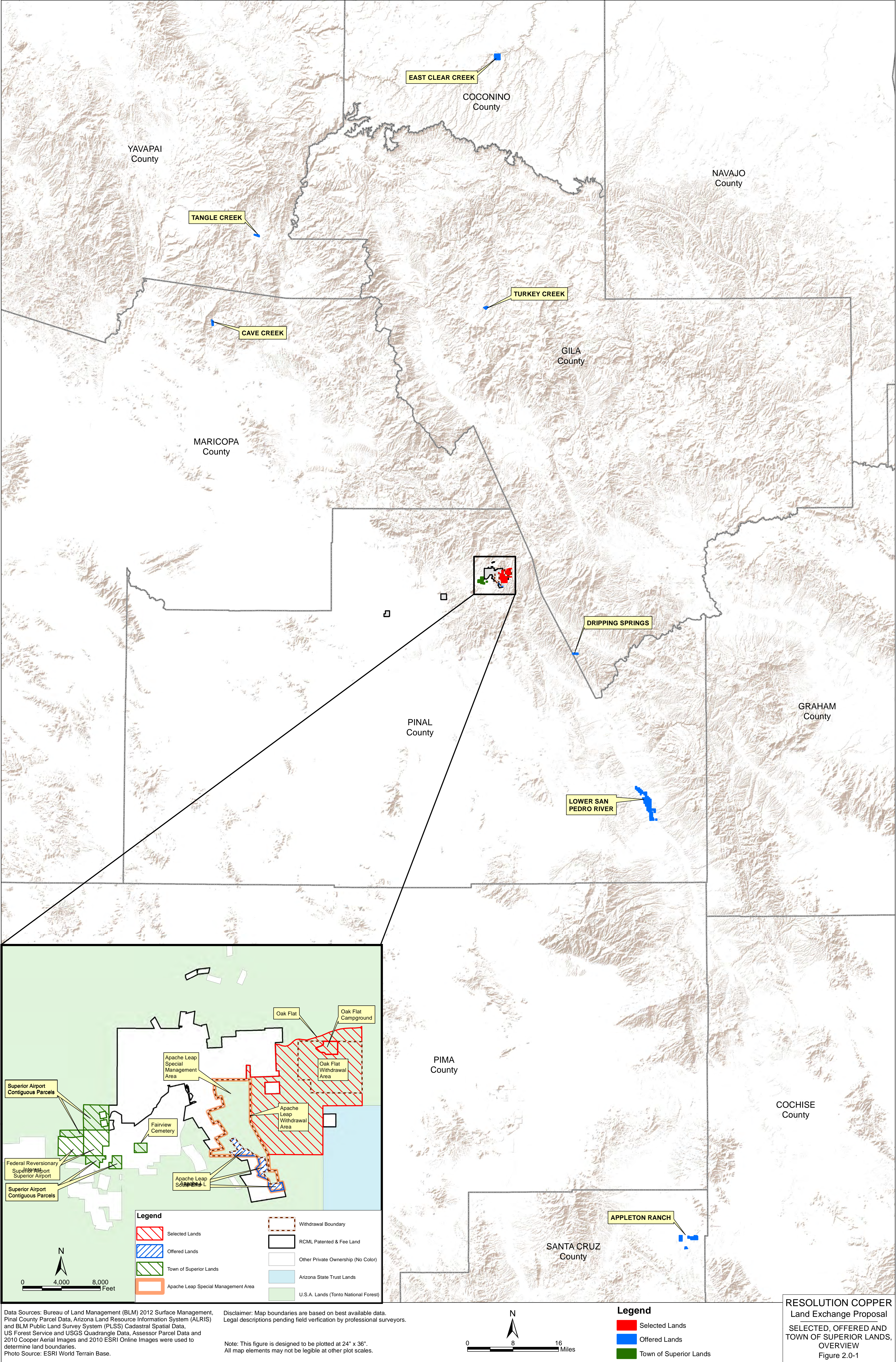
- Nature Conservancy in Arizona. 2010. Management Plan for the 7B Ranch. December 2010.
- Office of Management and Budget (OMB). 1997. Revisions to the Standards for the Classification of Federal Data on Race and Ethnicity. Federal Register, Vol 62, No. 210, October 30, 1997.
- Pinal County Recorder's Office. 2005. Special Warranty Deed. Certified Copy.
- _____. 2010. Resolution Pre-Feasibility Activities Plan of Operations (#03 12 02 006). Prepared for Resolution Copper Mining. October 1, 2010.
- _____. 2014. General Plan of Operations, Resolution Copper Mining. Initial Submittal November 15, 2013; Revised September 23, 2014.
- Richard, S.M., Reynolds, S.J., Spencer, J.E., and Pearthree, P.A., 2000, Geologic map of Arizona: Arizona Geological Survey Digital Geologic Map DGM-17, scale 1:1,000,000, with 5 p. text.
- Soil Survey Staff. 2015. Natural Resources Conservation Service, United States Department of Agriculture. Web Soil Survey. Online data retrieved at <http://websoilsurvey.nrcs.usda.gov/>. Accessed March 11, 2015.
- Spencer, J. E. and S. M. Richard. 1995. Geologic Map of the Picketpost Mountain and the Southern Part of the Iron Mountain 7 112' Quadrangles, Pinal County, Arizona. Arizona Geological Survey, Open File Report 95-15.
- Stotnicki, Stephen J. 1999. Geologic Map of the Copper Mountain Quadrangle, Gila County, Arizona, Open-File Report 99-24. Arizona Geological Society. October 1999.
- US Census Bureau (USCB). 2001. Overview of Race and Hispanic Origin. Online data retrieved at www.census.gov/prod/2001pubs/c2kbr01-1.pdf. Accessed March 10, 2015.
- _____. 2010. Census 2010 multiple tables; generated using EPS-HDT; Headwaters Economics. March 18, 2015.
- _____. 2012. Measuring America: How Census Measures Poverty. Online data retrieved at http://www.census.gov/how/infographics/poverty_measure_how.html. Accessed March 18, 2015.
- _____. 2014. Governments Division, Washington, D.C., Compiled using EPS-HDT; Headwaters Economics. March 18 2015
- _____. 2015. American Community Survey 5-Year Estimates, multiple tables. Generated using EPS-HDT; Headwaters Economics. March 18, 2015.

- US Department of Agriculture. Forest Service (USFS). 2003a. US Forest Service Manual on Land Ownership and Exchanges. FSM 5400 Land Ownership, Chapter 5430 Exchanges, Amendment No. 5400-2003-2. Washington D.C.
- _____. 2003b. Forest Service Manual 2300 Recreation, Wilderness, and Related Resource Management, Chapter 2830 Landscape Management
- _____. 2004. US Forest Service Land Acquisition Handbook. FSH 5409.13 Land Acquisition Handbook, Chapter 30 Land Exchange, Amendment No. 5409.13-2004-1. Washington D.C.
- _____. 2009. Washington, D.C. Compiled using EPS-HDT; Headwaters Economics. March 18 2015.
- US Department of Agriculture. Forest Service. Coconino National Forest (CNF). 1987. Coconino National Forest Land and Resource Management Plan Southwestern Region. August 1987.
- US Department of Agriculture. Forest Service. Tonto National Forest (TNF). 1985a. Tonto National Forest Plan, Forest Services, Southwestern Region. October 1985.
- _____. 1985b. Environmental Impact Statement Tonto National Forest Plan, Forest Services, Southwestern Region. October 1985.
- US Department of Interior. Payments in Lieu of Taxes (PILT). 2009. Washington D.C., Compiled using EPS-HDT; Headwaters Economics. March 18 2015.
- US Environmental Protection Agency (EPA). 1998. Final Guidance for Incorporating Environmental Justice Concerns in EPA's NEPA Compliance Analyses. April 1998.
- US Fish and Wildlife Service (USFWS). 2007. Washington, D.C., Compiled using EPS-HDT; Headwaters Economics. March 18 2015.
- _____. 2015. National Wetland Inventory. Digital Data. Online data retrieved at <http://www.fws.gov/wetlands/Data/Mapper.html>. Accessed March 12, 2015.
- US Geological Survey (USGS). 2012. Protected Areas Database of the United States version 1.3. Gap Analysis Program. Compiled using EPS-HDT; Headwaters Economics. March 18 2015.
- US Office of Natural Resources Revenue (ONRR). 2012. Washington, D.C., Compiled using EPS-HDT; Headwaters Economics. March 18 2015.
- Western Regional Climate Center (WRCC). 2015. Western US Climatological Summaries. Online data retrieved at <http://www.wrcc.dri.edu/climatedata/climsumaz>. Accessed April 1, 2015.
- WestLand Resources, Inc. (WestLand). 2003a. Ecological Overview: San Pedro River Parcel, Pinal County, Arizona. Prepared for Resolution Copper Company. September 2003.

- _____. 2003b. Phase I Environmental Site Assessment 3,500-Acre San Pedro River Site Pinal County, Arizona. Prepared for Resolution Copper Company. July 2003.
- _____. 2004a. Ecological Overview Appleton Ranch Parcel, Santa Cruz County, Arizona. Prepared for Resolution Copper Company. May 2004.
- _____. 2004b. Ecological Overview Summary: Federal Parcel and Offered Lands Parcels. Prepared for Resolution Copper Company. November, 2004.
- _____. 2004c. Ecological Review JX Ranch Parcel, Gila County, Arizona. Prepared for Resolution Copper Company. March 31, 2004.
- _____. 2004d. Ecological Review LX Bar Ranch Parcel, Yavapai County, Arizona. Prepared for Resolution Copper Mining. May 2004.
- _____. 2004e. Phase I Environmental Site Assessment 6L Ranch Site, Maricopa County, Arizona. Prepared for Swift Land & Cattle Company, LLC. April 6, 2004.
- _____. 2004f. Phase I Environmental Site Assessment Appleton Ranch, Site Santa Cruz County, Arizona. Prepared for Swift Land & Cattle Company, LLC. March 22, 2004.
- _____. 2004g. Phase I Environmental Site Assessment JX Ranch Site, Gila County, Arizona. Prepared for Resolution Copper Mining. March 2004.
- _____. 2004h. Phase I Environmental Site Assessment LX Ranch Site, Yavapai County, Arizona. Prepared for Swift Land & Cattle Company, LLC. March 10, 2004.
- _____. 2004i. Wetlands and Floodplains Report. Prepared for Resolution Copper Company. October 2004.
- _____. 2006. A Preliminary Assessment of Cultural Resources in the Tam O'Shanter Area Preliminary Roadway Assessment. Prepared for Resolution Copper Company. January 13, 2006.
- _____. 2010. 2009 Bird Census Resolution Copper Mine Study Area. Prepared for Resolution Copper Mining. September, 2010.
- _____. 2012a. Amphibian and Reptile Surveys. Prepared for Resolution Copper Mining. December 12, 2012.
- _____. 2012b. 2011 Raptor Surveys of Mine Area and Vicinity. Prepared for Resolution Copper Mining. July, 2012.
- _____. 2012c. Wildlife Camera Monitoring in Devils Canyon and East Plant Mine Site Vicinity. Prepared for Resolution Copper Mining. July 2012.
- _____. 2014. Wildlife Camera Monitoring Report. Prepared for Resolution Copper Mining. May 2014.

- _____. 2015a *in prep.* 2015 Arizona Hedgehog Cactus Survey Report East and West Plant Sites. In preparation for Resolution Copper Mining.
- _____. 2015b *in prep.* Ecological Overview Apache Leap South End Parcels Pinal County, Arizona. In preparation for Resolution Copper Mining.
- _____. 2015c *in prep.* Ecological Overview Dripping Springs Parcel Gila and Pinal Counties, Arizona. In preparation for Resolution Copper Mining.
- _____. 2015d *in prep.* Ecological Overview East Clear Creek Parcel Coconino County, Arizona. In preparation for Resolution Copper Mining.
- _____. 2015e *in prep.* Phase I Environmental Site Assessment Apache Leap South End. In preparation for Resolution Copper Mining.
- _____. 2015f. Phase I Site Assessment Non-Federal Parcel - Dripping Springs Gila County, Arizona. Prepared for Resolution Copper Mining. June 2015.
- Wood, J. Scott. 1976. An Archaeological Survey of the Lakeside Land Exchange, Superior Parcel, Superior Arizona, Globe Range District, Tonto National Forest. Cultural Resources Inventory Report 76-09, Tonto National Forest. October 1976.
- _____. 1979. Settlement and Reoccupation along Queen Creek, Central Arizona: An Archaeological Survey of the Superior Proposed Based for Exchange (South Half), Globe Ranger District, Tonto National Forest. Cultural Resources Report No. 29. USDA Forest Service Southwestern Region, Albuquerque, New Mexico.
- _____. 1999. Perry Mesa, a Visitor's Guide. Tonto National Forest. 1999.

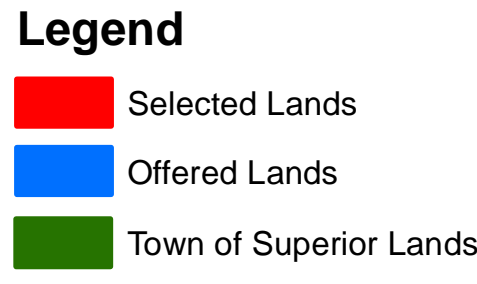
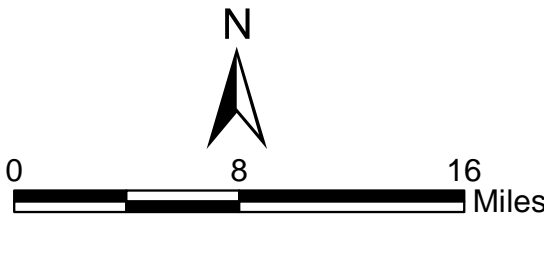
FIGURES



Data Sources: Bureau of Land Management (BLM) 2012 Surface Management, Pinal County Parcel Data, Arizona Land Resource Information System (ALRIS) and BLM Public Land Survey System (PLSS) Cadastral Spatial Data, US Forest Service and USGS Quadrangle Data, Assessor Parcel Data and 2010 Cooper Aerial Images and 2010 ESRI Online Images were used to determine land boundaries.
Photo Source: ESRI World Terrain Base.

Disclaimer: Map boundaries are based on best available data. Legal descriptions pending field verification by professional surveyors.

Note: This figure is designed to be plotted at 24" x 36". All map elements may not be legible at other plot scales.



RESOLUTION COPPER
Land Exchange Proposal

SELECTED, OFFERED AND TOWN OF SUPERIOR LANDS, OVERVIEW

Figure 2.0-1

Oak Flat:
2422 Acres of USFS Land to be conveyed to Resolution Copper,
T1S, R13E, Portion of Sections 28, 29, 31, 32 and Section 33.
T2S, R12E, Portion of Section 1,
T2S, R13E, Section 6 and Portion of Section 7,
Fairview Cemetery:
30 Acres of USFS Land to be conveyed to the Town of Superior,
T2S, R12E, Portion of Section 3,
Superior Airport:
Removal of Federal Reversionary Interest on 265 Acres
of Town of Superior Property,
T2S, R12E, Portion of Sections 4 and 5,
Superior Airport Contiguous Parcels:
250 Acres of USFS Land to be conveyed to the Town of Superior,
T2S, R12E, Portion of Sections 4, 5, and 9.
Pinal County, Arizona.

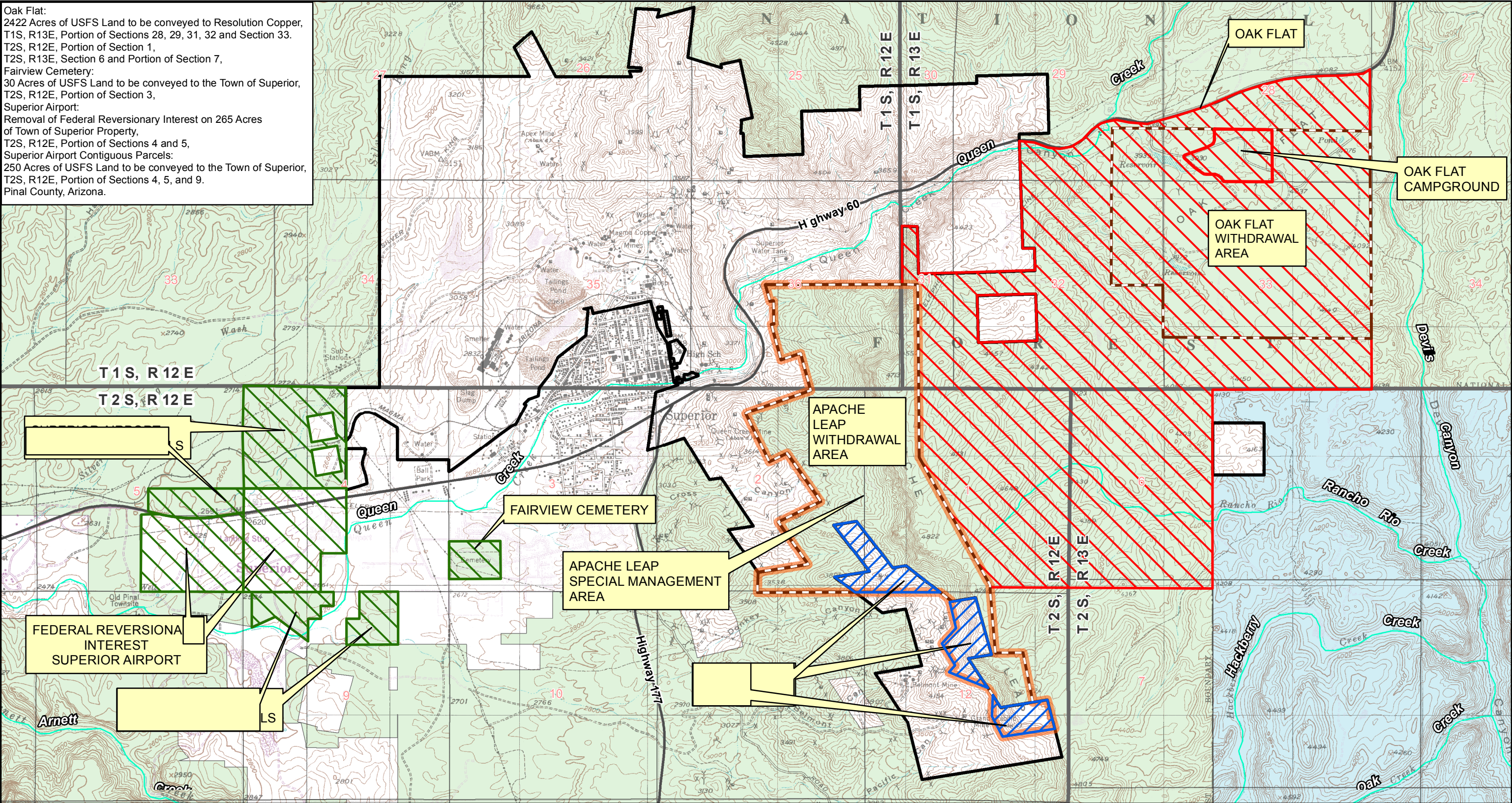









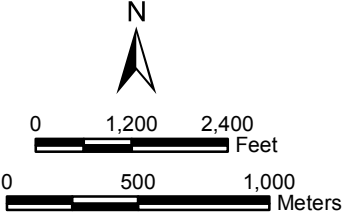


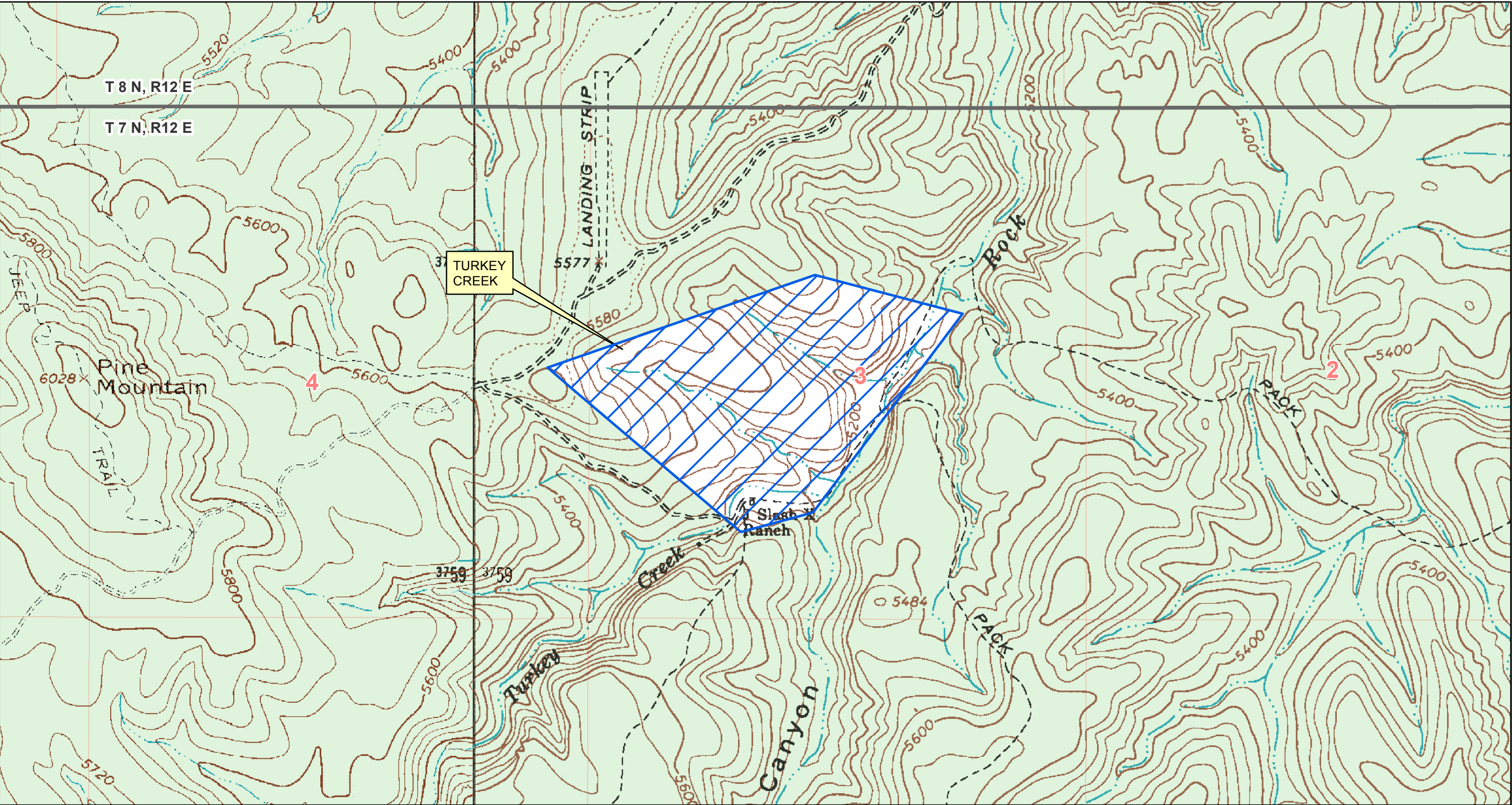
Image Source: Picketpost Mountain and Superior
7.5 Minute USGS Quadrangles
Data Source: BLM Surface Management 2012
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

- | | | |
|--|---|--|
|  Selected Lands |  Apache Leap Special Management Area |  Other Private Ownership (No Color) |
|  Offered Lands |  Withdrawal Boundary |  Arizona State Trust Lands |
|  Town of Superior Lands |  RCML Patented & Fee Land |  U.S.A. Lands (Tonto National Forest) |



RESOLUTION COPPER
Land Exchange Proposal
SELECTED & TOWN OF SUPERIOR LANDS
Figure 2.3-1



Turkey Creek:
147 Acres of Resolution Copper Property offered to the USFS,
T7N, R12E, Portion of Sections 3 & 4,
Gila County, Arizona.
Image Source: Copper Mountain 7.5 Minute USGS Quadrangle
Data Source: BLM Surface Management 2012
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

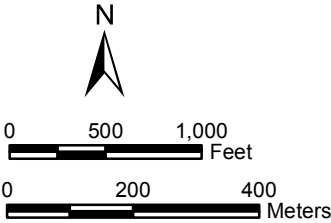
Legend



Offered Lands



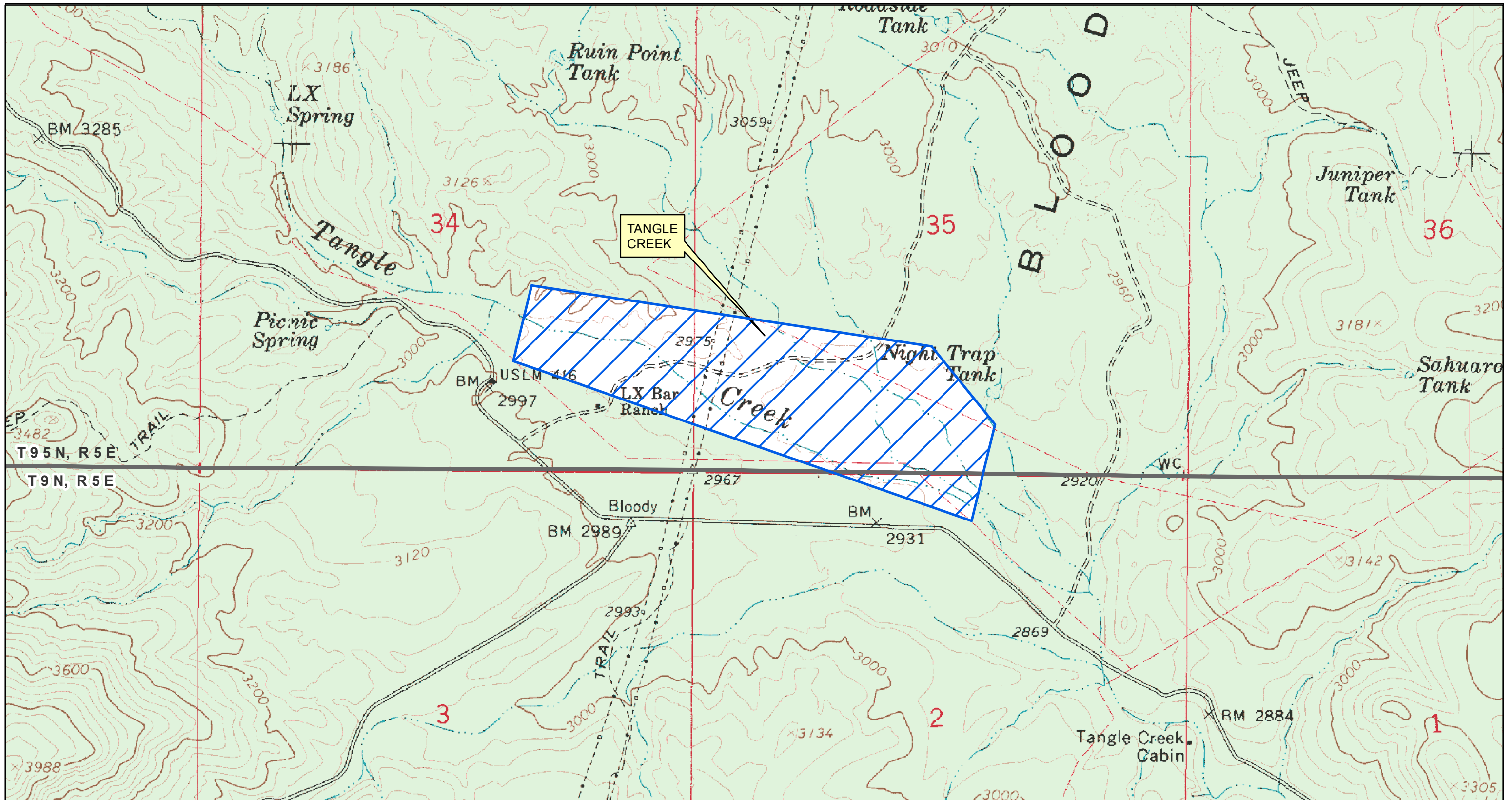
U.S.A. Lands (Tonto National Forest)



**RESOLUTION COPPER
Land Exchange Proposal**

TURKEY CREEK PARCEL

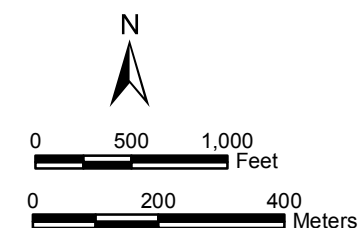
Figure 2.5-1



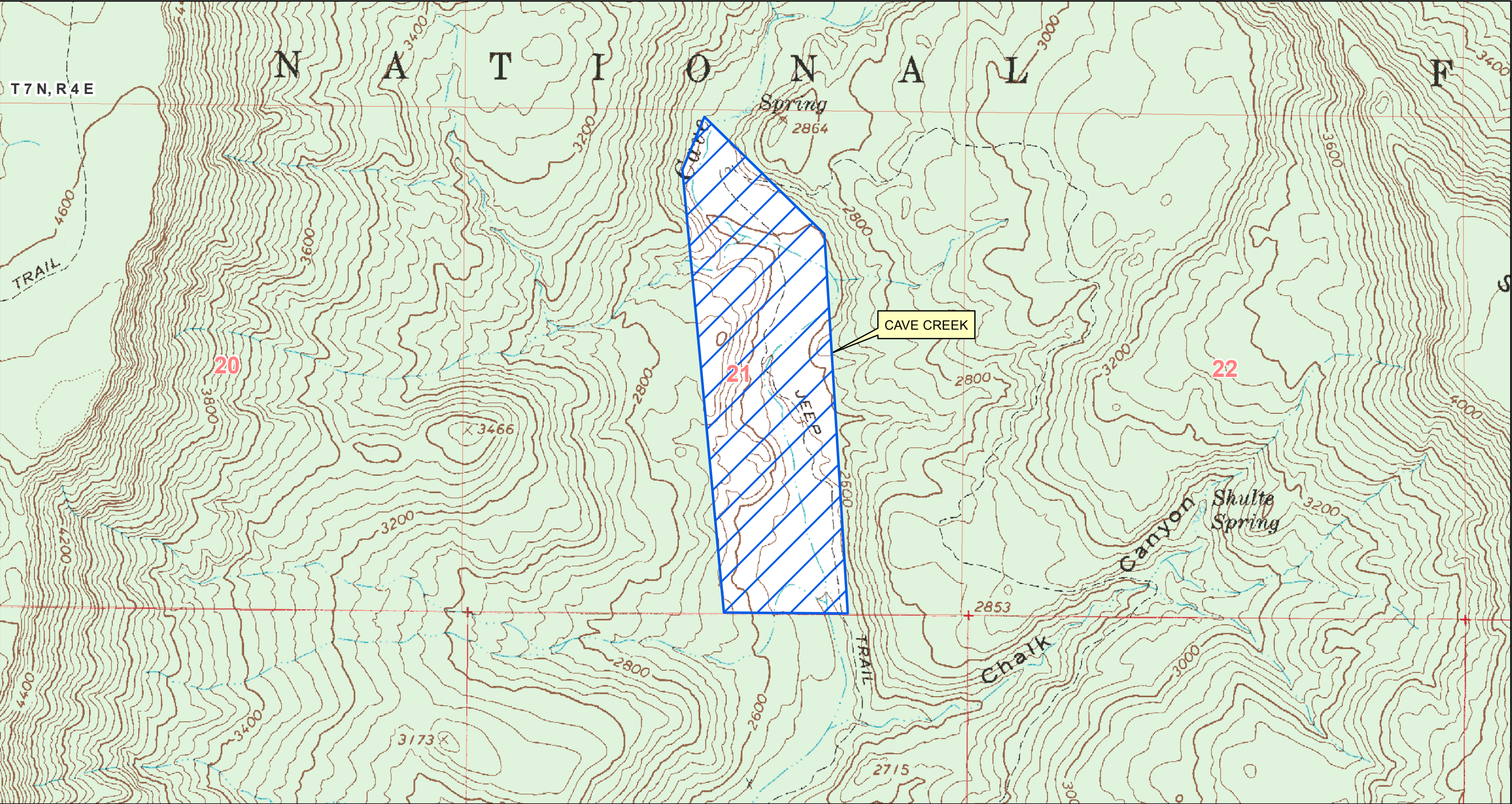
Tangle Creek:
 148 Acres of Resolution Copper Property offered to the USFS,
 T9.5N, R5E, Portion of Sections 34 and 35,
 T9N, R5E, Portion of Section 2,
 Yavapai County, Arizona.
 Image Source: Bloody Basin 7.5 Minute USGS Quadrangle
 Data Source: BLM Surface Management 2012
 Disclaimer: Map boundaries are based on best available data.
 Legal descriptions pending field verification by professional surveyors.

Legend

- Offered Lands
- U.S.A. Lands (Tonto National Forest)



RESOLUTION COPPER
 Land Exchange Proposal
TANGLE CREEK PARCEL
 Figure 2.5-2




Cave Creek:
149 Acres of Resolution Copper Property offered to the USFS,
T7N, R4E, Portion of Section 21,
Maricopa County, Arizona.
Image Source: New River Mesa 7.5 Minute USGS Quadrangle.
Data Source: BLM Surface Management 2012
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

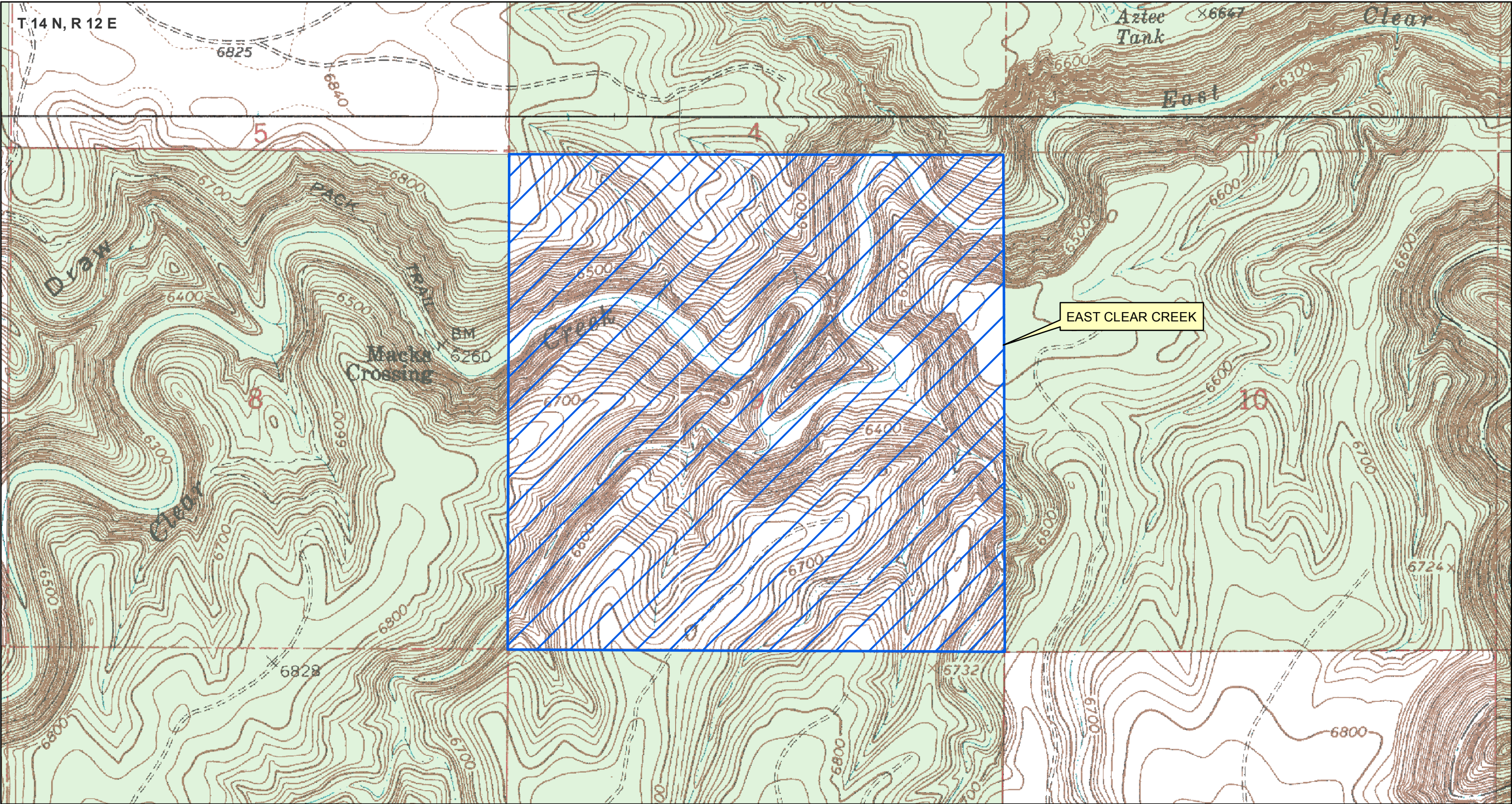
Legend

 Offered Lands

 U.S.A. Lands (Tonto National Forest)





0 500 1,000 Feet
0 200 400 Meters

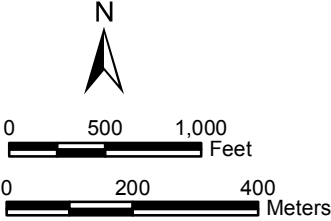
RESOLUTION COPPER
Land Exchange Proposal
CAVE CREEK PARCEL
Figure 2.5-3



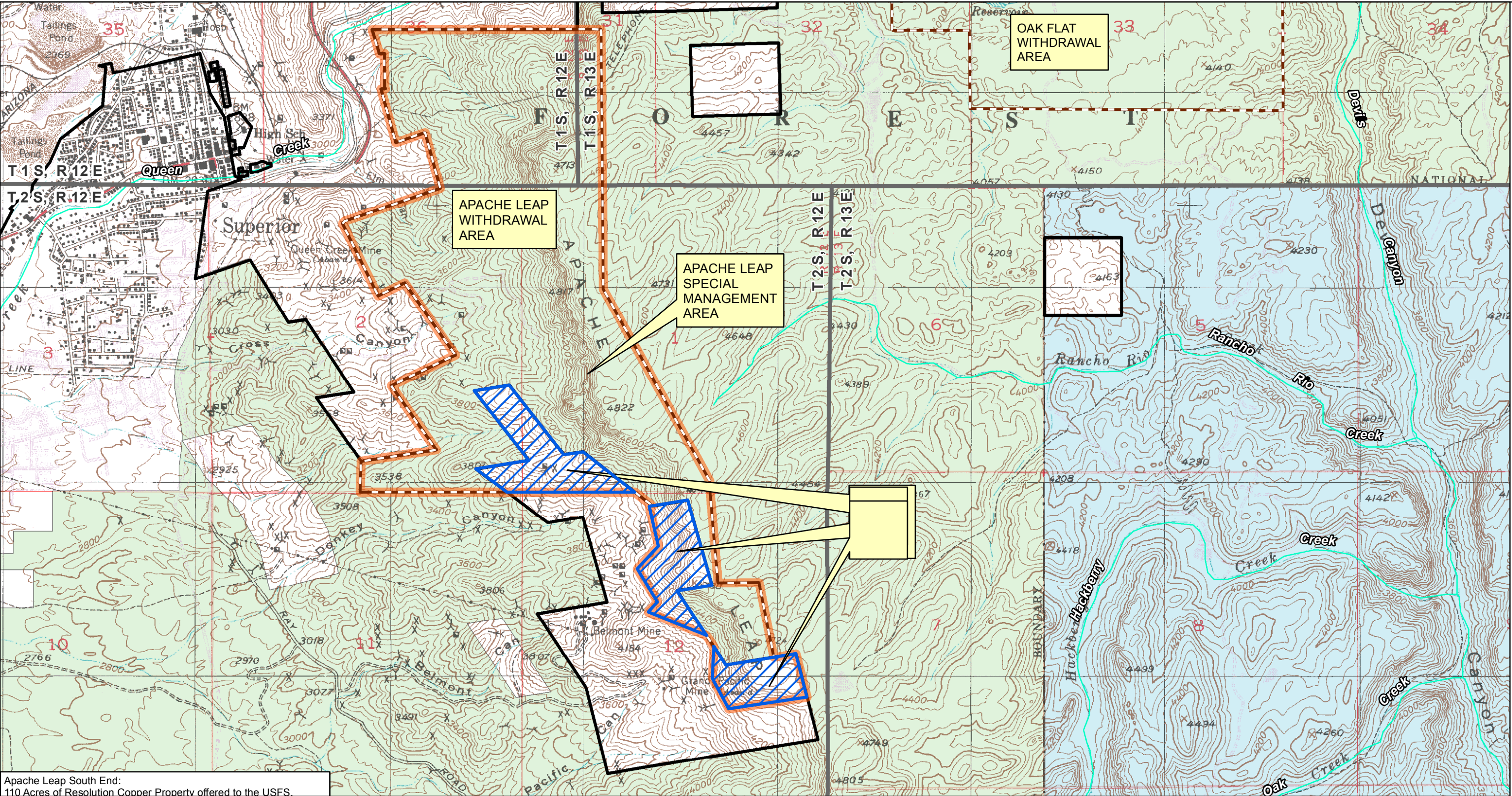
East Clear Creek:
640 Acres of Resolution Copper Property offered to the USFS,
T14N, R12E, Section 9,
Coconino County, Arizona.
Image Source: Leonard Canyon 7.5 Minute USGS Quadrangle
Data Source: BLM Surface Management 2012
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

- | | |
|---|--|
|  Offered Lands |  Other Private Ownership (No Color) |
|  U.S.A. Lands (Coconino National Forest) | |







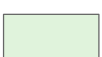


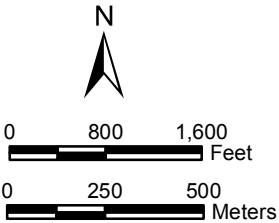
RESOLUTION COPPER
Land Exchange Proposal
EAST CLEAR CREEK PARCEL
Figure 2.5-4



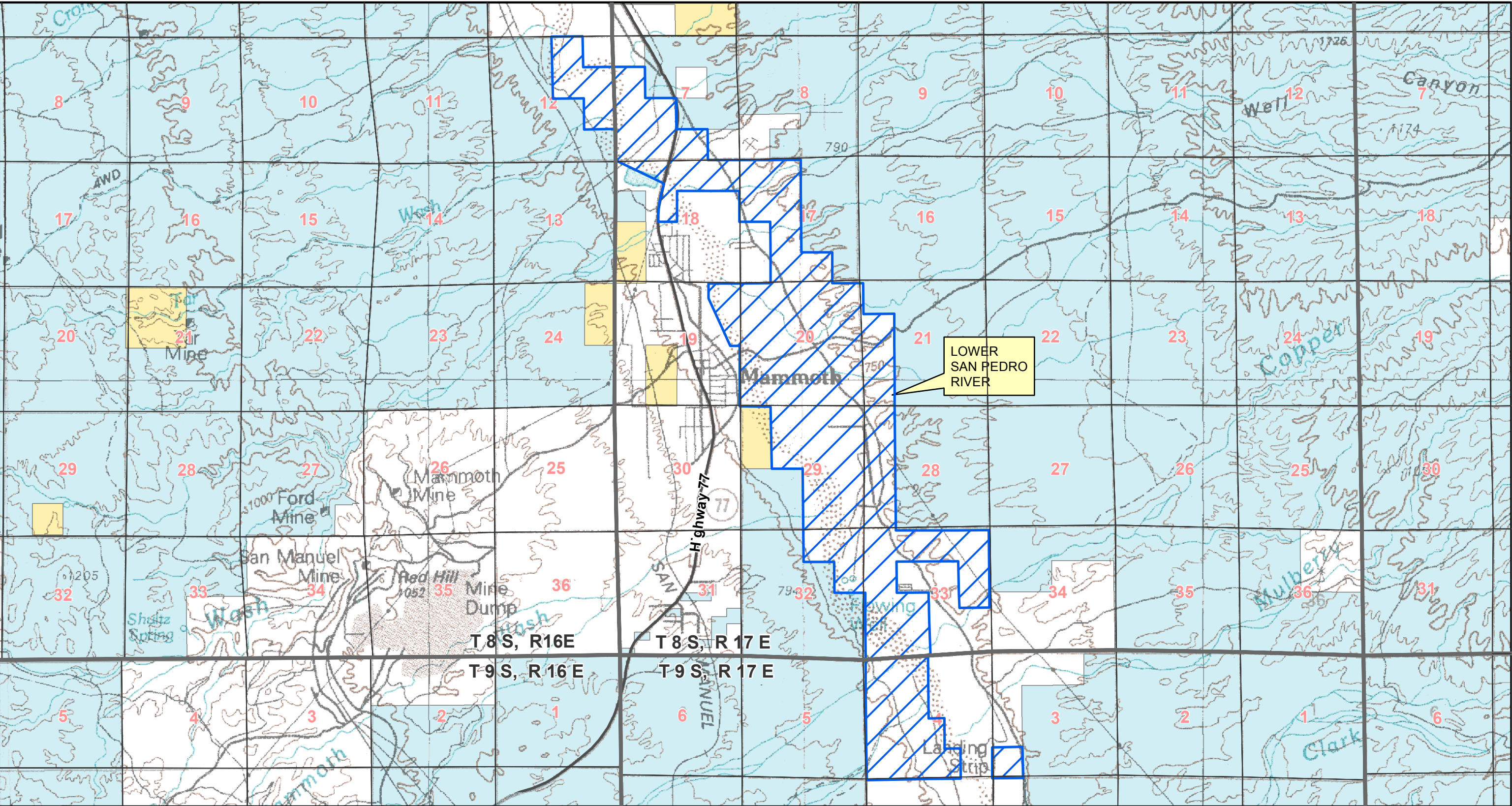
Apache Leap South End:
110 Acres of Resolution Copper Property offered to the USFS.
T2S, R12E, Portion of Sections 1, 2, and 12.
Apache Leap Special Management Area:
807 Acres that incorporates the 697 Acres of the Apache Leap
Withdrawal Area and the Apache Leap South End.
T1S, R12E, Portion of Section 36,
T1S, R13E, Portion of Section 31,
T2S, R12E, Portion of Sections 1, 2, and 12.
Pinal County, Arizona.
Image Source: Superior 7.5 Minute USGS Quadrangle
Data Source: BLM Surface Management 2012.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

- | | |
|--|--|
|  Offered Lands |  RCML Patented & Fee Land |
|  Apache Leap Special Management Area |  Other Private Ownership (No Color) |
|  Withdrawal Boundary |  Arizona State Trust Lands |
| |  U.S.A. Lands (Tonto National Forest) |







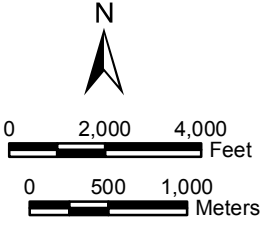
RESOLUTION COPPER
Land Exchange Proposal
APACHE LEAP SOUTH END PARCEL
Figure 2.5-5



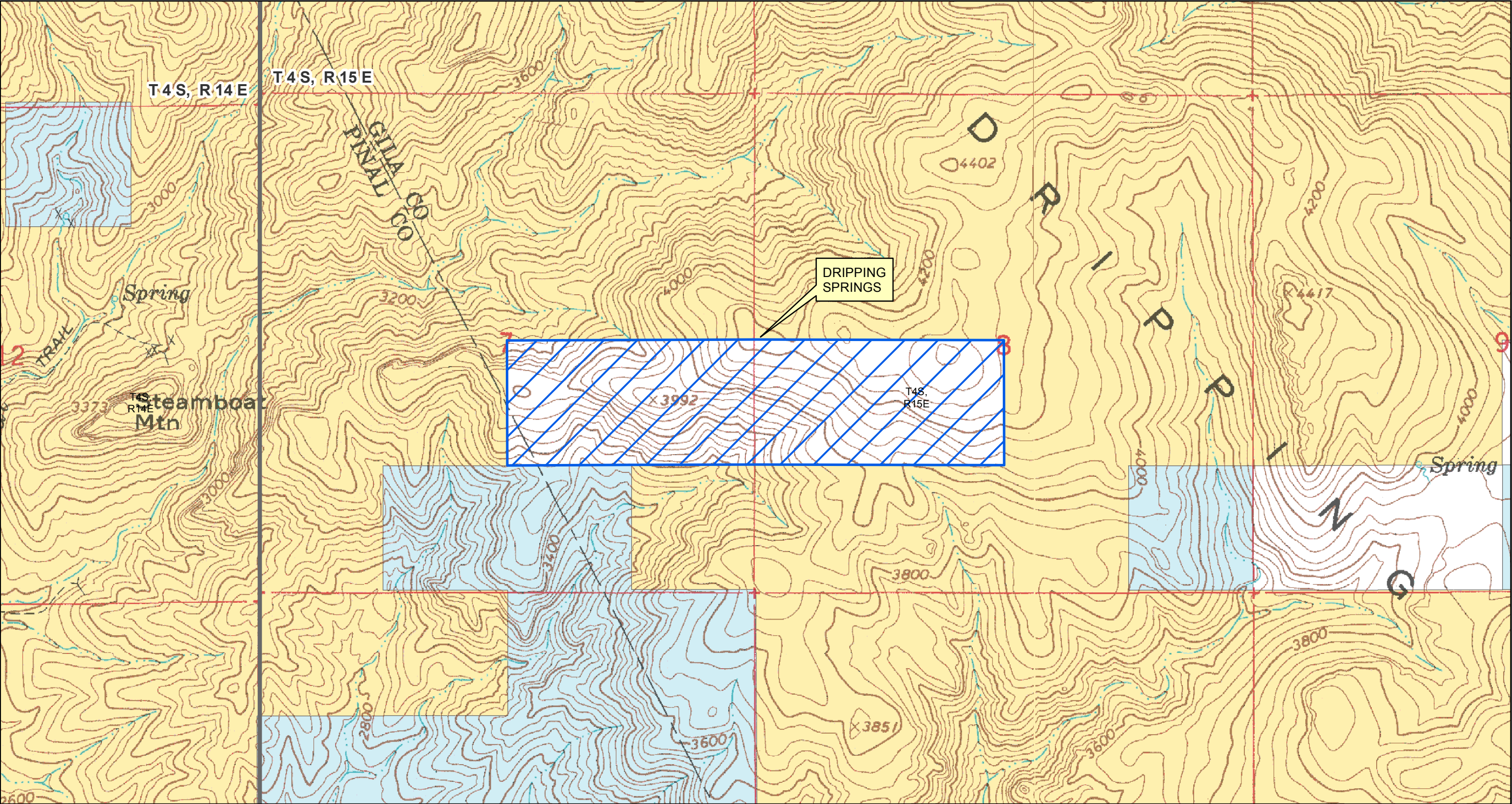
Lower San Pedro River:
3050 Acres of Resolution Copper Property offered to the BLM,
T8S, R16E, Portion of Section 12,
T8S, R17E, Portion of Sections 7, 17-21, 28, 29, 32 & 33,
T9S, R17E, Portion of Sections 3 & 4,
Pinal County, Arizona.
Image Source: Mammoth 1:100,000 USGS Quadrangle.
Data Source: BLM Surface Management 2012
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

- | | |
|--|---|
|  Offered Lands |  Bureau of Land Management (BLM) |
|  Other Private Ownership (No Color) | |
|  Arizona State Trust Lands | |







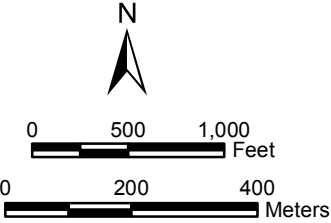
RESOLUTION COPPER
Land Exchange Proposal
LOWER SAN PEDRO RIVER PARCEL
Figure 2.5-6



Dripping Springs:
160 Acres of Resolution Copper Property offered to the BLM,
T4S, R15E, Portion of Sections 7 & 8,
Pinal and Gila Counties, Arizona.
Image Source: Hayden 7.5 Minute USGS Quadrangle.
Data Source: BLM Surface Management 2012
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

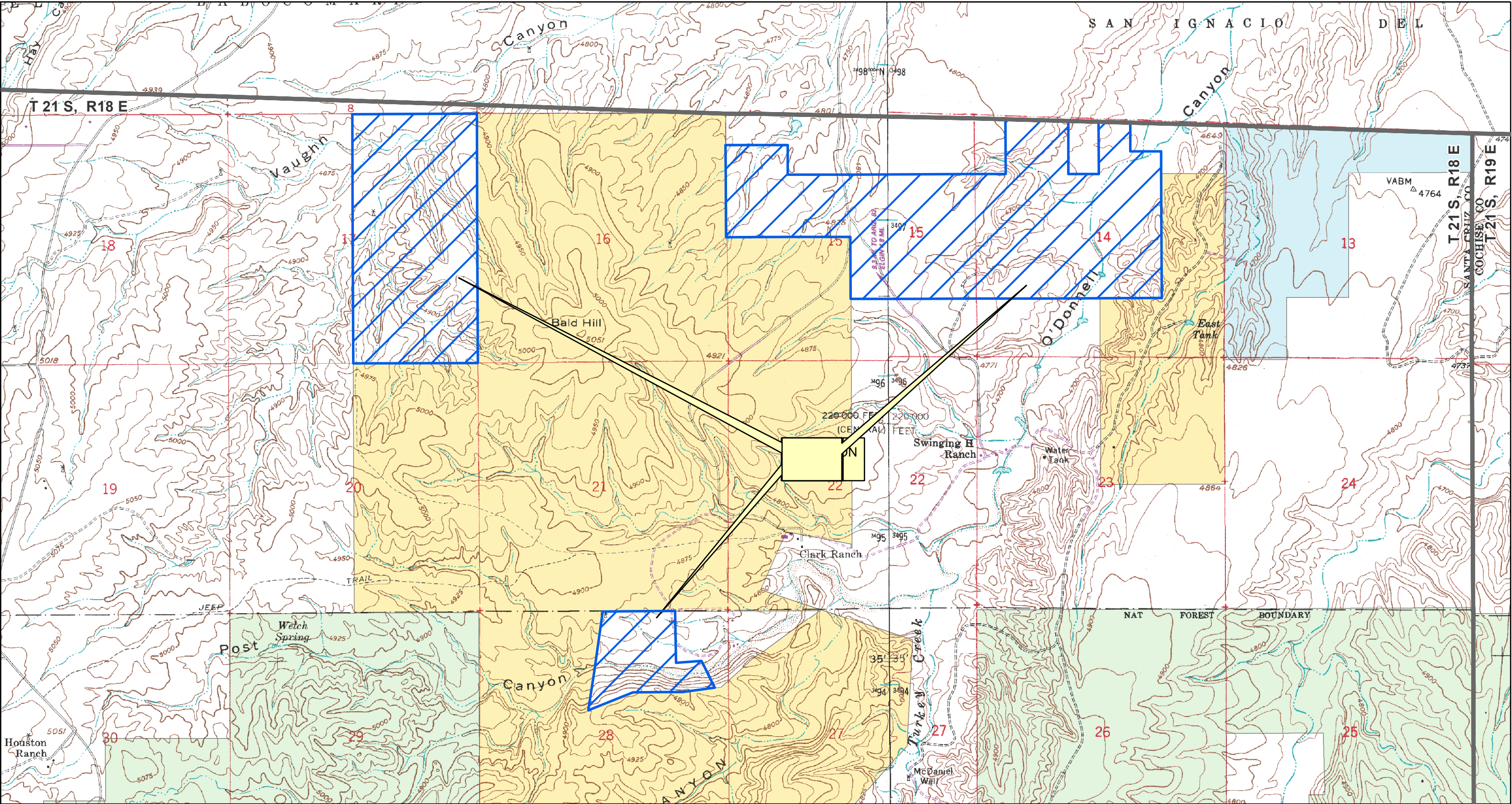
Legend

- | | |
|---|--|
|  Offered Lands |  Bureau of Land Management (BLM) |
| |  Other Private Ownership (No Color) |
| |  Arizona State Trust Lands |








**RESOLUTION COPPER
Land Exchange Proposal**

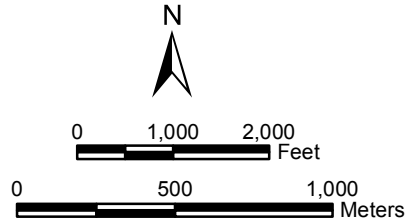
DRIPPING SPRINGS PARCEL
Figure 2.5-7



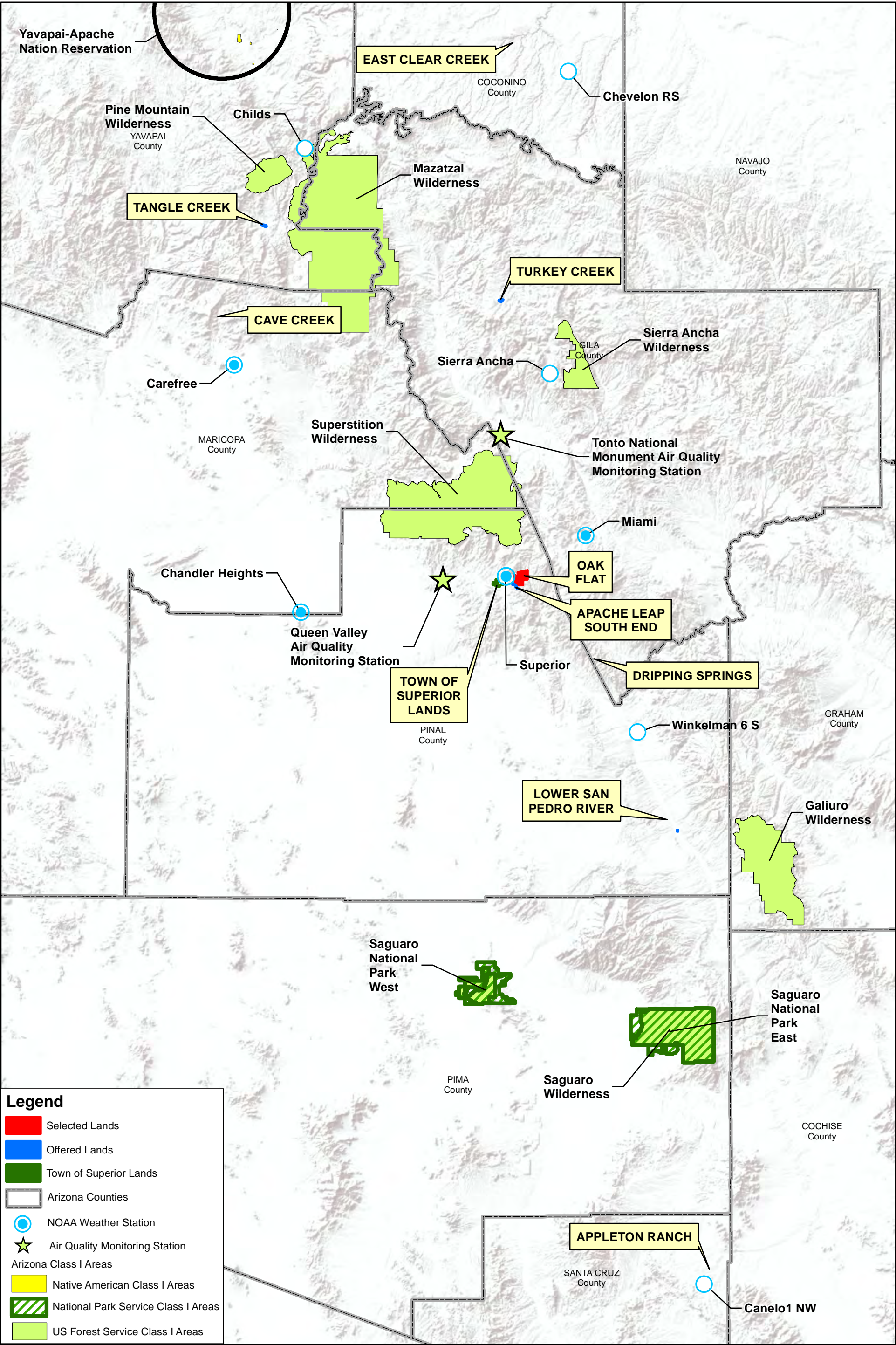
Appleton Ranch:
940 Acres of Resolution Copper Property offered to the BLM,
T21S, R18E, Portion of Sections 14, 15, 17 & 28,
Santa Cruz County, Arizona.
Image Source: O'Donnell Canyon and Pyeatt Ranch
7.5 Minute USGS Quadrangles.
Data Source: BLM Surface Management 2012
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

-  Offered Lands
-  Bureau of Land Management (BLM)
-  Other Private Ownership (No Color)
-  Arizona State Trust Lands
-  U.S.A. Lands (Coronado National Forest)



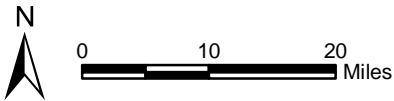
RESOLUTION COPPER
Land Exchange Proposal
APPLETON RANCH PARCEL
Figure 2.5-8



Legend

- Selected Lands
- Offered Lands
- Town of Superior Lands
- Arizona Counties
- NOAA Weather Station
- Air Quality Monitoring Station
- Arizona Class I Areas
 - Native American Class I Areas
 - National Park Service Class I Areas
 - US Forest Service Class I Areas

Image Source: ESRI Online World Terrain Base Map
Data Sources: Protected Areas Database of the United States (PADUS), National Park Service Layer; BLM Surface Management-November 2012. Wilderness Areas Downloaded 2/7/2012 from ALRIS; Class I data based on EPA Region 9-Air, AZ Class I Areas, September 2011.



RESOLUTION COPPER
Land Exchange Proposal
WEATHER STATIONS AND CLASS 1 AREAS
Figure 3.3-1

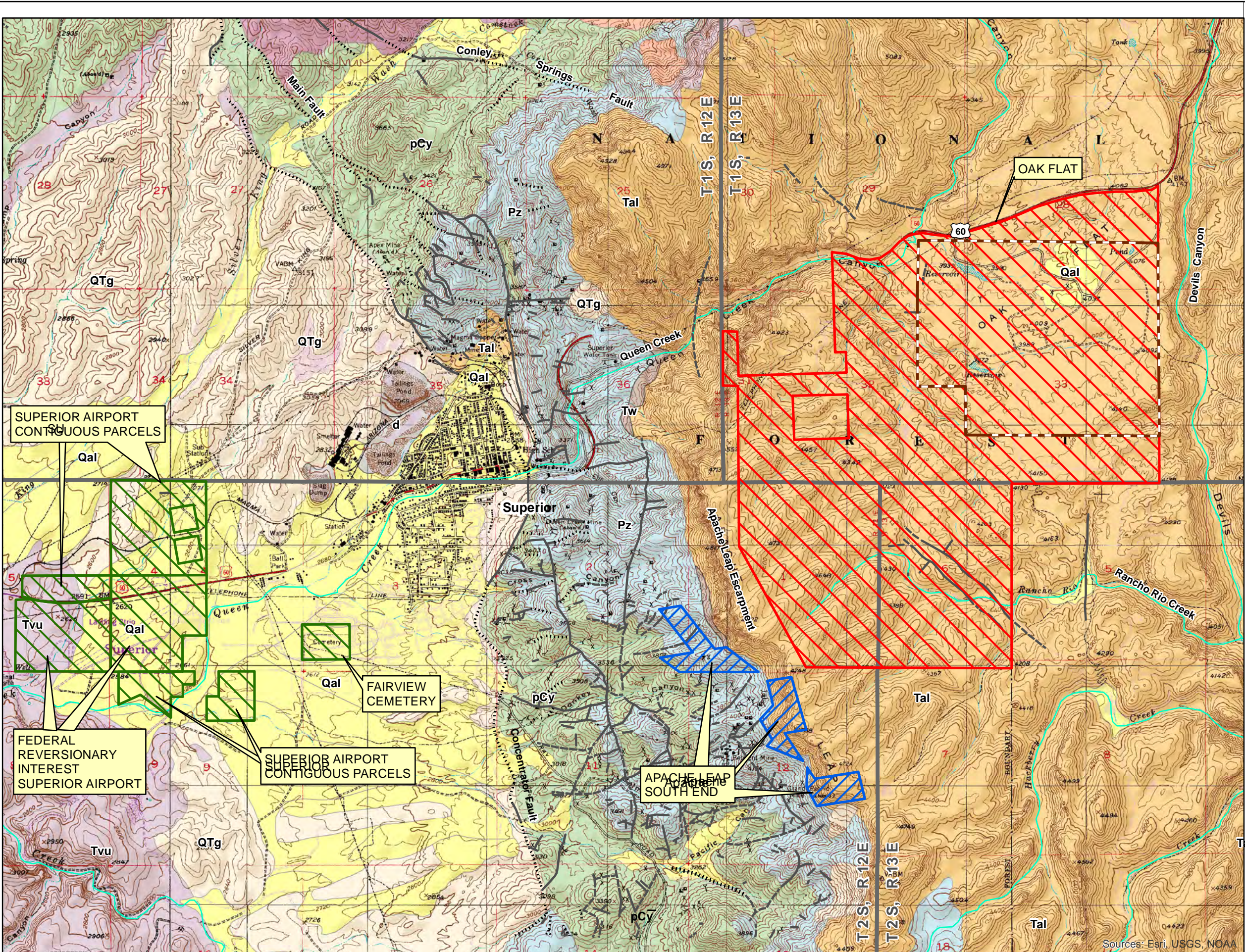


Image Source: Picketpost Mountain & Superior 1:24,000 USGS Quadrangles

Legend

Selected Lands

Offered Lands

Town of Superior Lands

Withdrawal Boundary

Geologic Units

dDisturbed Surficial Deposits

QalQuaternary Alluvial and Surficial Deposits

QTgQuaternary and Tertiary Basin-Fill Deposits

TalTertiary Apache Leap Tuff

TvuTertiary Volcanic Rocks, Undifferentiated

TwTertiary Whitetail Conglomerate

TKgCretaceous and Tertiary Intrusive Rocks

PzPaleozoic Sedimentary Rocks, Undifferentiated

pCyYounger Precambrian Sedimentary and Intrusive Rocks, Undifferentiated

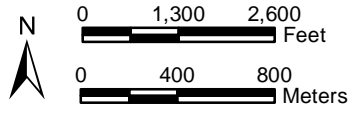
pCpiOlder Precambrian Pinal Schist

Fault

Fault - Approximate

Fault - Concealed

Data Sources:
Image Source: Picketpost Mountain and Superior 1:24,000 USGS Quadrangles, (40 Foot Contour Interval) and ERSI World Terrain Base
Geology Map
Spencer, J.E., Richard, S.M., and Pearthree, P.A., 1998, Geologic Map of the Mesa 30'x60' Quadrangle, Arizona: Digital Information Series DI-11, version 1.0, Arizona Geological Survey.
Fault Lines
Peterson, 1969, and
Spencer and Richard, 1995
Spencer et al., 1998
Geology generalized from Spencer, Richard, and Pearthree, 1998, by Montgomery & Associates, 2013



RESOLUTION COPPER
Land Exchange Proposal

GEOLOGIC MAP
APACHE LEAP SOUTH END, SELECTED
& TOWN OF SUPERIOR LANDS

Figure 3.3-2

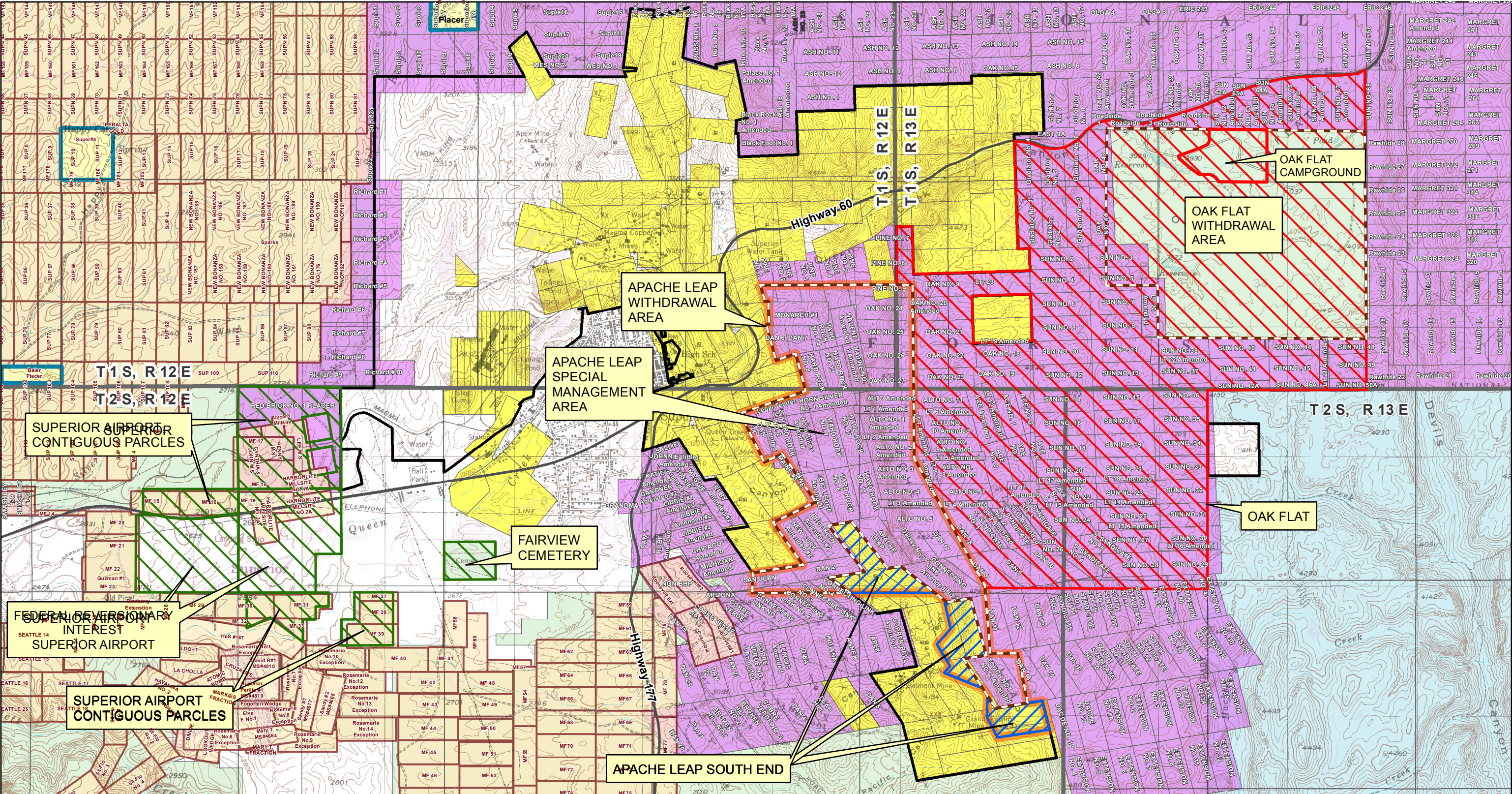













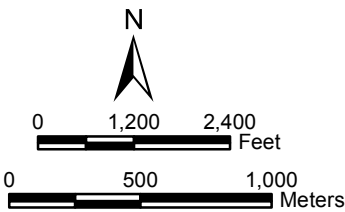


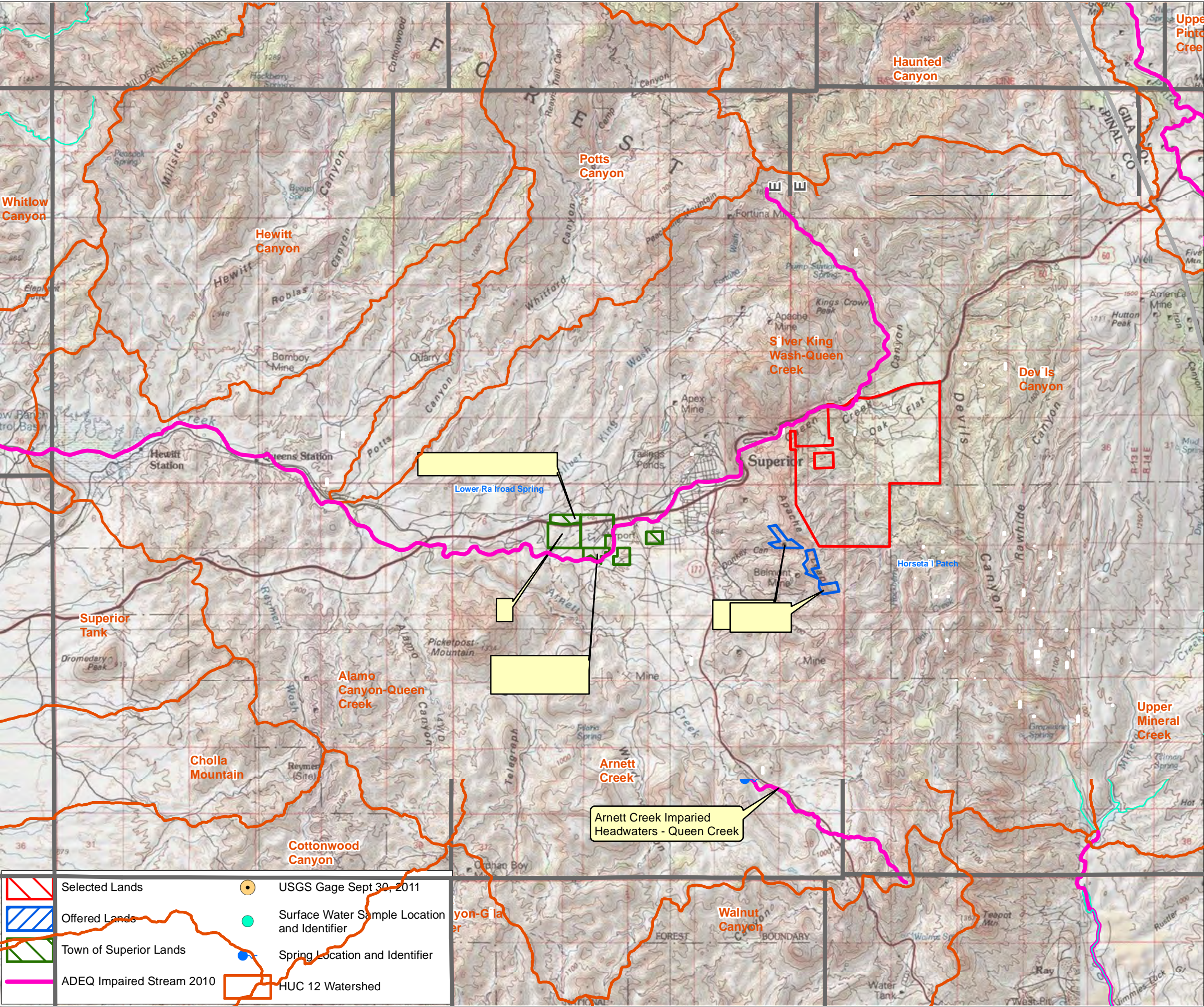
Image Source: Picketpost Mountain and Superior 7.5 Minute USGS Quadrangles.
Data Source: Mine Claim Data Provided By Resolution Copper, August 2013 and Modified July 2015.
Disclaimer: Map boundaries are based on best available data. Legal descriptions pending field verification by professional surveyors.

- | | | | | | |
|---|-------------------------------------|---|-------------------------|---|--------------------------------------|
|  | Selected Lands |  | 3rd Party Placer Claims |  | RCML Patented & Fee Land |
|  | Offered Lands |  | 3rd Party Claims |  | Other Private Ownership (No Color) |
|  | Town of Superior Lands |  | RCML Patented Claims |  | Arizona State Trust Lands |
|  | Apache Leap Special Management Area |  | RCML Unpatented Claims |  | U.S.A. Lands (Tonto National Forest) |
|  | Withdrawal Boundary | | | | |

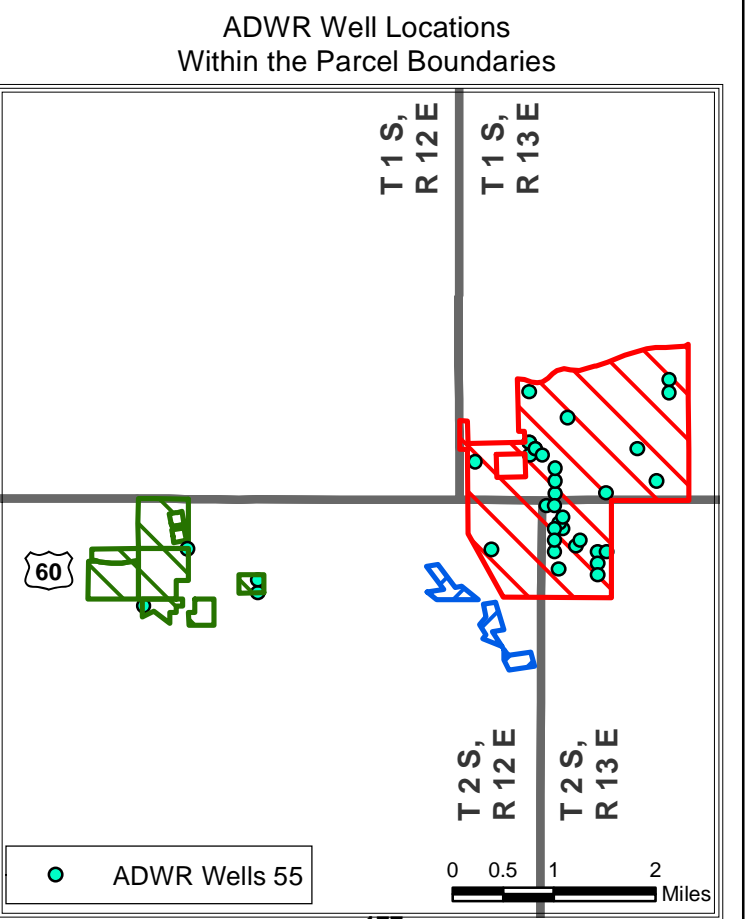


RESOLUTION COPPER Land Exchange Proposal

MINING CLAIMS
APACHE LEAP SOUTH END, SELECTED
& TOWN OF SUPERIOR LANDS
Figure 3.3-3



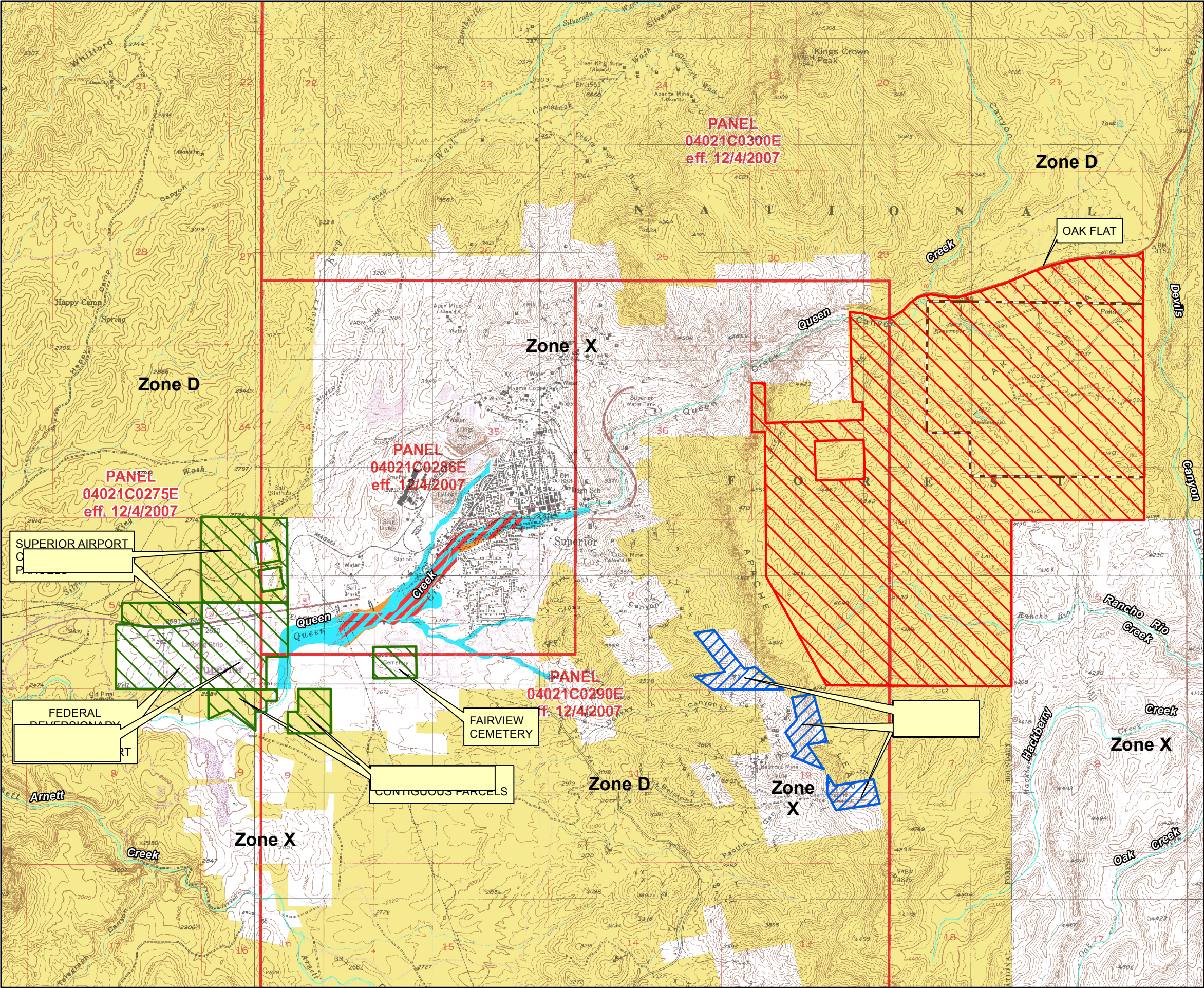
Oak Flat:
2422 Acres of USFS Land to be conveyed to Resolution Copper,
T1S, R13E, Portion of Sections 28, 29, 31, 32 and Section 33.
T2S, R12E, Portion of Section 1,
T2S, R13E, Section 6 and Portion of Section 7,
Fairview Cemetery:
30 Acres of USFS Land to be conveyed to the Town of Superior,
T2S, R12E, Portion of Section 3,
Superior Airport:
Removal of Federal Reversionary Interest on 265 Acres
of Town of Superior Property,
T2S, R12E, Portion of Sections 4 and 5,
Superior Airport Contiguous Parcels:
250 Acres of USFS Land to be conveyed to the Town of Superior,
T2S, R12E, Portion of Sections 4, 5, and 9.
Apache Leap South End:
110 Acres of Resolution Copper Property offered to the USFS,
T2S, R12E, Portion of Sections 1, 2, and 12.
Pinal County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ADWR, USGS, NHDH HUC 12, ADEQ
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.



The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -<http://www.azwater.gov/azdwr/gis/>

RESOLUTION COPPER
Land Exchange Proposal

SURFACE WATER RESOURCES AND WELLS
APACHE LEAP SOUTH END, SELECTED
& TOWN OF SUPERIOR LANDS
Figure 3.3-4



Oak Flat:
2422 Acres of USFS Land to be conveyed to Resolution Copper,
T1S, R13E, Portion of Sections 28, 29, 31, 32 and Section 33.
T2S, R12E, Portion of Section 1,
T2S, R13E, Section 6 and Portion of Section 7,
Fairview Cemetery:
30 Acres of USFS Land to be conveyed to the Town of Superior,
T2S, R12E, Portion of Section 3,
Superior Airport:
Removal of Federal Reversionary Interest on 265 Acres
of Town of Superior Property,
T2S, R12E, Portion of Sections 4 and 5,
Superior Airport Contiguous Parcels:
250 Acres of USFS Land to be conveyed to the Town of Superior,
T2S, R12E, Portion of Sections 4, 5, and 9.
Apache Leap South End:
110 Acres of Resolution Copper Property offered to the USFS,
T2S, R12E, Portion of Sections 1, 2, and 12.
Pinal County, Arizona.
Image Source: Picketpost Mountain and Superior 7.5 Minute
USGS Quadrangles
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

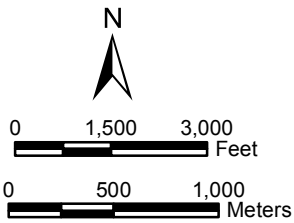
Legend

- Selected Lands
- Town of Superior Lands
- Offered Lands
- Withdrawal Boundary

Flood Hazard Zones

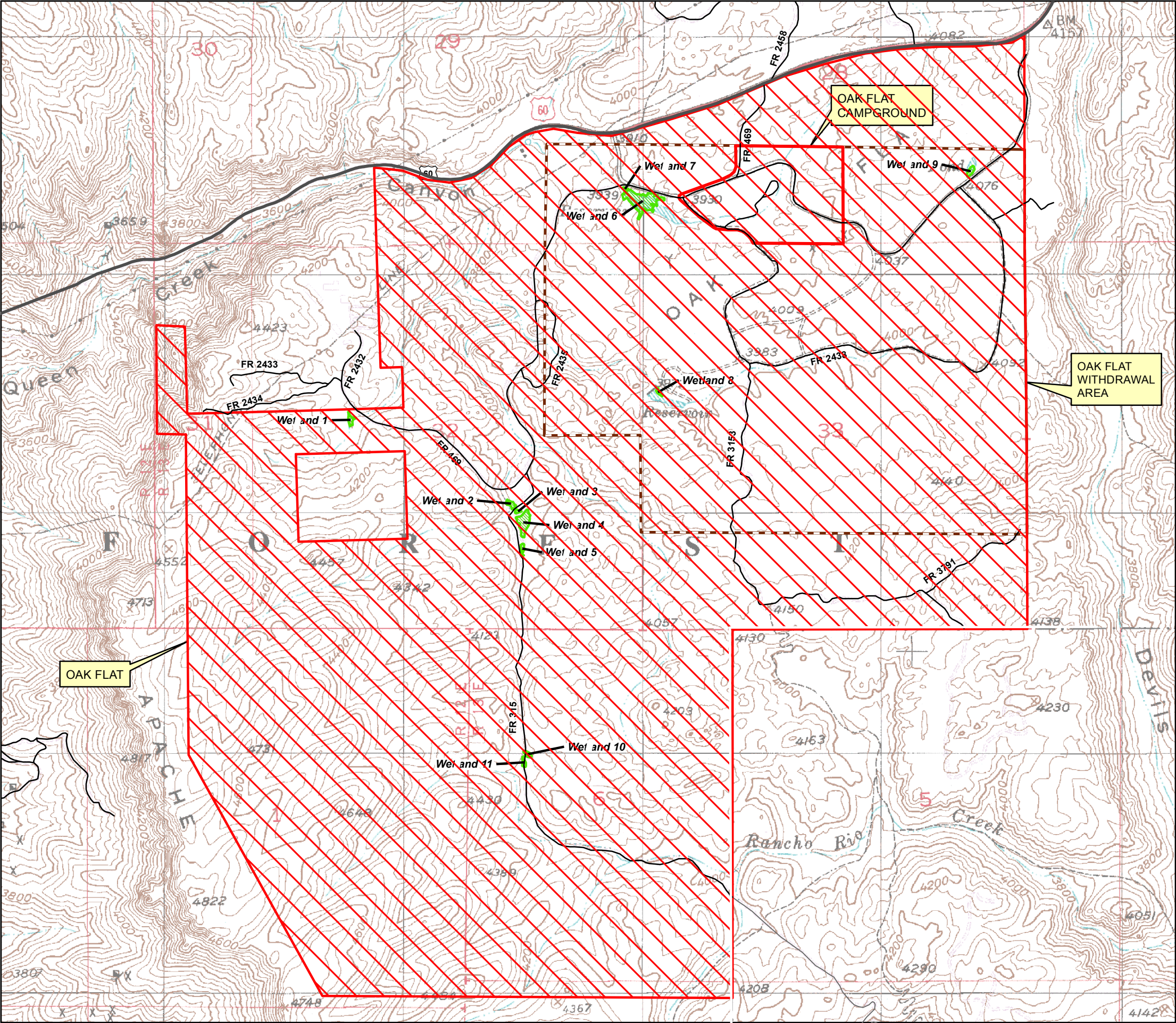
- 1% Annual Chance Flood Hazard (Zone A)
- Regulatory Floodway (Zone AE)
- Area of Undetermined Flood Hazard (Zone D)
- 0.2% Annual Chance Flood Hazard (Zone X)
- Zone X - Area of Minimal Flood Hazard

<https://hazards.fema.gov/gis/nfhl/services>



**RESOLUTION COPPER
Land Exchange Proposal**

FEMA FLOOD MAPS
APACHE LEAP SOUTH END, SELECTED
& TOWN OF SUPERIOR LANDS
Figure 3.3-5



Legend




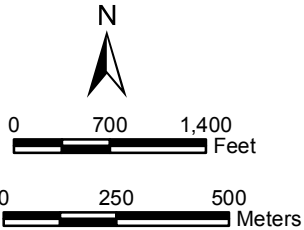
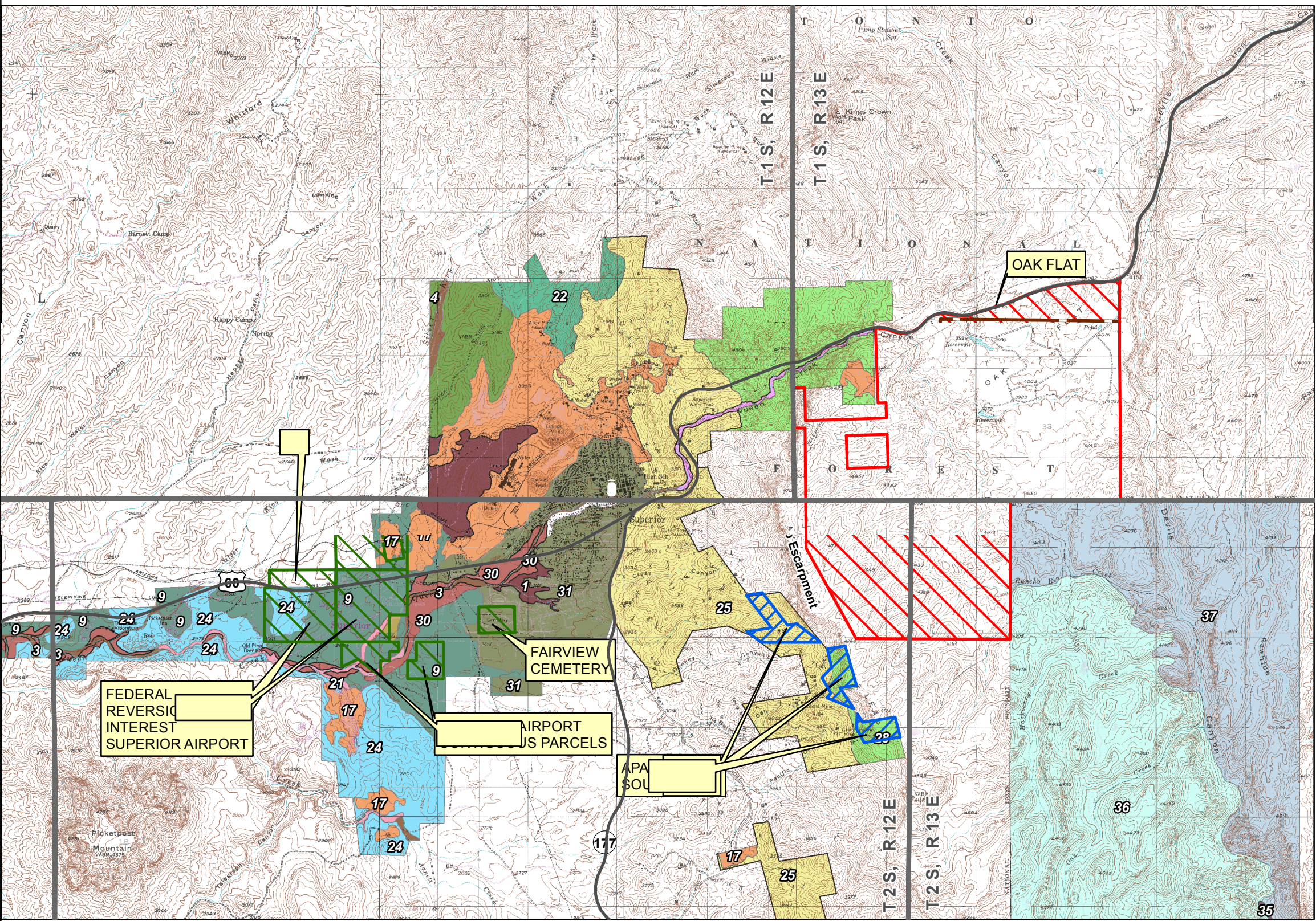
-  Selected Lands
-  Withdrawal Boundary
-  Wetland Areas

Image Source: Superior 1:24,000 USGS Quadrangle
Data Source: Tonto National Forest Roads 09-12-2013
Disclaimer: Map boundaries are based on best available data. Legal descriptions pending field verification by professional surveyors.

















RESOLUTION COPPER
Land Exchange Proposal

WETLAND AREAS
OAK FLAT
Figure 3.3-6



-  Offered Lands
-  Town of Superior Lands
-  Withdrawal Boundary

USDA NRCS Soil AZ 687

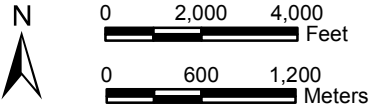
-  1 - Andrada extremely gravelly sandy loam, 10 to 40 percent slopes
-  3 - Bodecker soils and Riverwash, 0 to 5 percent slopes
-  4 - Caralampi extremely gravelly sandy loam, moderately deep, 20 to 40 percent slopes
-  9 - Deloro-Andrada-Sasabe, deep complex, 2 to 15 percent slopes
-  15 - Dumps
-  17 - Mined land
-  20 - Oxyaquic Torrifluents and Typic Fluvaquents soils and Riverwash, 0 to 5 percent slopes
-  21 - Oxyaquic Torrifluents-Riverwash-Water complex, 0 to 5 percent slopes
-  22 - Pantak-Cammerman-Rock outcrop complex, 20 to 65 percent slopes
-  24 - Rock outcrop-Lampshire complex, 5 to 40 percent slopes
-  25 - Rock outcrop-Mabray-Pantak complex, 20 to 70 percent slopes
-  28 - Rock outcrop-Woodcutter complex, tuff, 15 to 50 percent slopes
-  30 - Tenneco-Bodecker complex, 0 to 3 percent slopes
-  31 - Urban land and Haplic Torriarents soils, 2 to 15 percent slopes

USDA NRCS Soil AZ 661

-  35 - Oxyaquic Torrifluents-Riverwash complex, 0 to 5 percent slopes
-  36 - Rock outcrop-Lampshire complex, 10 to 60 percent slopes
-  37 - Rock outcrop-Lampshire complex, chaparral, 5 to 50 percent slopes

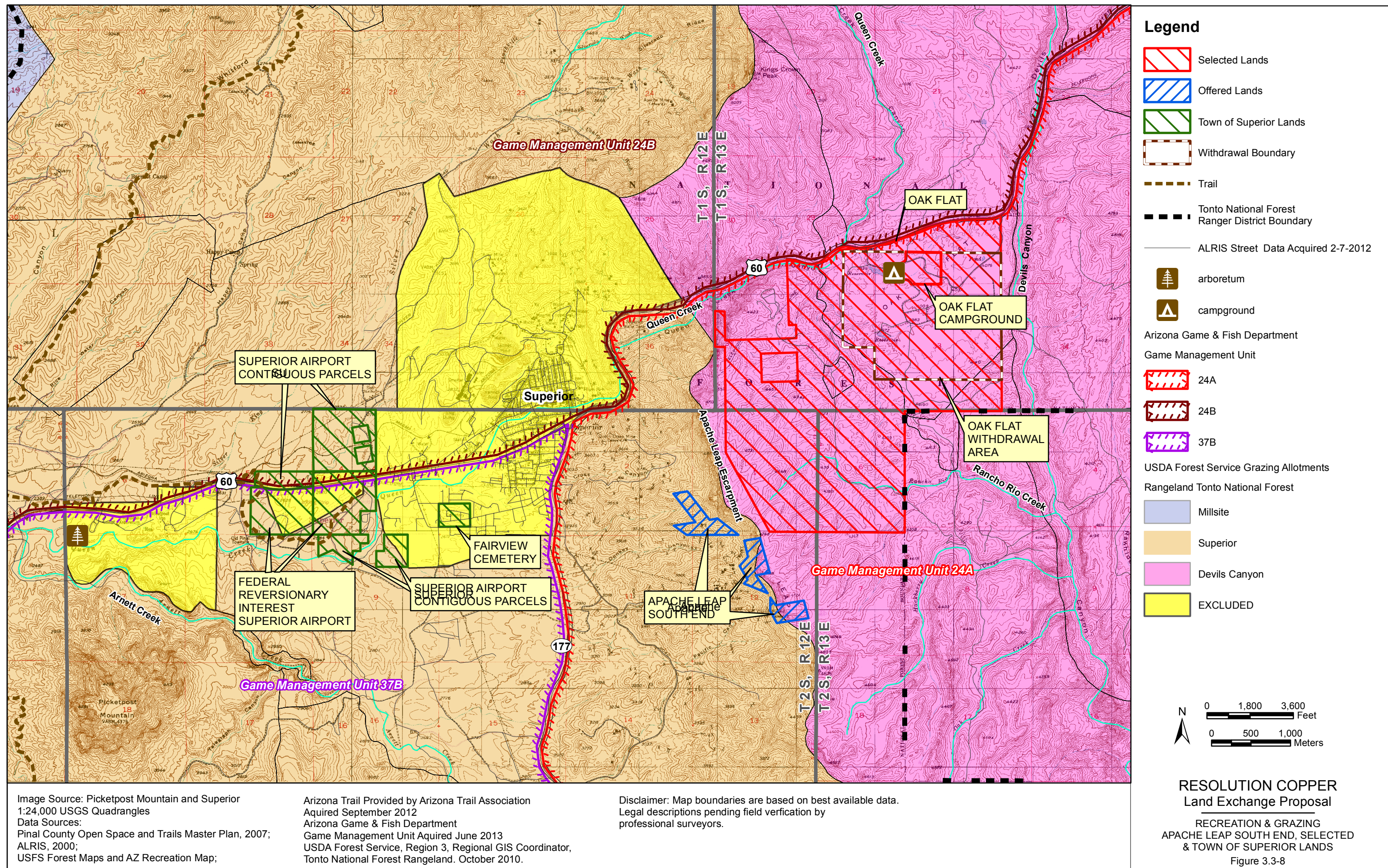
Pinal County, Arizona.
Image Source: Picketpost Mountain and Superior
1:24,000 USGS Quadrangles.

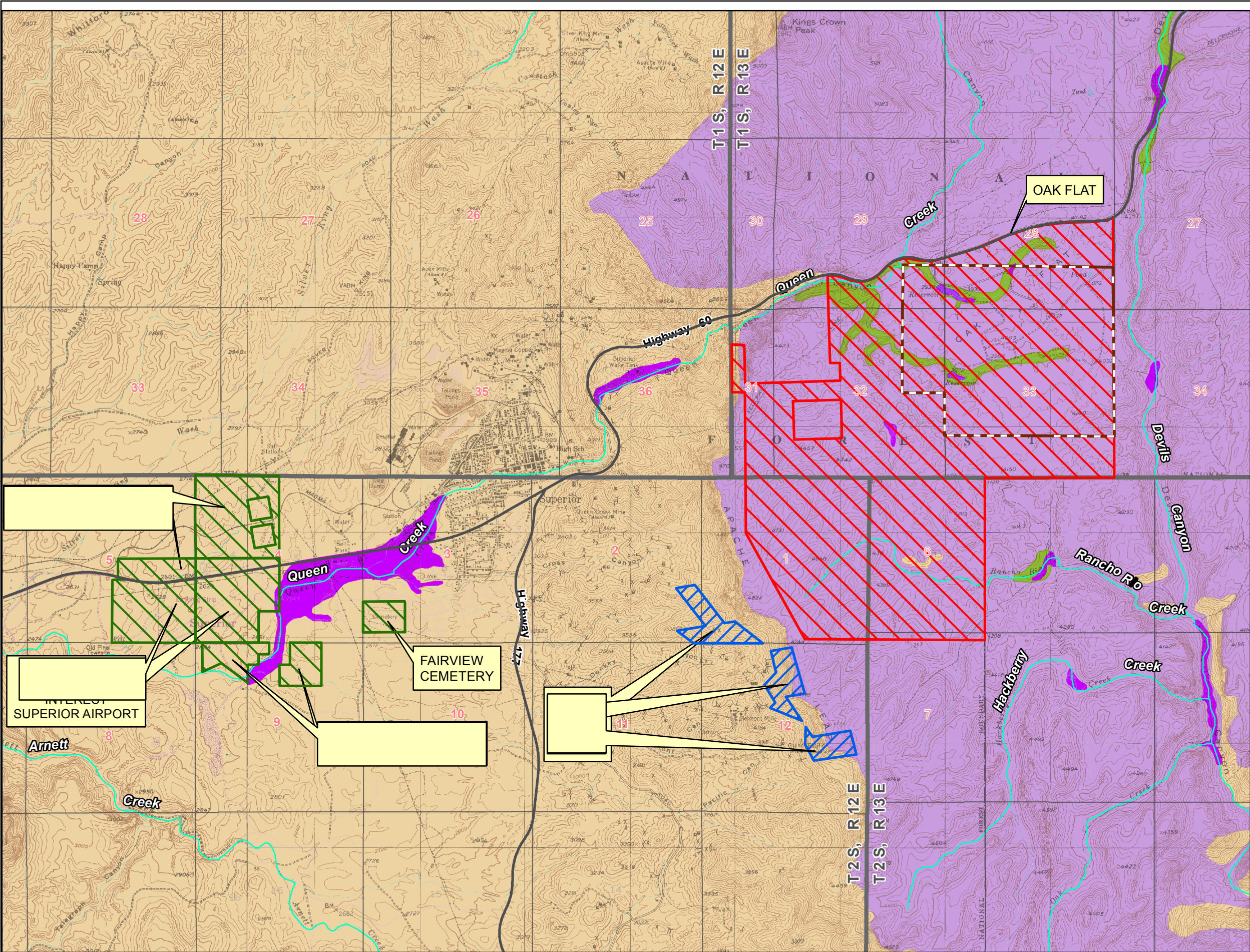
Soil Data Source: U.S. Department of Agriculture,
Natural Resources Conservation Service,
Soil Survey Geographic Database for Tonto National
Forest, AZ, Parts of Gila, Maricopa, Pinal & Yavapai Counties, AZ
Soil Survey Area Data for AZ687, Publication Date: 20101022.
Soil Data Source: U.S. Department of Agriculture, Natural Resources Conservation Service
Soil Survey Geographic Database for Eastern Pinal & Southern Gila Counties, AZ
Soil Survey Area Data for AZ661, Publication Date: 20090428.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.



RESOLUTION COPPER
Land Exchange Proposal

SOILS MAP
APACHE LEAP SOUTH END, SELECTED
& TOWN OF SUPERIOR LANDS
Figure 3.3-7



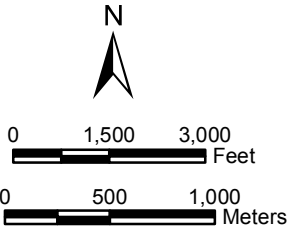


Legend

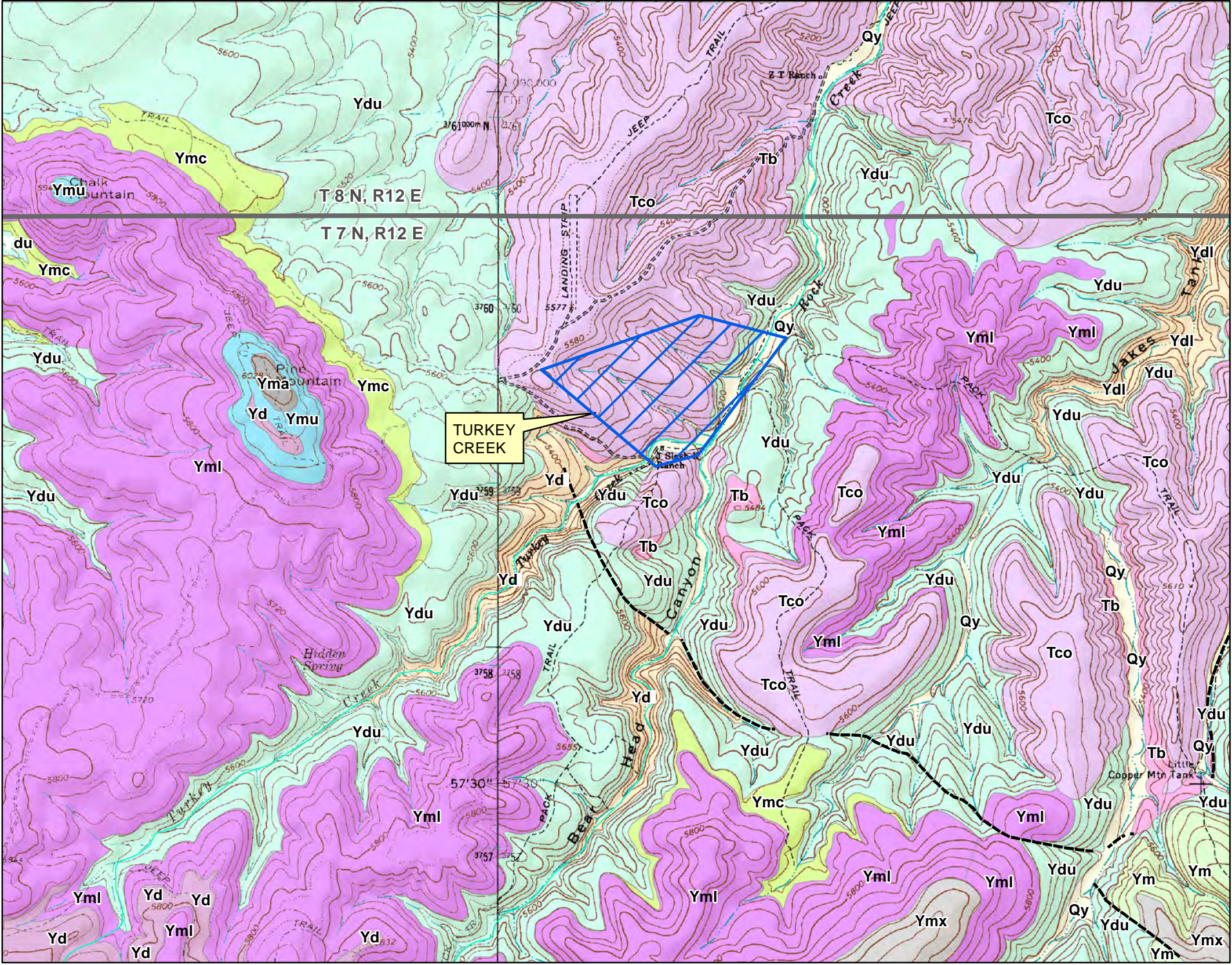
- Selected Lands
- Offered Lands
- Town of Superior Lands
- Withdrawal Boundary

- Biotic Communities**
- Interior Riparian Deciduous Forest
 - Interior Chaparral
 - Arizona Upland Subdivision of Sonoran Desertscrub
 - Madrean Evergreen Woodland

Image Source: Picketpost Mountain and Superior 1:24,000 USGS Quadrangles
Data Source: Vegetation Communities: Based on Biotic Communities of the Southwest, Brown & Lowe Classifications, August 1980, with modifications by WestLand Resources mapping efforts.
Disclaimer: Map boundaries are based on best available data. Legal descriptions pending field verification by professional surveyors.



RESOLUTION COPPER
Land Exchange Proposal
BIOTIC COMMUNITIES
APACHE LEAP SOUTH END, SELECTED
& TOWN OF SUPERIOR LANDS
Figure 3.3-9



Turkey Creek:
147 Acres of Resolution Copper Property offered to the USFS,
T7N, R12E, Portion of Sections 3 & 4,
Gila County, Arizona.
Image Source: Picture Mountain and Copper Mountain
1:24,000 USGS Quadrangles, (40 Foot Contour Interval (C.I.)
with 20 Foot Supplemental C.I.)
and ERSI World Terrain Base
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

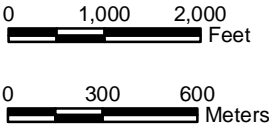
Legend



Offered Lands

Geologic Descriptions

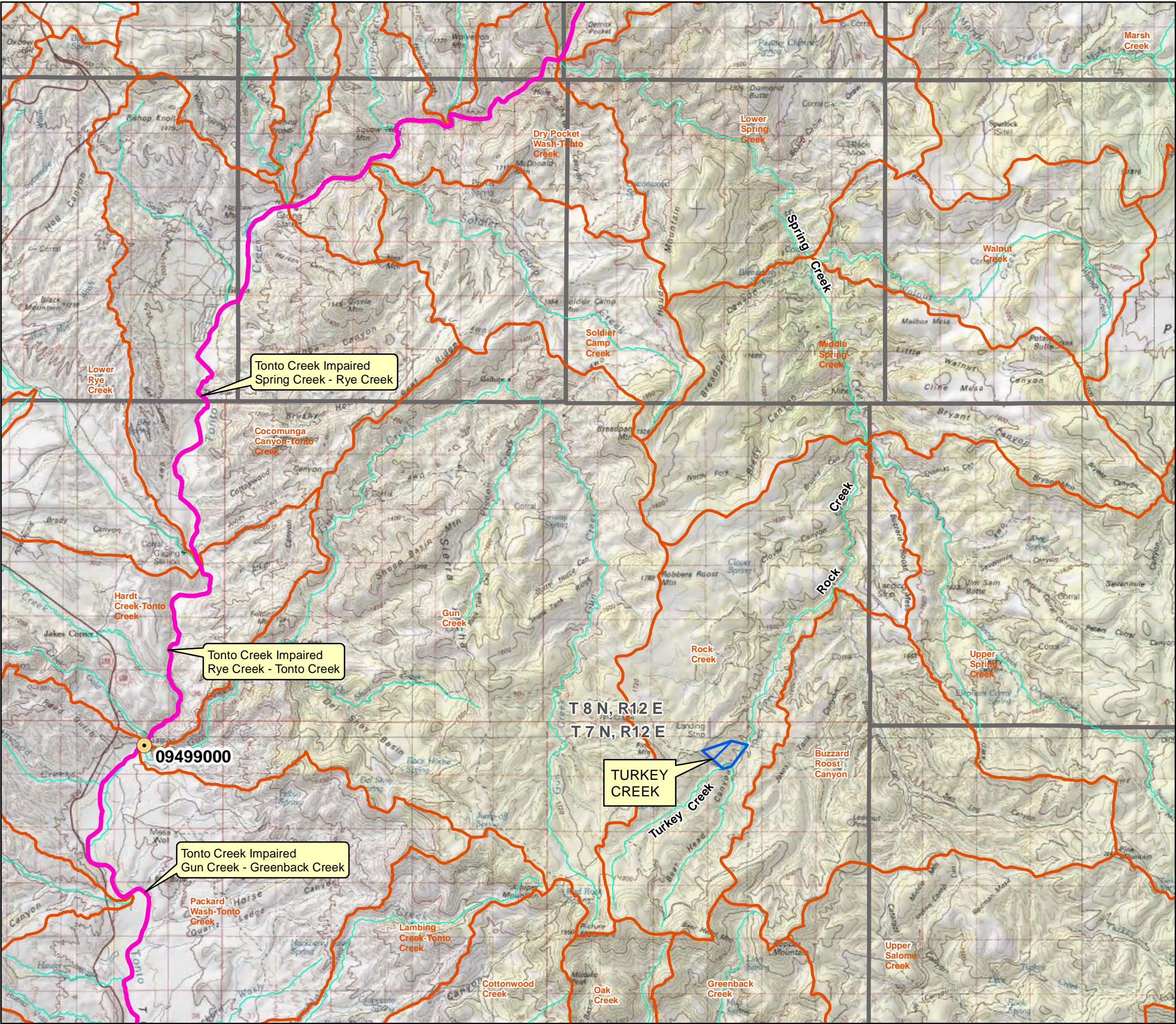
- Qy - Holocene Alluvium (<10 ka)
- Tco - Early to Middle Tertiary Older Conglomerate
- Tb - Tertiary Basalt
- Yd - Middle Proterozoic Diabase
- Yma - Middle Proterozoic Argillite
- Ymx - Middle Proterozoic Chert Breccia of the Mescal Limestone
- Ymc - Middle Proterozoic Mescal Basal Conglomerate
- Ymu - Middle Proterozoic Algal Member of the Mescal Limestone
- Yml - Middle Proterozoic Lower Member of the Mescal Limestone
- Ym - Middle Proterozoic Mescal Limestone, undivided
- Ydu - Middle Proterozoic Upper Member of the Dripping Spring Quartzite
- Ydl - Middle Proterozoic Lower Member of the Dripping Spring Quartzite
- Fault



RESOLUTION COPPER
Land Exchange Proposal

GEOLOGIC MAP
TURKEY CREEK PARCEL
Figure 3.5-1

Source of mapped bedrock and legend text:
Skothenicki, S.J. 1999. Geologic map of the Copper Mountain Quadrangle, Gila County, Arizona. Arizona Geological Survey Open-File Report 99-24.
Skothenicki, S.J. 1999. Geologic map of the Picture Mountain Quadrangle, Gila County, Arizona. Arizona Geological Survey Open-File Report 99-23.

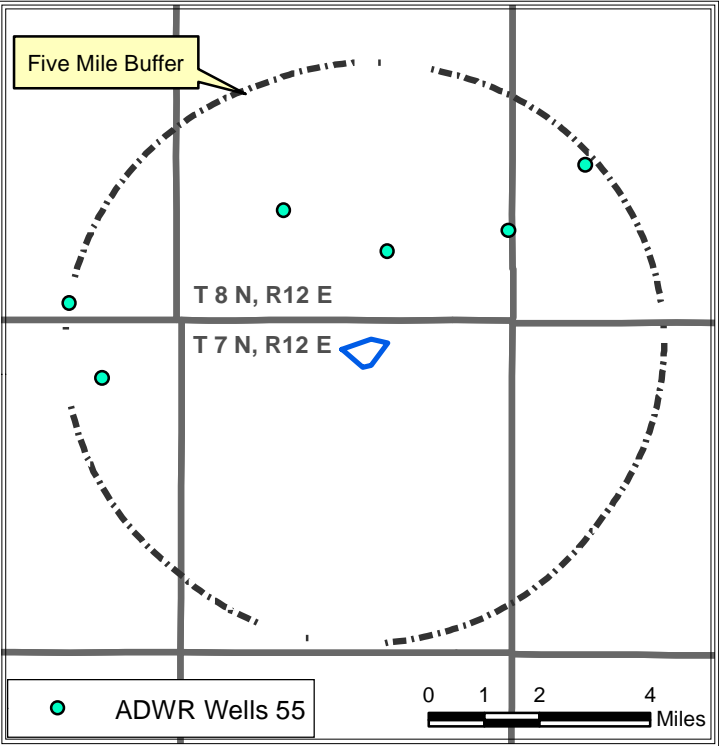


Turkey Creek:
147 Acres of Resolution Copper Property offered to the USFS,
T7N, R12E, Portion of Sections 3 & 4,
Gila County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ADWR, USGS, NHDH HUC 12, ADEQ
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

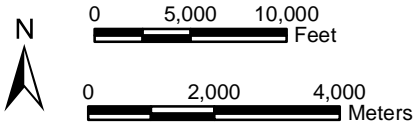
Legend

-  Offered Lands
-  ADEQ Impaired Stream 2010
-  USGS Gage Sept 30, 2011
-  HUC 12 Watershed

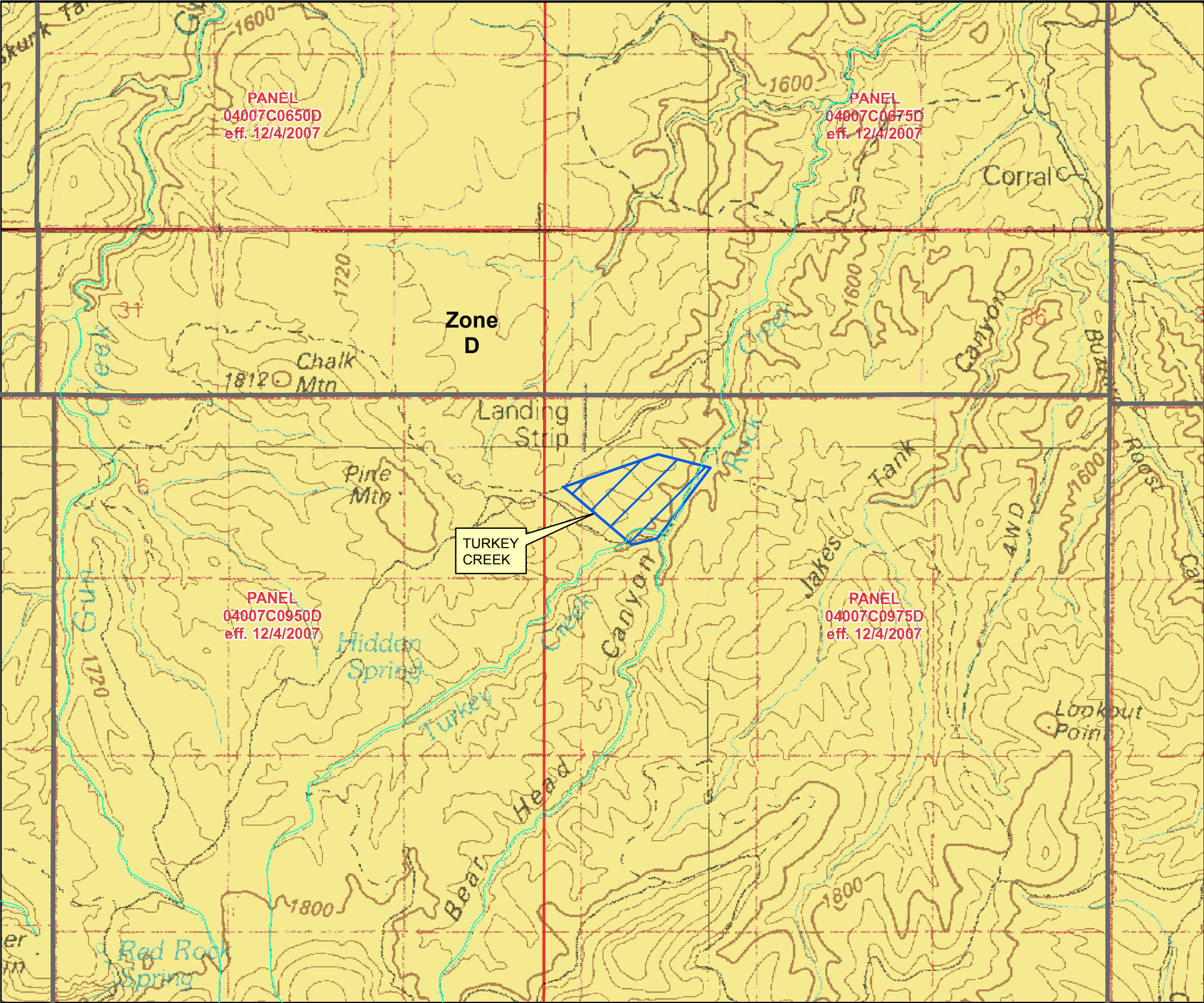
**ADWR Well Locations
Within a Five Mile Buffer of Parcel**



The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -<http://www.azwater.gov/azdwr/gis/>




**RESOLUTION COPPER
Land Exchange Proposal**
SURFACE WATER RESOURCES AND WELLS
TURKEY CREEK PARCEL
Figure 3.5-2




Turkey Creek:
147 Acres of Resolution Copper Property offered to the USFS,
T7N, R12E, Portion of Sections 3 & 4,
Gila County, Arizona.
Image Source: Payson & Theodore Roosevelt Lake
1:100,000 USGS Quadrangles
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

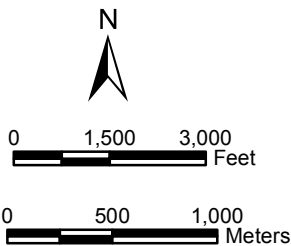
Legend

 Offered Lands

Flood Hazard Zones

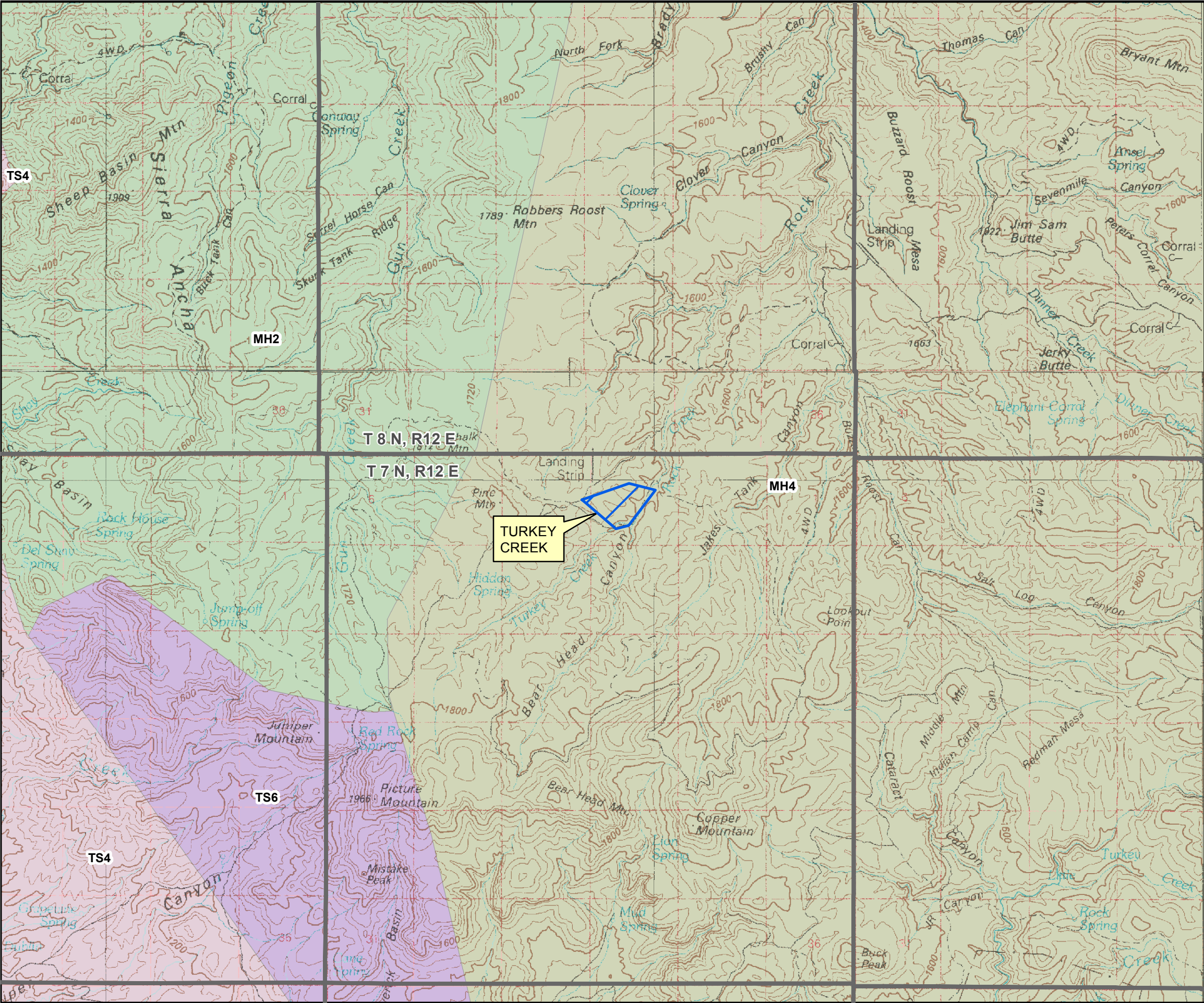
 Area of Undetermined Flood Hazard
(Zone D)

<https://hazards.fema.gov/gis/nfhl/services>



RESOLUTION COPPER Land Exchange Proposal

FEMA FLOOD MAPS
TURKEY CREEK PARCEL
Figure 3.5-3







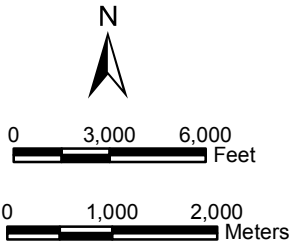
Turkey Creek:
147 Acres of Resolution Copper Property offered to the USFS,
T7N, R12E, Portion of Sections 3 & 4,
Gila County, Arizona.
Image Source: Payson & Theodore Roosevelt Lake
1:100,000 USGS Quadrangles
Data Source: ALRIS 'General Soil Map - 1975', by U.S.
Dept. of Agriculture - Soil Conservation Service and Univ. of Arizona
Experimental Station. Digitized at 1:1,000,000 scale.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

 Offered Lands

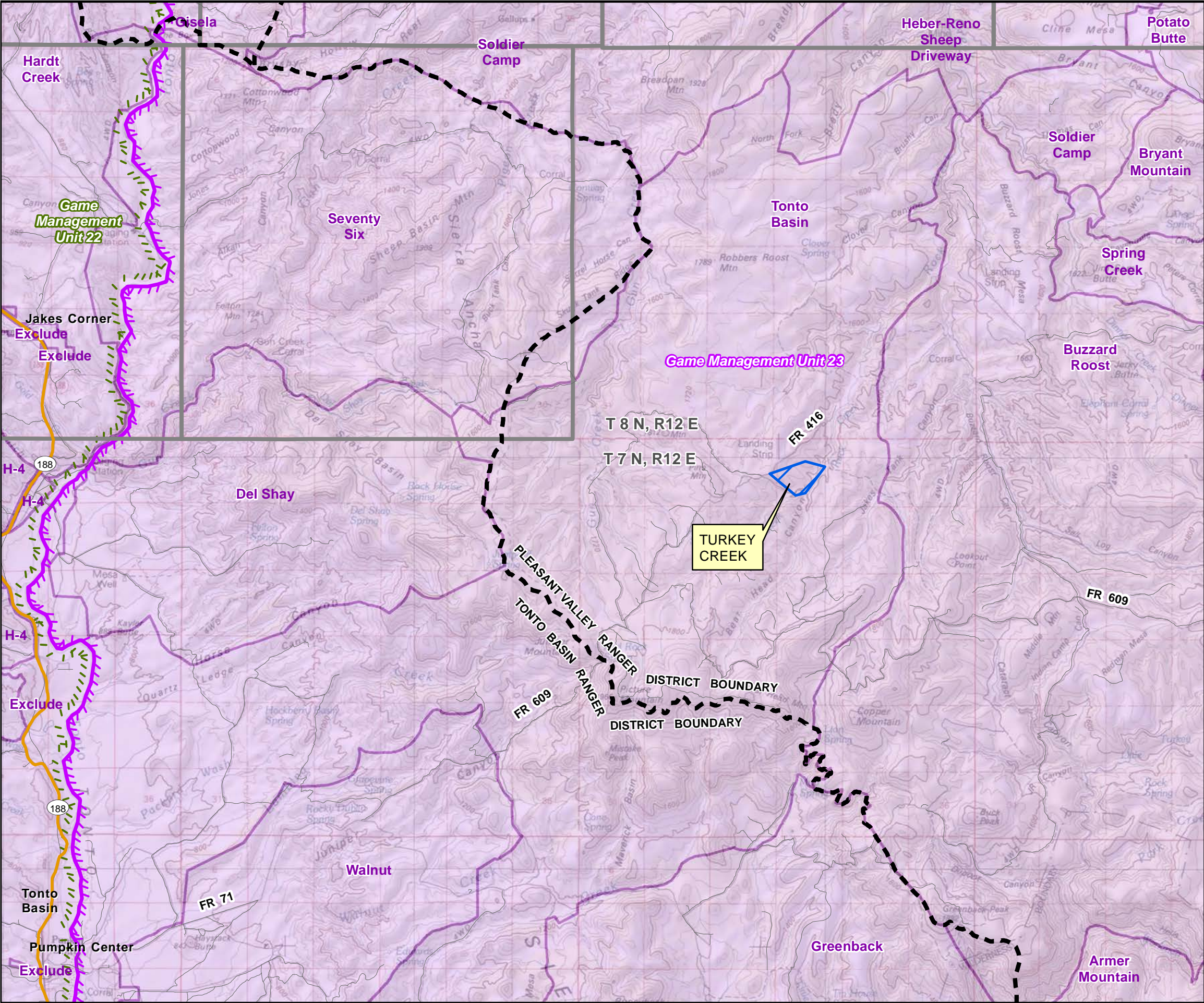
Arizona Soils Data (ALRIS 1975)

- Description
-  MH2- Lithic Haplustolls-Lithic Argiustolls-Rock Outcrop Association: Shallow, gravelly and cobbly, moderately coarse to moderately fine-textured, gently sloping to very steep soils and rock outcrop on hills and mountains.
 -  MH4- Roundtop-Tortugas-Jacks Association: Shallow to moderately deep, gravelly and cobbly, medium and fine-textured, undulating to very steep soils on hills and mountains.
 -  TS4- White House-Bernardino-Hathaway Association: Deep, fine-textured and gravelly, moderately coarse to moderately fine-textured, nearly level to moderately steep soils on alluvial fan surfaces and steep side slopes.
 -  TS6- Lithic Torriorthents-Lithic Haplustolls-Rock Outcrop Association: Shallow, cobbly and gravelly, strongly sloping to very steep soils and rock outcrop on hills and mountains.










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Land Exchange Proposal

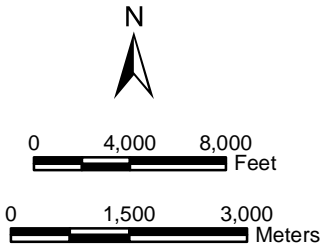
SOILS MAP
TURKEY CREEK PARCEL
Figure 3.5-4



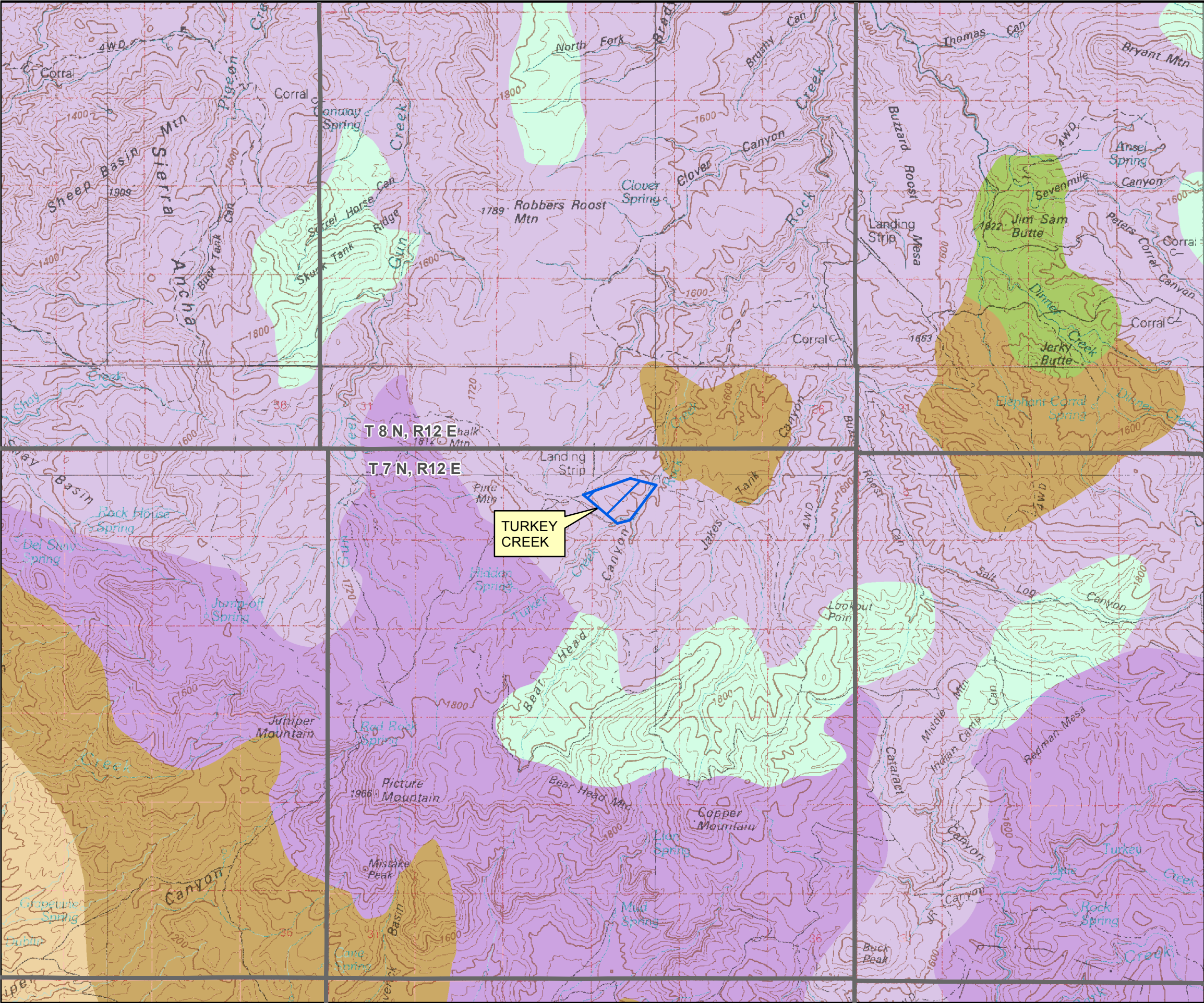
Turkey Creek:
147 Acres of Resolution Copper Property offered to the USFS,
T7N, R12E, Portion of Sections 3 & 4,
Gila County, Arizona.
Image Sources: ESRI Online USA Topo Maps
Data Sources: TNF Roads; USDA Forest Service, Tonto National Forest:
Grazing Allotments, Content Date: 2010
AZG&FD-Game Management Units Acquired 6-26-2013
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

-  Offered Lands
-  Tonto National Forest Ranger District Boundary
-  Major Roads
-  Tonto National Forest Roads 09-12-2013
- Arizona Game & Fish Department
- Game Management Unit
 -  22
 -  23
-  USDA Forest Service Grazing Allotments Rangeland Tonto National Forest



RESOLUTION COPPER
Land Exchange Proposal
RECREATION & GRAZING
TURKEY CREEK PARCEL
Figure 3.5-5



Turkey Creek:
147 Acres of Resolution Copper Property offered to the USFS,
T7N, R12E, Portion of Sections 3 & 4,
Gila County, Arizona.
Image Source: Payson & Theodore Roosevelt Lake
1:100,000 USGS Quadrangles
Data Sources: Biotic Communities of the Southwest,
Brown & Lowe, August 1980.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

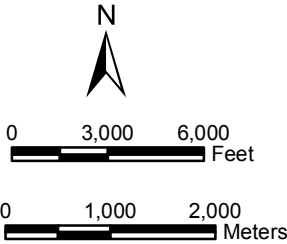


Offered Lands

Biotic Communities

DESCRIPTION

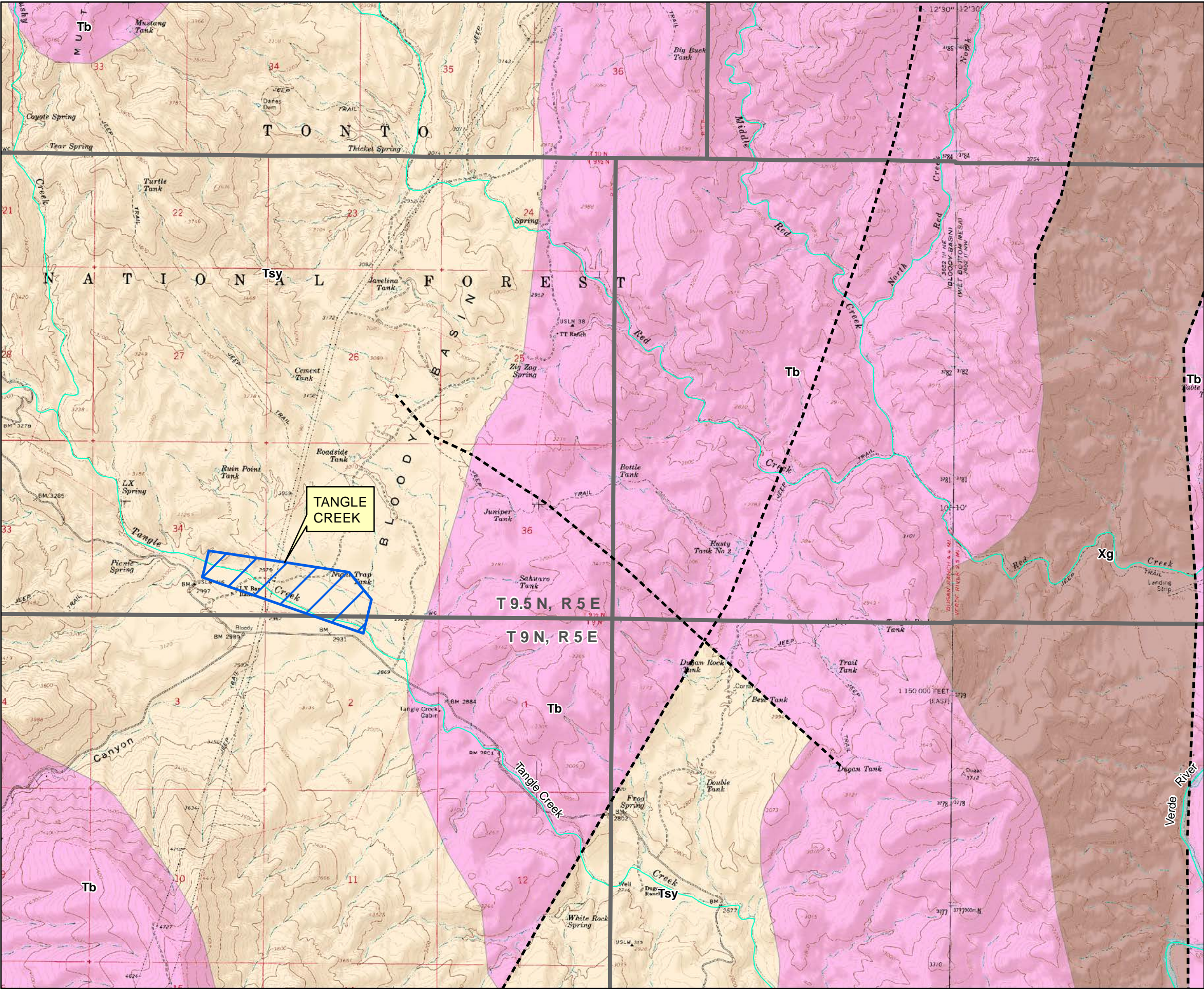
- AZ UPLAND SUBDIVISION - SONORAN DESERTSCRUB
- GREAT BASIN CONIFER WOODLAND
- INTERIOR CHAPPARAL
- MADREAN EVERGREEN WOODLAND
- PETTRAN MONTANE CONIFER FOREST
- SEMIDESERT GRASSLAND



RESOLUTION COPPER Land Exchange Proposal

BIOTIC COMMUNITIES
TURKEY CREEK PARCEL

Figure 3.5-6







Tangle Creek:
148 Acres of Resolution Copper Property offered to the USFS,
T9.5N, R5E, Portion of Sections 34 and 35,
T9N, R5E, Portion of Section 2,
Yavapai County, Arizona.
Image Source: Bloody Basin & Wet Bottom Mesa
1:24,000 USGS Quadrangles
(40 Foot Contour Interval (C.I.) and 20 Foot Supplemental C.I.)
and ERSI World Terrain Base
Data Source: Arizona Geological Survey 2011.
http://www.azgs.az.gov/services_azgeomap.shtml
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

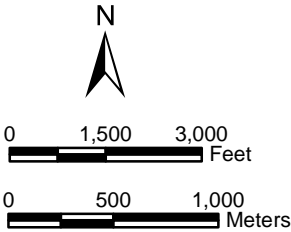
Legend

 Offered Lands

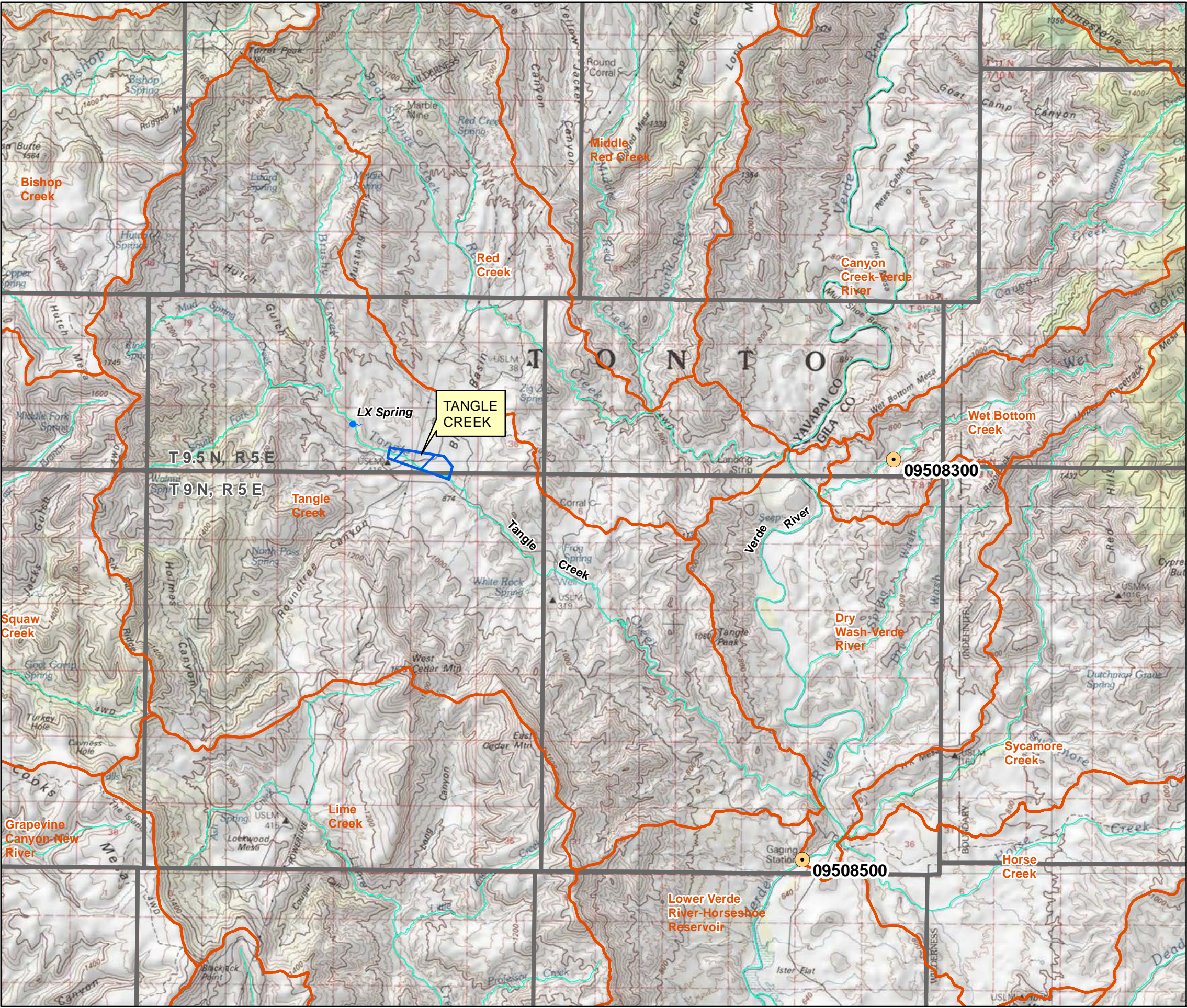
Arizona Geological Survey, 2011

Description

-  Tb - Late to Middle Miocene Basaltic Rocks (8-16 Ma)
-  Tsy - Pliocene to Middle Miocene Deposits (2-16 Ma)
-  Xg - Early Proterozoic Granitic Rocks (1600-1800 Ma)
-  AZ Faults







RESOLUTION COPPER
Land Exchange Proposal
GEOLOGIC MAP
TANGLE CREEK PARCEL
Figure 3.5-7

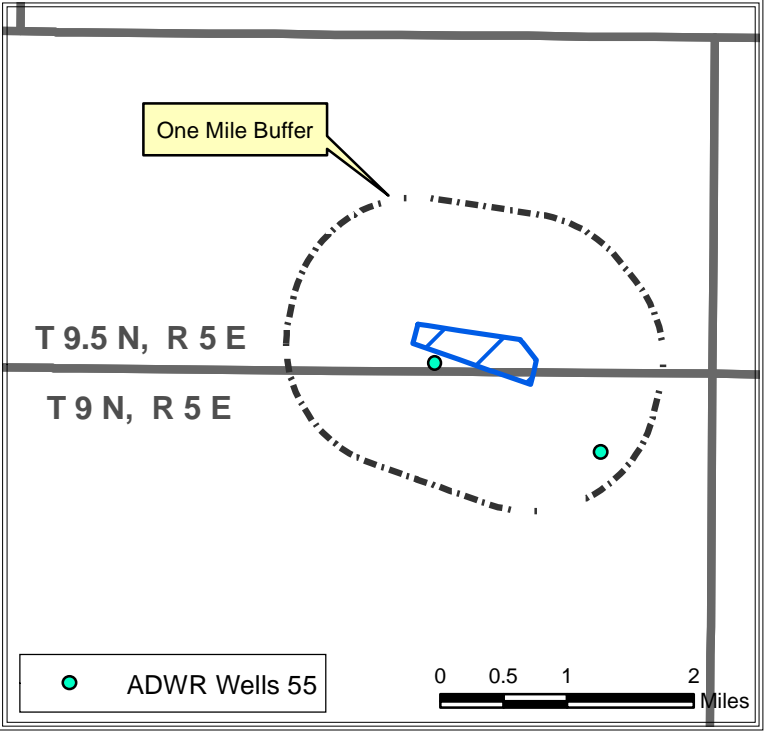


Tangle Creek:
148 Acres of Resolution Copper Property offered to the USFS,
T9.5N, R5E, Portion of Sections 34 and 35,
T9N, R5E, Portion of Section 2,
Yavapai County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ADWR, USGS, NHDH HUC 12
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors

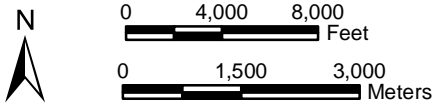
Legend

-  Offered Lands
-  Springs
-  USGS Gage Sept 30, 2011
-  HUC 12 Watershed

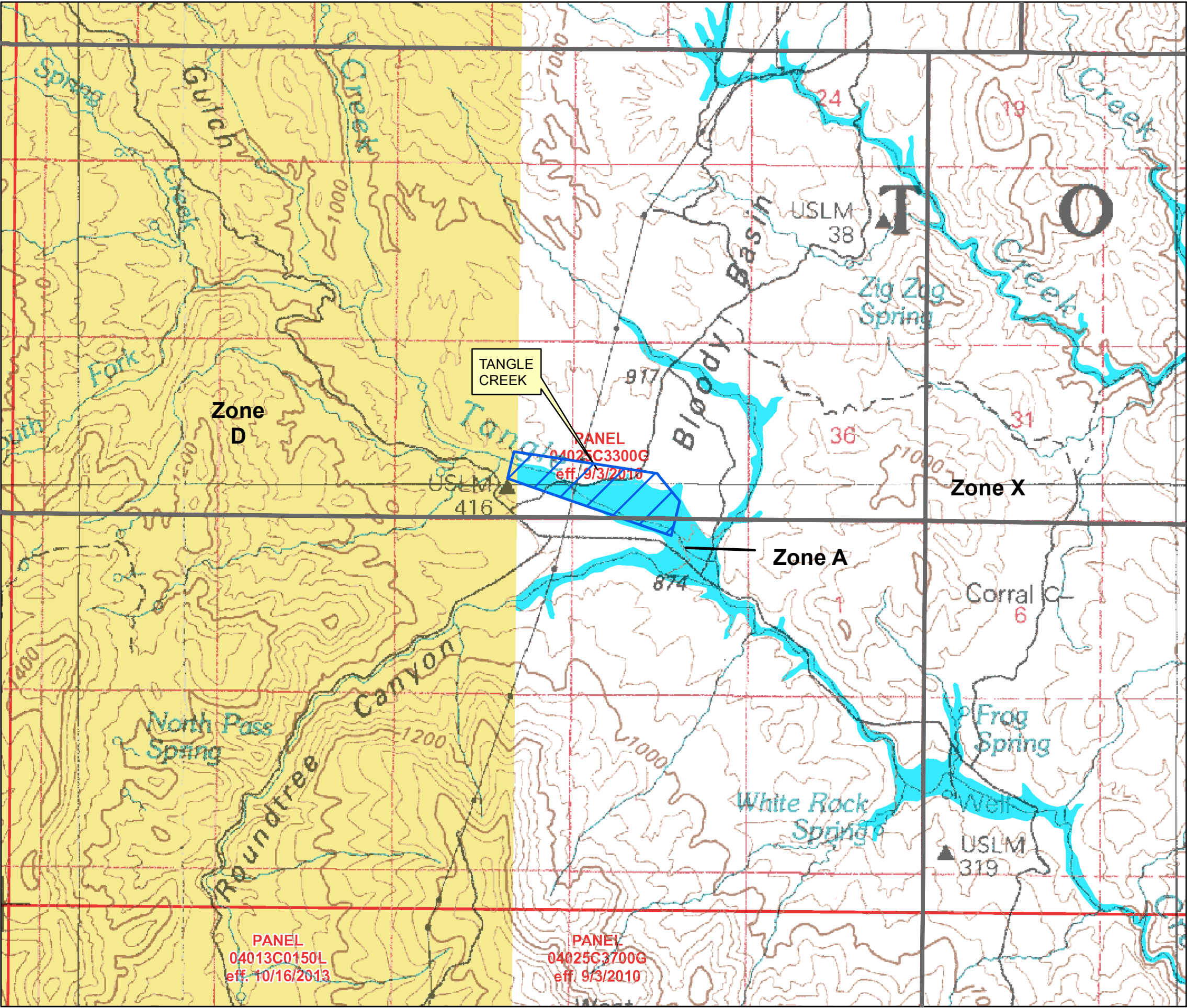
ADWR Well Locations
Within a One Mile Buffer of Parcel



The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -<http://www.azwater.gov/azdwr/gis/>



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Land Exchange Proposal
SURFACE WATER RESOURCES AND WELLS
TANGLE CREEK PARCEL
Figure 3.5-8






Tangle Creek:
148 Acres of Resolution Copper Property offered to the USFS,
T9.5N, R5E, Portion of Sections 34 and 35,
T9N, R5E, Portion of Section 2,
Yavapai County, Arizona.
Image Source: Payson 1:100,000 USGS Quadrangle
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

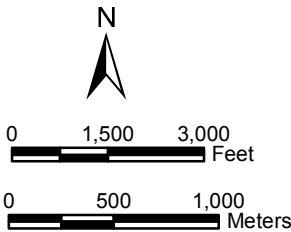
Legend

 Offered Lands

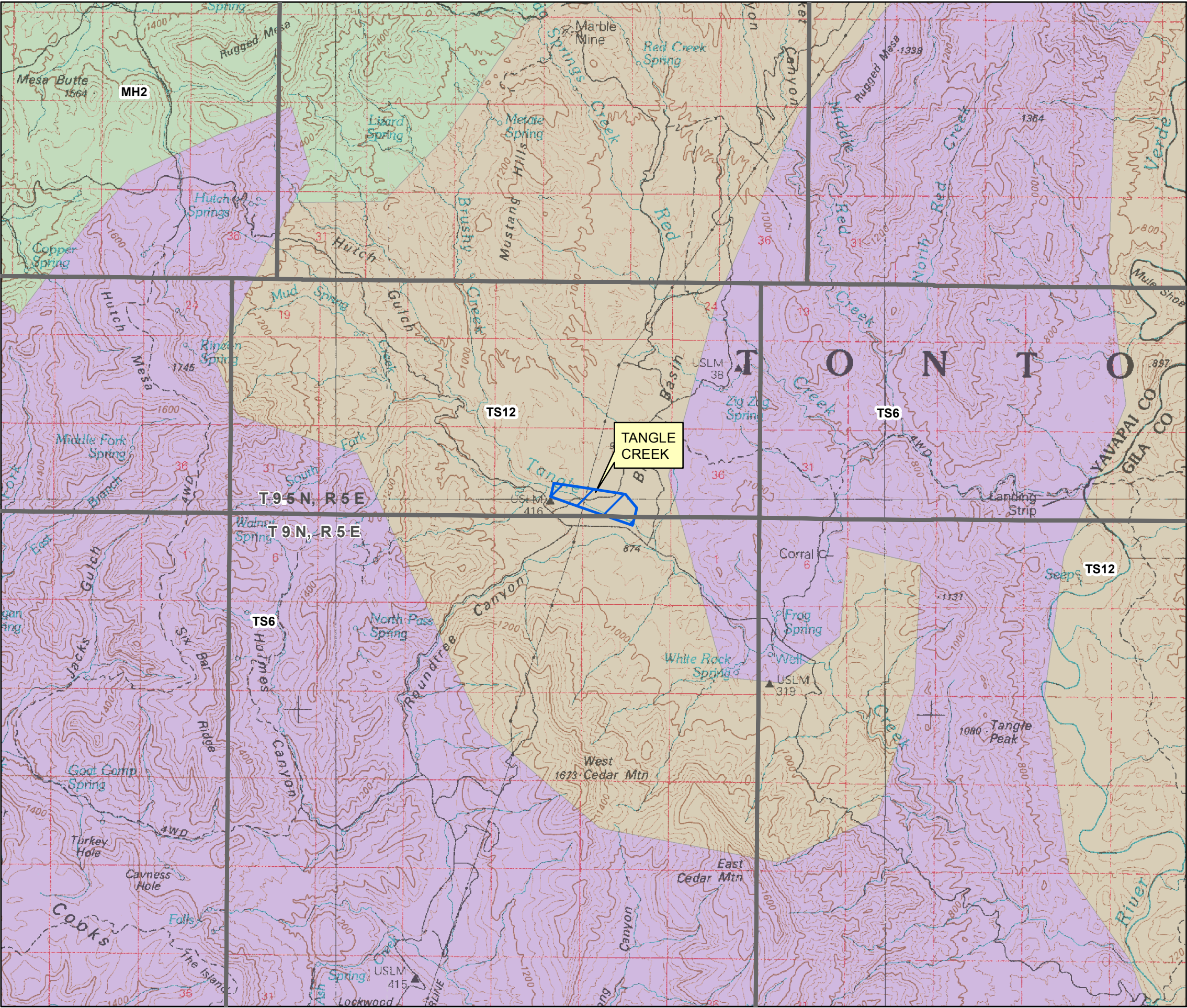
Flood Hazard Zones

-  1% Annual Chance Flood Hazard (Zone A)
-  Area of Undetermined Flood Hazard (Zone D)
-  Zone X - Area of Minimal Flood Hazard

<https://hazards.fema.gov/gis/nfhl/services>



RESOLUTION COPPER
Land Exchange Proposal
FEMA FLOOD MAPS
TANGLE CREEK PARCEL
Figure 3.5-9


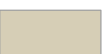



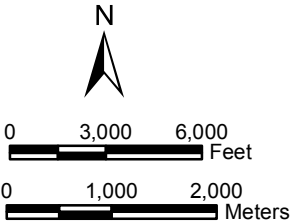
Tangle Creek:
148 Acres of Resolution Copper Property offered to the USFS,
T9.5N, R5E, Portion of Sections 34 and 35,
T9N, R5E, Portion of Section 2,
Yavapai County, Arizona.
Image Source: Payson 1:100,000 USGS Quadrangle
Data Source: ALRIS 'General Soil Map - 1975', by U.S.
Dept. of Agriculture - Soil Conservation Service and Univ. of Arizona
Experimental Station. Digitized at 1:1,000,000 scale.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

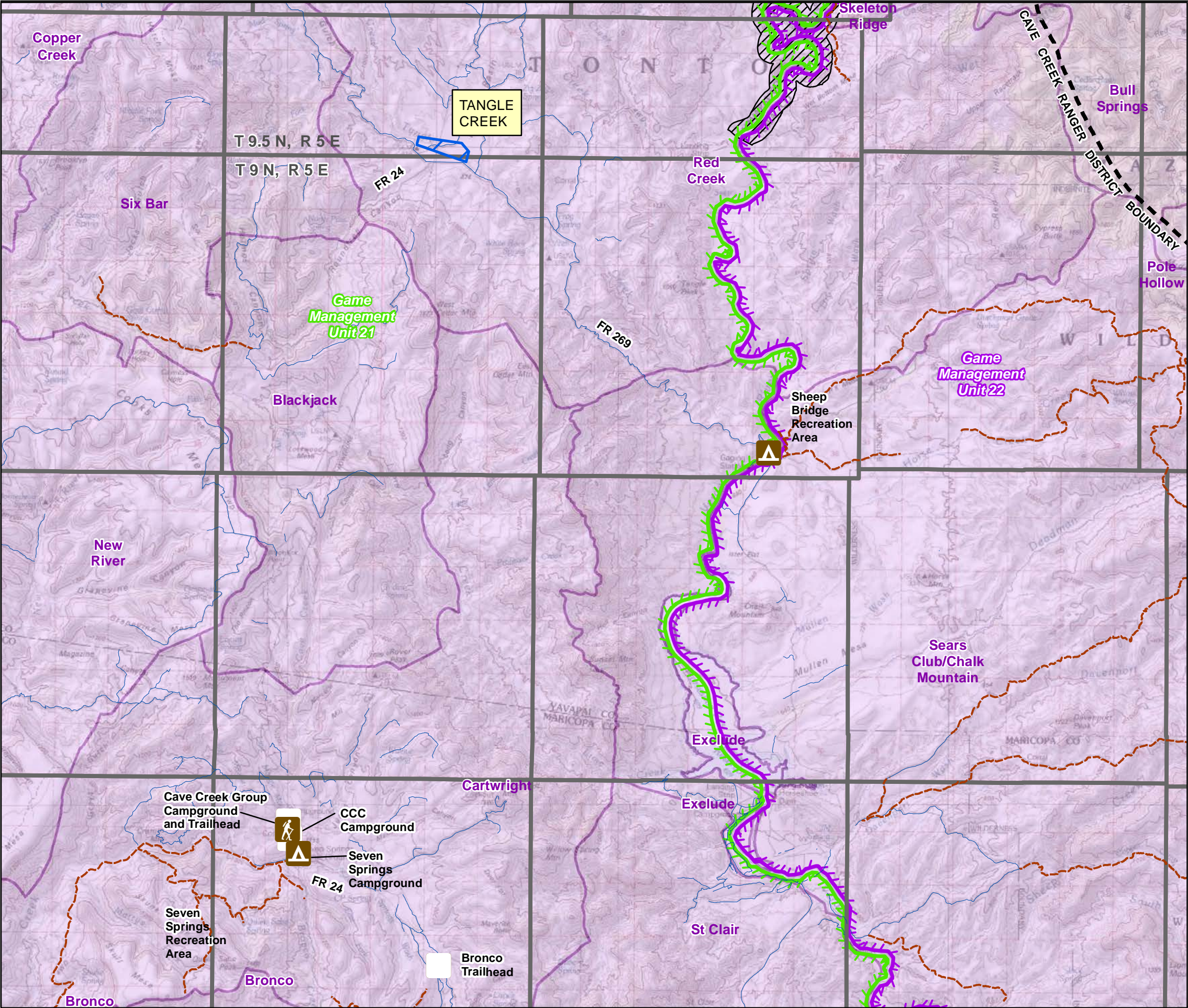
Legend

 Offered Lands

Arizona Soils Data (ALRIS 1975)

Description	
MH2- Lithic Haplustolls-Lithic Argiustolls-Rock Outcrop Association: Shallow, gravelly and cobbly, moderately coarse to moderately fine-textured, gently sloping to very steep soils and rock outcrop on hills and mountains.	
TS12- Continental-Latene-Pinaleno Association: Deep, gravelly, medium to fine-textured, nearly level to steep soils on dissected alluvial fan surfaces.	
TS6- Lithic Torriorthents-Lithic Haplustolls-Rock Outcrop Association: Shallow, cobbly and gravelly, strongly sloping to very steep soils and rock outcrop on hills and mountains.	

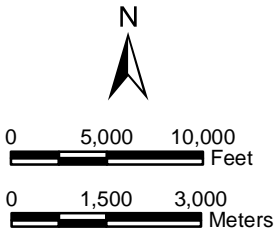




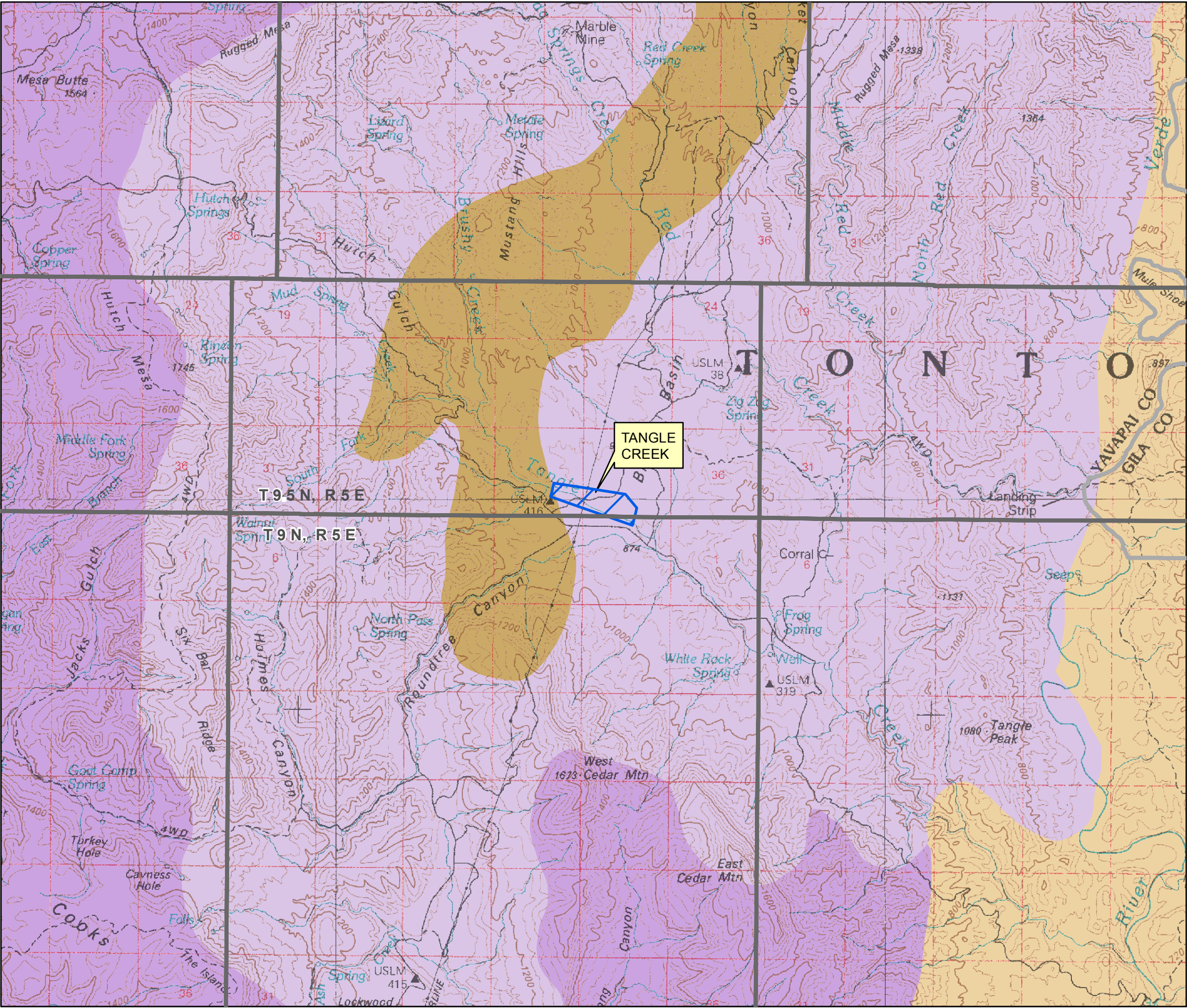
Tangle Creek:
148 Acres of Resolution Copper Property offered to the USFS,
T9.5N, R5E, Portion of Sections 34 and 35,
T9N, R5E, Portion of Section 2,
Yavapai County, Arizona.
Image Sources: ESRI Online USA Topo Maps
Data Sources: USDA Forest Service, Tonto National Forest:
Grazing Allotments, Content Date: 2010
AZG&FD-Game Management Units Acquired 6-26-2013
Tonto National Forest Recreation Sites and Roads
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

- Offered Lands
- TNF Ranger District Boundary
- TNF Verde Wild River Area
- Tonto National Forest Roads 09-12-2013
- Tonto National Forest Trails
- TNF Recreation Site
 - campground
 - trailhead
- Arizona Game & Fish Department
- Game Management Unit
 - 21
 - 22
- USDA Forest Service Grazing Allotments Rangeland Tonto National Forest



RESOLUTION COPPER
Land Exchange Proposal
RECREATION & GRAZING
TANGLE CREEK PARCEL
Figure 3.5-11







Tangle Creek:
148 Acres of Resolution Copper Property offered to the USFS,
T9.5N, R5E, Portion of Sections 34 and 35,
T9N, R5E, Portion of Section 2,
Yavapai County, Arizona.
Image Source: Payson 1:100,000 USGS Quadrangle
Data Sources: Biotic Communities of the Southwest,
Brown & Lowe, August 1980.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

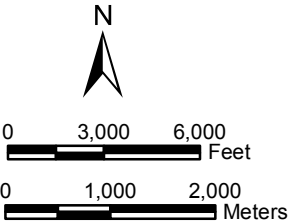
Legend

 Offered Lands

Biotic Communities

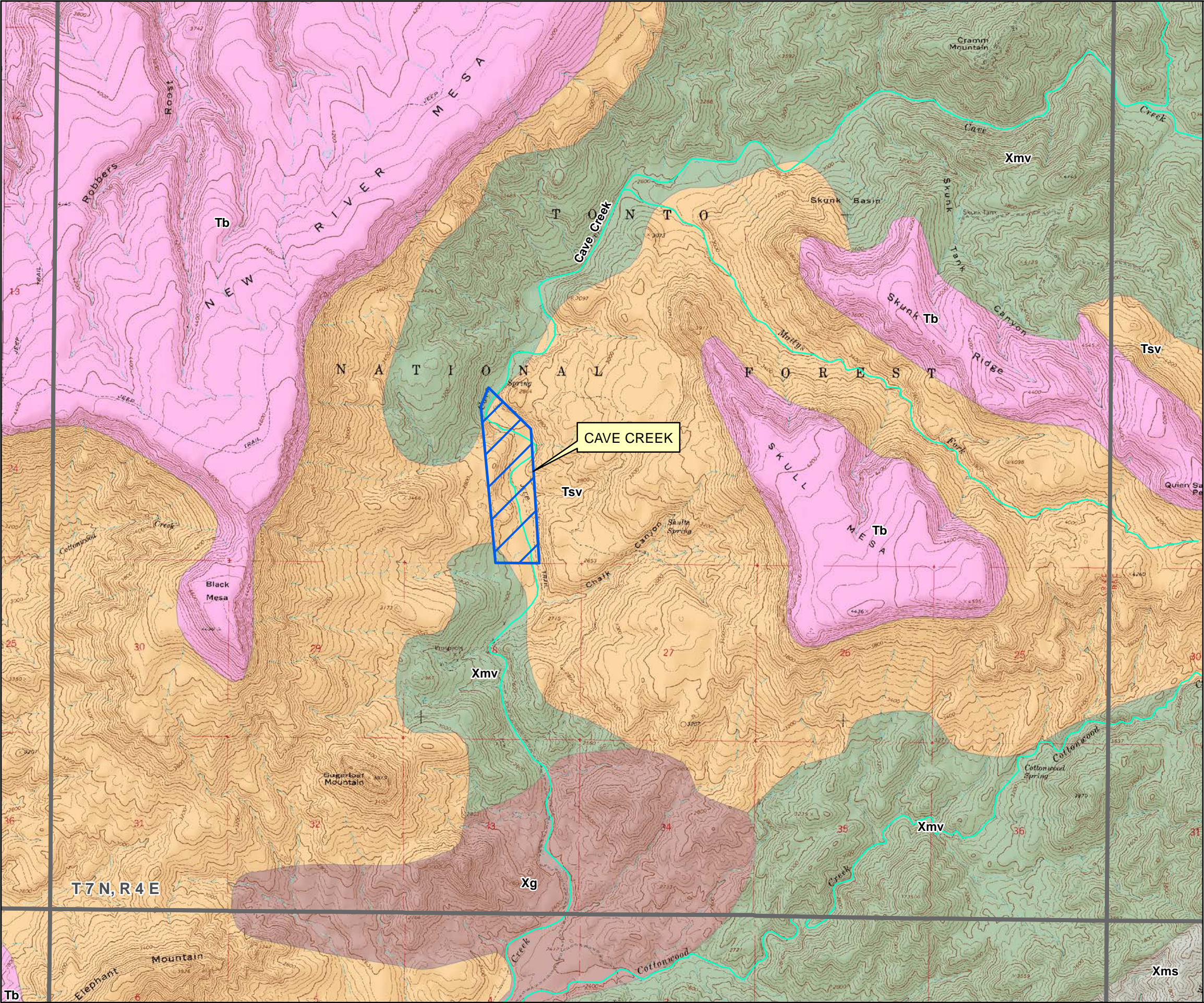
DESCRIPTION

-  AZ UPLAND SUBDIVISION - SONORAN DESERT SCRUB
-  GREAT BASIN CONIFER WOODLAND
-  INTERIOR CHAPPARAL
-  SEMIDESERT GRASSLAND



RESOLUTION COPPER
Land Exchange Proposal

BIOTIC COMMUNITIES
TANGLE CREEK PARCEL
Figure 3.5-12







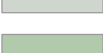
Cave Creek:
149 Acres of Resolution Copper Property offered to the USFS,
T7N, R4E, Portion of Section 21,
Maricopa County, Arizona.
Image Source: New River Mesa 1:24,000 USGS Quadrangle,
(40 Foot Contour Interval (C.I.) with 20 Foot Supplemental C.I.)
and ERSI World Terrain Base
Data Source: Arizona Geological Survey 2011.
http://www.azgs.az.gov/services_azgeomap.shtml
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

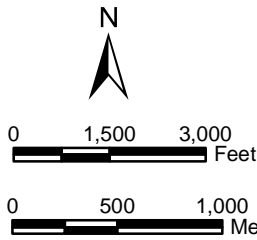
 Offered Lands

Arizona Geological Survey, 2011

Description

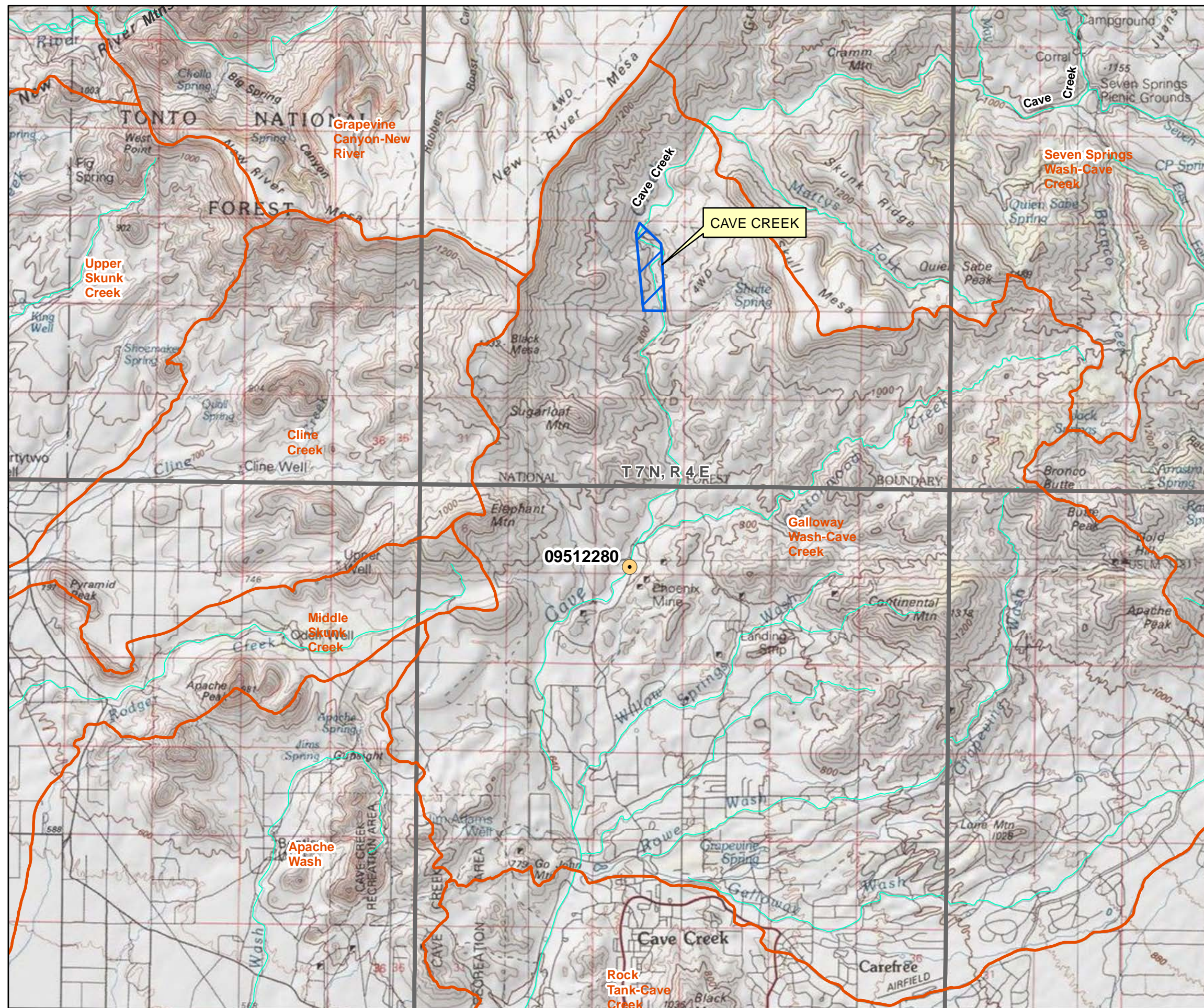
-  Tb - Late to Middle Miocene Basaltic Rocks (8-16 Ma)
-  Tsv - Middle Miocene to Oligocene Volcanic And Sedimentary Rocks, Undivided (11-32 Ma)
-  Xg - Early Proterozoic Granitic Rocks (1600-1800 Ma)
-  Xms - Early Proterozoic Metasedimentary Rocks (1600-1800 Ma)
-  Xmv - Early Proterozoic Metavolcanic Rocks (1650-1800 Ma)

----- AZ Faults






RESOLUTION COPPER Land Exchange Proposal

GEOLOGIC MAP
CAVE CREEK PARCEL
Figure 3.5-13

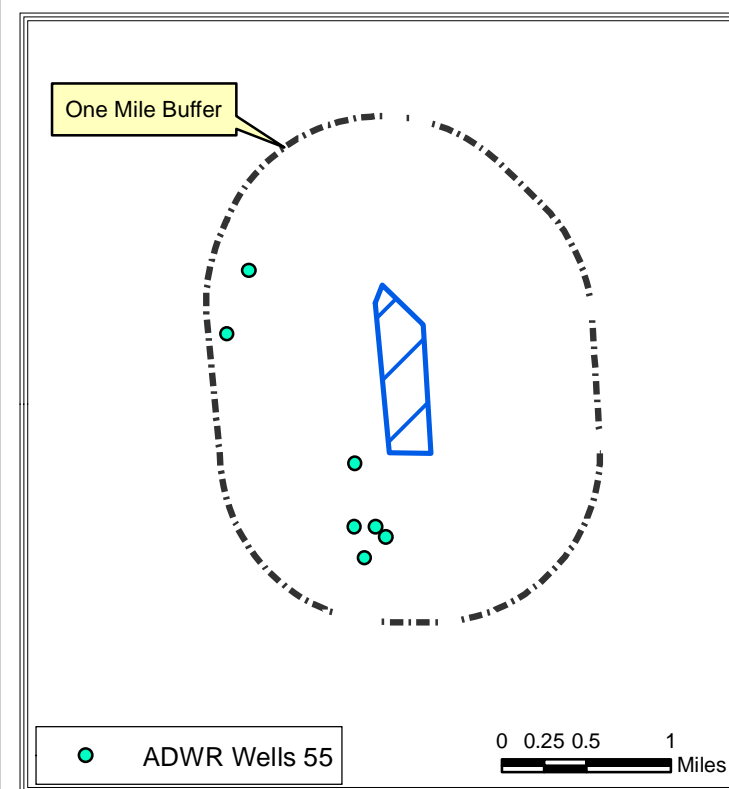


Cave Creek:
149 Acres of Resolution Copper Property offered to the USFS,
T7N, R4E, Portion of Section 21,
Maricopa County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ADWR, USGS, NHDH HUC 12
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

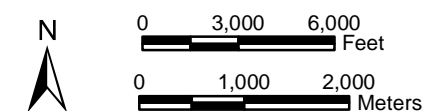
Legend

-  Offered Lands
 USGS Gage Sept 30, 2011
 HUC 12 Watershed

ADWR Well Locations
Within a One Mile Buffer of Parcel

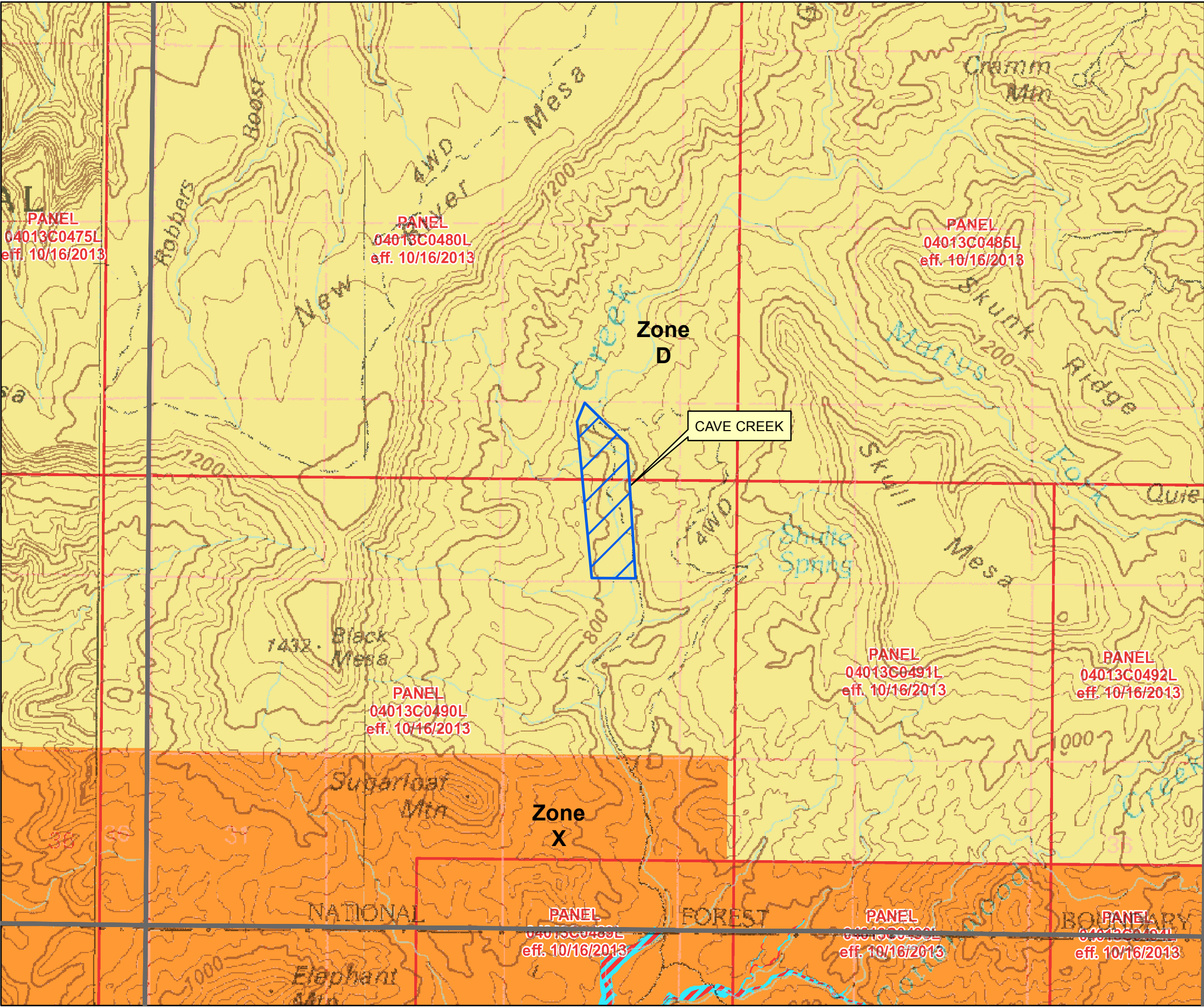


The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -[Http://www.azwater.gov/azdwr/gis/](http://www.azwater.gov/azdwr/gis/)



RESOLUTION COPPER
Land Exchange Proposal

SURFACE WATER RESOURCES AND WELLS
CAVE CREEK PARCEL
Figure 3.5-14






Cave Creek:
149 Acres of Resolution Copper Property offered to the USFS,
T7N, R4E, Portion of Section 21,
Maricopa County, Arizona.
Image Source: Phoenix North & Theodore Roosevelt Lake
1:100,000 USGS Quadrangles
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

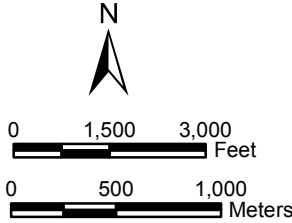
Legend

 Offered Lands

Flood Hazard Zones

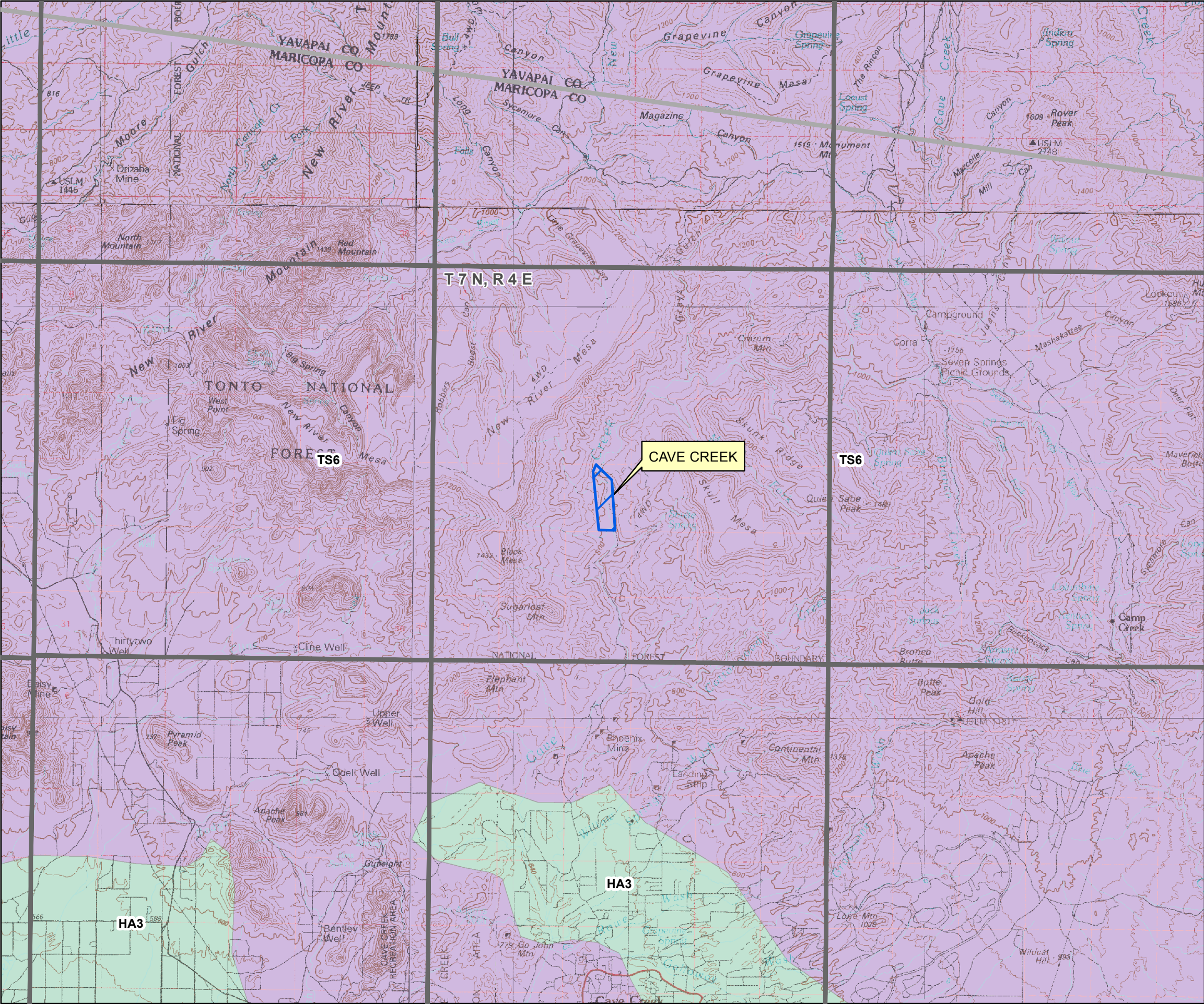
-  Regulatory Floodway (Zone AE)
-  Area of Undetermined Flood Hazard (Zone D)
-  0.2% Annual Chance Flood Hazard (Zone X)

<https://hazards.fema.gov/gis/nfhl/services>



**RESOLUTION COPPER
Land Exchange Proposal**

FEMA FLOOD MAPS
CAVE CREEK PARCEL
Figure 3.5-15





Cave Creek:
149 Acres of Resolution Copper Property offered to the USFS,
T7N, R4E, Portion of Section 21,
Maricopa County, Arizona.
Image Source: Bradshaw Mtns, Payson, Phoenix North &
Theodore Roosevelt Lake 1:100,000 USGS Quadrangles
Data Source: ALRIS 'General Soil Map - 1975', by U.S.
Dept. of Agriculture - Soil Conservation Service and Univ. of Arizona
Experimental Station. Digitized at 1:1,000,000 scale.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

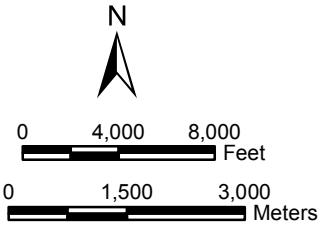
Legend

 Offered Lands

Arizona Soils Data (ALRIS 1975)

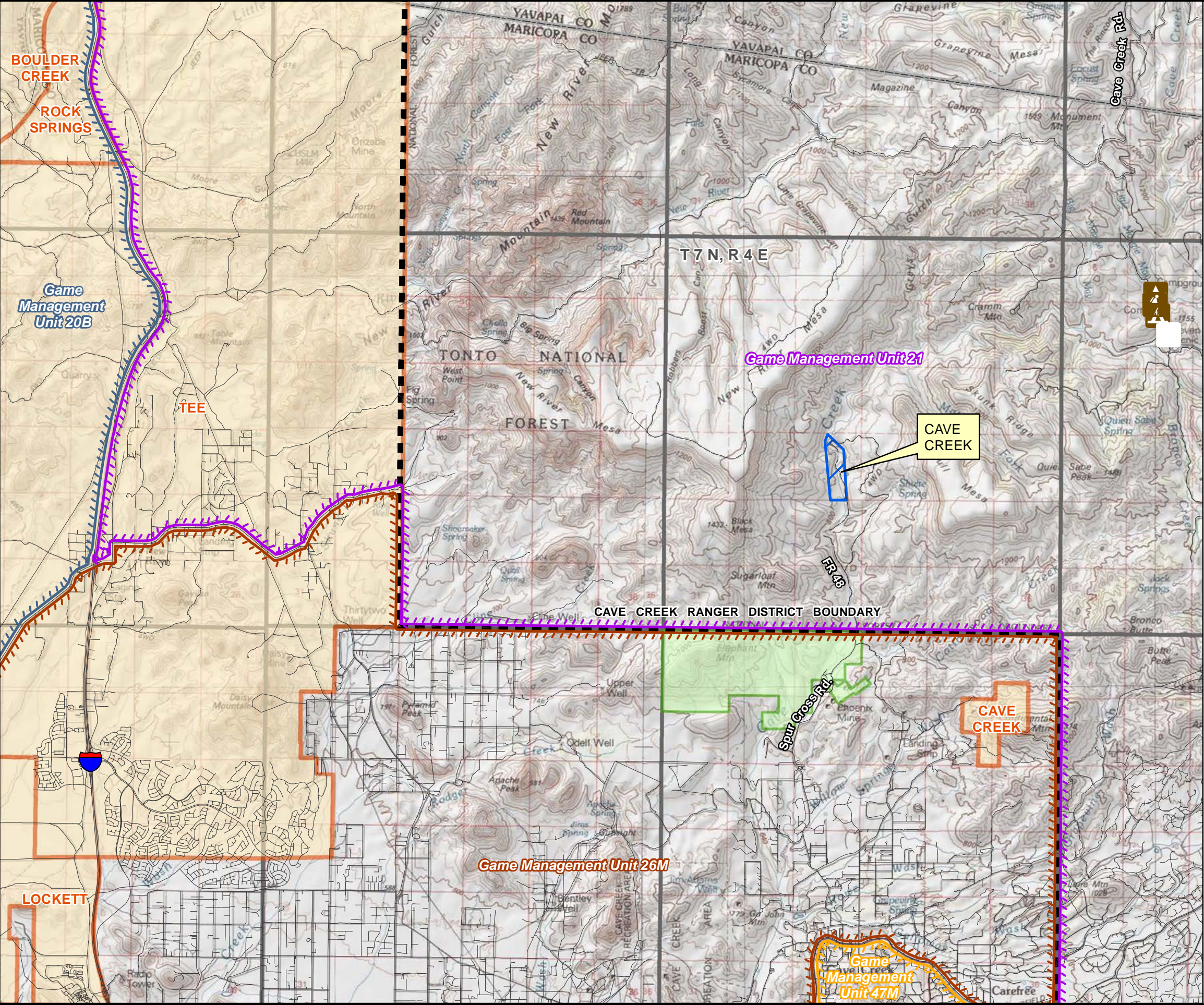
Description

-  HA3- Mohall-Vecont-Pinamt Association: Deep, moderately fine and fine-textured and gravelly, moderately fine-textured, nearly level to gently sloping soils on valley plains.
-  TS6- Lithic Torriorthents-Lithic Haplustolls-Rock Outcrop Association: Shallow, cobbly and gravelly, strongly sloping to very steep soils and rock outcrop on hills and mountains.









RESOLUTION COPPER
Land Exchange Proposal

SOILS MAP
CAVE CREEK PARCEL
Figure 3.5-16








Cave Creek:
149 Acres of Resolution Copper Property offered to the USFS,
T7N, R4E, Portion of Section 21,
Maricopa County, Arizona.
Image Sources: ESRI Online USA Topo Maps
Data Sources: ESRI Street Map Data; ALRIS Street Data;
Arizona BLM Grazing Allotments 5-14-2011;
AZG&FD-Game Management Units Acquired 6-26-2013;
Tonto National Forest Recreation Sites;
Maricopa County Parks and Recreation, Spur Cross Ranch
Conservation Area, Acquired 5-29-2015
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

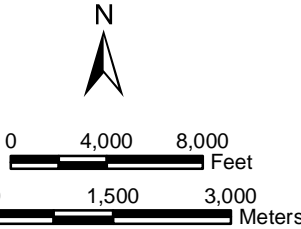
Legend

-  Offered Lands
-  Tonto National Forest Ranger District Boundary
-  Spur Cross Ranch Conservation Area
-  ALRIS Street Data Acquired 2-7-2012
-  campground
-  trailhead

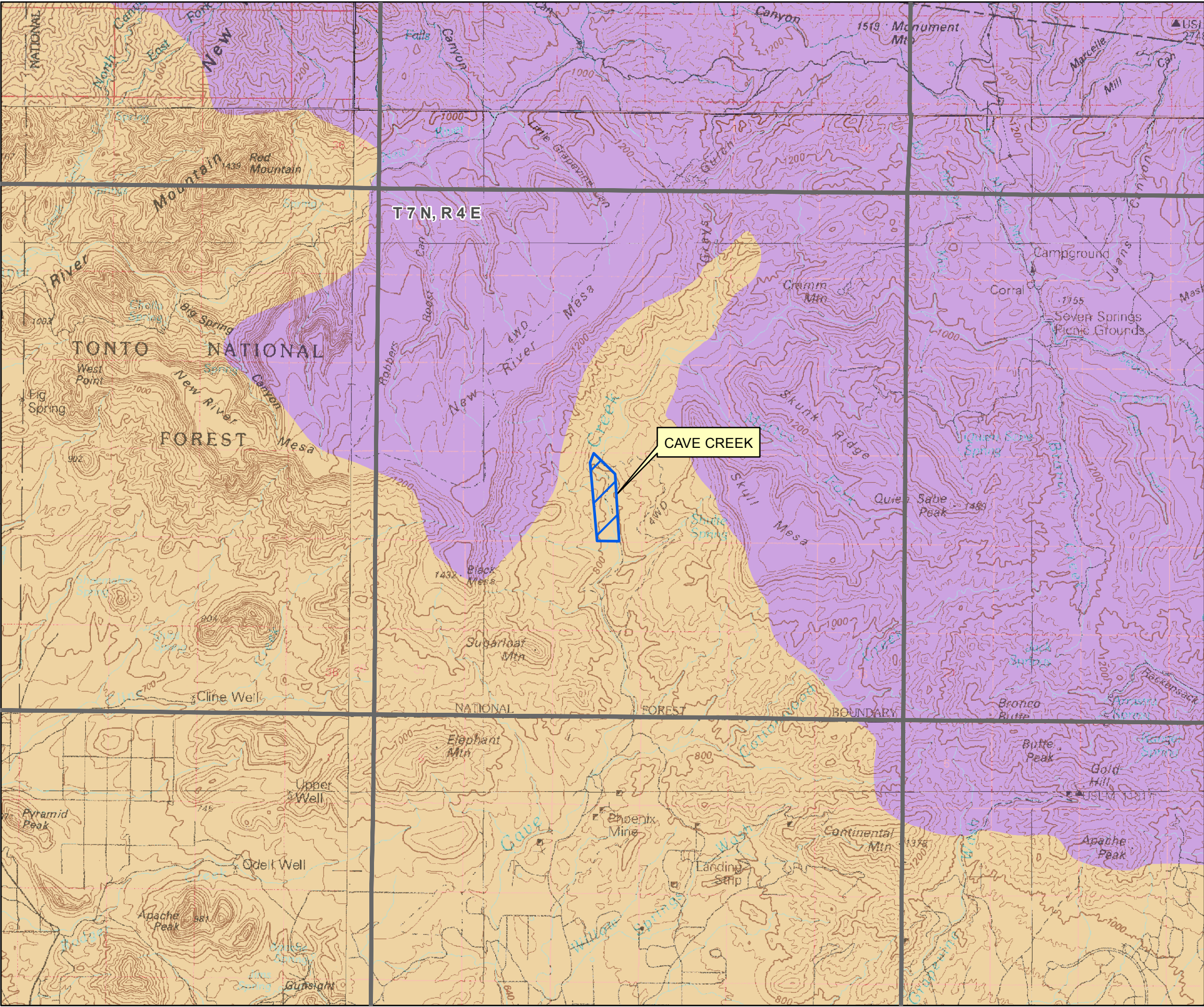
Arizona Game & Fish Department

Game Management Unit

-  20B
-  21
-  26M
-  47M
-  Bureau of Land Management Grazing Allotments



RESOLUTION COPPER
Land Exchange Proposal
RECREATION & GRAZING
CAVE CREEK PARCEL
Figure 3.5-17



Cave Creek:
149 Acres of Resolution Copper Property offered to the USFS,
T7N, R4E, Portion of Section 21,
Maricopa County, Arizona.
Image Source: Bradshaw Mtns, Payson, Phoenix North &
Theodore Roosevelt Lake 1:100,000 USGS Quadrangles
Data Sources: Biotic Communities of the Southwest,
Brown & Lowe, August 1980.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

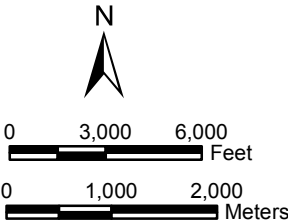
 Offered Lands

Biotic Communities

DESCRIPTION

 AZ UPLAND SUBDIVISION - SONORAN DESERTSCRUB

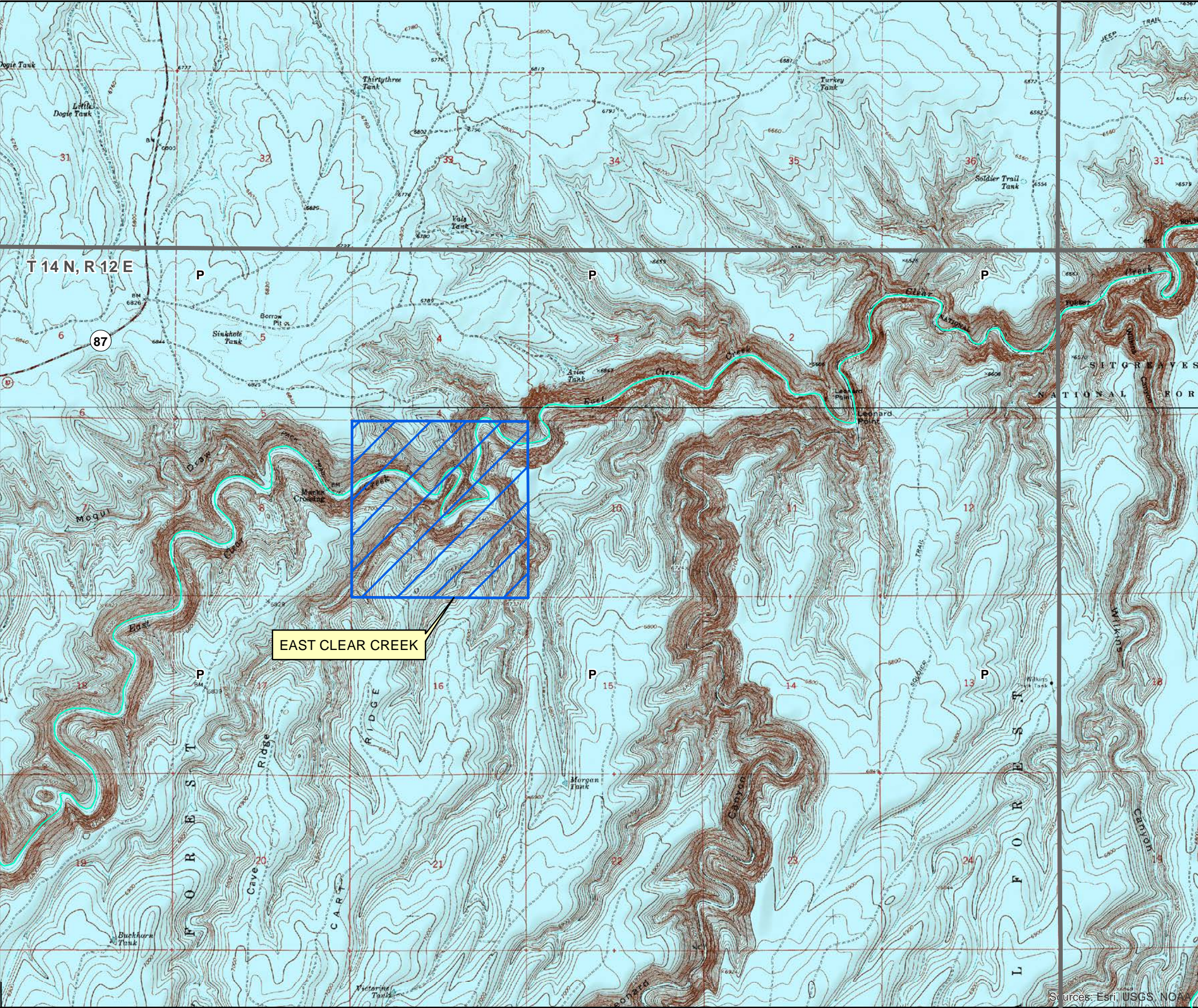
 INTERIOR CHAPPARAL



RESOLUTION COPPER
Land Exchange Proposal

BIOTIC COMMUNITIES
CAVE CREEK PARCEL

Figure 3.5-18




East Clear Creek:
640 Acres of Resolution Copper Property offered to the USFS,
T14N, R12E, Section 9,
Coconino County, Arizona.
Image Source: Quayle Hill & Leonard Canyon 1:24,000 USGS Quadrangles
(20 Foot Contour Interval (C.I.) with 10 Foot Supplemental C.I.)
and ERSI World Terrain Base
Data Source: Arizona Geological Survey 2011.
http://www.azgs.az.gov/services_azgeomap.shtml
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

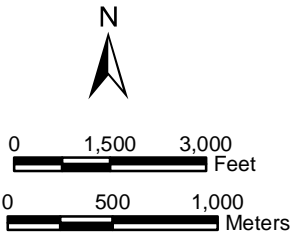
Legend

 Offered Lands

Arizona Geological Survey, 2011

Description

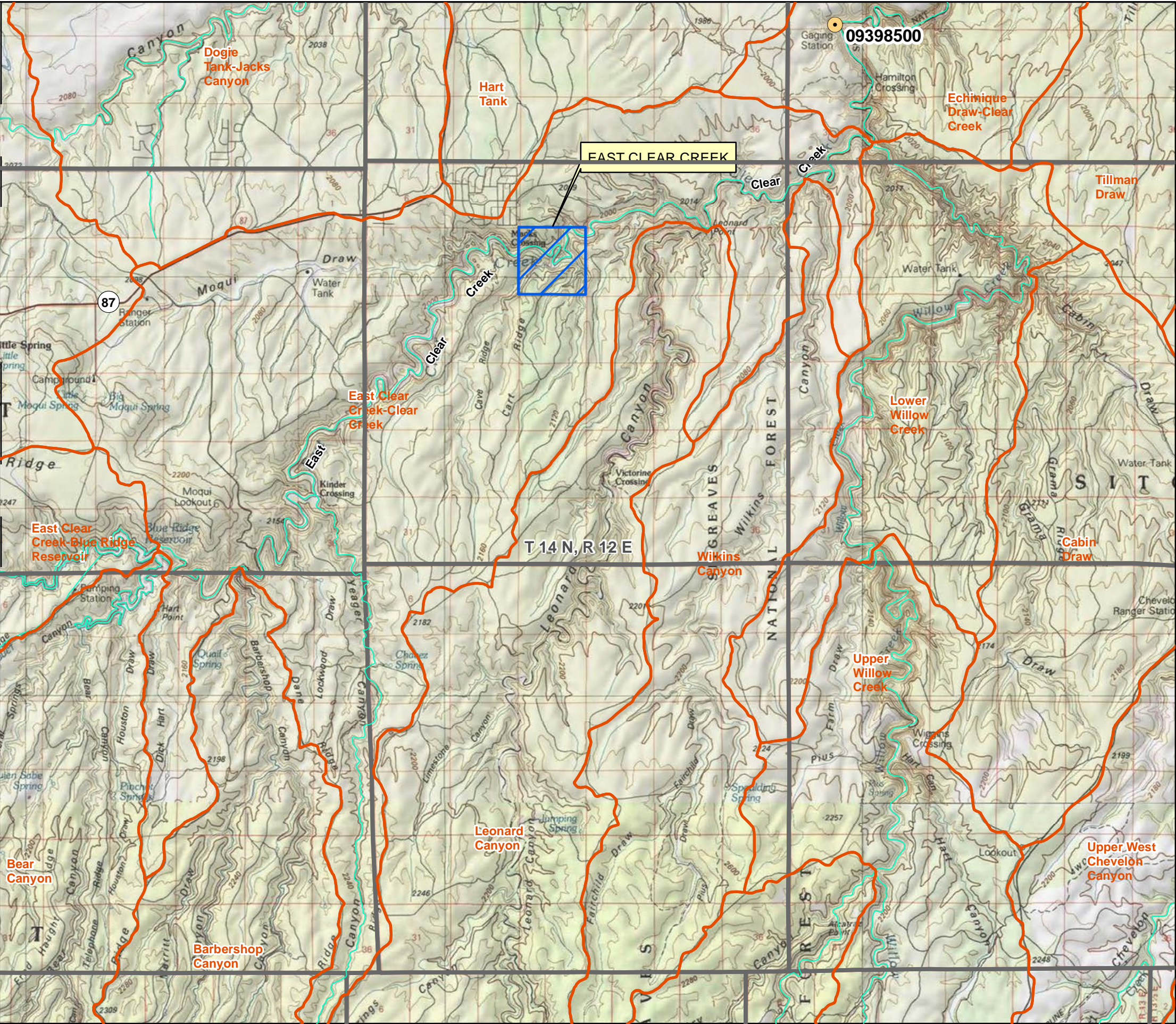
 P - Permian Sedimentary Rocks (270-280 Ma)



RESOLUTION COPPER
Land Exchange Proposal


GEOLOGIC MAP
EAST CLEAR CREEK PARCEL
Figure 3.5-19

Sources: Esri, USGS, NOAA

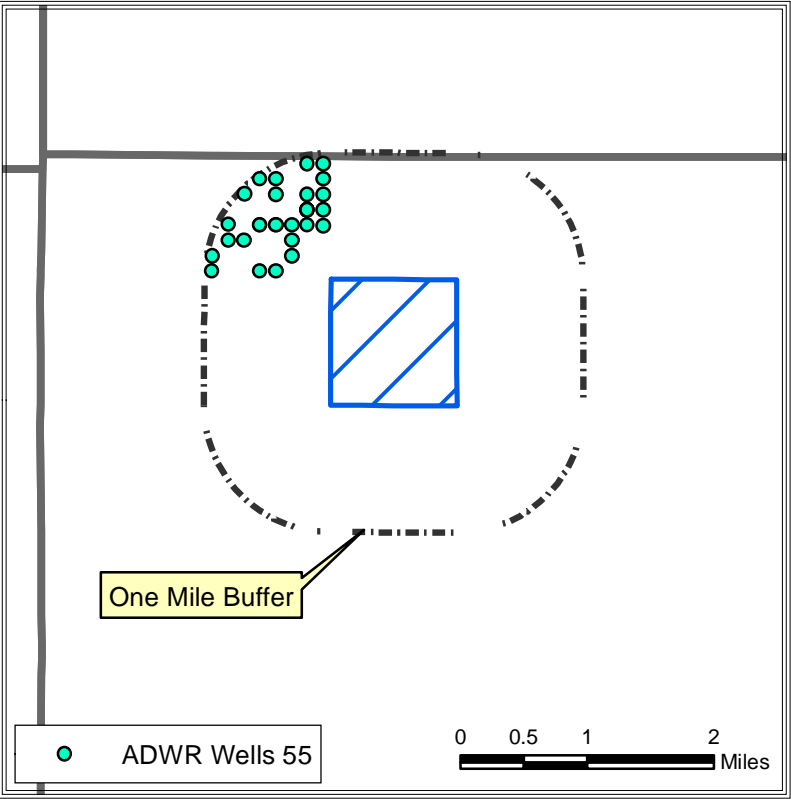


East Clear Creek:
640 Acres of Resolution Copper Property offered to the USFS,
T14N, R12E, Section 9,
Coconino County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ADWR, USGS, NHDH HUC 12
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

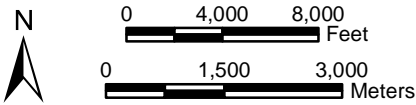
Legend

-  Offered Lands
-  USGS Gage Sept 30, 2011
-  HUC 12 Watershed

ADWR Well Locations
Within a One Mile Buffer of Parcel

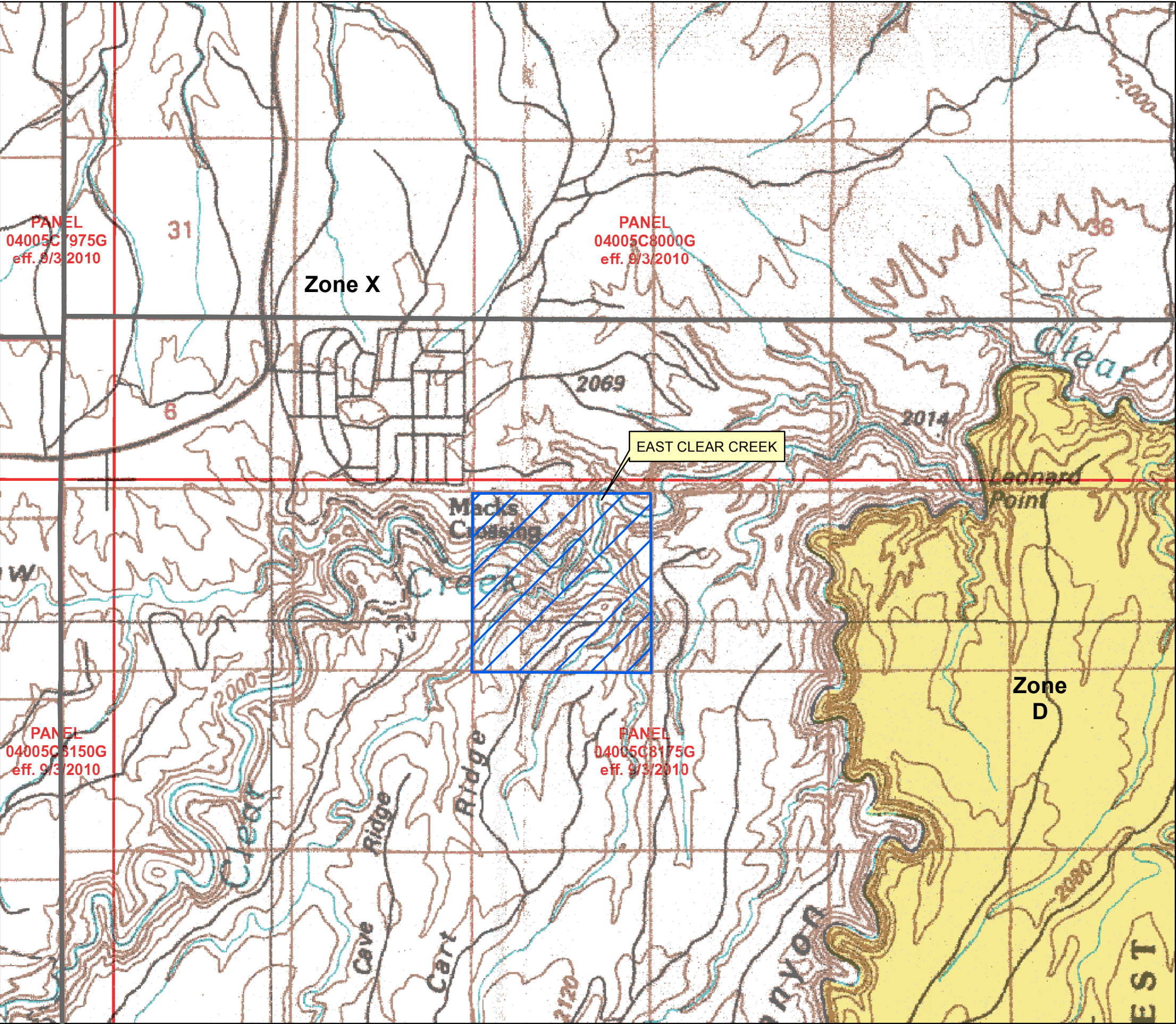


The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -<http://www.azwater.gov/azdwr/gis/>



RESOLUTION COPPER
Land Exchange Proposal

SURFACE WATER RESOURCES AND WELLS
EAST CLEAR CREEK PARCEL
Figure 3.5-20



East Clear Creek:
640 Acres of Resolution Copper Property offered to the USFS,
T14N, R12E, Section 9,
Coconino County, Arizona.
Image Source: Sedona & Holbrook 1:100,000 USGS Quadrangles
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

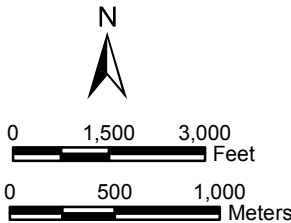
Legend



Flood Hazard Zones

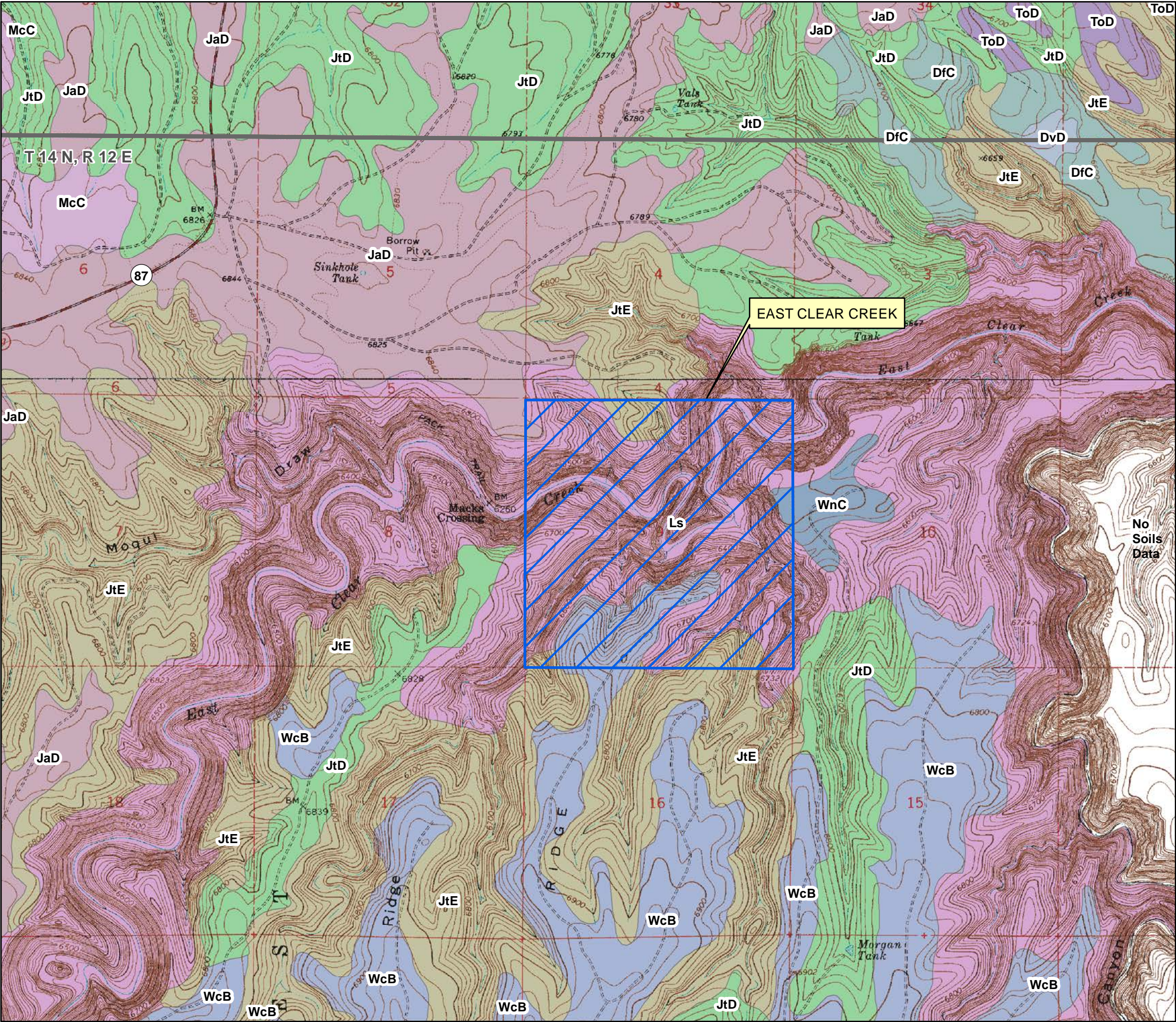
- Area of Undetermined Flood Hazard (Zone D)
- Zone X - Area of Minimal Flood Hazard

<https://hazards.fema.gov/gis/nfhl/services>



RESOLUTION COPPER Land Exchange Proposal

FEMA FLOOD MAPS
EAST CLEAR CREEK PARCEL
Figure 3.5-21



East Clear Creek:
640 Acres of Resolution Copper Property offered to the USFS,
T14N, R12E, Section 9,
Coconino County, Arizona.
Image Source: Quayle Hill & Leonard Canyon 1:24,000 USGS Quadrangles
Data Source: Soil Data Source: U.S. Department of Agriculture, NRSC
Soil Survey Geographic (SSURGO) AZ 643
<http://websoilsurvey.nrcs.usda.gov>
Acquired 5-2015
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend



Offered Lands

USDA, NRSC Soil Data



DfC-Dye fine sandy loam, 0 to 10 percent slopes



DvD-Dye very stony fine sandy loam, 0 to 20 percent slopes



JaD-Jacks fine sandy loam, 0 to 20 percent slopes



JtD-Jacks-Tortugas extremely rocky complex, 0 to 20 percent slopes



JtE-Jacks-Tortugas extremely rocky complex, 20 to 45 percent slopes



Ls-Limestone and sandstone rock land



McC-McVickers very fine sandy loam, 0 to 10 percent slopes



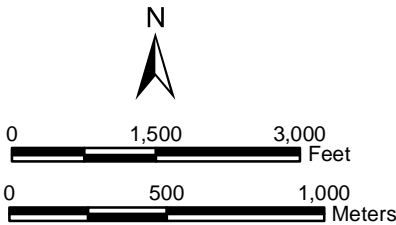
ToD-Tortugas very stony loam, 0 to 30 percent slopes



WcB-Wildcat gravelly fine sandy loam, 0 to 5 percent slopes

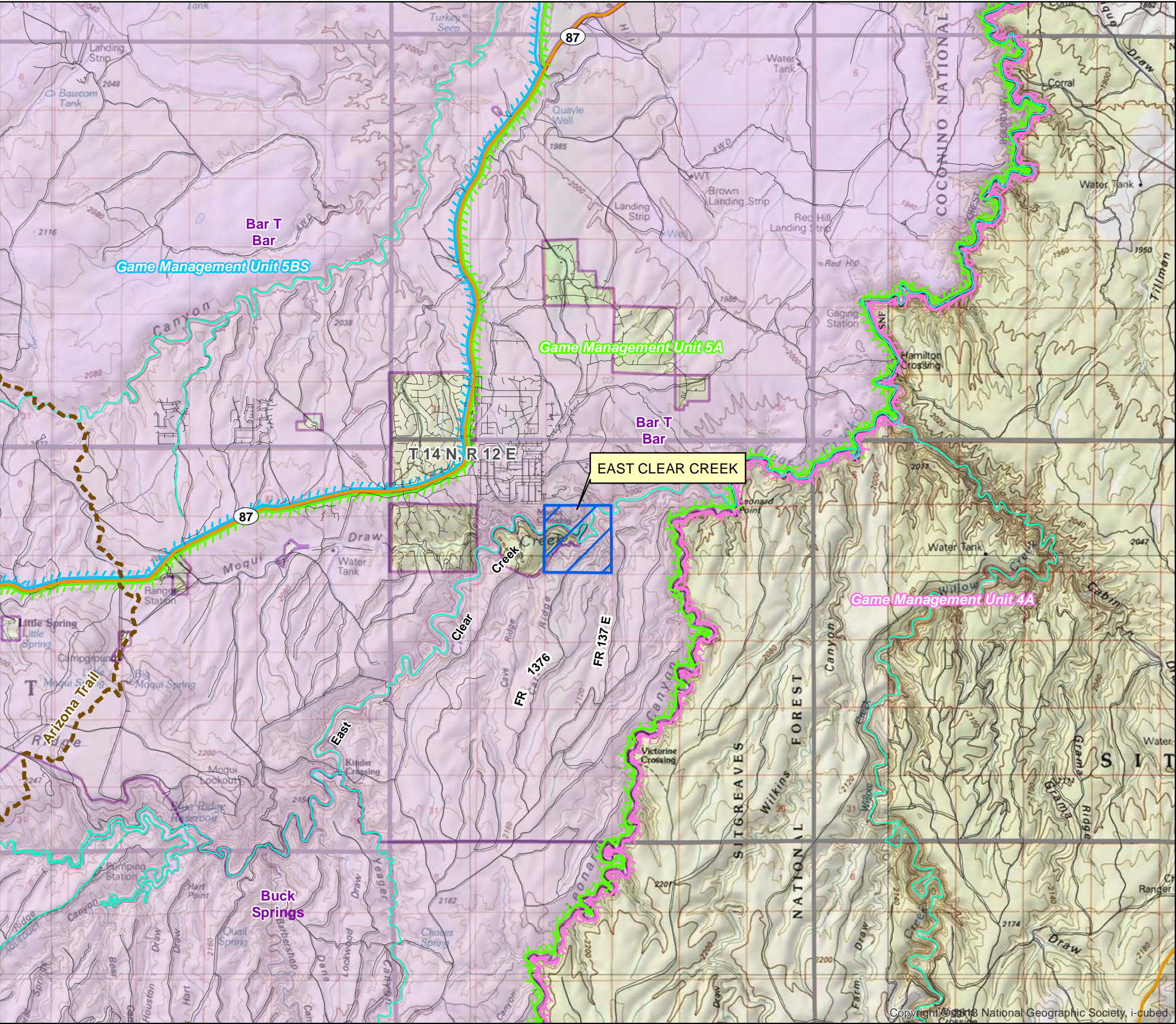


WnC-Winona gravelly loam, 0 to 10 percent slopes



RESOLUTION COPPER Land Exchange Proposal

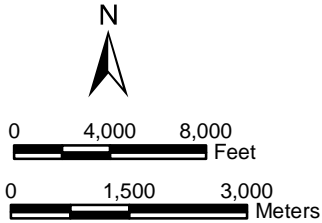
SOILS MAP
EAST CLEAR CREEK PARCEL
Figure 3.5-22



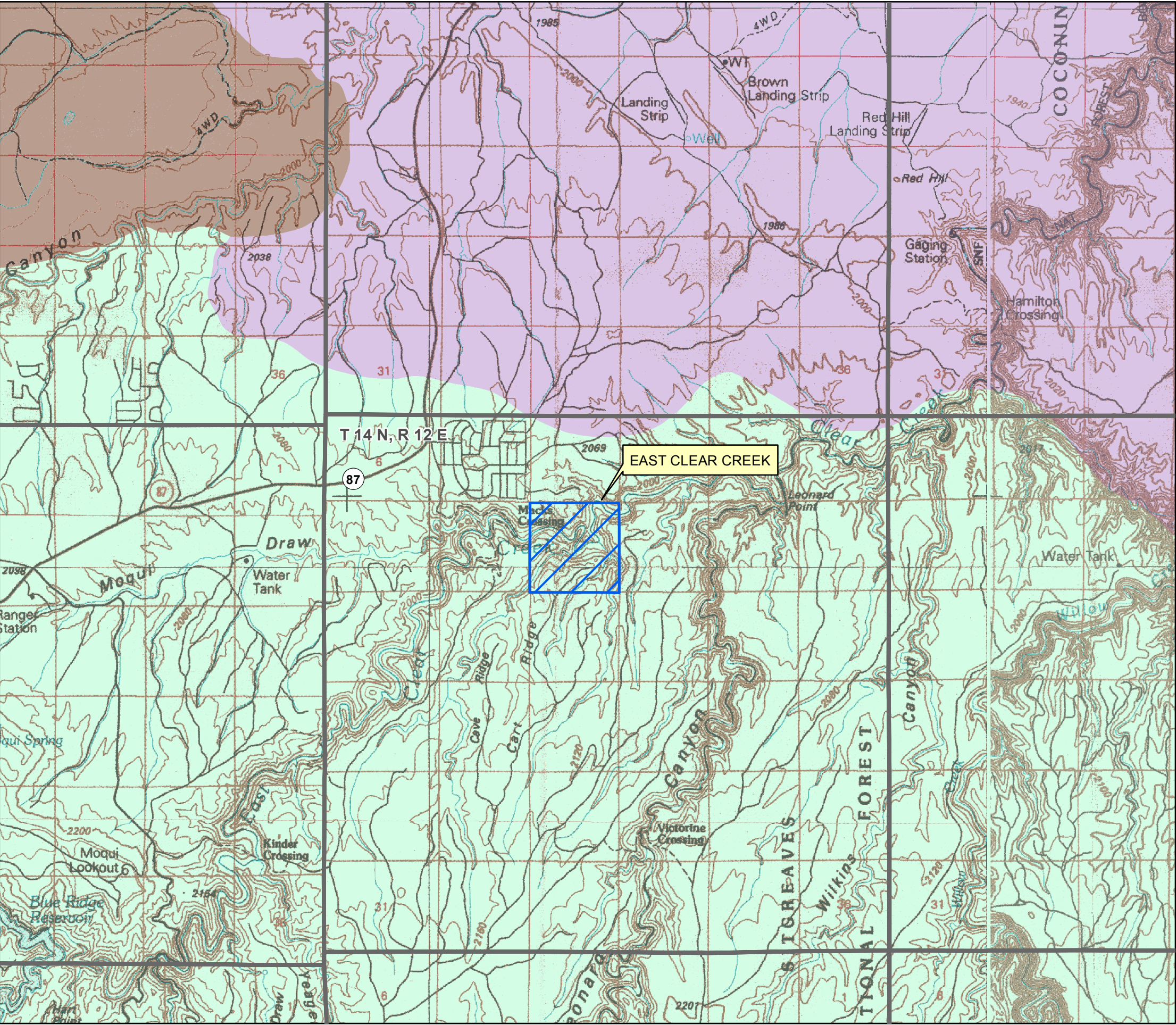
East Clear Creek:
640 Acres of Resolution Copper Property offered to the USFS,
T14N, R12E, Section 9,
Coconino County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Sources: ALRIS Street Data;
USDA Forest Service, Coconino National Forest:
Grazing Units, Publication Date: 20140519
Arizona BLM Grazing Allotments 5-14-2011
AZG&FD-Game Management Units Acquired 6-26-2013
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

-  Offered Lands
-  Arizona Trail (ESRI Online Data)
-  ALRIS Street Data Acquired 2-7-2012
- Arizona Game & Fish Department
- Game Management Unit
 -  4A
 -  5A
 -  5BS
-  USDA Forest Service Grazing Allotments
Rangeland Coconino National Forest




RESOLUTION COPPER
Land Exchange Proposal
RECREATION & GRAZING
EAST CLEAR CREEK PARCEL
Figure 3.5-23




East Clear Creek:
640 Acres of Resolution Copper Property offered to the USFS,
T14N, R12E, Section 9,
Coconino County, Arizona.
Image Source: Sedona & Holbrook 1:100,000 USGS Quadrangles
Data Sources: Biotic Communities of the Southwest,
Brown & Lowe, August 1980.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

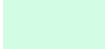
Legend


 Offered Lands

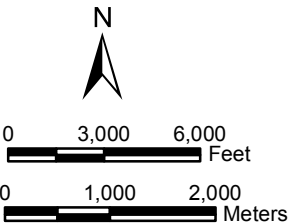
Biotic Communities

DESCRIPTION

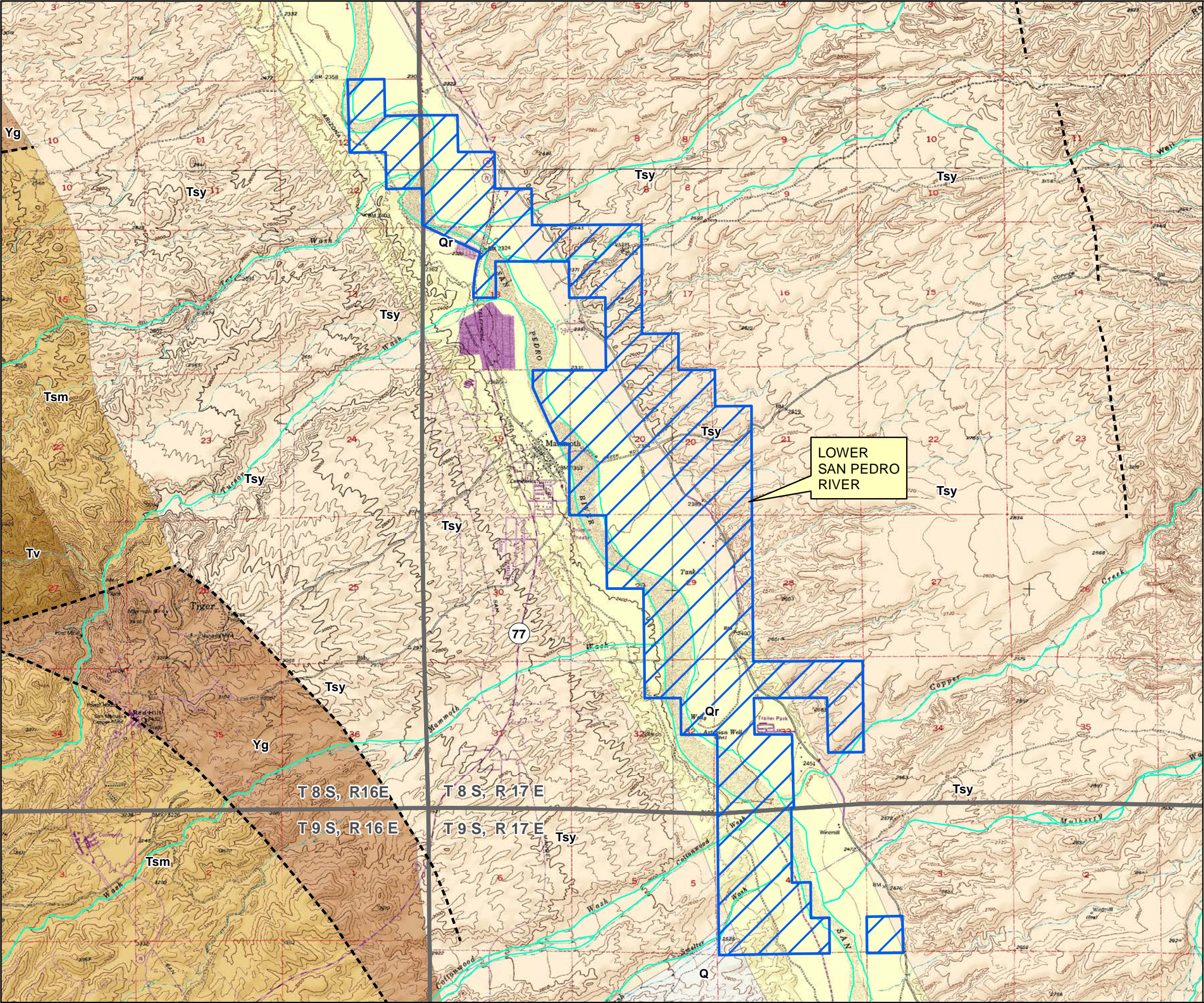
 GREAT BASIN CONIFER WOODLAND

 PETRAN MONTANE CONIFER FOREST

 PLAINS AND GREAT BASIN GRASSLAND




RESOLUTION COPPER
Land Exchange Proposal
BIOTIC COMMUNITIES
EAST CLEAR CREEK PARCEL
Figure 3.5-24









Lower San Pedro River:
3050 Acres of Resolution Copper Property offered to the BLM,
T8S, R16E, Portion of Section 12,
T8S, R17E, Portion of Sections 7, 17-21, 28, 29, 32 & 33,
T9S, R17E, Portion of Sections 3 & 4,
Pinal County, Arizona.
Image Source: Lookout Mtn., Holy Joe Peak, Mammoth & Clark Ranch
1:24,000 USGS Quadrangles. (40 Foot Contour Interval)
and ERSI World Terrain Base
Data Source: Arizona Geological Survey 2011.
http://www.azgs.az.gov/services_azgeomap.shtml
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

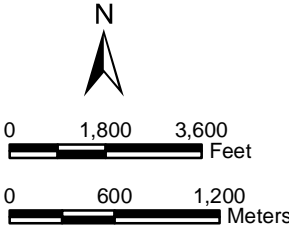
 Offered Lands

Arizona Geological Survey, 2011

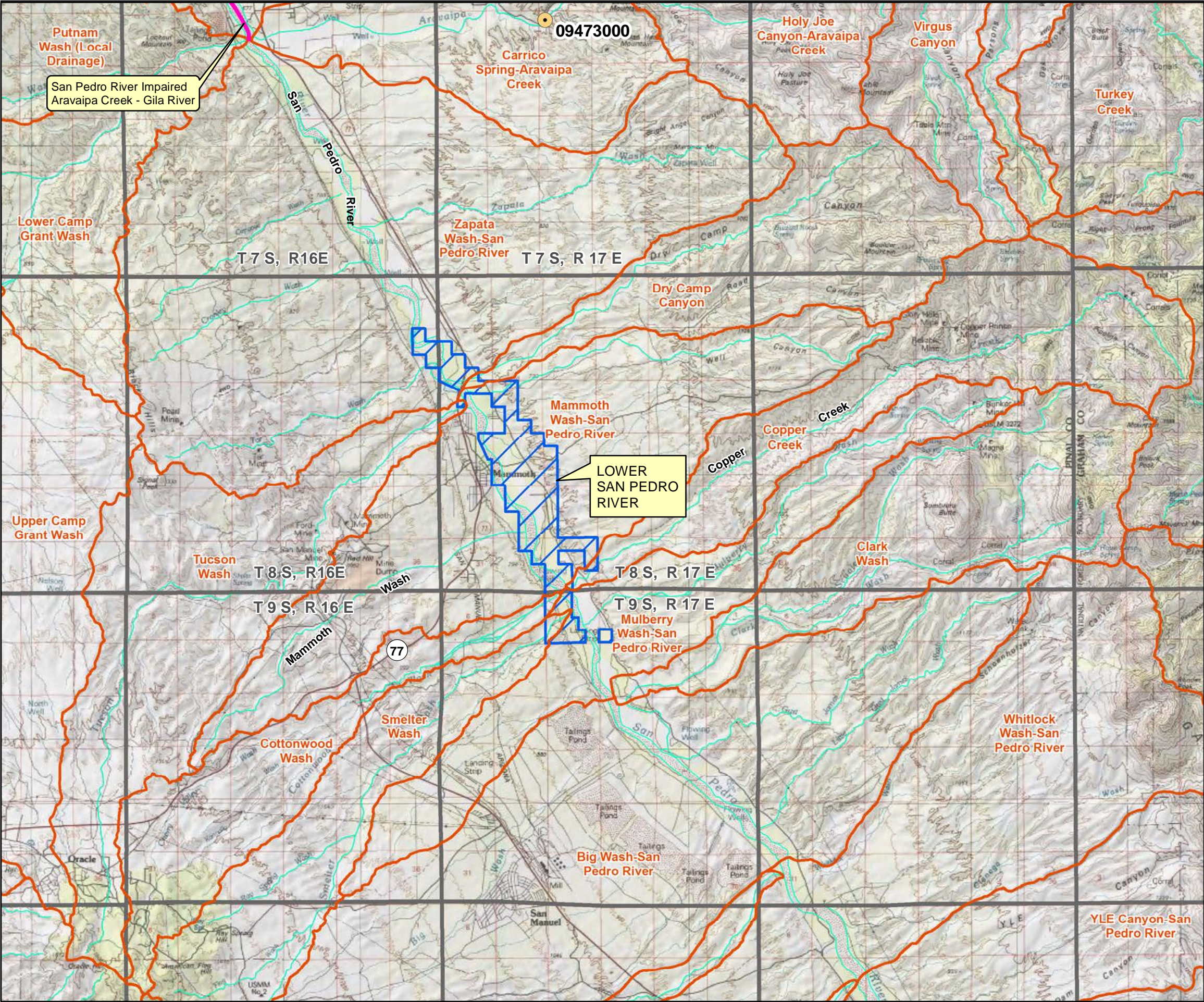
Description

-  Q - Quaternary Surficial Deposits, undivided (0-2 Ma)
-  Qr - Holocene River Alluvium (0-10 ka)
-  Tsm - Middle Miocene to Oligocene Sedimentary Rocks (11-32 Ma)
-  Tsy - Pliocene to Middle Miocene Deposits (2-16 Ma)
-  Tv - Middle Miocene to Oligocene Volcanic Rocks (11-38 Ma)
-  Yg - Middle Proterozoic Granitic Rocks (1400-1450 Ma)

 AZ Faults



RESOLUTION COPPER
Land Exchange Proposal
GEOLOGIC MAP
LOWER SAN PEDRO RIVER PARCEL
Figure 3.5-25

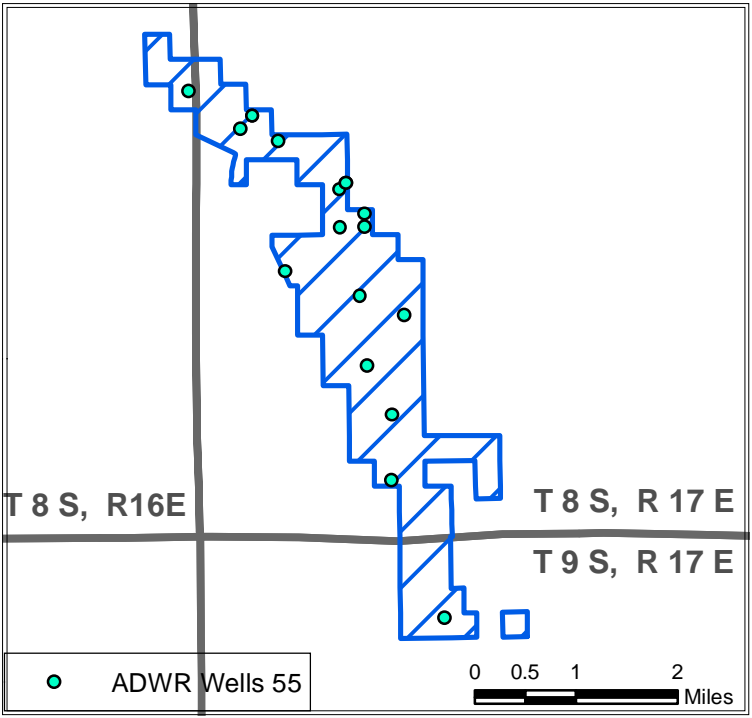


Lower San Pedro River:
3050 Acres of Resolution Copper Property offered to the BLM,
T8S, R16E, Portion of Section 12,
T8S, R17E, Portion of Sections 7, 17-21, 28, 29, 32 & 33,
T9S, R17E, Portion of Sections 3 & 4,
Pinal County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ADWR, USGS, NHDH HUC 12, ADEQ
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

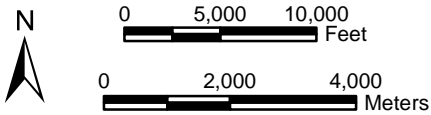
Legend

- Offered Lands
- ADEQ Impaired Stream 2010
- USGS Gage Sept 30, 2011
- HUC 12 Watershed

**ADWR Well Locations
Within the Parcel Boundary**

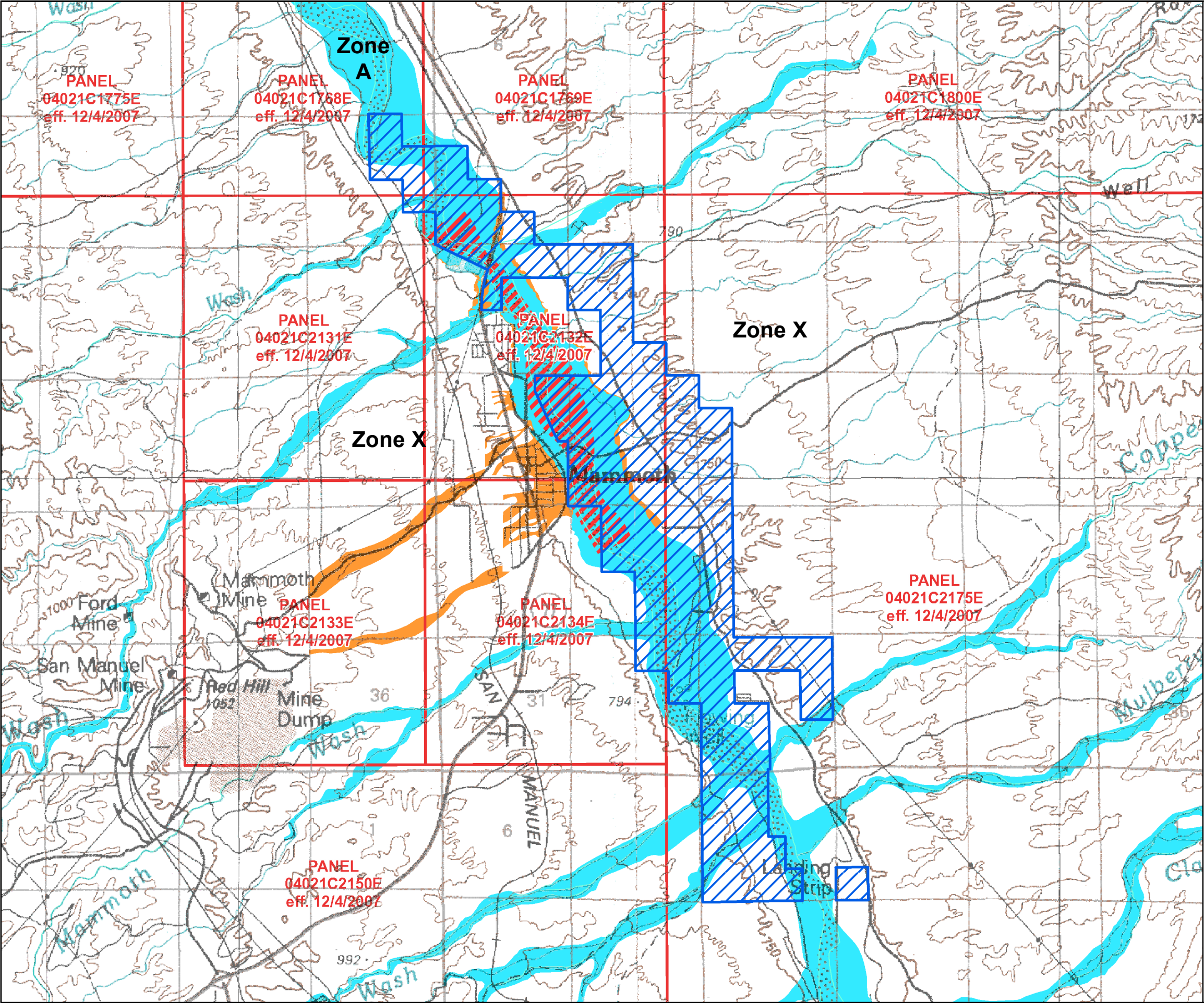


The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -<http://www.azwater.gov/azdwr/gis/>



**RESOLUTION COPPER
Land Exchange Proposal**

**SURFACE WATER RESOURCES AND WELLS
LOWER SAN PEDRO RIVER PARCEL**
Figure 3.5-26







Lower San Pedro River:
3050 Acres of Resolution Copper Property offered to the BLM,
T8S, R16E, Portion of Section 12,
T8S, R17E, Portion of Sections 7, 17-21, 28, 29, 32 & 33,
T9S, R17E, Portion of Sections 3 & 4,
Pinal County, Arizona.
Image Source: Mammoth 1:100,000 USGS Quadrangle.
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

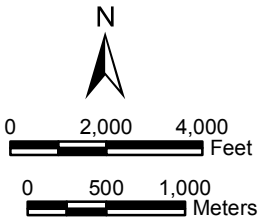
Legend

 Offered Lands

Flood Hazard Zones

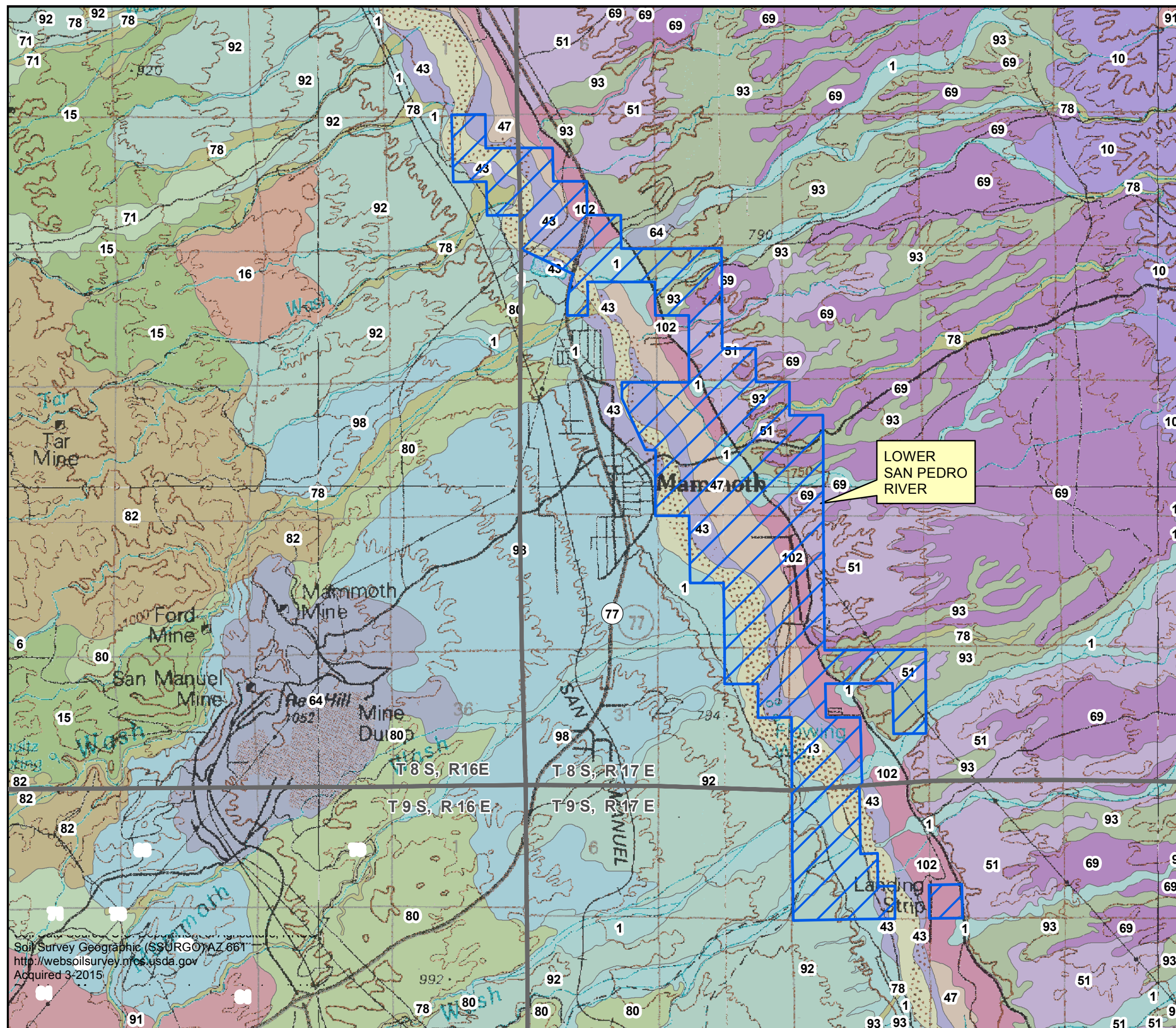
-  1% Annual Chance Flood Hazard (Zone A)
-  Regulatory Floodway (Zone AE)
-  0.2% Annual Chance Flood Hazard (Zone X)
-  Zone X - Area of Minimal Flood Hazard

<https://hazards.fema.gov/gis/nfhl/services>



RESOLUTION COPPER
Land Exchange Proposal

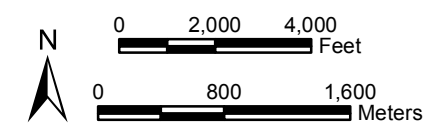
FEMA FLOOD MAPS
LOWER SAN PEDRO RIVER PARCEL
Figure 3.5-27



Offered Lands

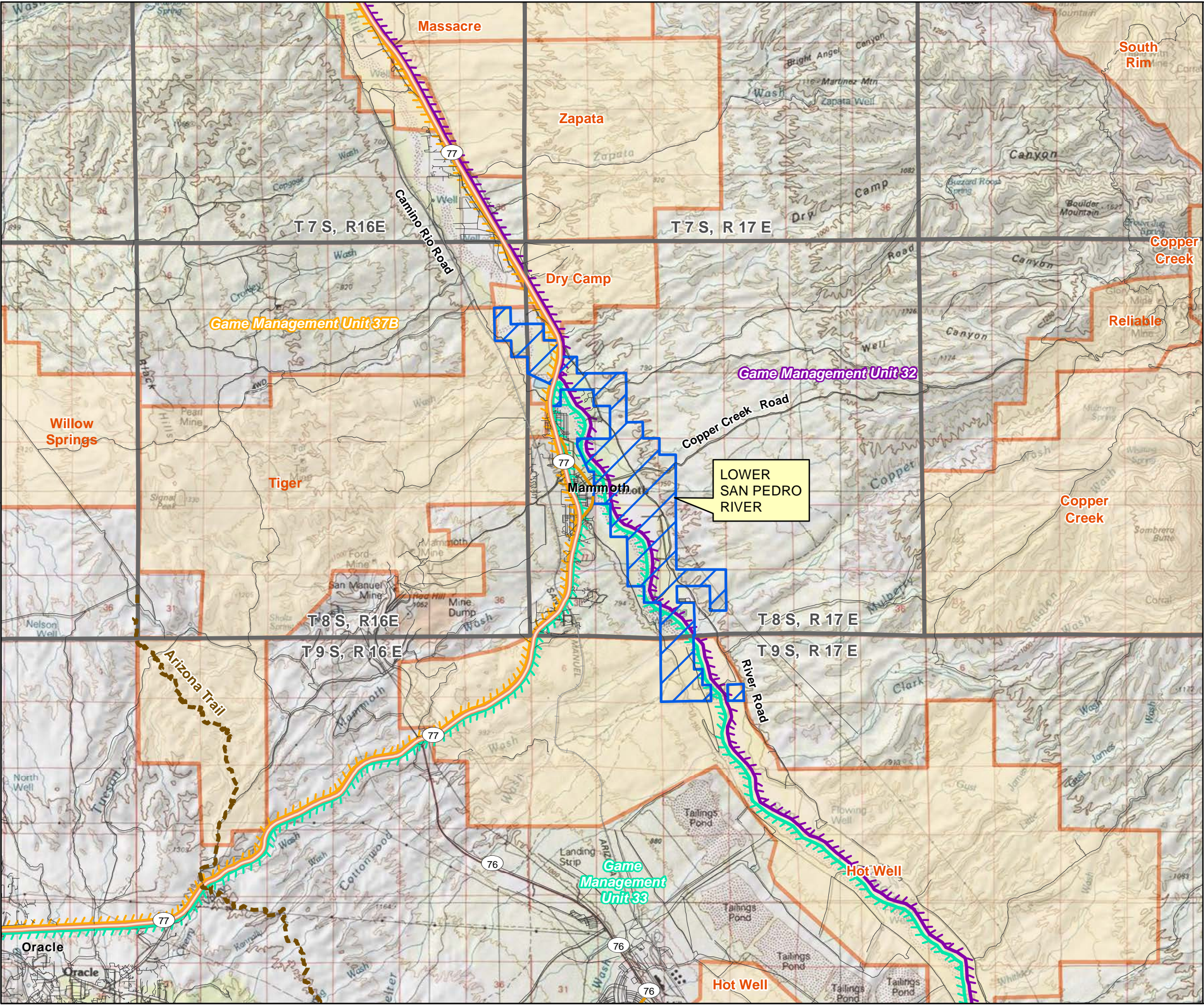
USDA, NRCS Soil Data

- 1-Agustin-Kokan-Queencreek complex, 1 to 8 percent slopes
- 10-Caracara-Delthorny complex, 3 to 45 percent slopes
- 102-Ugyp-Whitecliff complex, eroded, 1 to 5 percent slopes
- 13-Cascabel soils, wetrock soils, and riverwash, 0 to 5 percent slopes
- 15-Cellar-Anklam-Rock outcrop complex, 20 to 70 percent slopes
- 16-Cellar-Rock outcrop complex, 5 to 70 percent slopes
- 43-Gila-Vinton complex, 0 to 5 percent slopes
- 47-Glendale-Hantz complex, 0 to 5 percent slopes
- 51-Haplogypsids-Whitecliff-Badlands complex, 1 to 80 percent slopes
- 6-Bodecker- Riverwash complex, 0 to 5 percent slopes
- 64-Mined land
- 69-Nahda-Delnorte complex, 1 to 10 percent slopes
- 71-Oracle-Romero-Combate complex, 1 to 20 percent slopes
- 78-Queencreek soils and riverwash, 0 to 5 percent slopes
- 80-Ripsey-Rock outcrop complex, 15 to 70 percent slopes
- 82-Rock outcrop-Lajitas complex, 5 to 60 percent slopes
- 91-Selevin-Tombstone-Saddlebrook complex, 3 to 45 percent slopes
- 92-Stagecoach-Delnorte complex, 5 to 45 percent slopes
- 93-Stagecoach-Haplogypsids-Delnorte complex, 5 to 80 percent slopes
- 98-Tubac-Rillino complex, 3 to 25 percent slopes



RESOLUTION COPPER
Land Exchange Proposal
 SOILS MAP
 LOWER SAN PEDRO RIVER PARCEL
 Figure 3.5-28

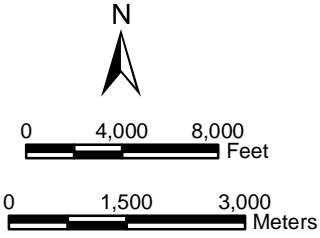
Soil Survey Geographic (SSURGO) AZ 661
<http://websoilsurvey.nrcs.usda.gov>
 Acquired 3-2015



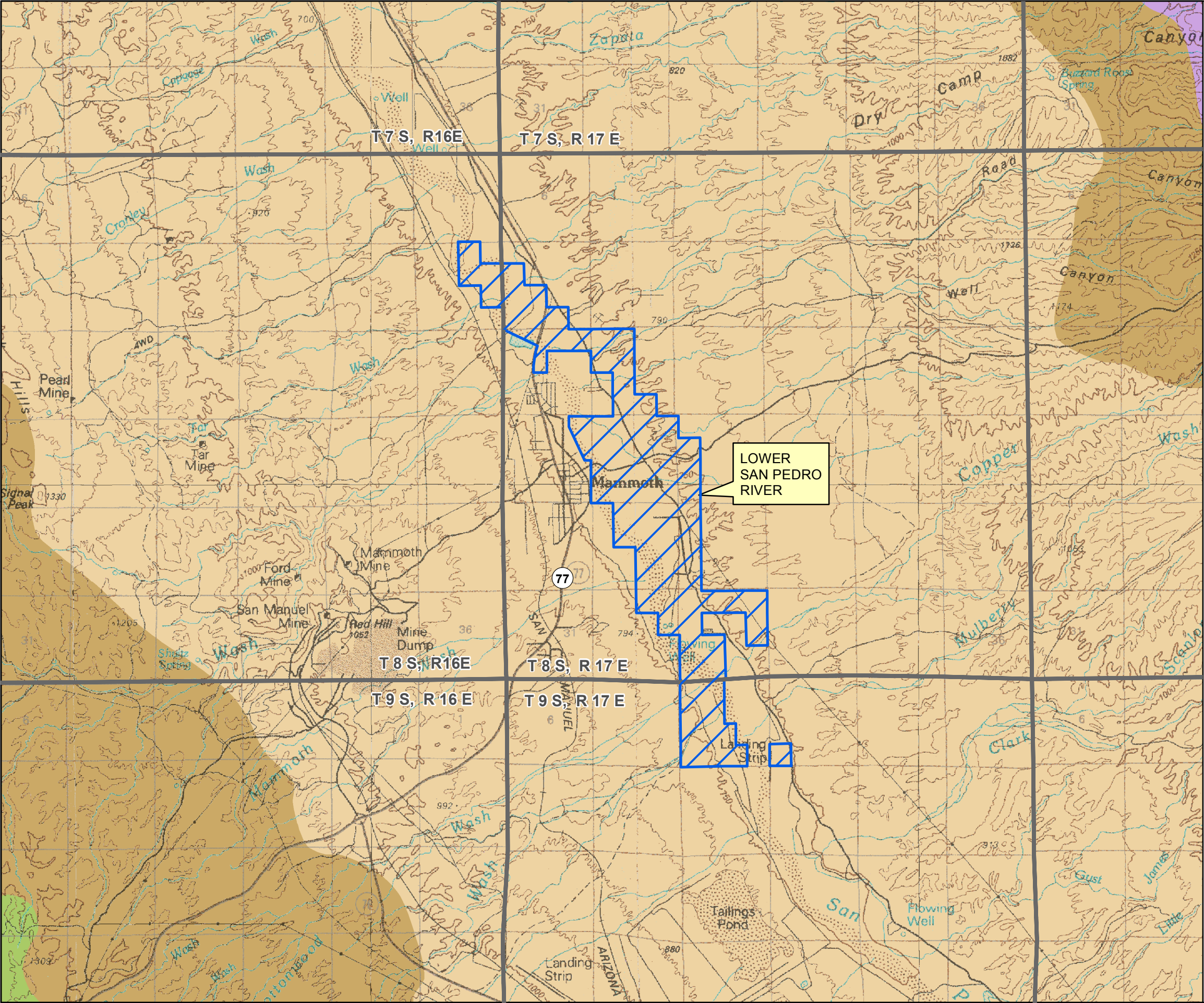
Lower San Pedro River:
3050 Acres of Resolution Copper Property offered to the BLM,
T8S, R16E, Portion of Section 12,
T8S, R17E, Portion of Sections 7, 17-21, 28, 29, 32 & 33,
T9S, R17E, Portion of Sections 3 & 4,
Pinal County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ESRI Streetmap Data; ALRIS Street Data;
Arizona BLM Grazing Allotments 5-14-2011;
AZG&FD-Game Management Units Acquired 6-26-2013
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

- Offered Lands
- Arizona Trail (ESRI Online Data)
- Highways
- Major Roads
- Main rail line
- ALRIS Street Data Acquired 2-7-2012
- Arizona Game & Fish Department
- Game Management Unit
 - 32
 - 33
 - 37B
- Bureau of Land Management Grazing Allotments



RESOLUTION COPPER
Land Exchange Proposal
RECREATION & GRAZING
LOWER SAN PEDRO RIVER PARCEL
Figure 3.5-29







Lower San Pedro River:
3050 Acres of Resolution Copper Property offered to the BLM,
T8S, R16E, Portion of Section 12,
T8S, R17E, Portion of Sections 7, 17-21, 28, 29, 32 & 33,
T9S, R17E, Portion of Sections 3 & 4,
Pinal County, Arizona.
Image Source: Mammoth 1:100,000 USGS Quadrangle.
Data Sources: Biotic Communities of the Southwest,
Brown & Lowe, August 1980.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

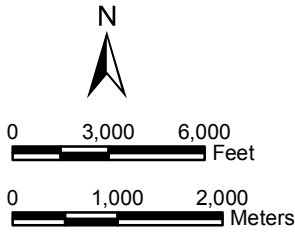
Legend

 Offered Lands

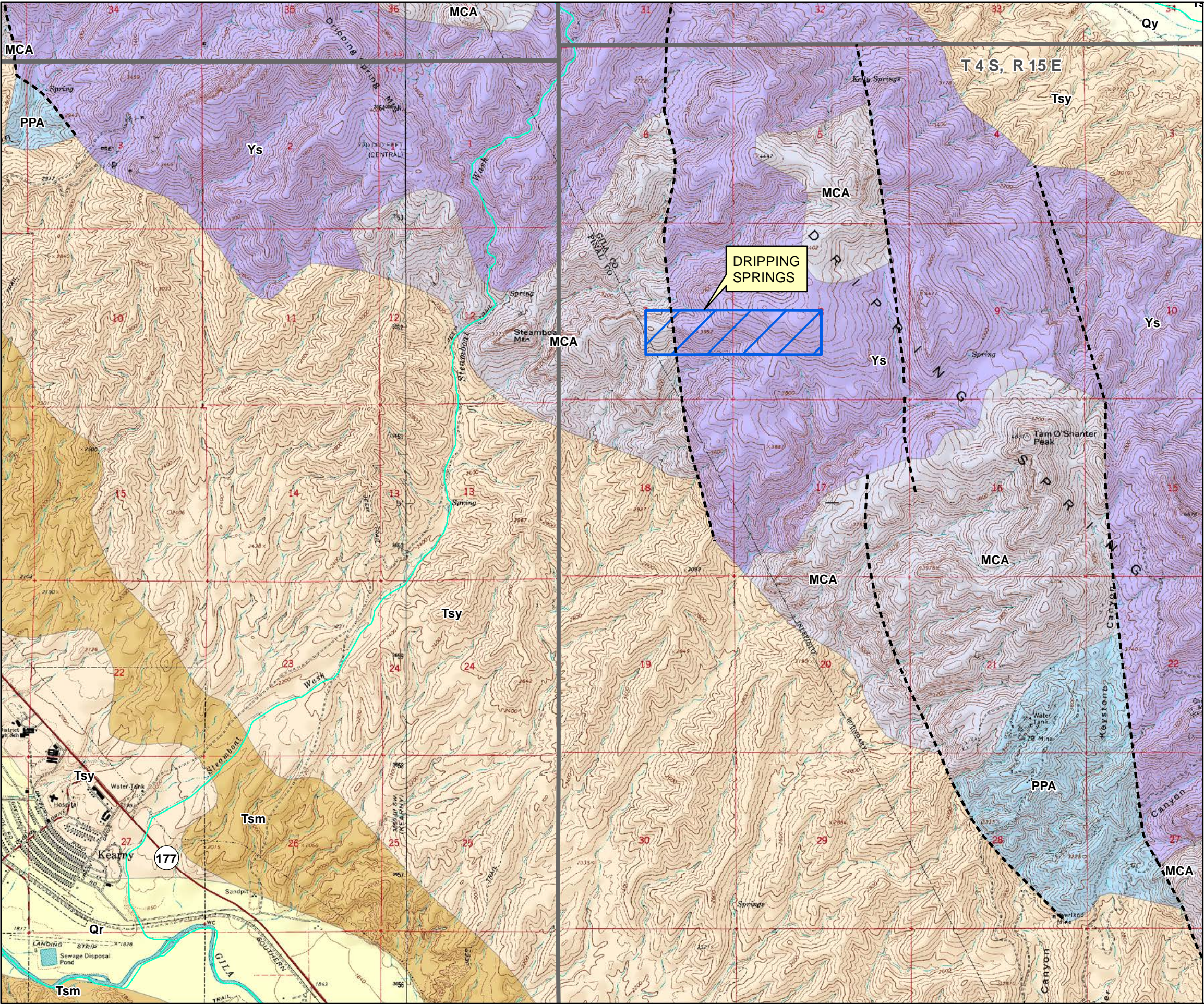
Biotic Communities

DESCRIPTION

-  AZ UPLAND SUBDIVISION - SONORAN DESERTSCRUB
-  INTERIOR CHAPPARAL
-  MADREAN EVERGREEN WOODLAND
-  SEMIDESERT GRASSLAND



RESOLUTION COPPER
Land Exchange Proposal
BIOTIC COMMUNITIES
LOWER SAN PEDRO RIVER PARCEL
Figure 3.5-30




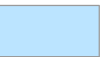






Dripping Springs:
160 Acres of Resolution Copper Property offered to the BLM,
T4S, R15E, Portion of Sections 7 & 8,
Pinal and Gila Counties, Arizona.
Image Source: Kearny & Hayden 1:24,000 USGS Quadrangles,
(40 Foot Contour Interval (C.I.) with 20 Foot Supplemental C.I.)
and ERSI World Terrain Base
Data Source: Arizona Geological Survey 2011.
http://www.azgs.az.gov/services_azgeomap.shtml
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

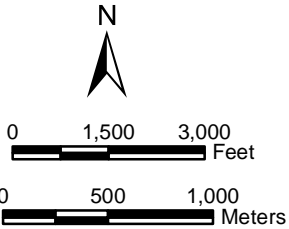
Legend

 Offered Lands

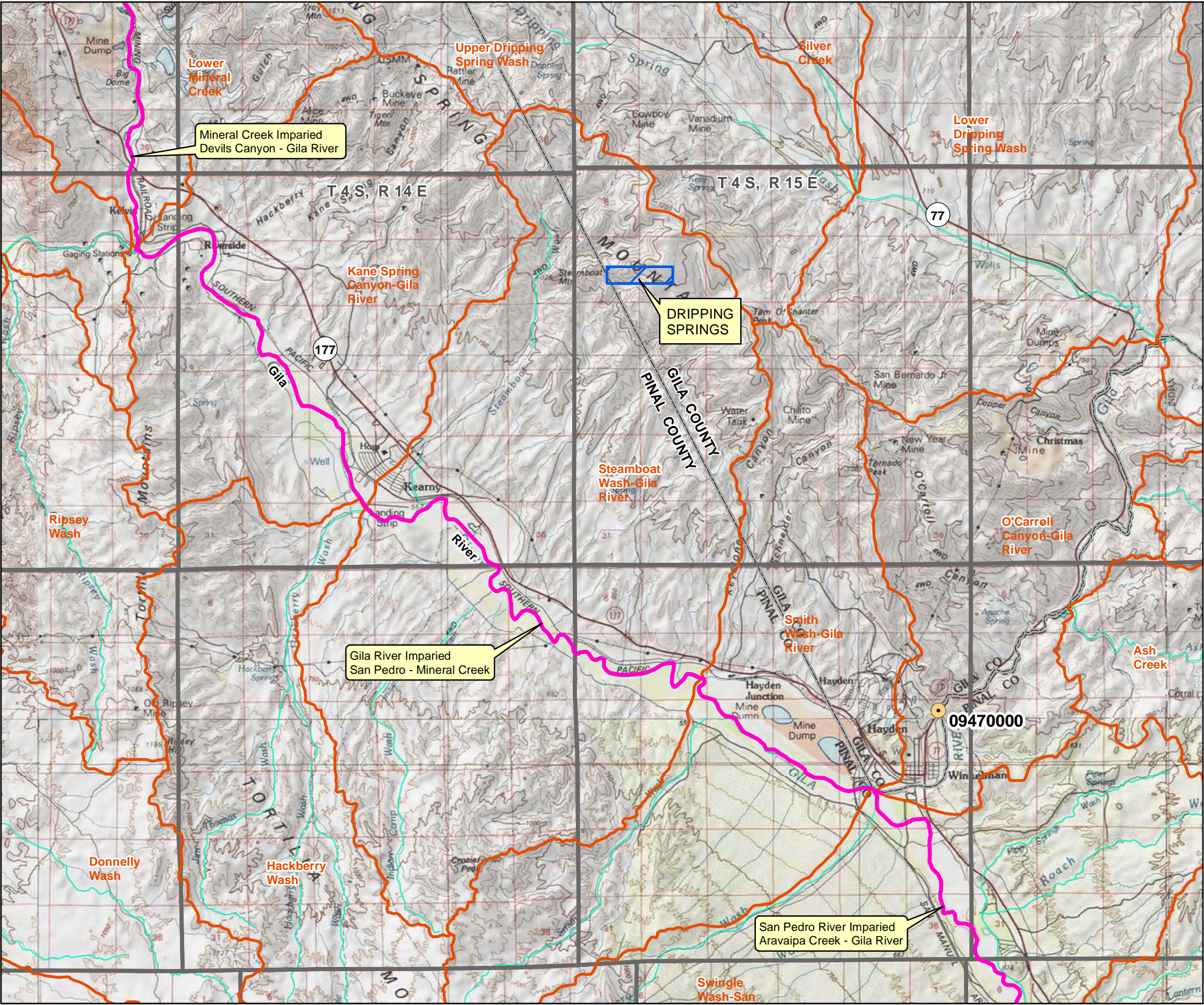
Arizona Geological Survey, 2011

Description

-  MCA - Mississippian, Devonian, And Cambrian Sedimentary Rocks (330-540 Ma)
-  PPA - Permian to Pennsylvanian Sedimentary Rocks (280-310 Ma)
-  Qr - Holocene River Alluvium (0-10 ka)
-  Qy - Holocene Surficial Deposits (0-10 ka)
-  Tsm - Middle Miocene to Oligocene Sedimentary Rocks (11-32 Ma)
-  Tsy - Pliocene to Middle Miocene Deposits (2-16 Ma)
-  Ys - Middle Proterozoic Sedimentary Rocks (700-1300 Ma)
-  AZ Faults



RESOLUTION COPPER
Land Exchange Proposal
GEOLOGIC MAP
DRIPPING SPRINGS PARCEL
Figure 3.5-31

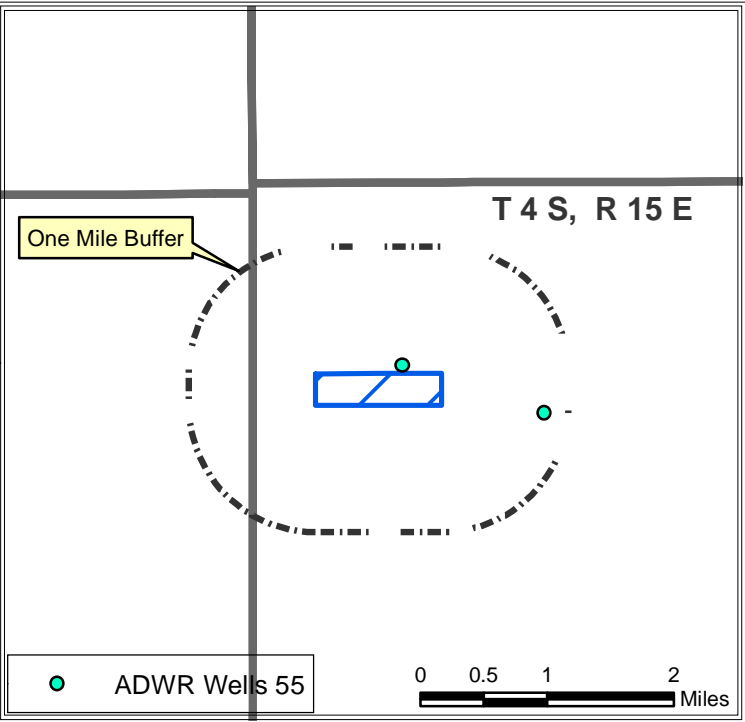


Dripping Springs:
160 Acres of Resolution Copper Property offered to the BLM,
T4S, R15E, Portion of Sections 7 & 8,
Pinal and Gila Counties, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Source: ADWR, USGS, NHDH HUC 12, ADEQ
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

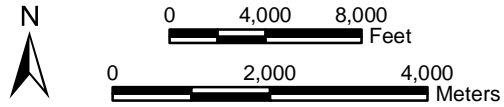
Legend

-  Offered Lands
-  ADEQ Impaired Stream 2010
-  USGS Gage Sept 30, 2011
-  HUC 12 Watershed

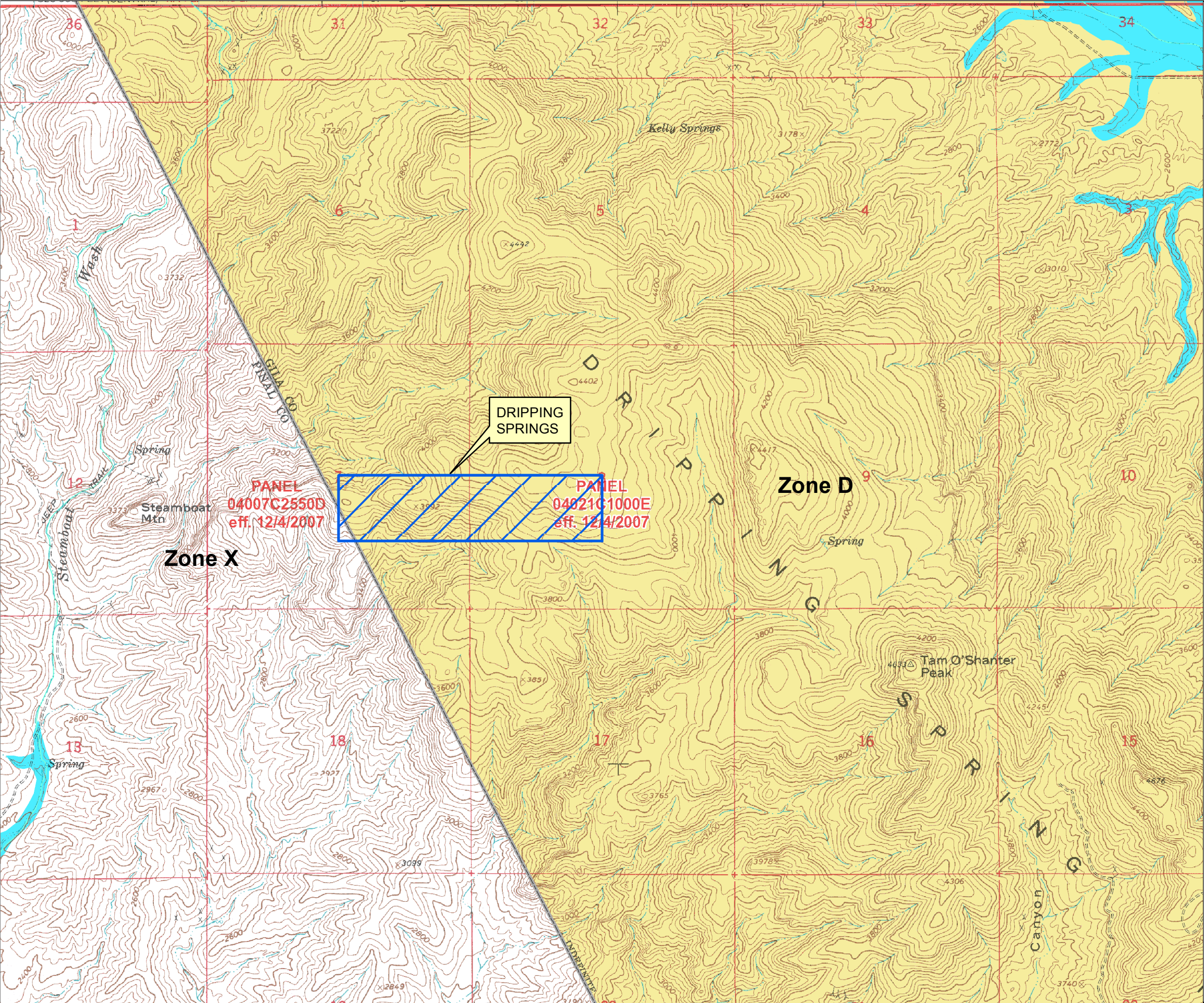
ADWR Well Locations
Within a One Mile Buffer of Parcel



The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -<http://www.azwater.gov/azdwr/gis/>



RESOLUTION COPPER
Land Exchange Proposal
SURFACE WATER RESOURCES AND WELLS
DRIPPING SPRINGS PARCEL
Figure 3.5-32






Dripping Springs:
160 Acres of Resolution Copper Property offered to the BLM,
T4S, R15E, Portion of Sections 7 & 8,
Pinal and Gila Counties, Arizona.
Image Source: Hayden 7.5 Minute USGS Quadrangle
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional
surveyors.

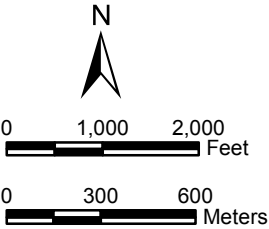
Legend

 Offered Lands

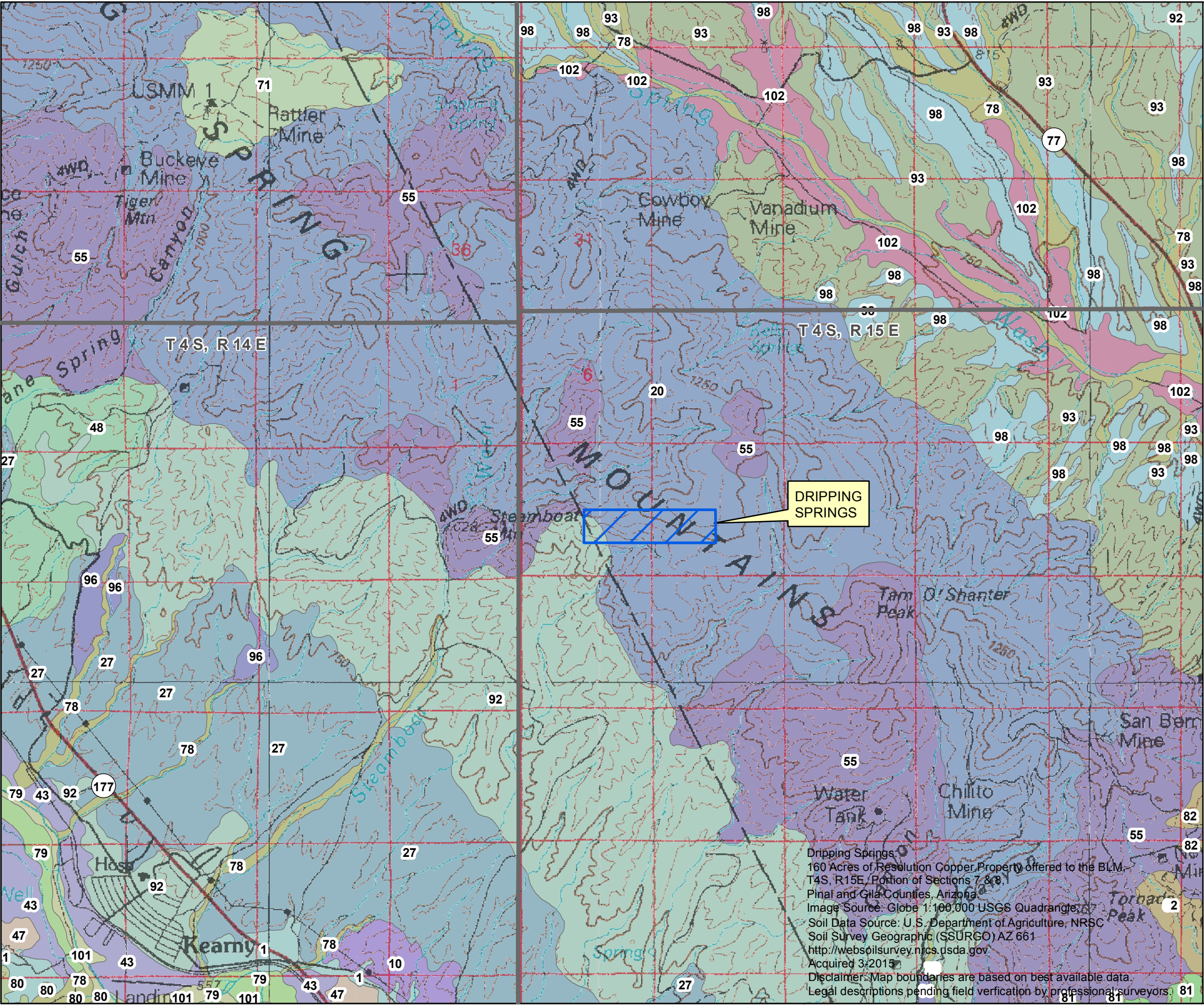
Flood Hazard Zones









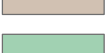


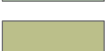

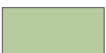







-  1% Annual Chance Flood Hazard (Zone A)
-  Area of Undetermined Flood Hazard (Zone D)
-  Zone X - Area of Minimal Flood Hazard

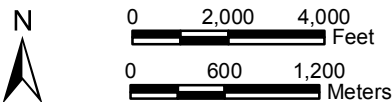
<https://hazards.fema.gov/gis/nfhl/services>



RESOLUTION COPPER
Land Exchange Proposal
FEMA FLOOD MAPS
DRIPPING SPRINGS PARCEL
Figure 3.5-33



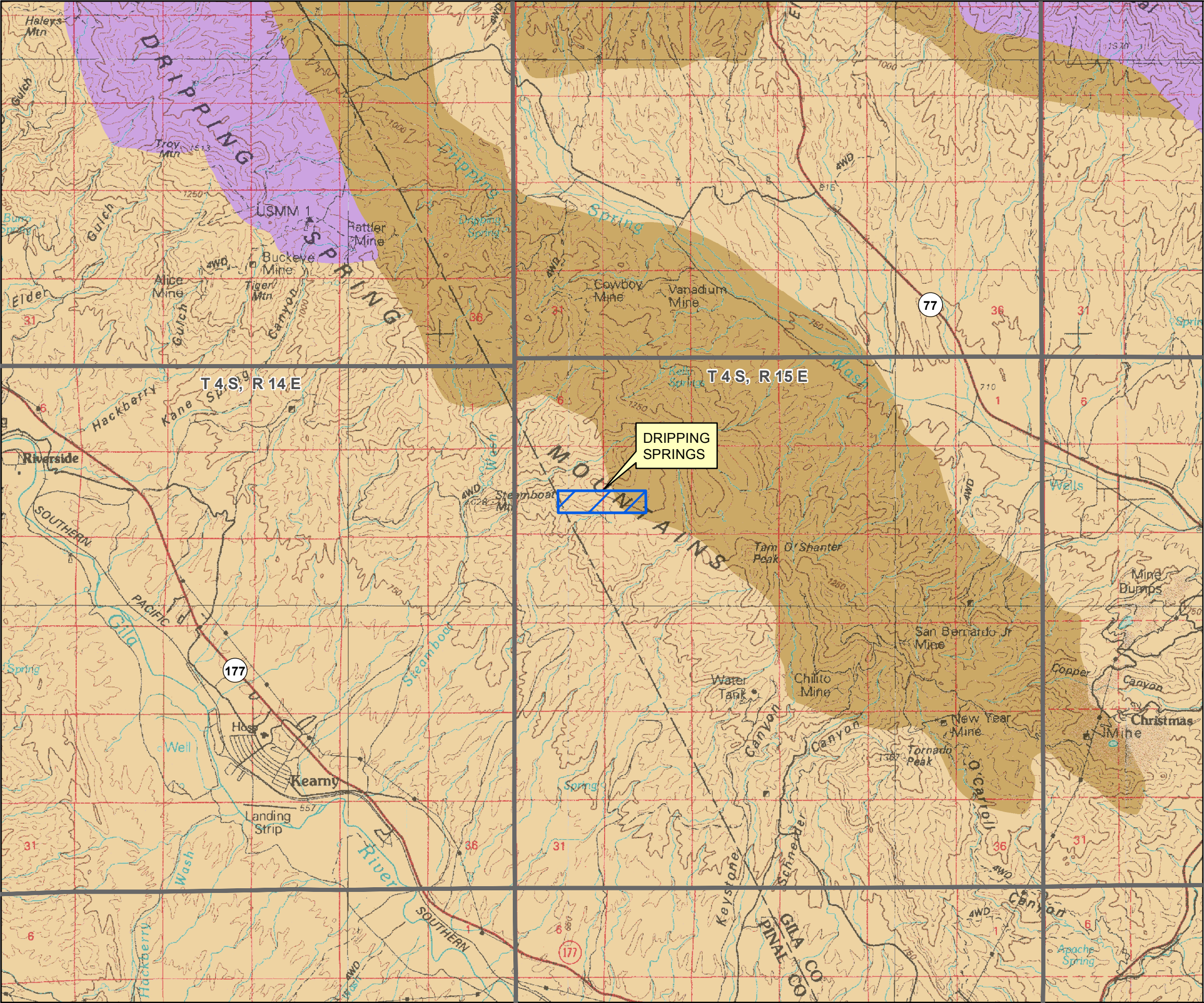
-  Offered Lands
- USDA, NRCS Soil Data
-  1-Agustin-Kokan-Queencreek complex, 1 to 8 percent slopes
 -  10-Caracara-Delthorny complex, 3 to 45 percent slopes
 -  101-Typic Fluvaquents, wetrock soils, and water, 0 to 3 percent slopes
 -  102-Ugyp-Whitecliff complex, eroded, 1 to 5 percent slopes
 -  20-Chiricahua-deloro-leyte soils, 10 to 50 percent slopes
 -  27-Delnorte-Nahda complex, 3 to 20 percent slopes
 -  43-Gila-Vinton complex, 0 to 5 percent slopes
 -  47-Glendale-Hantz complex, 0 to 5 percent slopes
 -  48-Gran-Rock outcrop-Pantano complex, 20 to 60 percent slopes
 -  55-Holguin-Rock outcrop complex, 15 to 60 percent slopes
 -  71-Oracle-Romero-Combate complex, 1 to 20 percent slopes
 -  78-Queencreek soils and riverwash, 0 to 5 percent slopes
 -  79-Quiburi-Gila complex, 0 to 3 percent slopes
 -  80-Ripsey-Rock outcrop complex, 15 to 70 percent slopes
 -  81-Rock outcrop-Garzona family complex, 15 to 70 percent slopes
 -  82-Rock outcrop-Lajitas complex, 5 to 60 percent slopes
 -  92-Stagecoach-Delnorte complex, 5 to 45 percent slopes
 -  93-Stagecoach-Haplogypsids-Delnorte complex, 5 to 80 percent slopes
 -  96-Topawa very gravelly sandy loam, 5 to 20 percent slopes
 -  98-Tubac-Rillino complex, 3 to 25 percent slopes



RESOLUTION COPPER
Land Exchange Proposal



SOILS MAP
DRIPPING SPRINGS PARCEL
Figure 3.5-34

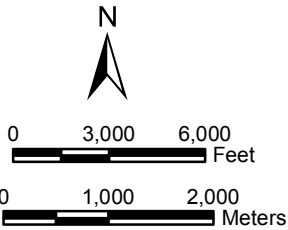
Dripping Springs,
160 Acres of Resolution Copper Property offered to the BLM,
T4S, R15E, Portion of Sections 7 & 8,
Pinal and Gila Counties, Arizona
Image Source: Globe 1:100,000 USGS Quadrangle, 27
Soil Data Source: U.S. Department of Agriculture, NRCS
Soil Survey Geographic (SSURGO) AZ 661
<http://websoilsurvey.nrcs.usda.gov>
Acquired 3/2019
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.



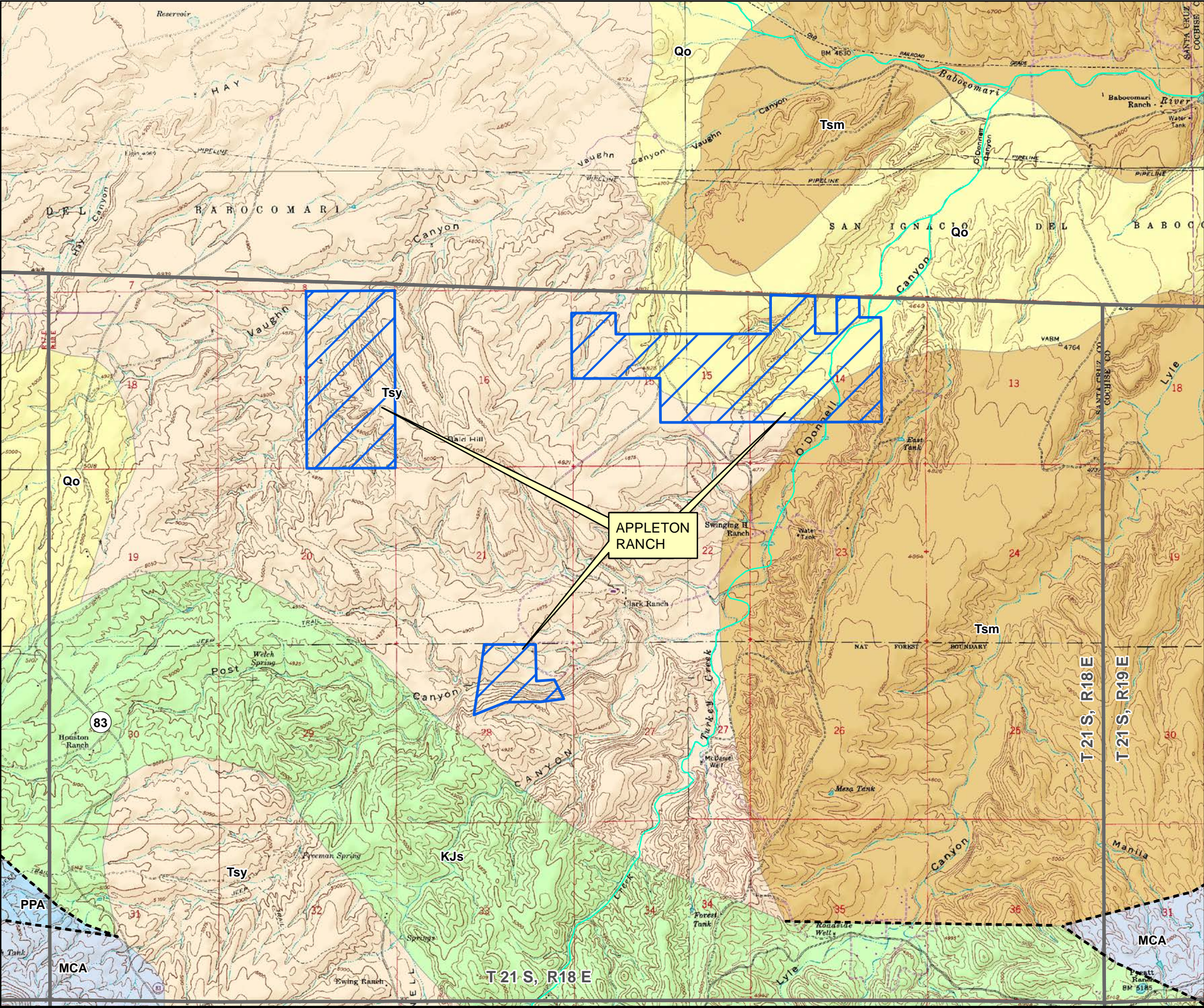
Dripping Springs:
160 Acres of Resolution Copper Property offered to the BLM,
T4S, R15E, Portion of Sections 7 & 8,
Pinal and Gila Counties, Arizona.
Image Source: Globe 1:100,000 USGS Quadrangle.
Data Sources: Biotic Communities of the Southwest,
Brown & Lowe, August 1980.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

Legend

	Offered Lands
Biotic Communities	
DESCRIPTION	
	AZ UPLAND SUBDIVISION - SONORAN DESERTSCRUB
	INTERIOR CHAPPARAL
	SEMIDESERT GRASSLAND



RESOLUTION COPPER
Land Exchange Proposal
BIOTIC COMMUNITIES
DRIPPING SPRINGS PARCEL
Figure 3.5-36



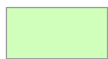

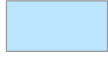




Appleton Ranch:
940 Acres of Resolution Copper Property offered to the BLM,
T21S, R18E, Portion of Sections 14, 15, 17 & 28,
Santa Cruz County, Arizona.
Image Source: Elgin, Mustang Mtns, O'Donnell Canyon & Pyeatt Ranch
1:24,000 USGS Quadrangles, (25 Foot Contour Interval)
and ERSI World Terrain Base
Data Source: Arizona Geological Survey 2011.
http://www.azgs.az.gov/services_azgeomap.shtml
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

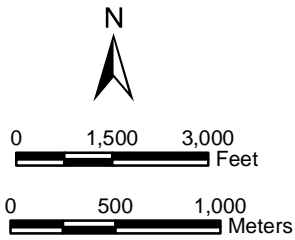
Legend

 Offered Lands

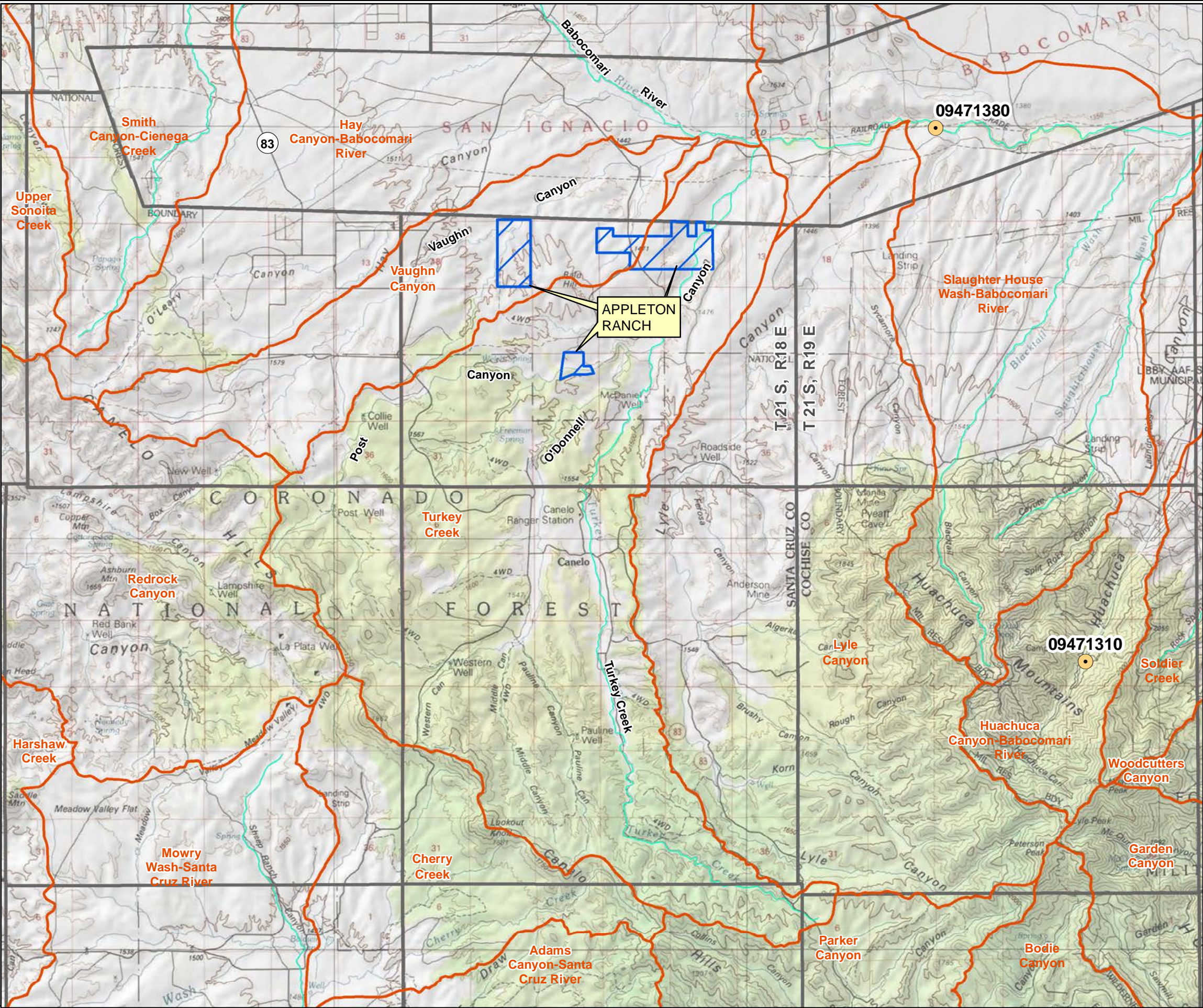
Arizona Geological Survey, 2011

Description

-  KJs - Cretaceous to Upper Jurassic Sedimentary Rocks with Minor Volcanic Rocks (80-160 Ma)
-  MCA - Mississippian, Devonian, And Cambrian Sedimentary Rocks (330-540 Ma)
-  PPA - Permian to Pennsylvanian Sedimentary Rocks (280-310 Ma)
-  Qo - Early Pleistocene to Latest Pliocene Surficial Deposits (0.75-3 Ma)
-  Tsm - Middle Miocene to Oligocene Sedimentary Rocks (11-32 Ma)
-  Tsy - Pliocene to Middle Miocene Deposits (2-16 Ma)
-  AZ Faults





RESOLUTION COPPER
Land Exchange Proposal
GEOLOGIC MAP
APPLETON RANCH PARCEL
Figure 3.5-37

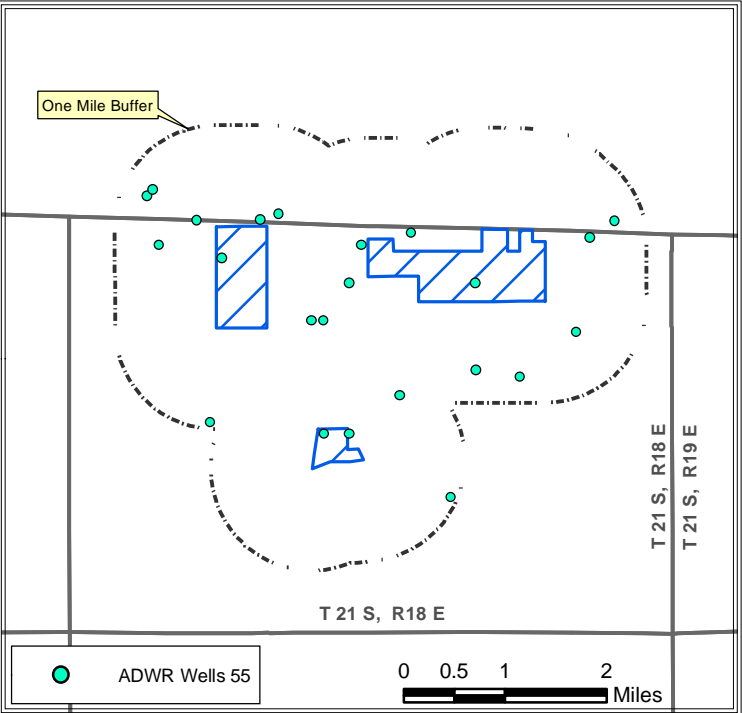


Appleton Ranch:
940 Acres of Resolution Copper Property offered to the BLM,
T21S, R18E, Portion of Sections 14, 15, 17 & 28,
Santa Cruz County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Sources: ADWR, USGS, NHDH HUC 12
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

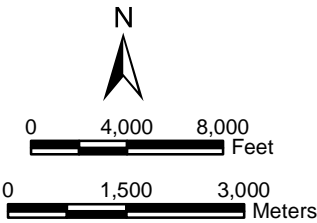
Legend

-  Offered Lands
-  USGS Gages 9-30-2011
-  HUC 12 Watershed

**ADWR Well Locations
Within a One Mile Buffer of Parcel**

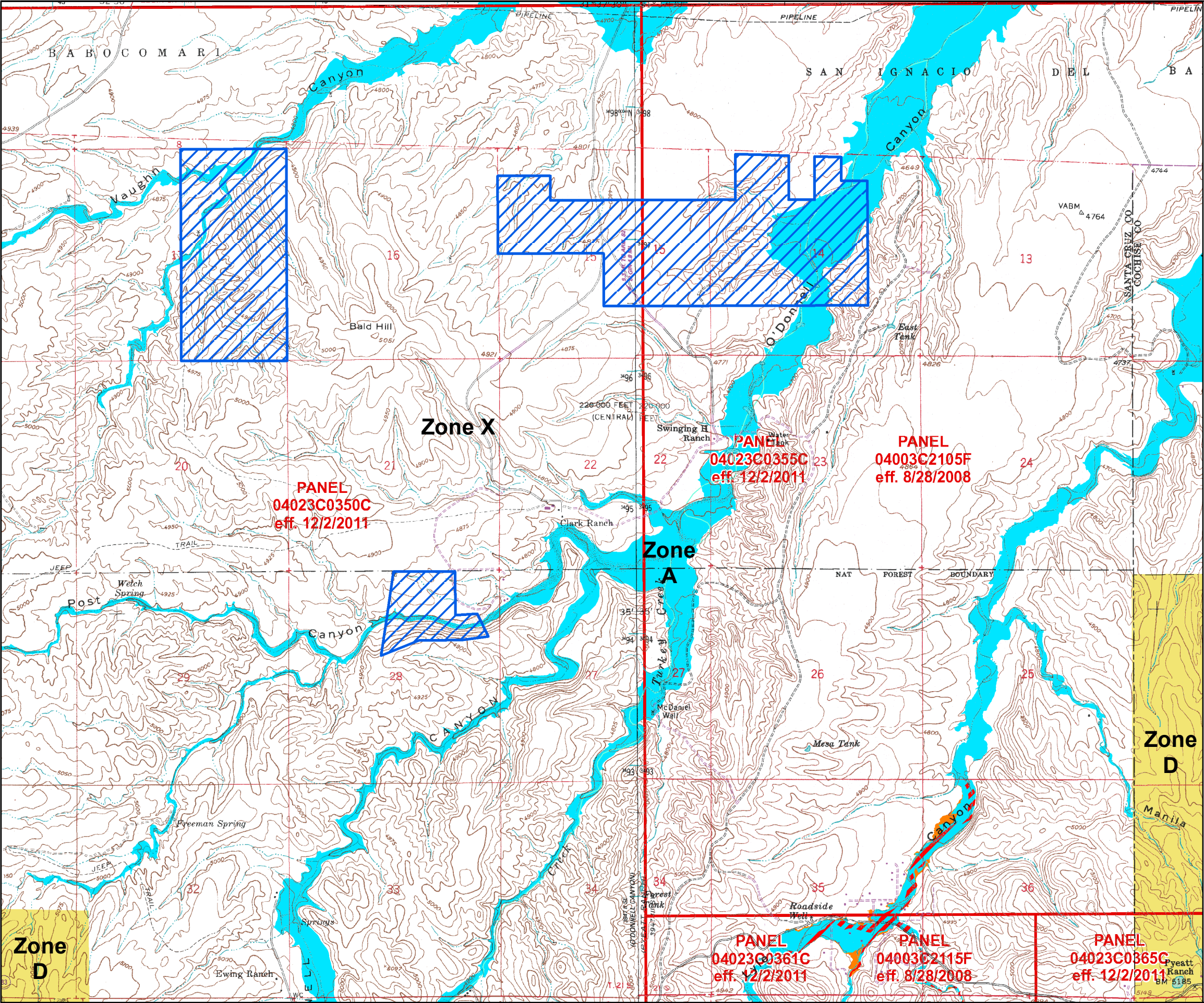


The ADWR Wells 55 Registry contains all wells registered in the state.
Downloaded from ADWR Website 4/2/2013 -<http://www.azwater.gov/azdwr/gis/>



**RESOLUTION COPPER
Land Exchange Proposal**

**SURFACE WATER RESOURCES AND WELLS
APPLETON RANCH PARCEL
Figure 3.5-38**








Appleton Ranch:
940 Acres of Resolution Copper Property offered to the BLM,
T21S, R18E, Portion of Sections 14, 15, 17 & 28,
Santa Cruz County, Arizona.
Image Source: O'Donnell Canyon & Pyeatt Ranch 7.5 Minute
USGS Quadrangles
Data Sources: FEMA Flood Hazard Zones
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

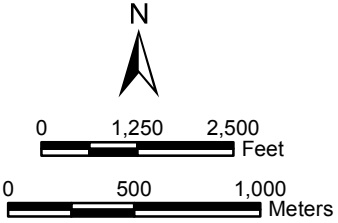
Legend

 Offered Lands

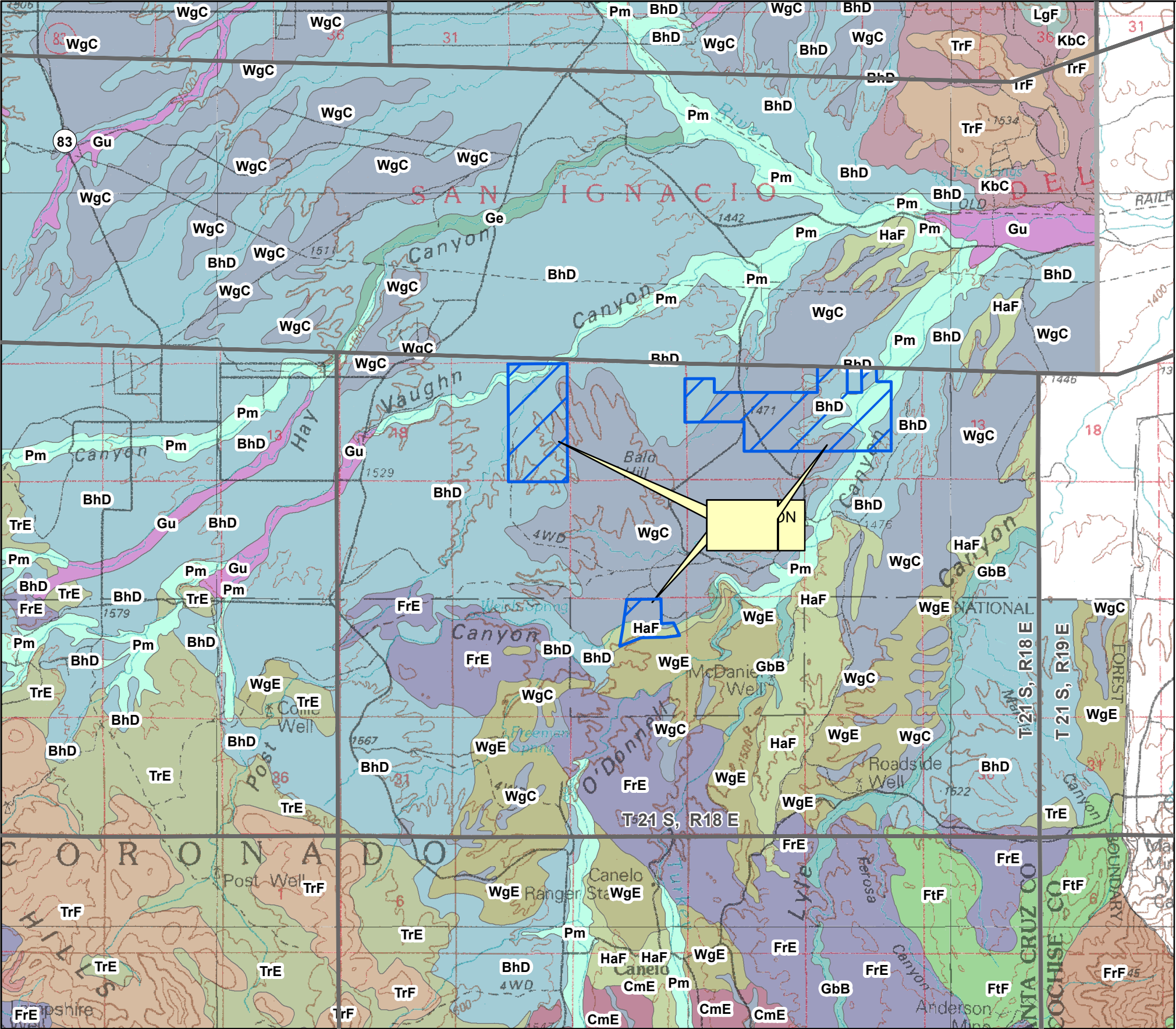
Flood Hazard Zones

-  1% Annual Chance Flood Hazard (Zone A)
-  Regulatory Floodway (Zone AE)
-  Area of Undetermined Flood Hazard (Zone D)
-  0.2% Annual Chance Flood Hazard (Zone X)
-  Zone X - Area of Minimal Flood Hazard

<https://hazards.fema.gov/gis/nfhl/services>



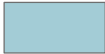

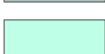
RESOLUTION COPPER
Land Exchange Proposal
FEMA FLOOD MAPS
APPLETON RANCH PARCEL
Figure 3.5-39



Appleton Ranch:
940 Acres of Resolution Copper Property offered to the BLM,
T21S, R18E, Portion of Sections 14, 15, 17 & 28,
Santa Cruz County, Arizona.
Image Source: Ft. Hucuchau 1:100,000 USGS Quadrangle.
Soil Data Source: U.S. Department of Agriculture, NRSC
Soil Survey Geographic (SSURGO) AZ 667
<http://websoilsurvey.nrcs.usda.gov>
Acquired 5-2015
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

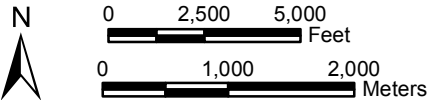
 Offered Lands

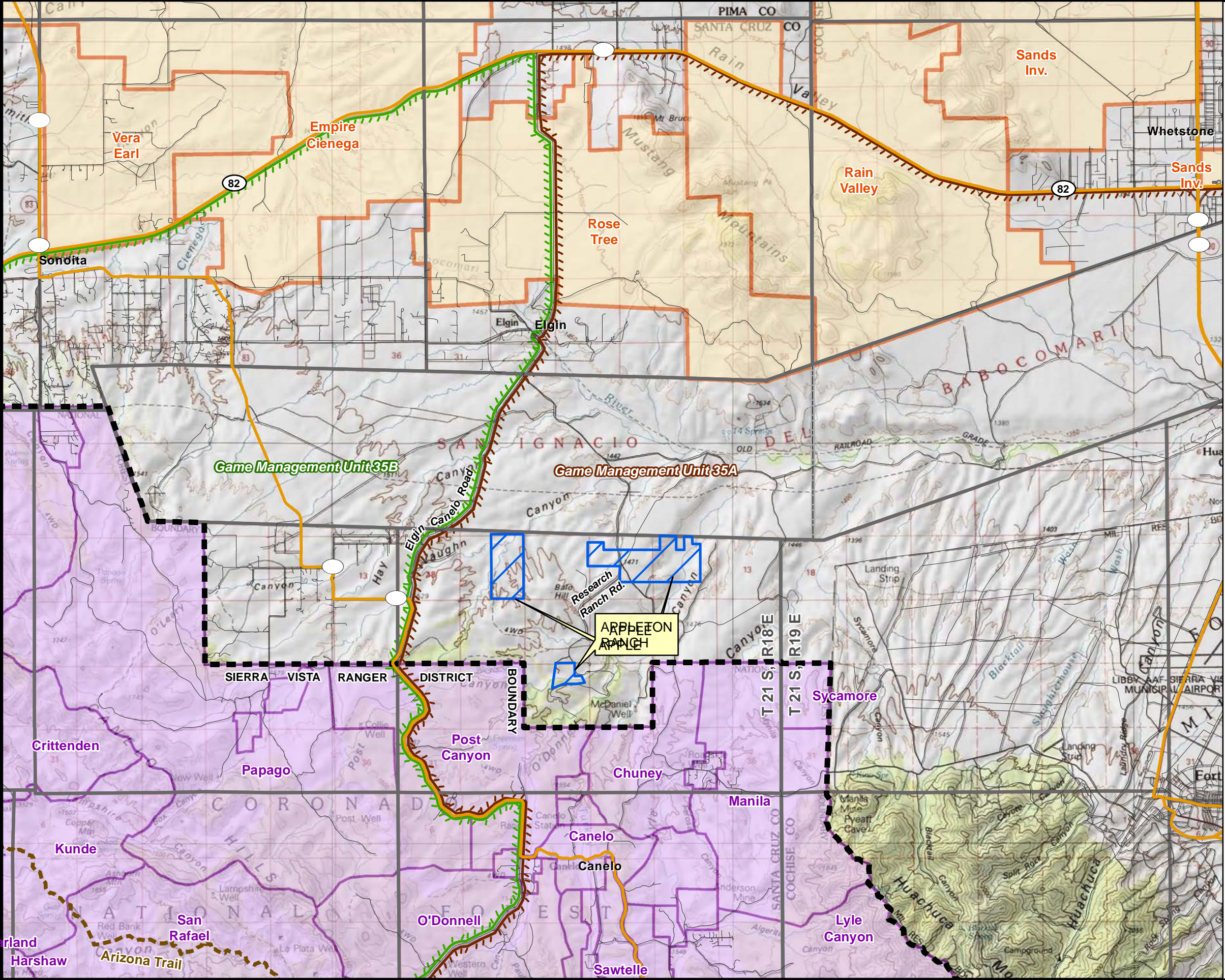
USDA, NRCS Soil Data

-  BhD-Bernardino-Hathaway association, rolling
-  CmE-Casto very gravelly sandy loam, 10 to 40 percent slopes
-  FrE-Faraway-Rock outcrop complex, 10 to 30 percent slopes
-  FrF-Faraway-rock outcrop complex, 30 to 60 percent slopes
-  FtF-Faraway-Tortugas-Rock outcrop association, steep
-  GbB-Grabe-Comoro complex, 0 to 5 percent slopes
-  Ge-Grabe soils
-  Gu-Guest soils
-  HaF-Hathaway gravelly sandy loam, 20 to 50 percent slopes
-  KbC-Kimbrough soils, 2 to 10 percent slopes
-  LgF-Lampshire-Graham-Rock outcrop association, steep
-  Pm-Pima soils
-  Rn-Rock outcrop-Lithic Haplustolls association
-  Th-Torrifluvents and haplustolls
-  TrE-Tortugas-Rock outcrop complex, 5 to 25 percent slopes
-  TrF-Tortugas-Rock outcrop complex, 25 to 60 percent slopes
-  WgC-White House gravelly loam, 0 to 10 percent slopes
-  WgE-White House gravelly loam, 10 to 35 percent slopes

RESOLUTION COPPER
Land Exchange Proposal

SOILS MAP
APPLETON RANCH PARCEL
Figure 3.5-40

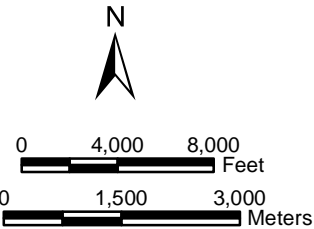




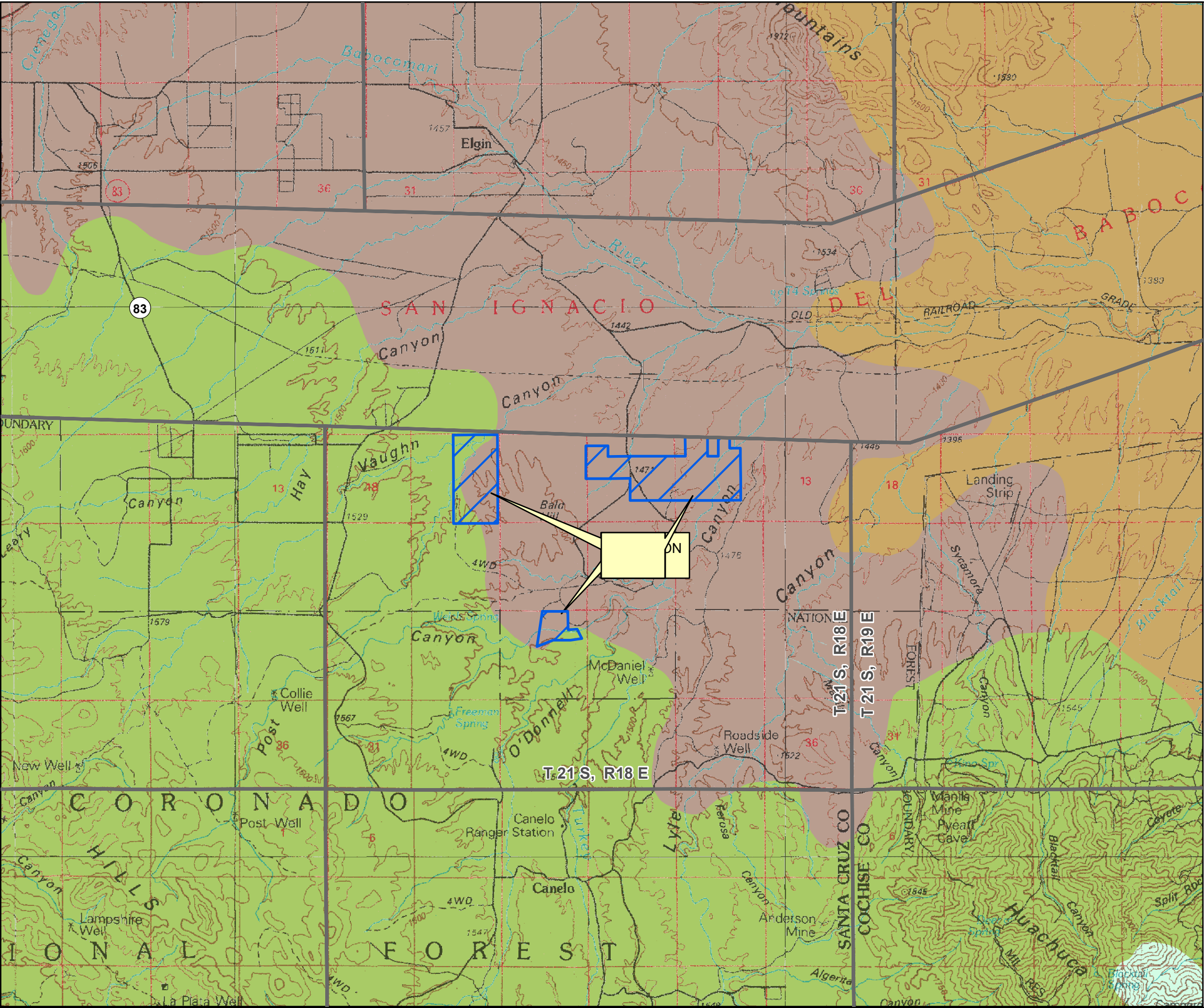
Appleton Ranch:
940 Acres of Resolution Copper Property offered to the BLM,
T21S, R18E, Portion of Sections 14, 15, 17 & 28,
Santa Cruz County, Arizona.
Image Source: ESRI Online USA Topo Maps
Data Sources: ESRI Street Map Data; ALRIS Street Data;
USDA Forest Service, Coronado National Forest:
Rangeland, USDA Forest Service, Region 3,
Regional GIS Coordinator, Publication Date: 20150210;
Arizona BLM Grazing Allotments 5-14-2011;
AZG&FD-Game Management Units Acquired 6-26-2013
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional
surveyors.

Legend

- Offered Lands
- Coronado National Forest Ranger District Boundary
- Arizona Trail (ESRI Online Data)
- Major Roads
- ALRIS Street Data Acquired 2-7-2012
- Arizona Game & Fish Department
- Game Management Unit
 - 35A
 - 35B
- USDA Forest Service Grazing Allotments
Rangeland Coronado National Forest
- Bureau of Land Management Grazing Allotments



RESOLUTION COPPER
Land Exchange Proposal
RECREATION & GRAZING
APPLETON RANCH PARCEL
Figure 3.5-41



Appleton Ranch:
940 Acres of Resolution Copper Property offered to the BLM,
T21S, R18E, Portion of Sections 14, 15, 17 & 28,
Santa Cruz County, Arizona.
Image Sources: Ft. Hucuchau 1:100,000 USGS Quadrangle
Data Sources: Biotic Communities of the Southwest,
Brown & Lowe, August 1980.
Disclaimer: Map boundaries are based on best available data.
Legal descriptions pending field verification by professional surveyors.

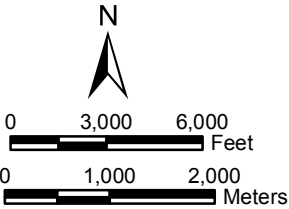
Legend

- Offered Lands
- Biotic Communities
- DESCRIPTION
- MADREAN EVERGREEN WOODLAND

PETRAN MONTANE CONIFER FOREST

PLAINS AND GREAT BASIN GRASSLAND

SEMIDESERT GRASSLAND



RESOLUTION COPPER
Land Exchange Proposal
BIOTIC COMMUNITIES
APPLETON RANCH PARCEL
Figure 3.5-42

APPENDICES

APPENDIX A

Southeast Arizona Land Exchange and Conservation Act
(Section 3003 of 113 H.R. ENR), with Maps

paragraph (2), update the shareholder roll of Sealaska to include the affected individual.

(4) SHAREHOLDER STATUS.—As of the date on which the affected individual is added to the shareholder roll of Sealaska under paragraph (3), it is the intent of Congress that Sealaska—

(A) reinstate the affected individual to the shareholder roll of Sealaska; and

(B) ensure the provision to the affected individual of the number of shares originally allocated to the affected individual by Sealaska.

(5) EFFECT OF SUBSECTION.—Nothing in this subsection provides to the affected individual any retroactive benefit relating to membership in—

(A) Sealaska; or

(B) the Metlakatla Indian Community.

SEC. 3003. SOUTHEAST ARIZONA LAND EXCHANGE AND CONSERVATION.

(a) PURPOSE.—The purpose of this section is to authorize, direct, facilitate, and expedite the exchange of land between Resolution Copper and the United States.

(b) DEFINITIONS.—In this section:

(1) APACHE LEAP.—The term “Apache Leap” means the approximately 807 acres of land depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Apache Leap” and dated March 2011.

(2) FEDERAL LAND.—The term “Federal land” means the approximately 2,422 acres of land located in Pinal County, Arizona, depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Federal Parcel–Oak Flat” and dated March 2011.

(3) INDIAN TRIBE.—The term “Indian tribe” has the meaning given the term in section 4 of the Indian Self-Determination and Education Assistance Act (25 U.S.C. 450b).

(4) NON-FEDERAL LAND.—The term “non-Federal land” means the parcels of land owned by Resolution Copper that are described in subsection (d)(1) and, if necessary to equalize the land exchange under subsection (c), subsection (c)(5)(B)(i)(I).

(5) OAK FLAT CAMPGROUND.—The term “Oak Flat Campground” means the approximately 50 acres of land comprising approximately 16 developed campsites depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Oak Flat Campground” and dated March 2011.

(6) OAK FLAT WITHDRAWAL AREA.—The term “Oak Flat Withdrawal Area” means the approximately 760 acres of land depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Oak Flat Withdrawal Area” and dated March 2011.

(7) RESOLUTION COPPER.—The term “Resolution Copper” means Resolution Copper Mining, LLC, a Delaware limited liability company, including any successor, assign, affiliate, member, or joint venturer of Resolution Copper Mining, LLC.

(8) SECRETARY.—The term “Secretary” means the Secretary of Agriculture.

(9) STATE.—The term “State” means the State of Arizona.

(10) TOWN.—The term “Town” means the incorporated town of Superior, Arizona.

(11) RESOLUTION MINE PLAN OF OPERATIONS.—The term “Resolution mine plan of operations” means the mine plan of operations submitted to the Secretary by Resolution Copper in November, 2013, including any amendments or supplements.

(c) LAND EXCHANGE.—

(1) IN GENERAL.—Subject to the provisions of this section, if Resolution Copper offers to convey to the United States all right, title, and interest of Resolution Copper in and to the non-Federal land, the Secretary is authorized and directed to convey to Resolution Copper, all right, title, and interest of the United States in and to the Federal land.

(2) CONDITIONS ON ACCEPTANCE.—Title to any non-Federal land conveyed by Resolution Copper to the United States under this section shall be in a form that—

(A) is acceptable to the Secretary, for land to be administered by the Forest Service and the Secretary of the Interior, for land to be administered by the Bureau of Land Management; and

(B) conforms to the title approval standards of the Attorney General of the United States applicable to land acquisitions by the Federal Government.

(3) CONSULTATION WITH INDIAN TRIBES.—

(A) IN GENERAL.—The Secretary shall engage in government-to-government consultation with affected Indian tribes concerning issues of concern to the affected Indian tribes related to the land exchange.

(B) IMPLEMENTATION.—Following the consultations under paragraph (A), the Secretary shall consult with Resolution Copper and seek to find mutually acceptable measures to—

(i) address the concerns of the affected Indian tribes; and

(ii) minimize the adverse effects on the affected Indian tribes resulting from mining and related activities on the Federal land conveyed to Resolution Copper under this section.

(4) APPRAISALS.—

(A) IN GENERAL.—As soon as practicable after the date of enactment of this Act, the Secretary and Resolution Copper shall select an appraiser to conduct appraisals of the Federal land and non-Federal land in compliance with the requirements of section 254.9 of title 36, Code of Federal Regulations.

(B) REQUIREMENTS.—

(i) IN GENERAL.—Except as provided in clause (ii), an appraisal prepared under this paragraph shall be conducted in accordance with nationally recognized appraisal standards, including—

(I) the Uniform Appraisal Standards for Federal Land Acquisitions; and

(II) the Uniform Standards of Professional Appraisal Practice.

(ii) FINAL APPRAISED VALUE.—After the final appraised values of the Federal land and non-Federal land are determined and approved by the Secretary,

the Secretary shall not be required to reappraise or update the final appraised value—

(I) for a period of 3 years beginning on the date of the approval by the Secretary of the final appraised value; or

(II) at all, in accordance with section 254.14 of title 36, Code of Federal Regulations (or a successor regulation), after an exchange agreement is entered into by Resolution Copper and the Secretary.

(iii) IMPROVEMENTS.—Any improvements made by Resolution Copper prior to entering into an exchange agreement shall not be included in the appraised value of the Federal land.

(iv) PUBLIC REVIEW.—Before consummating the land exchange under this section, the Secretary shall make the appraisals of the land to be exchanged (or a summary thereof) available for public review.

(C) APPRAISAL INFORMATION.—The appraisal prepared under this paragraph shall include a detailed income capitalization approach analysis of the market value of the Federal land which may be utilized, as appropriate, to determine the value of the Federal land, and shall be the basis for calculation of any payment under subsection (e).

(5) EQUAL VALUE LAND EXCHANGE.—

(A) IN GENERAL.—The value of the Federal land and non-Federal land to be exchanged under this section shall be equal or shall be equalized in accordance with this paragraph.

(B) SURPLUS OF FEDERAL LAND VALUE.—

(i) IN GENERAL.—If the final appraised value of the Federal land exceeds the value of the non-Federal land, Resolution Copper shall—

(I) convey additional non-Federal land in the State to the Secretary or the Secretary of the Interior, consistent with the requirements of this section and subject to the approval of the applicable Secretary;

(II) make a cash payment to the United States;

or

(III) use a combination of the methods described in subclauses (I) and (II), as agreed to by Resolution Copper, the Secretary, and the Secretary of the Interior.

(ii) AMOUNT OF PAYMENT.—The Secretary may accept a payment in excess of 25 percent of the total value of the land or interests conveyed, notwithstanding section 206(b) of the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1716(b)).

(iii) DISPOSITION AND USE OF PROCEEDS.—Any amounts received by the United States under this subparagraph shall be deposited in the fund established under Public Law 90–171 (commonly known as the “Sisk Act”; 16 U.S.C. 484a) and shall be made available to the Secretary for the acquisition of land or interests in land in Region 3 of the Forest Service.

(C) SURPLUS OF NON-FEDERAL LAND.—If the final appraised value of the non-Federal land exceeds the value of the Federal land—

(i) the United States shall not make a payment to Resolution Copper to equalize the value; and

(ii) except as provided in subsection (h), the surplus value of the non-Federal land shall be considered to be a donation by Resolution Copper to the United States.

(6) OAK FLAT WITHDRAWAL AREA.—

(A) PERMITS.—Subject to the provisions of this paragraph and notwithstanding any withdrawal of the Oak Flat Withdrawal Area from the mining, mineral leasing, or public land laws, the Secretary, upon enactment of this Act, shall issue to Resolution Copper—

(i) if so requested by Resolution Copper, within 30 days of such request, a special use permit to carry out mineral exploration activities under the Oak Flat Withdrawal Area from existing drill pads located outside the Area, if the activities would not disturb the surface of the Area; and

(ii) if so requested by Resolution Copper, within 90 days of such request, a special use permit to carry out mineral exploration activities within the Oak Flat Withdrawal Area (but not within the Oak Flat Campground), if the activities are conducted from a single exploratory drill pad which is located to reasonably minimize visual and noise impacts on the Campground.

(B) CONDITIONS.—Any activities undertaken in accordance with this paragraph shall be subject to such reasonable terms and conditions as the Secretary may require.

(C) TERMINATION.—The authorization for Resolution Copper to undertake mineral exploration activities under this paragraph shall remain in effect until the Oak Flat Withdrawal Area land is conveyed to Resolution Copper in accordance with this section.

(7) COSTS.—As a condition of the land exchange under this section, Resolution Copper shall agree to pay, without compensation, all costs that are—

(A) associated with the land exchange and any environmental review document under paragraph (9); and

(B) agreed to by the Secretary.

(8) USE OF FEDERAL LAND.—The Federal land to be conveyed to Resolution Copper under this section shall be available to Resolution Copper for mining and related activities subject to and in accordance with applicable Federal, State, and local laws pertaining to mining and related activities on land in private ownership.

(9) ENVIRONMENTAL COMPLIANCE.—

(A) IN GENERAL.—Except as otherwise provided in this section, the Secretary shall carry out the land exchange in accordance with the requirements of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.).

(B) ENVIRONMENTAL ANALYSIS.—Prior to conveying Federal land under this section, the Secretary shall prepare a single environmental impact statement under the National Environmental Policy Act of 1969 (42 U.S.C. 4321

et seq.), which shall be used as the basis for all decisions under Federal law related to the proposed mine and the Resolution mine plan of operations and any related major Federal actions significantly affecting the quality of the human environment, including the granting of any permits, rights-of-way, or approvals for the construction of associated power, water, transportation, processing, tailings, waste disposal, or other ancillary facilities.

(C) IMPACTS ON CULTURAL AND ARCHEOLOGICAL RESOURCES.—The environmental impact statement prepared under subparagraph (B) shall—

(i) assess the effects of the mining and related activities on the Federal land conveyed to Resolution Copper under this section on the cultural and archeological resources that may be located on the Federal land; and

(ii) identify measures that may be taken, to the extent practicable, to minimize potential adverse impacts on those resources, if any.

(D) EFFECT.—Nothing in this paragraph precludes the Secretary from using separate environmental review documents prepared in accordance with the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.) or other applicable laws for exploration or other activities not involving—

(i) the land exchange; or

(ii) the extraction of minerals in commercial quantities by Resolution Copper on or under the Federal land.

(10) TITLE TRANSFER.—Not later than 60 days after the date of publication of the final environmental impact statement, the Secretary shall convey all right, title, and interest of the United States in and to the Federal land to Resolution Copper.

(d) CONVEYANCE AND MANAGEMENT OF NON-FEDERAL LAND.—

(1) CONVEYANCE.—On receipt of title to the Federal land, Resolution Copper shall simultaneously convey—

(A) to the Secretary, all right, title, and interest that the Secretary determines to be acceptable in and to—

(i) the approximately 147 acres of land located in Gila County, Arizona, depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–Turkey Creek” and dated March 2011;

(ii) the approximately 148 acres of land located in Yavapai County, Arizona, depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–Tangle Creek” and dated March 2011;

(iii) the approximately 149 acres of land located in Maricopa County, Arizona, depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–Cave Creek” and dated March 2011;

(iv) the approximately 640 acres of land located in Coconino County, Arizona, depicted on the map

entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–East Clear Creek” and dated March 2011; and

(v) the approximately 110 acres of land located in Pinal County, Arizona, depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–Apache Leap South End” and dated March 2011; and

(B) to the Secretary of the Interior, all right, title, and interest that the Secretary of the Interior determines to be acceptable in and to—

(i) the approximately 3,050 acres of land located in Pinal County, Arizona, identified as “Lands to DOI” as generally depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–Lower San Pedro River” and dated July 6, 2011;

(ii) the approximately 160 acres of land located in Gila and Pinal Counties, Arizona, identified as “Lands to DOI” as generally depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–Dripping Springs” and dated July 6, 2011; and

(iii) the approximately 940 acres of land located in Santa Cruz County, Arizona, identified as “Lands to DOI” as generally depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Non-Federal Parcel–Appleton Ranch” and dated July 6, 2011.

(2) MANAGEMENT OF ACQUIRED LAND.—

(A) LAND ACQUIRED BY THE SECRETARY.—

(i) IN GENERAL.—Land acquired by the Secretary under this section shall—

(I) become part of the national forest in which the land is located; and

(II) be administered in accordance with the laws applicable to the National Forest System.

(ii) BOUNDARY REVISION.—On the acquisition of land by the Secretary under this section, the boundaries of the national forest shall be modified to reflect the inclusion of the acquired land.

(iii) LAND AND WATER CONSERVATION FUND.—For purposes of section 7 of the Land and Water Conservation Fund Act of 1965 (16 U.S.C. 4601–9), the boundaries of a national forest in which land acquired by the Secretary is located shall be deemed to be the boundaries of that forest as in existence on January 1, 1965.

(B) LAND ACQUIRED BY THE SECRETARY OF THE INTERIOR.—

(i) SAN PEDRO NATIONAL CONSERVATION AREA.—

(I) IN GENERAL.—The land acquired by the Secretary of the Interior under paragraph (1)(B)(i) shall be added to, and administered as part of, the San Pedro National Conservation Area in accordance with the laws (including regulations) applicable to the Conservation Area.

(II) MANAGEMENT PLAN.—Not later than 2 years after the date on which the land is acquired, the Secretary of the Interior shall update the management plan for the San Pedro National Conservation Area to reflect the management requirements of the acquired land.

(ii) DRIPPING SPRINGS.—Land acquired by the Secretary of the Interior under paragraph (1)(B)(ii) shall be managed in accordance with the Federal Land Policy and Management Act of 1976 (43 U.S.C. 1701 et seq.) and applicable land use plans.

(iii) LAS CIENEGAS NATIONAL CONSERVATION AREA.—Land acquired by the Secretary of the Interior under paragraph (1)(B)(iii) shall be added to, and administered as part of, the Las Cienegas National Conservation Area in accordance with the laws (including regulations) applicable to the Conservation Area.

(e) VALUE ADJUSTMENT PAYMENT TO UNITED STATES.—

(1) ANNUAL PRODUCTION REPORTING.—

(A) REPORT REQUIRED.—As a condition of the land exchange under this section, Resolution Copper shall submit to the Secretary of the Interior an annual report indicating the quantity of locatable minerals produced during the preceding calendar year in commercial quantities from the Federal land conveyed to Resolution Copper under subsection (c). The first report is required to be submitted not later than February 15 of the first calendar year beginning after the date of commencement of production of valuable locatable minerals in commercial quantities from such Federal land. The reports shall be submitted February 15 of each calendar year thereafter.

(B) SHARING REPORTS WITH STATE.—The Secretary shall make each report received under subparagraph (A) available to the State.

(C) REPORT CONTENTS.—The reports under subparagraph (A) shall comply with any recordkeeping and reporting requirements prescribed by the Secretary or required by applicable Federal laws in effect at the time of production.

(2) PAYMENT ON PRODUCTION.—If the cumulative production of valuable locatable minerals produced in commercial quantities from the Federal land conveyed to Resolution Copper under subsection (c) exceeds the quantity of production of locatable minerals from the Federal land used in the income capitalization approach analysis prepared under subsection (c)(4)(C), Resolution Copper shall pay to the United States, by not later than March 15 of each applicable calendar year, a value adjustment payment for the quantity of excess production at the same rate assumed for the income capitalization approach analysis prepared under subsection (c)(4)(C).

(3) STATE LAW UNAFFECTED.—Nothing in this subsection modifies, expands, diminishes, amends, or otherwise affects any State law relating to the imposition, application, timing, or collection of a State excise or severance tax.

(4) USE OF FUNDS.—

(A) SEPARATE FUND.—All funds paid to the United States under this subsection shall be deposited in a special fund established in the Treasury and shall be available, in such amounts as are provided in advance in appropriation Acts, to the Secretary and the Secretary of the Interior only for the purposes authorized by subparagraph (B).

(B) AUTHORIZED USE.—Amounts in the special fund established pursuant to subparagraph (A) shall be used for maintenance, repair, and rehabilitation projects for Forest Service and Bureau of Land Management assets.

(f) WITHDRAWAL.—Subject to valid existing rights, Apache Leap and any land acquired by the United States under this section are withdrawn from all forms of—

(1) entry, appropriation, or disposal under the public land laws;

(2) location, entry, and patent under the mining laws; and

(3) disposition under the mineral leasing, mineral materials, and geothermal leasing laws.

(g) APACHE LEAP SPECIAL MANAGEMENT AREA.—

(1) DESIGNATION.—To further the purpose of this section, the Secretary shall establish a special management area consisting of Apache Leap, which shall be known as the “Apache Leap Special Management Area” (referred to in this subsection as the “special management area”).

(2) PURPOSE.—The purposes of the special management area are—

(A) to preserve the natural character of Apache Leap;

(B) to allow for traditional uses of the area by Native American people; and

(C) to protect and conserve the cultural and archaeological resources of the area.

(3) SURRENDER OF MINING AND EXTRACTION RIGHTS.—As a condition of the land exchange under subsection (c), Resolution Copper shall surrender to the United States, without compensation, all rights held under the mining laws and any other law to commercially extract minerals under Apache Leap.

(4) MANAGEMENT.—

(A) IN GENERAL.—The Secretary shall manage the special management area in a manner that furthers the purposes described in paragraph (2).

(B) AUTHORIZED ACTIVITIES.—The activities that are authorized in the special management area are—

(i) installation of seismic monitoring equipment on the surface and subsurface to protect the resources located within the special management area;

(ii) installation of fences, signs, or other measures necessary to protect the health and safety of the public; and

(iii) operation of an underground tunnel and associated workings, as described in the Resolution mine plan of operations, subject to any terms and conditions the Secretary may reasonably require.

(5) PLAN.—

(A) IN GENERAL.—Not later than 3 years after the date of enactment of this Act, the Secretary, in consultation with affected Indian tribes, the Town, Resolution Copper,

and other interested members of the public, shall prepare a management plan for the Apache Leap Special Management Area.

(B) CONSIDERATIONS.—In preparing the plan under subparagraph (A), the Secretary shall consider whether additional measures are necessary to—

- (i) protect the cultural, archaeological, or historical resources of Apache Leap, including permanent or seasonal closures of all or a portion of Apache Leap; and
- (ii) provide access for recreation.

(6) MINING ACTIVITIES.—The provisions of this subsection shall not impose additional restrictions on mining activities carried out by Resolution Copper adjacent to, or outside of, the Apache Leap area beyond those otherwise applicable to mining activities on privately owned land under Federal, State, and local laws, rules and regulations.

(h) CONVEYANCES TO TOWN OF SUPERIOR, ARIZONA.—

(1) CONVEYANCES.—On request from the Town and subject to the provisions of this subsection, the Secretary shall convey to the Town the following:

(A) Approximately 30 acres of land as depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Federal Parcel–Fairview Cemetery” and dated March 2011.

(B) The reversionary interest and any reserved mineral interest of the United States in the approximately 265 acres of land located in Pinal County, Arizona, as depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Federal Reversionary Interest–Superior Airport” and dated March 2011.

(C) The approximately 250 acres of land located in Pinal County, Arizona, as depicted on the map entitled “Southeast Arizona Land Exchange and Conservation Act of 2011–Federal Parcel–Superior Airport Contiguous Parcels” and dated March 2011.

(2) PAYMENT.—The Town shall pay to the Secretary the market value for each parcel of land or interest in land acquired under this subsection, as determined by appraisals conducted in accordance with subsection (c)(4).

(3) SISK ACT.—Any payment received by the Secretary from the Town under this subsection shall be deposited in the fund established under Public Law 90–171 (commonly known as the “Sisk Act”) (16 U.S.C. 484a) and shall be made available to the Secretary for the acquisition of land or interests in land in Region 3 of the Forest Service.

(4) TERMS AND CONDITIONS.—The conveyances under this subsection shall be subject to such terms and conditions as the Secretary may require.

(i) MISCELLANEOUS PROVISIONS.—

(1) REVOCATION OF ORDERS; WITHDRAWAL.—

(A) REVOCATION OF ORDERS.—Any public land order that withdraws the Federal land from appropriation or disposal under a public land law shall be revoked to the extent necessary to permit disposal of the land.

(B) WITHDRAWAL.—On the date of enactment of this Act, if the Federal land or any Federal interest in the non-Federal land to be exchanged under subsection (c)

is not withdrawn or segregated from entry and appropriation under a public land law (including mining and mineral leasing laws and the Geothermal Steam Act of 1970 (30 U.S.C. 1001 et seq.)), the land or interest shall be withdrawn, without further action required by the Secretary concerned, from entry and appropriation. The withdrawal shall be terminated—

(i) on the date of consummation of the land exchange; or

(ii) if Resolution Copper notifies the Secretary in writing that it has elected to withdraw from the land exchange pursuant to section 206(d) of the Federal Land Policy and Management Act of 1976, as amended (43 U.S.C. 1716(d)).

(C) RIGHTS OF RESOLUTION COPPER.—Nothing in this section shall interfere with, limit, or otherwise impair, the unpatented mining claims or rights currently held by Resolution Copper on the Federal land, nor in any way change, diminish, qualify, or otherwise impact Resolution Copper's rights and ability to conduct activities on the Federal land under such unpatented mining claims and the general mining laws of the United States, including the permitting or authorization of such activities.

(2) MAPS, ESTIMATES, AND DESCRIPTIONS.—

(A) MINOR ERRORS.—The Secretary concerned and Resolution Copper may correct, by mutual agreement, any minor errors in any map, acreage estimate, or description of any land conveyed or exchanged under this section.

(B) CONFLICT.—If there is a conflict between a map, an acreage estimate, or a description of land in this section, the map shall control unless the Secretary concerned and Resolution Copper mutually agree otherwise.

(C) AVAILABILITY.—On the date of enactment of this Act, the Secretary shall file and make available for public inspection in the Office of the Supervisor, Tonto National Forest, each map referred to in this section.

(3) PUBLIC ACCESS IN AND AROUND OAK FLAT CAMPGROUND.—As a condition of conveyance of the Federal land, Resolution Copper shall agree to provide access to the surface of the Oak Flat Campground to members of the public, including Indian tribes, to the maximum extent practicable, consistent with health and safety requirements, until such time as the operation of the mine precludes continued public access for safety reasons, as determined by Resolution Copper.

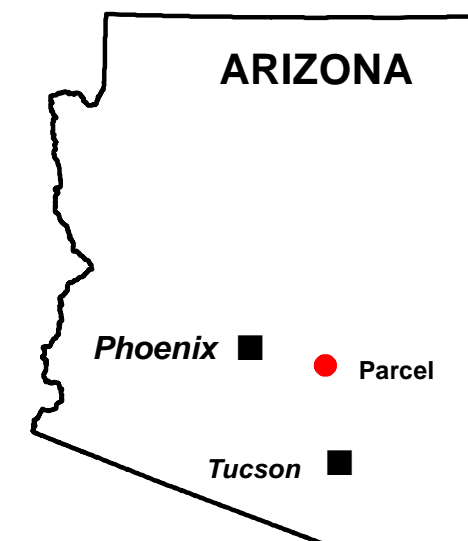
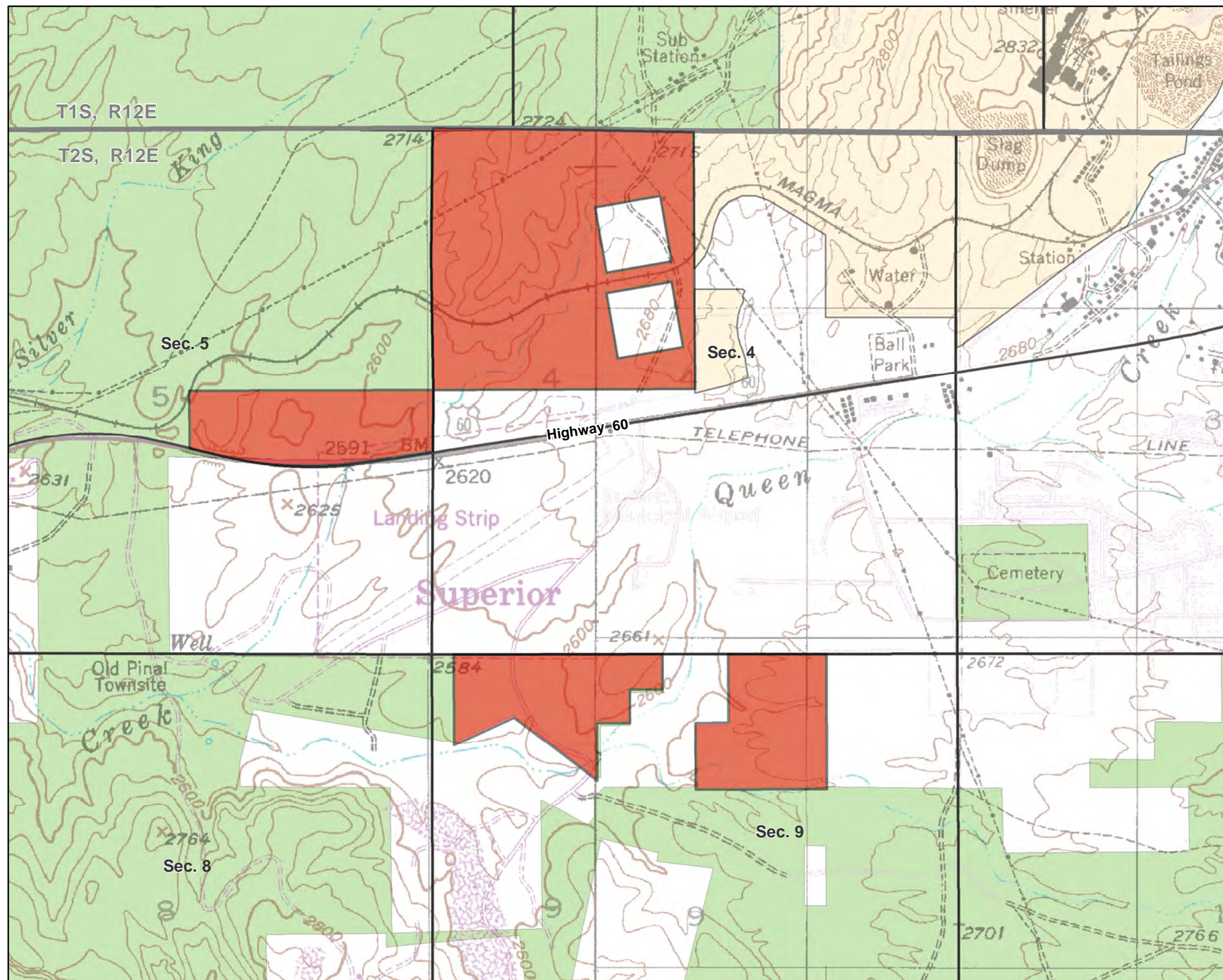
SEC. 3004. LAND EXCHANGE, CIBOLA NATIONAL WILDLIFE REFUGE, ARIZONA, AND BUREAU OF LAND MANAGEMENT LAND IN RIVERSIDE COUNTY, CALIFORNIA.

(a) DEFINITIONS.—In this section—

(1) MAP 1.—The term “Map 1” means the map entitled “Specified Parcel of Public Land in California” and dated July 18, 2014.

(2) MAP 2.—The term “Map 2” means the map entitled “River Bottom Farm Lands” and dated July 18, 2014.

(b) LAND EXCHANGE.—



- Federal Parcel - Superior Airport Contiguous Parcels Approximately 250 Acres
- RCML Patented & Fee Land
- U.S.A. Lands (Tonto National Forest)
- Other Private Ownership (No Color)



Scale

.5 Miles



Southeast Arizona Land Exchange and Conservation Act of 2011
FEDERAL PARCEL - SUPERIOR AIRPORT CONTIGUOUS PARCELS
TONTO NATIONAL FOREST, PHOENIX, ARIZONA

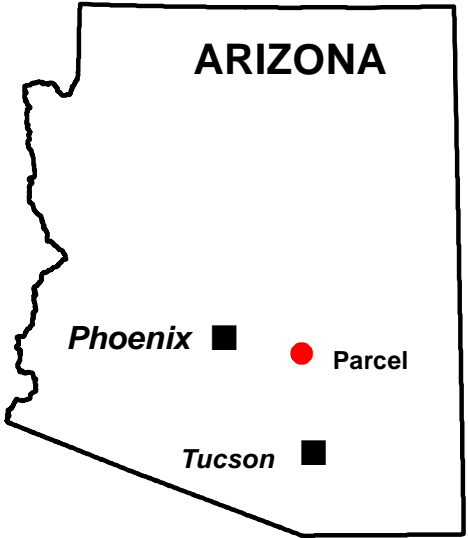
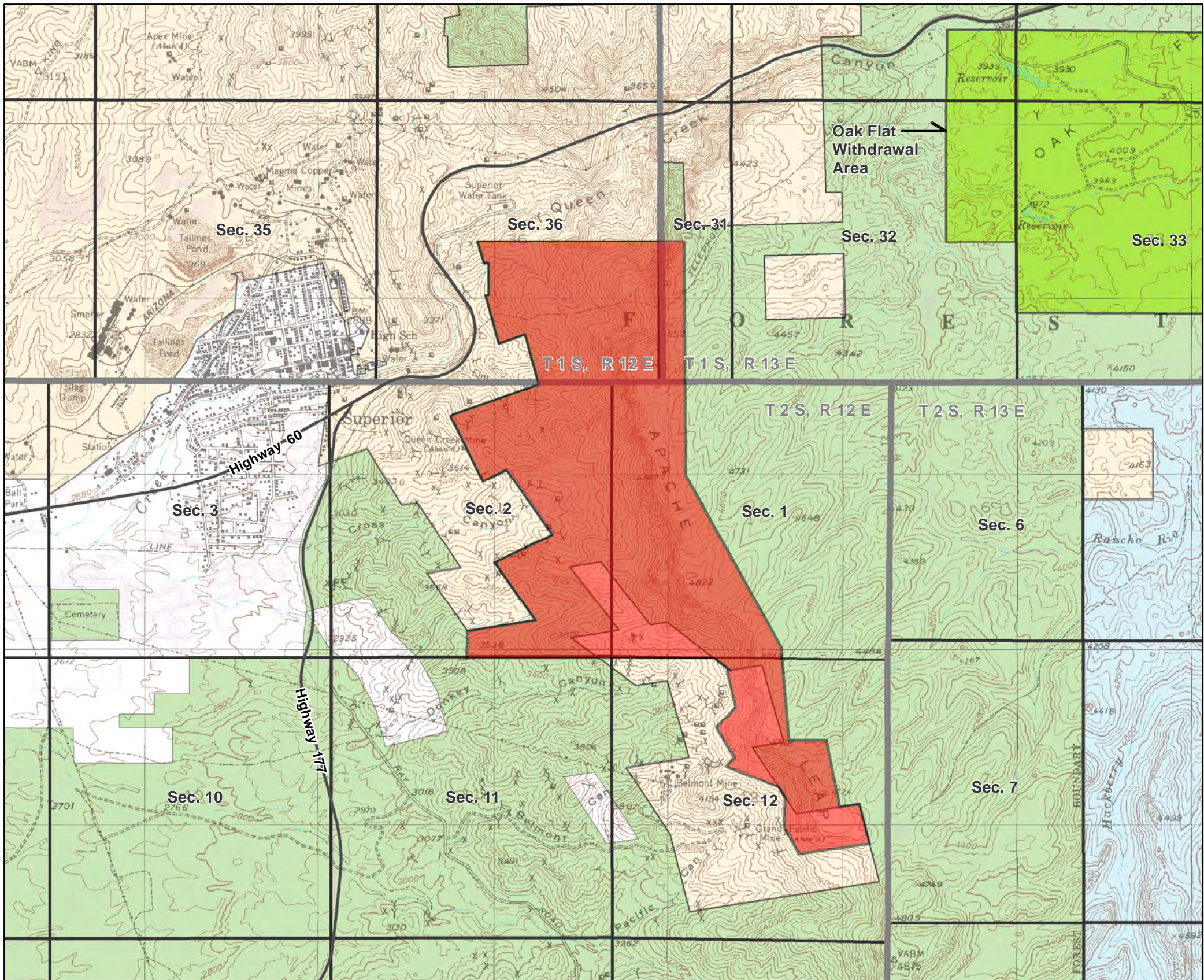
County: PINAL

Location: T2S, R12E,
Portion of Secs. 4, 5, & 9.

USGS 7.5' Quads: SUPERIOR &
PICKETPOST MOUNTAIN

Date: March, 2011
Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



- Apache Leap Protection Area
Approximately 807 Acres
- RCML Patented & Fee Land
- Other Private Ownership (No Color)
- Arizona State Trust Lands
- U.S.A. Lands (Tonto National Forest)



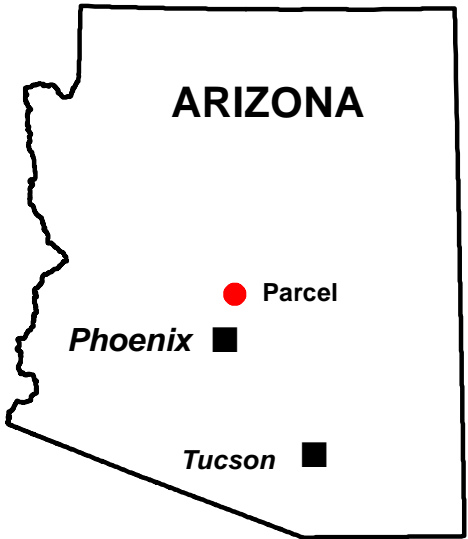
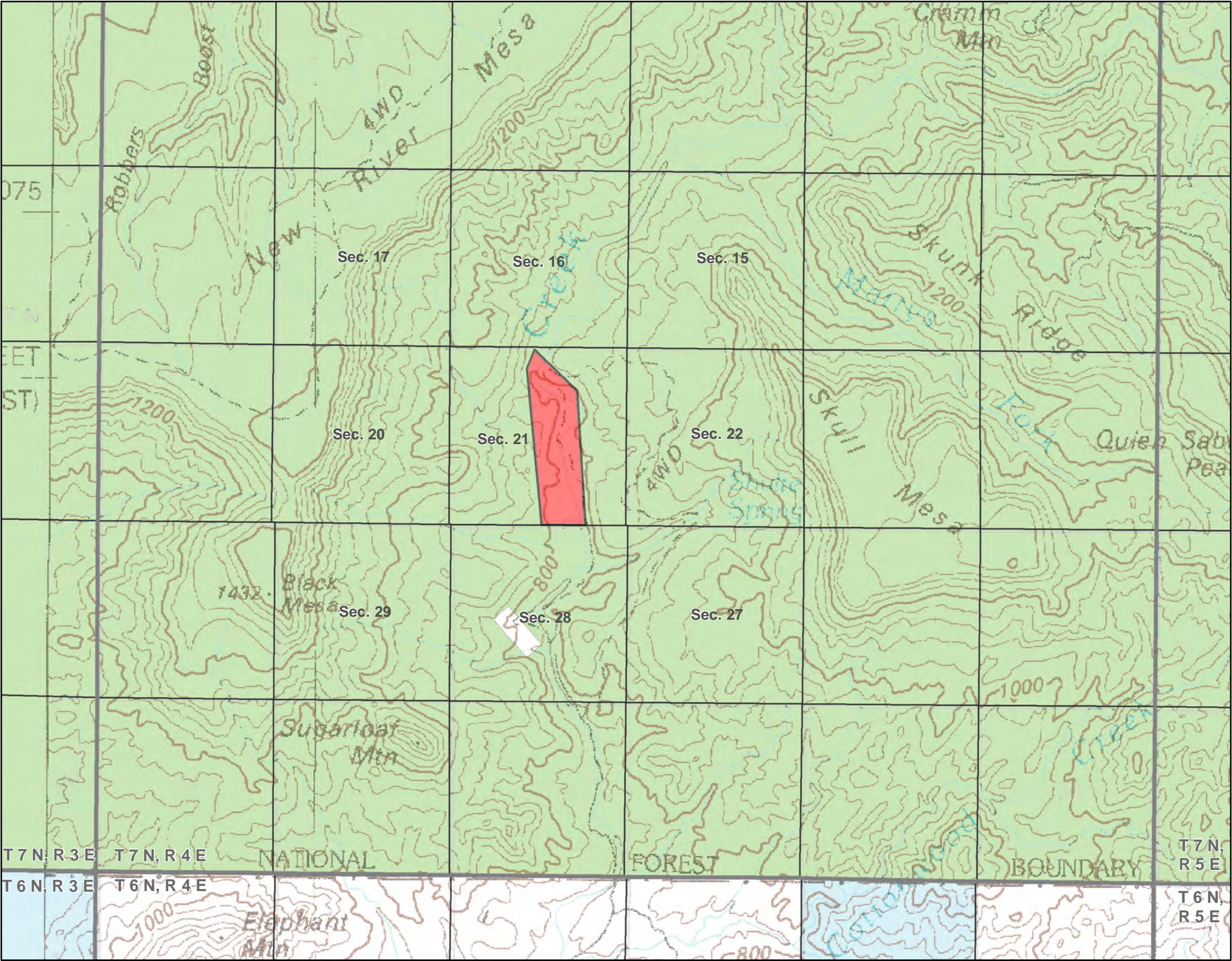
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.5 Miles







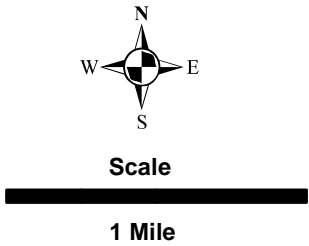
**Southeast Arizona Land Exchange and
Conservation Act of 2011
APACHE LEAP
TONGO NATIONAL FOREST, PHOENIX, ARIZONA**

County: PINAL	Location: T1S, R12E, Portion of Sec. 36; T1S, R13E, Portion of Sec. 31; T2S, R12E, Portion of Secs. 1, 2, & 12.
USGS 7.5' Quad: SUPERIOR	Date: March, 2011 Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification

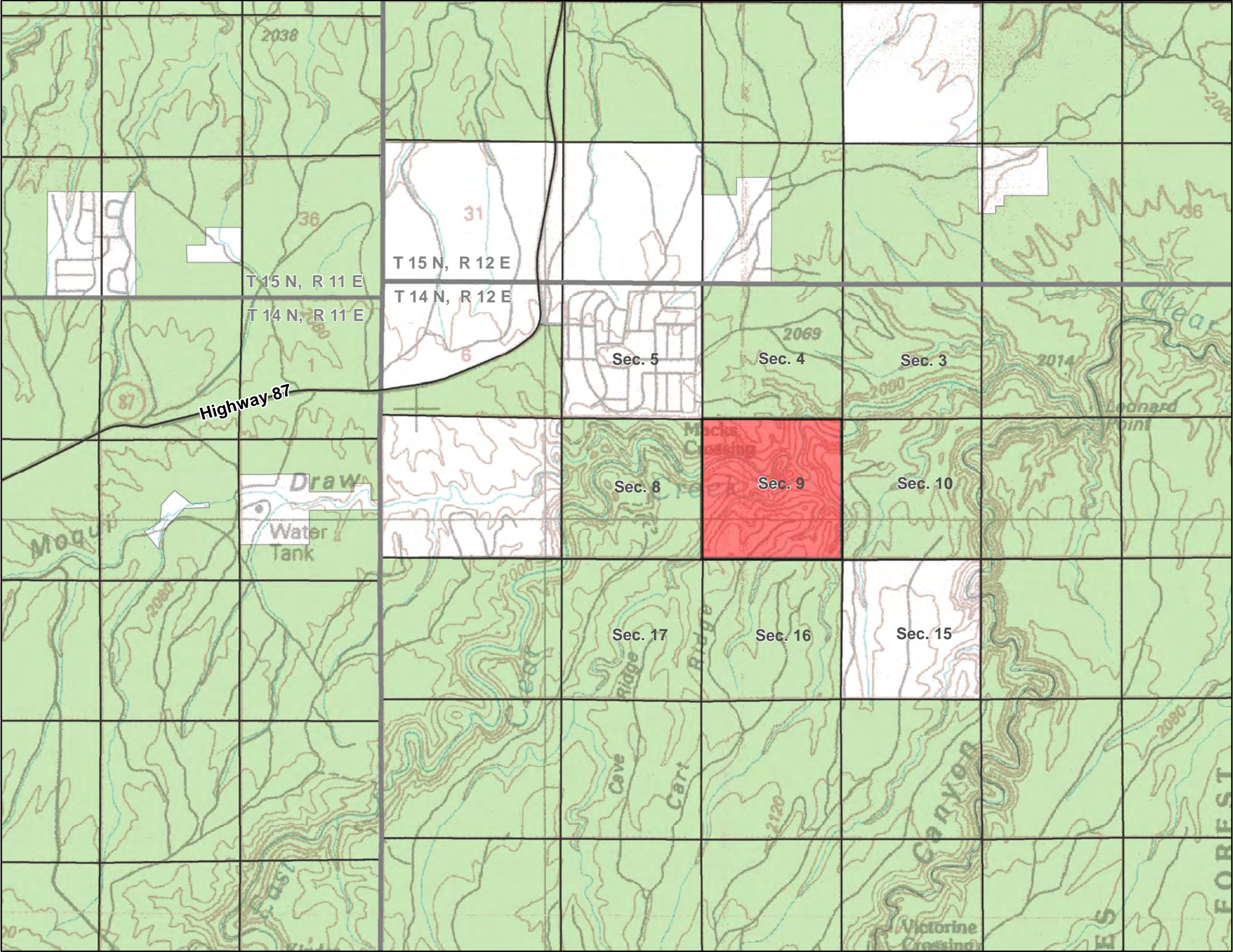





-  Non-Federal Parcel - Cave Creek
Approximately 149 Acres
-  U.S.A. Lands (Tonto National Forest)
-  Other Private Ownership (No Color)
-  Arizona State Trust Lands



- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification

Southeast Arizona Land Exchange and Conservation Act of 2011 NON-FEDERAL PARCEL - CAVE CREEK TONTONATIONAL FOREST, PHOENIX, ARIZONA	
County: MARICOPA	Location: T7N, R4E, Portion of Sec. 21.
USGS 7.5' Quad: NEW RIVER MESA	Date: March, 2011 Revised March 30, 2015



-  Non-Federal Parcel - East Clear Creek Approximately 640 Acres
-  Other Private Ownership (No Color)
-  U.S.A. Lands (Coconino National Forest)



Scale
1 Mile



Southeast Arizona Land Exchange and Conservation Act of 2011
NON-FEDERAL PARCEL - EAST CLEAR CREEK
COCONINO NATIONAL FOREST, FLAGSTAFF, ARIZONA

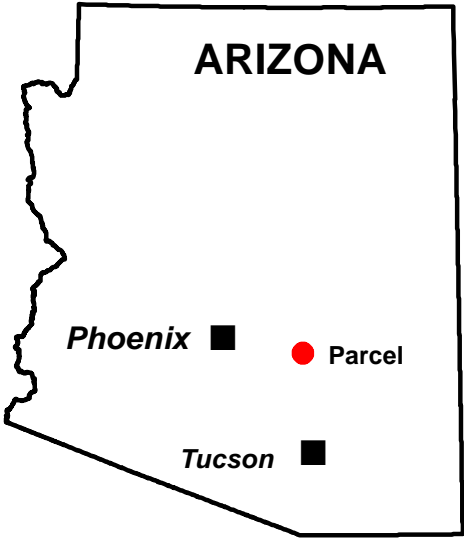
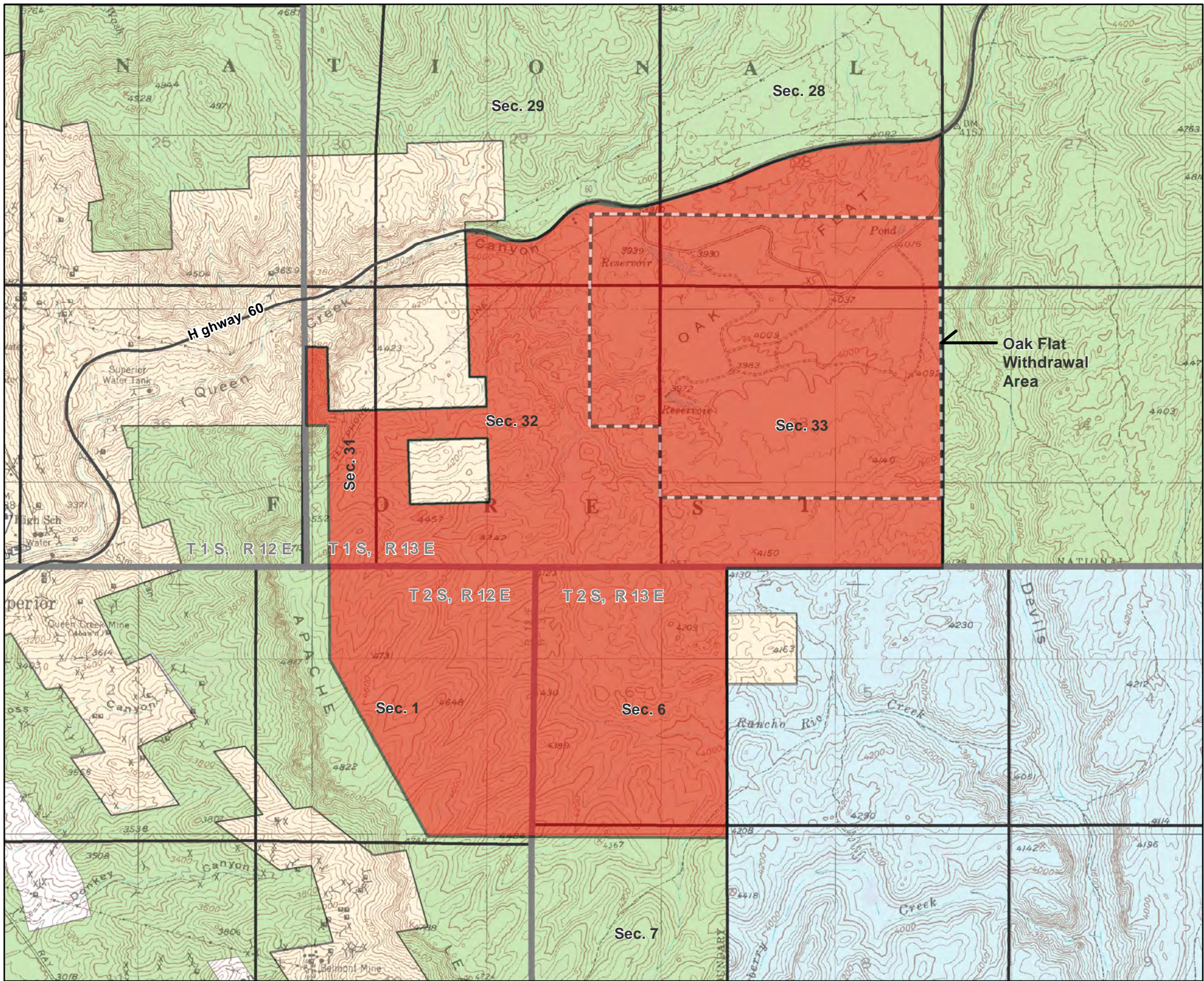
County: COCONINO

Location: T14N, R12E, Sec. 9.

USGS 7.5' Quad:
LEONARD CANYON

Date: March, 2011
Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



- Federal Parcel - Oak Flat
Approximately 2,422 Acres
- RCML Patented & Fee Land
- Other Private Ownership (No Color)
- Arizona State Trust Lands
- U.S.A. Lands (Tonto National Forest)



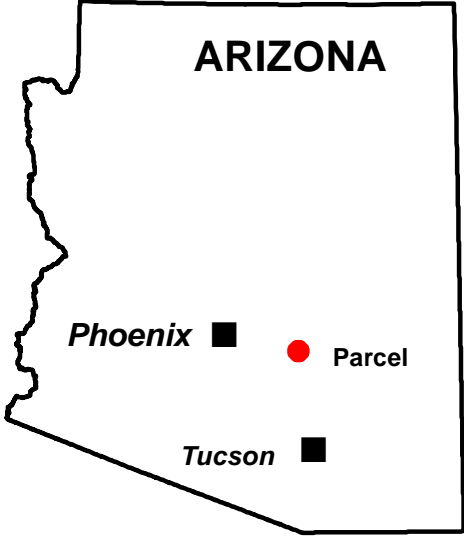
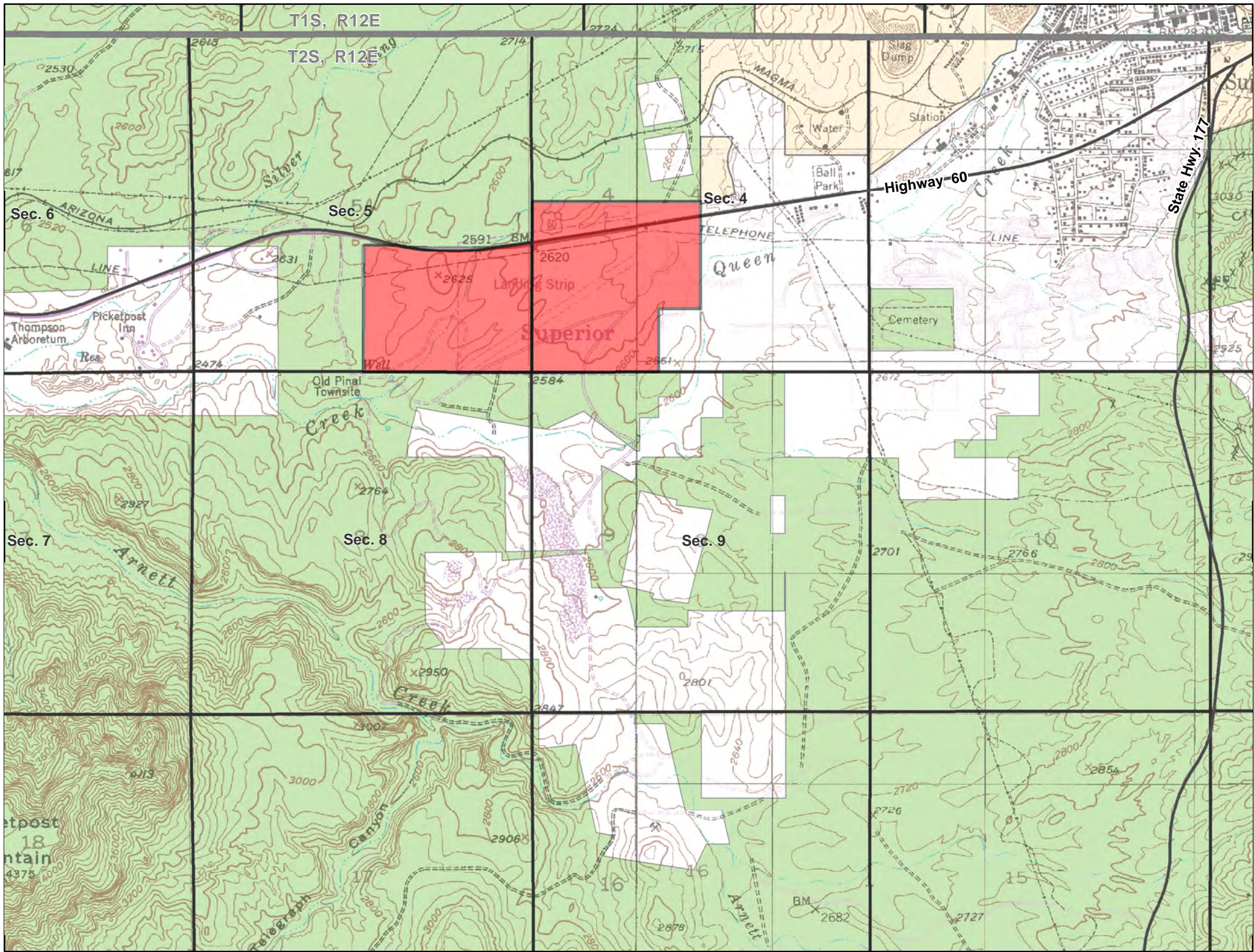
Scale







**Southeast Arizona Land Exchange and
Conservation Act of 2011
FEDERAL PARCEL - OAK FLAT
TONGO NATIONAL FOREST, PHOENIX, ARIZONA**

County: PINAL	Location: T1S, R13E, Portion of Secs. 28, 29, 31, 32 & Sec. 33; T2S, R12E, Portion of Sec. 1; T2S, R13E, Sec. 6 and Portion of Sec. 7.
USGS 7.5' Quads: SUPERIOR & PICKETPOST MOUNTAIN	Date: March, 2011 Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



-  Federal Reversionary Interest - Superior Airport
Approximately 265 Acres
-  RCML Patented & Fee Land
-  U.S.A. Lands (Tonto National Forest)
-  Other Private Ownership (No Color)



Scale

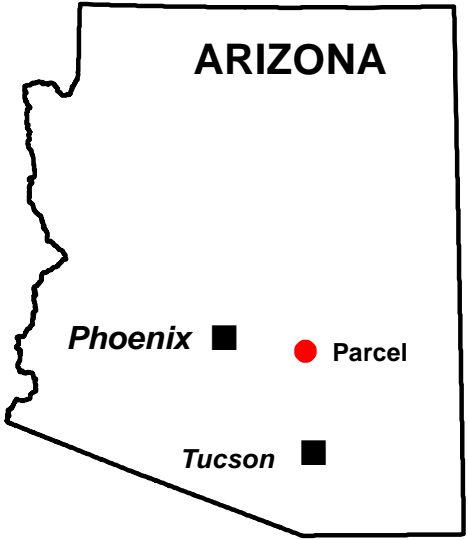
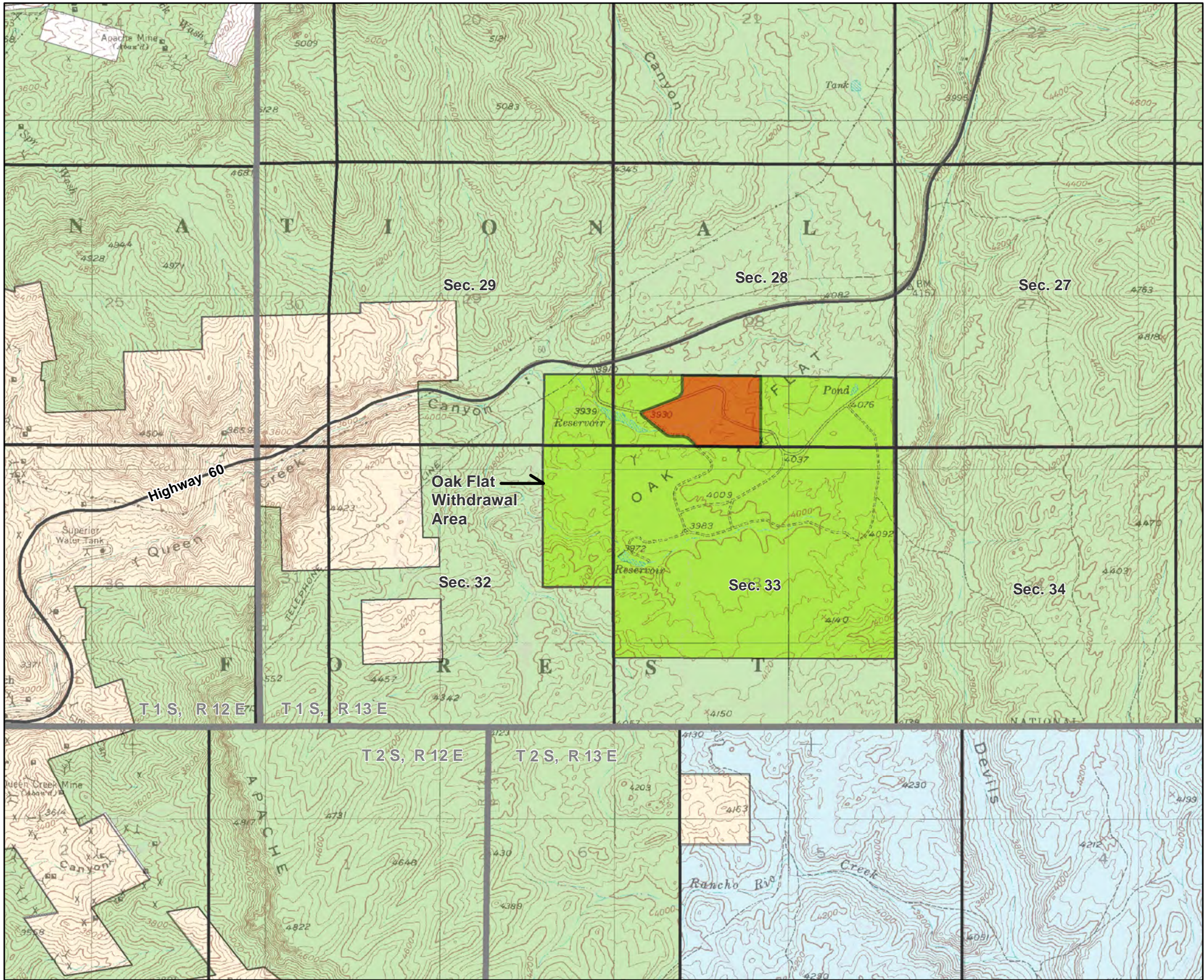
1 Mile



Southeast Arizona Land Exchange and Conservation Act of 2011
FEDERAL REVERSIONARY INTEREST - SUPERIOR AIRPORT
TONTO NATIONAL FOREST, PHOENIX, ARIZONA

County: PINAL	Location: T2S, R12E, Portion of Secs. 4 & 5.
USGS 7.5' Quads: SUPERIOR & PICKETPOST MOUNTAIN	Date: March, 2011 Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



-  Oak Flat Campground
Approximately 50 Acres
-  RCML Patented & Fee Land
-  Other Private Ownership (No Color)
-  Arizona State Trust Lands
-  U.S.A. Lands (Tonto National Forest)



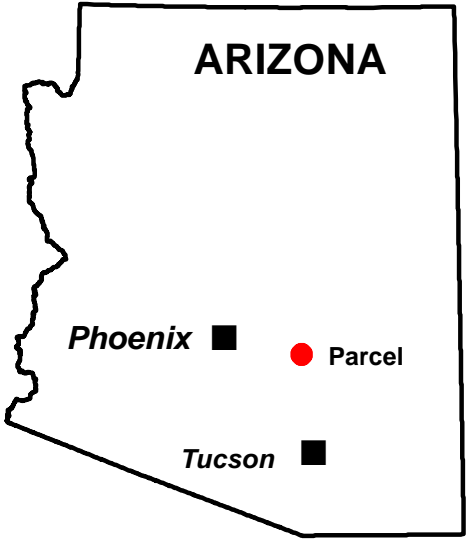
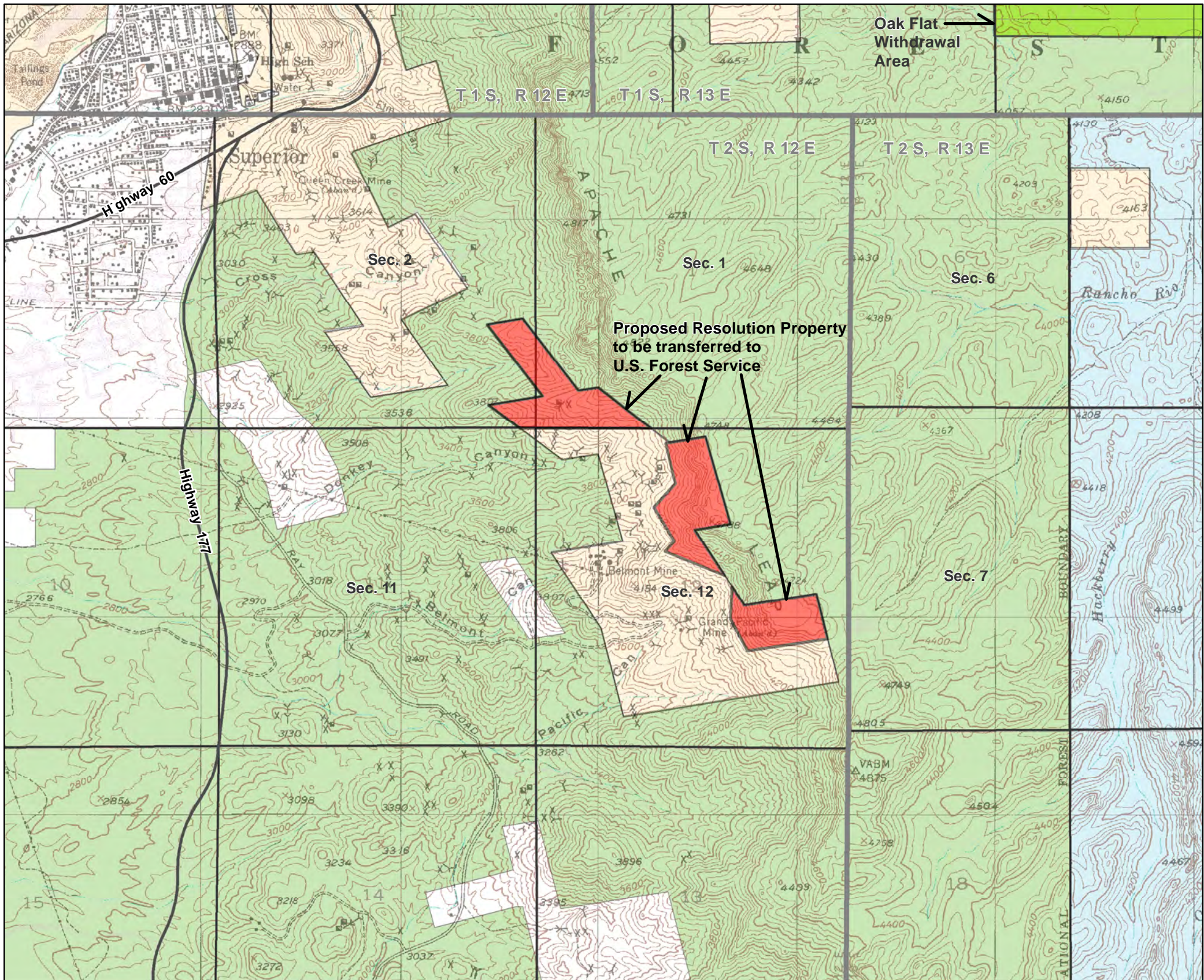
Scale
0.5 Miles



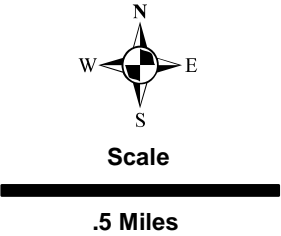
**Southeast Arizona Land Exchange and
Conservation Act of 2011
OAK FLAT CAMPGROUND
TONGO NATIONAL FOREST, PHOENIX, ARIZONA**

County: PINAL	Location: T1S, R13E, Portion of Sec. 28.
USGS 7.5' Quad: SUPERIOR	Date: March, 2011 Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



- Non-Federal Parcel - Apache Leap South End Approximately 110 Acres
- RCML Patented & Fee Land
- Other Private Ownership (No Color)
- Arizona State Trust Lands
- U.S.A. Lands (Tonto National Forest)



Southeast Arizona Land Exchange and Conservation Act of 2011
NON-FEDERAL PARCEL - APACHE LEAP SOUTH END
TONTO NATIONAL FOREST, PHOENIX, ARIZONA

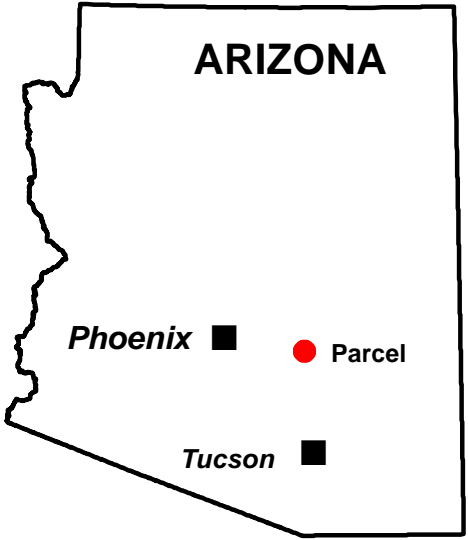
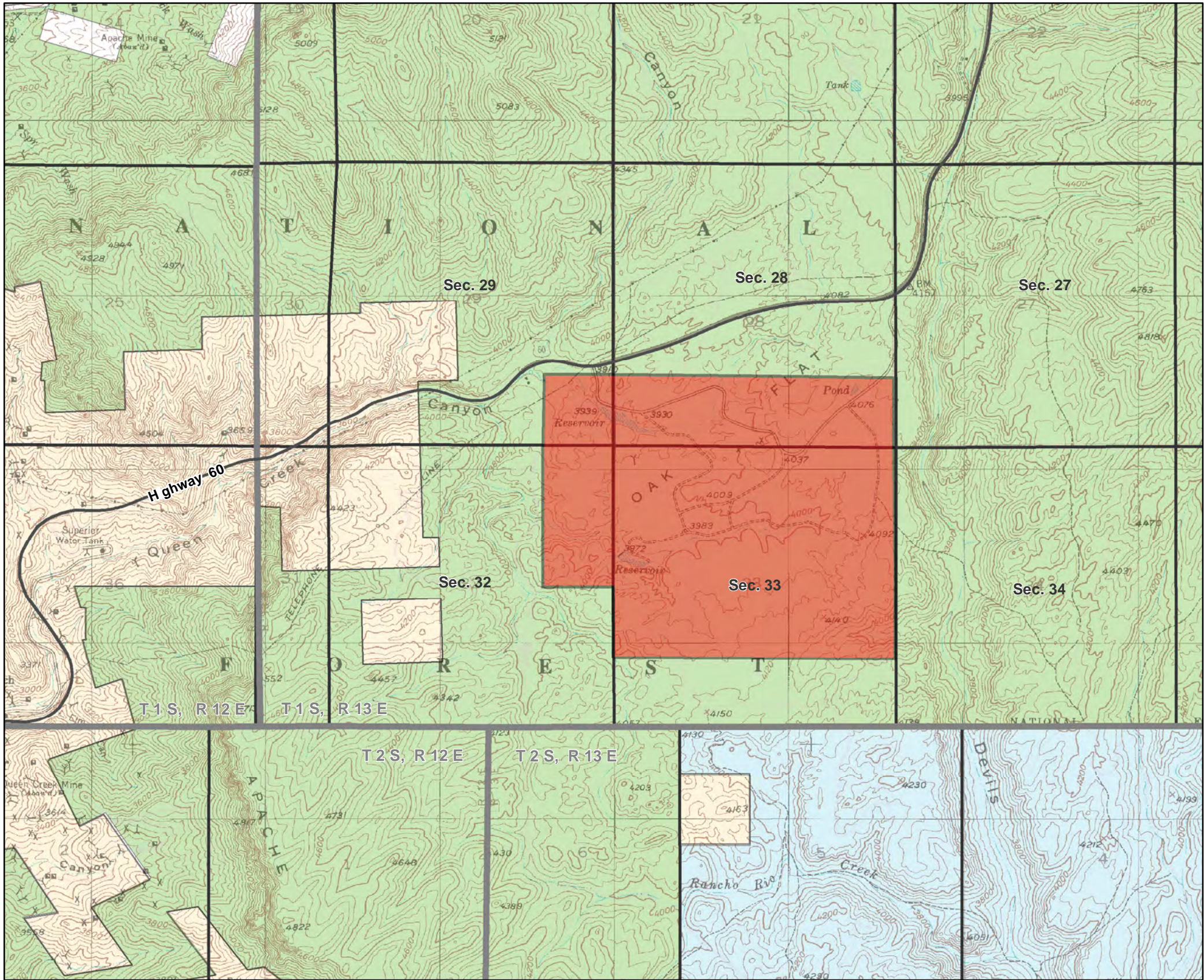
County: PINAL

Location: T2S, R12E,
Portion of Secs. 1, 2, & 12.

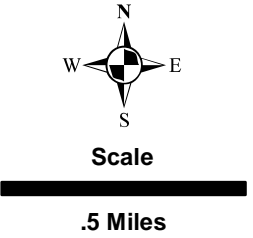
USGS 7.5' Quad: SUPERIOR

Date: March, 2011
Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



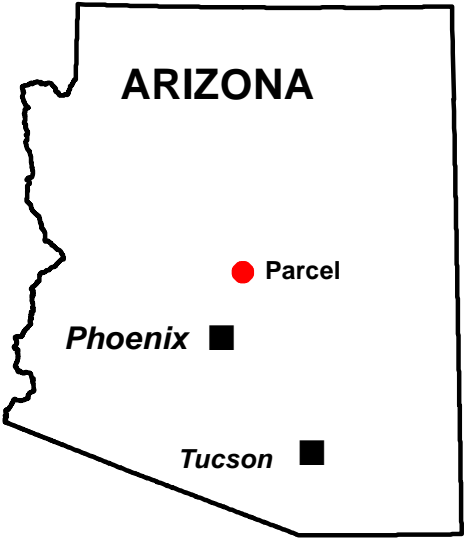
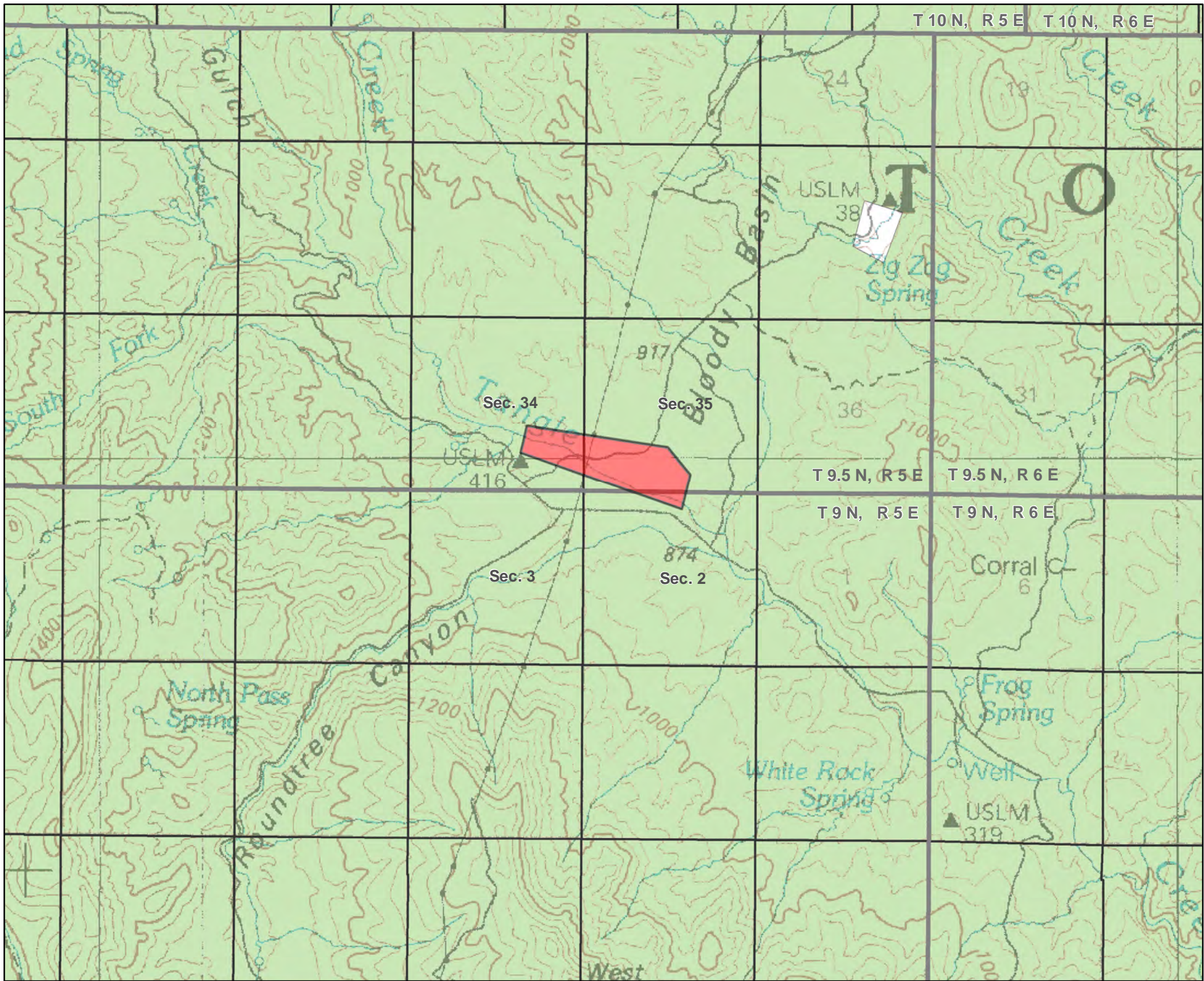
-  Oak Flat Withdrawal Area
Approximately 760 Acres
-  RCML Patented & Fee Land
-  Other Private Ownership (No Color)
-  Arizona State Trust Lands
-  U.S.A. Lands (Tonto National Forest)



**Southeast Arizona Land Exchange and
Conservation Act of 2011
OAK FLAT WITHDRAWAL AREA
TONTONATIONAL FOREST, PHOENIX, ARIZONA**

County: PINAL	Location: T1S, R13E, Portion of Secs. 28, 29, 32 & 33.
USGS 7.5' Quad: SUPERIOR	Date: March, 2011 Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



- Non-Federal Parcel - Tangle Creek
Approximately 148 Acres
- U.S.A. Lands (Tonto National Forest)
- Other Private Ownership (No Color)



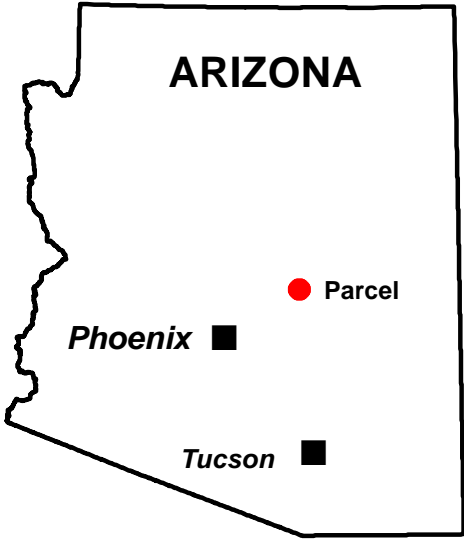
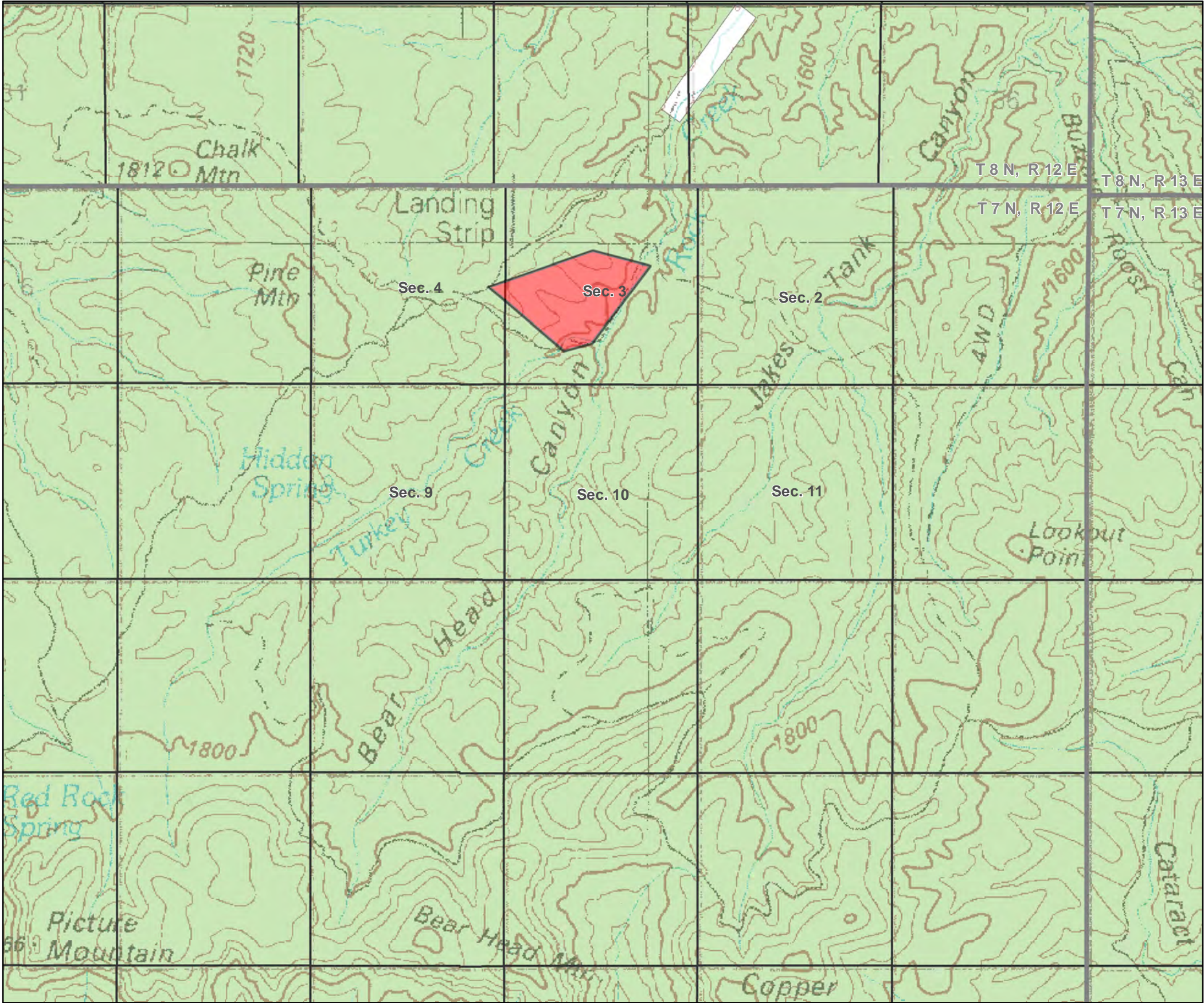
Scale
1 Mile






**Southeast Arizona Land Exchange and
Conservation Act of 2011
NON-FEDERAL PARCEL - TANGLE CREEK
TONGO NATIONAL FOREST, PHOENIX, ARIZONA**

County: YAVAPAI	Location: T9.5N, R5E, Portion of Secs. 34 & 35; T9N, R5E, Portion of Sec. 2.
USGS 7.5' Quad: BLOODY BASIN	Date: March, 2011 Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



-  Non-Federal Parcel - Turkey Creek
Approximately 147 Acres
-  U.S.A. Lands (Tonto National Forest)
-  Other Private Ownership (No Color)



Scale
1 Mile



**Southeast Arizona Land Exchange and
Conservation Act of 2011
NON-FEDERAL PARCEL - TURKEY CREEK
TONGO NATIONAL FOREST, PHOENIX, ARIZONA**

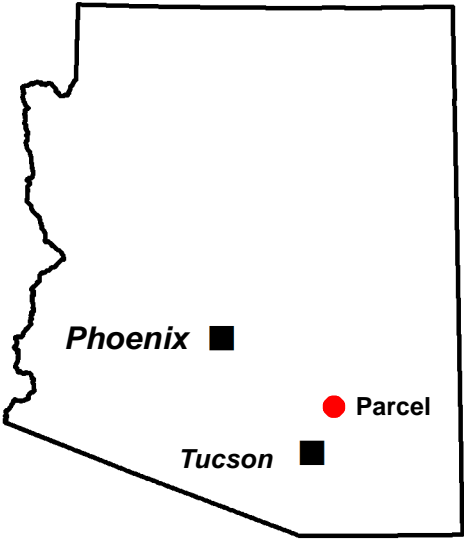
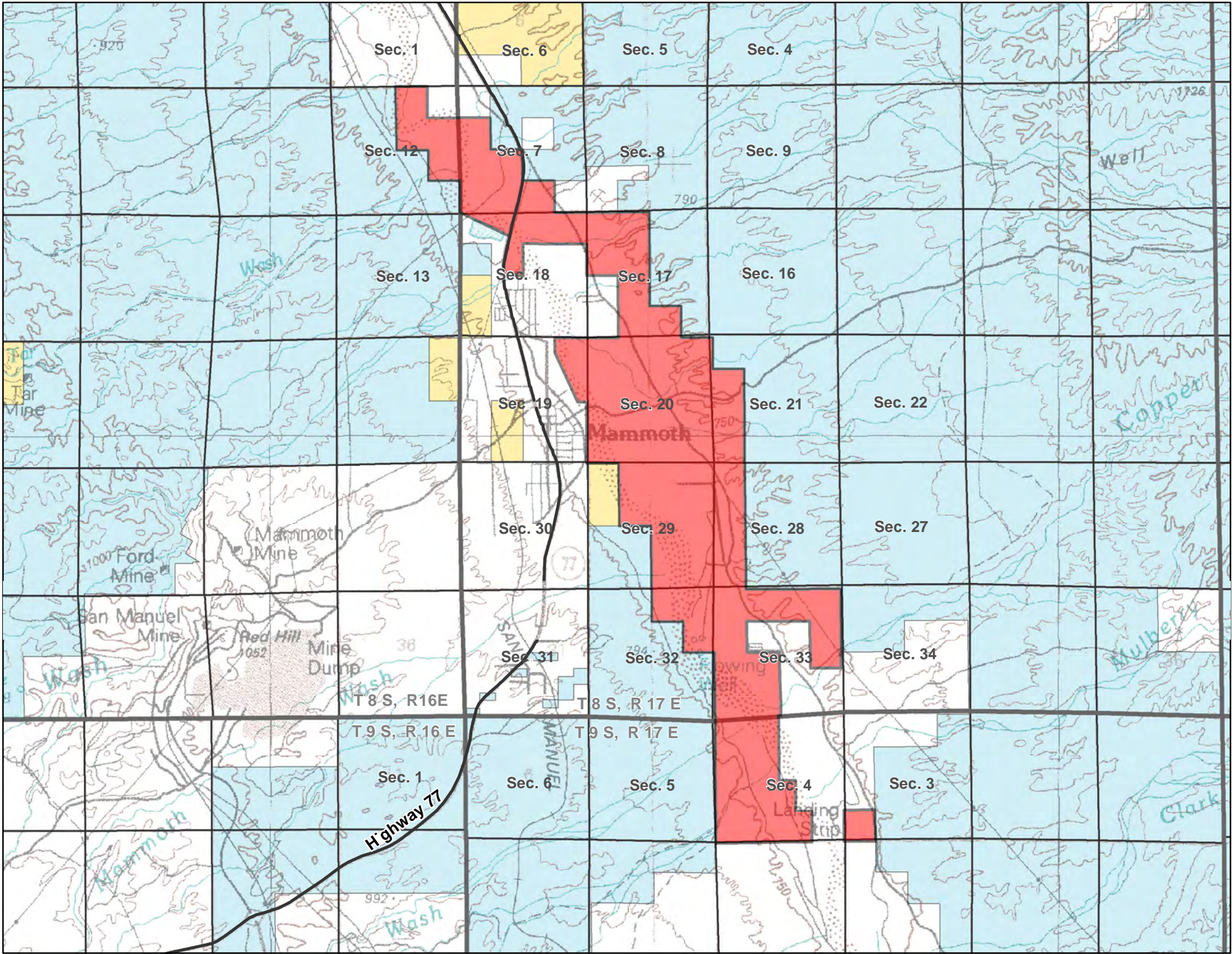
County: GILA

Location: T7N, R12E,
Portion of Secs. 3 & 4.

USGS 7.5' Quad: COPPER MTN.

Date: March, 2011
Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Location: U.S.D.A. Forest Service, Southwestern Region, Tonto National Forest, Phoenix, Arizona
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification



- Non-Federal Parcel - Lower San Pedro River Approximately 3050 Acres
- Bureau of Land Management (BLM)
- Other Private Ownership (No Color)
- Arizona State Trust Lands

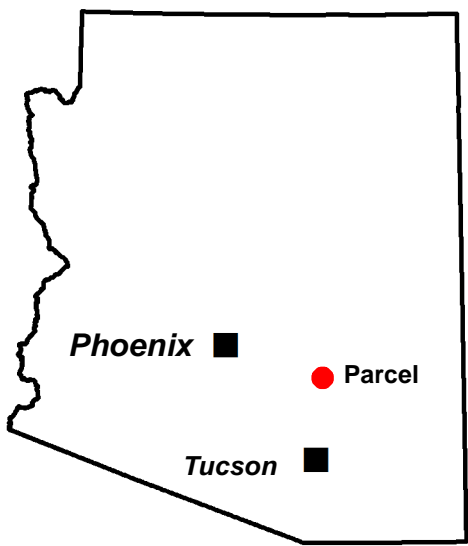
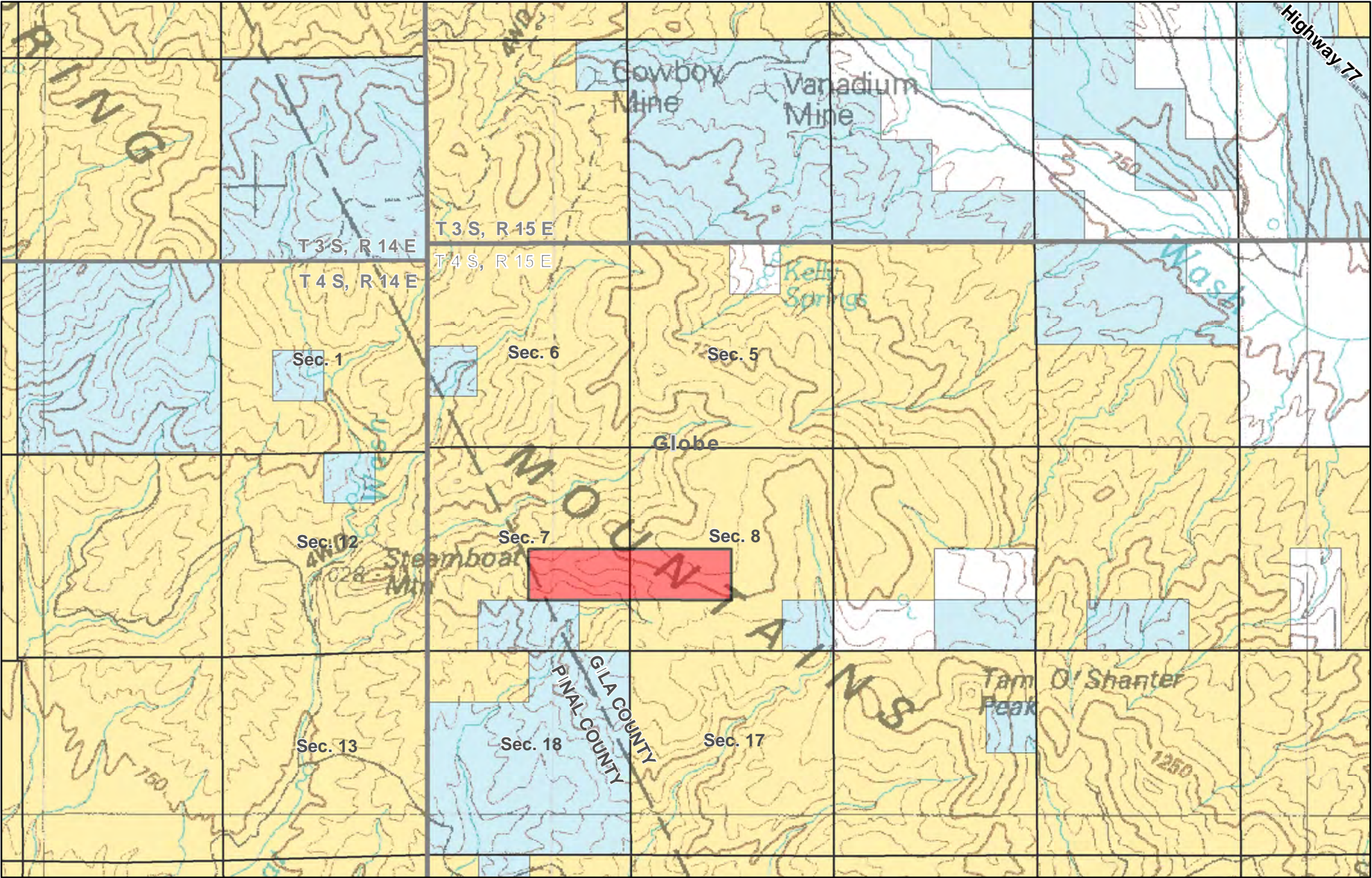



Scale
1 Mile

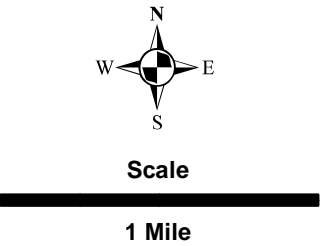


- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification

Southeast Arizona Land Exchange and Conservation Act of 2011 NON-FEDERAL PARCEL - LOWER SAN PEDRO RIVER	
County: PINAL	Location: T8S, R16E, Portion of Sec. 12, T8S, R17E, Portion of Secs. 7, 17-21, 28, 29, 32 & 33, T9S, R17E, Portion of Secs. 3 & 4.
USGS 7.5' Quads: LOOKOUT MTN, MAMMOTH & CLARK RANCH	Date: July 6, 2011 Revised March 30, 2015

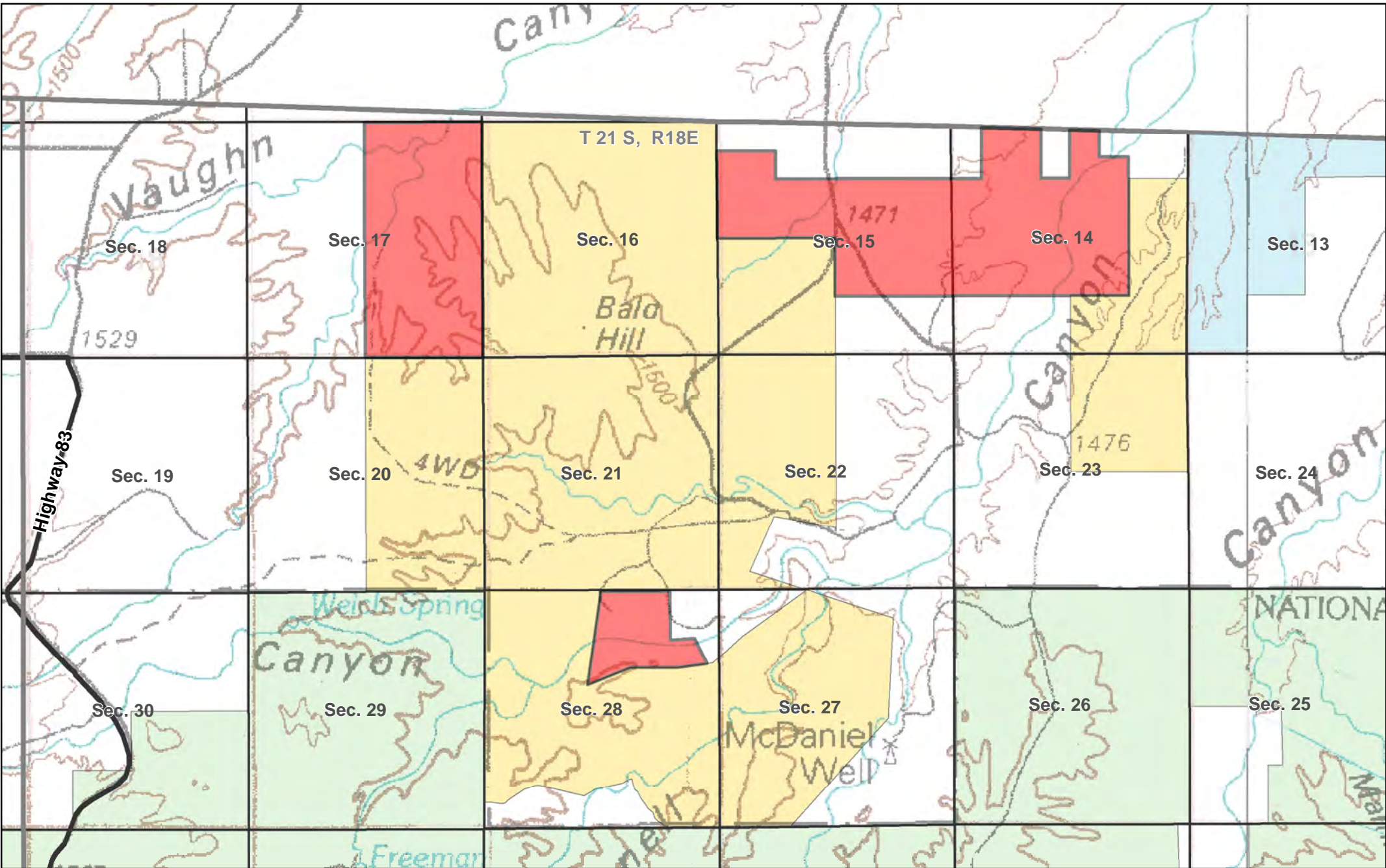







-  Non-Federal Parcel - Dripping Springs
Approximately 160 Acres
-  Bureau of Land Management (BLM)
-  Other Private Ownership (No Color)
-  Arizona State Trust Lands



- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification

Southeast Arizona Land Exchange and Conservation Act of 2011 NON-FEDERAL PARCEL - DRIPPING SPRINGS	
Counties: PINAL AND GILA	Location: T4S, R15E, Portion of Secs. 7 & 8.
USGS 7.5' Quad: HAYDEN	Date: July 6, 2011 Revised March 30, 2015



-  Non-Federal Parcel - Appleton Ranch
Approximately 940 Acres
-  Bureau of Land Management (BLM)
-  Other Private Ownership (No Color)
-  Arizona State Trust Lands
-  U.S.A. Lands
(Coronado National Forest)



Scale

1 Mile



**Southeast Arizona Land Exchange and
Conservation Act of 2011
NON-FEDERAL PARCEL - APPLETON RANCH**

County: SANTA CRUZ

Location: T21S, R18E,
Portion of Secs. 14, 15, 17 & 28.

USGS 7.5' Quads: O'DONNELL
CANYON & PYEATT RANCH

Date: July 6, 2011
Revised March 30, 2015

- Map Projection: UTM NAD27, Zone 12 North, Meters
- Surface Management Source: Bureau of Land Management 2012
- Copies of this map are on file in the office of the Regional Forester, Southwestern Region, Lands, Albuquerque, New Mexico
- Disclaimer: Pending legal description verification

APPENDIX B

Photographs of Selected,
Town of Superior, and Offered Lands



Photo 1. Oak Flat, March 2004



Photo 2. Oak Flat, March 2004



Photo 3. Oak Flat, March 2004



Photo 4. Oak Flat, March 2004



Photo 5. Fairview Cemetery, March 2014



Photo 6. Fairview Cemetery, March 2014



Photo 7. Superior Airport Contiguous Parcels, north of US 60 view west, March 2014



Photo 8. Superior Airport Contiguous Parcels, north of US 60, view east, March 2014



Photo 9. Superior Airport Contiguous Parcels, south of US 60, view west, March 2014



Photo 10. Superior Airport Contiguous Parcels, south of US 60, view east, March 2014



Photo 11. Superior Airport, March 2014



Photo 12. Superior Airport, March 2014



Photo 13. Turkey Creek, February 2004



Photo 14. Turkey Creek, February 2004



Photo 15. Turkey Creek, February 2004



Photo 16. Turkey Creek, February 2004



Photo 17. Tangle Creek, February 2004



Photo 18. Tangle Creek, February 2004



Photo 19. Tangle Creek, February 2004



Photo 20. Tangle Creek, February 2004



Photo 21. Cave Creek, March 2004



Photo 22. Cave Creek, March 2004



Photo 23. Cave Creek, March 2004



Photo 24. Cave Creek, March 2004



Photo 25. East Clear Creek, May 2015



Photo 26. East Clear Creek, May 2015



Photo 27. East Clear Creek, May 2015



Photo 28. East Clear Creek, May 2015



Photo 29. East Clear Creek, May 2015



Photo 30. Apache Leap South End, northern portion, view east, March 2015



Photo 31. Apache Leap South End, middle portion, view south, March 2015



Photo 32. Apache Leap South End, southeast portion, view south, May 2015



Photo 33. Apache Leap South End, southeast portion, view southwest, March 2014



Photo 34. Lower San Pedro River Ranch, June 2003



Photo 35. Lower San Pedro River Ranch, June 2003



Photo 36. Lower San Pedro River Ranch, June 2003



Photo 37. Lower San Pedro River Ranch, June 2003



Photo 38. Appleton Ranch, February 2004



Photo 39. Appleton Ranch, February 2004



Photo 40. Appleton Ranch, February 2004



Photo 41. Appleton Ranch, February 2004



Photo 42. Dripping Springs, view of Arizona Upland subdivision of Sonoran desert scrub on south facing slope, April 2015.



Photo 43. Dripping Springs, view of semi-desert grassland on north facing slope, with Arizona Upland subdivision of Sonoran desert scrub on south facing slope at lower left, May, 2015.



Photo 44. Dripping Springs, view of rock outcrop with recreational rock climbing potential, May 2015.

APPENDIX C

Mining Claims Information

APPENDIX C. Mining Claim Information

Table C1. Active Mining Lode Claims for Oak Flat Parcel

Claim Name	Owner	Status	AZ Mining Claim Numbers
EAST NO. 2	RCM	Patented	02-70-0081
EAST NO. 7	RCM	Patented	02-70-0081
OAK NO. 14	RCM	Patented	02-96-0027
OAK NO. 16	RCM	Patented	02-96-0027
OAK NO. 17	RCM	Patented	02-96-0027
OAK NO. 4	RCM	Patented	02-68-0020
ACE Amended	RCM	Unpatented	60173
ACE NO. 1	RCM	Unpatented	60174
ACE NO. 2	RCM	Unpatented	60175
ACE NO. 3	RCM	Unpatented	60176
ACE NO. 4	RCM	Unpatented	60177
ACE NO. 5	RCM	Unpatented	60178
ACE NO. 6	RCM	Unpatented	60178
ALTO Amended	RCM	Unpatented	60180
ALTO NO. 1 Amended	RCM	Unpatented	60181
ALTO NO. 10 Amended	RCM	Unpatented	60190
ALTO NO. 11	RCM	Unpatented	60191
ALTO NO. 2 Amended	RCM	Unpatented	60182
ALTO NO. 3 Amended	RCM	Unpatented	60183
ALTO NO. 4	RCM	Unpatented	60184
ALTO NO. 5	RCM	Unpatented	60185
ALTO NO. 7	RCM	Unpatented	60187
ALTO NO. 8 Amended	RCM	Unpatented	60188
ALTO NO. 9 Amended	RCM	Unpatented	60189
DAN 10	RCM	Unpatented	356189
DAN 13	RCM	Unpatented	356192
DAN 18	RCM	Unpatented	356197
DAN 8	RCM	Unpatented	356187
DAN 9	RCM	Unpatented	356188
EXTENSION NO. 39	RCM	Unpatented	60441
EXTENSION NO. 40	RCM	Unpatented	60442
EXTENSION NO. 41	RCM	Unpatented	60443
GLADIATOR NO. 1	RCM	Unpatented	359396
GLADIATOR NO. 2	RCM	Unpatented	359397
GLADIATOR NO. 3	RCM	Unpatented	359398
GLADIATOR NO. 4	RCM	Unpatented	359399
GLADIATOR NO. 5	RCM	Unpatented	359400
GLADIATOR NO. 6	RCM	Unpatented	359401
GLADIATOR NO. 8	RCM	Unpatented	359403
LEGAL TENDER 10 Amended	RCM	Unpatented	356893
LEGAL TENDER 11 Amended	RCM	Unpatented	356894
LEGAL TENDER 12 Amended	RCM	Unpatented	356895

Table C1. Active Mining Lode Claims for Oak Flat Parcel

Claim Name	Owner	Status	AZ Mining Claim Numbers
LEGAL TENDER 13 Amended	RCM	Unpatented	356865
LEGAL TENDER 14 Amended	RCM	Unpatented	356866
LEGAL TENDER 15 Amended	RCM	Unpatented	356867
LEGAL TENDER 16 Amended	RCM	Unpatented	356896
LEGAL TENDER 17 Amended	RCM	Unpatented	356868
LEGAL TENDER 18 Amended	RCM	Unpatented	356869
LEGAL TENDER 19 Amended	RCM	Unpatented	356897
LEGAL TENDER 1Amended	RCM	Unpatented	356884
LEGAL TENDER 2 Amended	RCM	Unpatented	356885
LEGAL TENDER 20 Amended	RCM	Unpatented	356870
LEGAL TENDER 21 Amended	RCM	Unpatented	356871
LEGAL TENDER 22 Amended	RCM	Unpatented	356872
LEGAL TENDER 23	RCM	Unpatented	356933
LEGAL TENDER 3 Amended	RCM	Unpatented	356886
LEGAL TENDER 4 Amended	RCM	Unpatented	356887
LEGAL TENDER 5 Amended	RCM	Unpatented	356888
LEGAL TENDER 6 Amended	RCM	Unpatented	356889
LEGAL TENDER 7 Amended	RCM	Unpatented	356890
LEGAL TENDER 8 Amended	RCM	Unpatented	356891
LEGAL TENDER 9 Amended	RCM	Unpatented	356892
OAK NO. 18	RCM	Unpatented	60141
OAK NO. 19	RCM	Unpatented	60142
OAK NO. 20 Amended	RCM	Unpatented	60143
OAK NO. 21	RCM	Unpatented	60144
OAK NO. 22	RCM	Unpatented	60145
OAK NO. 23	RCM	Unpatented	60146
OAK NO. 24	RCM	Unpatented	60147
OAK NO. 25	RCM	Unpatented	60148
OAK NO. 26	RCM	Unpatented	60149
OAK NO. 27	RCM	Unpatented	60150
OAK NO. 38 Amended	RCM	Unpatented	60165
OAK NO. 39 Amended	RCM	Unpatented	60166
OAK NO. 40	RCM	Unpatented	405556
OAK NO. 41Amended	RCM	Unpatented	60168
OAK NO. 42 Amended	RCM	Unpatented	60169
OAK NO. 43	RCM	Unpatented	60170
OAK NO. 44	RCM	Unpatented	60171
OAK NO. 9	RCM	Unpatented	60136
PINE NO. 7	RCM	Unpatented	60157
PINE NO. 8	RCM	Unpatented	60158
PINE NO. 9	RCM	Unpatented	60159
ROADSIDE 1 (NEW)	RCM	Unpatented	405551

Table C1. Active Mining Lode Claims for Oak Flat Parcel

Claim Name	Owner	Status	AZ Mining Claim Numbers
ROADSIDE 2 (NEW)	RCM	Unpatented	405552
ROADSIDE 3 (NEW)	RCM	Unpatented	405553
ROADSIDE 4 (NEW)	RCM	Unpatented	405554
ROADSIDE 5 (NEW)	RCM	Unpatented	405555
SOUTH SYNDICATE NO. 1	RCM	Unpatented	60245
SOUTH SYNDICATE NO. 2	RCM	Unpatented	60246
SOUTH SYNDICATE NO. 3	RCM	Unpatented	60247
SOUTH SYNDICATE NO. 4	RCM	Unpatented	60248
SOUTH SYNDICATE NO. 5	RCM	Unpatented	60249
SOUTH SYNDICATE NO. 6	RCM	Unpatented	60394
SOUTH SYNDICATE NO. 7	RCM	Unpatented	60395
SOUTH SYNDICATE NO. 8	RCM	Unpatented	60396
SOUTH SYNDICATE NO. 9	RCM	Unpatented	60397
SUN 62A	RCM	Unpatented	60304
SUN 63A	RCM	Unpatented	60305
SUN 64A	RCM	Unpatented	60306
SUN NO. 10	RCM	Unpatented	60258
SUN NO. 11	RCM	Unpatented	60259
SUN NO. 12	RCM	Unpatented	60260
SUN NO. 13	RCM	Unpatented	60261
SUN NO. 14	RCM	Unpatented	60262
SUN NO. 15	RCM	Unpatented	60263
SUN NO. 16	RCM	Unpatented	60264
SUN NO. 17	RCM	Unpatented	60265
SUN NO. 18	RCM	Unpatented	60266
SUN NO. 19	RCM	Unpatented	60267
SUN NO. 2	RCM	Unpatented	60250
SUN NO. 20	RCM	Unpatented	60268
SUN NO. 21	RCM	Unpatented	60269
SUN NO. 22	RCM	Unpatented	60270
SUN NO. 23	RCM	Unpatented	60271
SUN NO. 24	RCM	Unpatented	60272
SUN NO. 25	RCM	Unpatented	60273
SUN NO. 26	RCM	Unpatented	60274
SUN NO. 27	RCM	Unpatented	60275
SUN NO. 28	RCM	Unpatented	60276
SUN NO. 29	RCM	Unpatented	60277
SUN NO. 3	RCM	Unpatented	60251
SUN NO. 30	RCM	Unpatented	60278
SUN NO. 31	RCM	Unpatented	60279
SUN NO. 32	RCM	Unpatented	60280
SUN NO. 33	RCM	Unpatented	60281

Table C1. Active Mining Lode Claims for Oak Flat Parcel

Claim Name	Owner	Status	AZ Mining Claim Numbers
SUN NO. 34	RCM	Unpatented	60282
SUN NO. 35	RCM	Unpatented	60283
SUN NO. 36	RCM	Unpatented	60284
SUN NO. 37	RCM	Unpatented	60285
SUN NO. 38	RCM	Unpatented	60286
SUN NO. 4	RCM	Unpatented	60252
SUN NO. 40	RCM	Unpatented	60288
SUN NO. 41	RCM	Unpatented	60289
SUN NO. 42A	RCM	Unpatented	60314
SUN NO. 44	RCM	Unpatented	60290
SUN NO. 45	RCM	Unpatented	60291
SUN NO. 46A	RCM	Unpatented	60315
SUN NO. 48	RCM	Unpatented	60292
SUN NO. 49	RCM	Unpatented	60293
SUN NO. 5	RCM	Unpatented	60253
SUN NO. 50A	RCM	Unpatented	60316
SUN NO. 58	RCM	Unpatented	60300
SUN NO. 6	RCM	Unpatented	60254
SUN NO. 62 Amended	RCM	Unpatented	60304
SUN NO. 63 Amended	RCM	Unpatented	60305
SUN NO. 64 Amended	RCM	Unpatented	60306
SUN NO. 65 Amended	RCM	Unpatented	60307
SUN NO. 66 Amended	RCM	Unpatented	60308
SUN NO. 67 Amended	RCM	Unpatented	60309
SUN NO. 68	RCM	Unpatented	60310
SUN NO. 7	RCM	Unpatented	60255
SUN NO. 8	RCM	Unpatented	60256
SUN NO. 9	RCM	Unpatented	60257

Table C2. Active Mining Claims for Superior Airport Contiguous parcels

Claim Name	Owner	Status	AZ Mining Claim Numbers
RED BRICK NO.1 PLACER	RCM	Unpatented	60069

Table C3. Active Mining Lode Claims for Apache Leap South End parcel

Claim Name	Owner	Status	AZ Mining Claim Numbers
BELMONT	RCM	Patented	658231
GRAND	RCM	Patented	838255
HILLSIDE	RCM	Patented	658231
MONTE CARLO	RCM	Patented	658231
PACIFIC NO. 13	RCM	Patented	838255
PACIFIC NO. 19	RCM	Patented	838255
PACIFIC NO. 32	RCM	Patented	838255
PANIC	RCM	Patented	633038
RAWHIDE	RCM	Patented	658231
SELMA	RCM	Patented	413338
SKIBEREAN	RCM	Patented	413338
TOUCH NOT	RCM	Patented	658231
TOUCH NOT NO. 3	RCM	Patented	658231

Table C4. Active Mining Lode Claims for Apache Leap Withdrawal Area
(RCM will surrender all mineral rights of these claims)

Claim Name	Owner	Status	Arizona Mining Claim Numbers
ALTO Amended	RCM	Unpatented	60180
ALTO NO. 1 Amended	RCM	Unpatented	60181
ALTO NO. 2 Amended	RCM	Unpatented	60182
ALTO NO. 3 Amended	RCM	Unpatented	60183
ALTO NO. 4	RCM	Unpatented	60184
ALTO NO. 5	RCM	Unpatented	60185
APACHE LEAP	RCM	Unpatented	60224
BIG LEDGE Amended	RCM	Unpatented	60193
BROOKLYN Amended #2	RCM	Unpatented	60197
CONNECTING LINK Amended No.2	RCM	Unpatented	60227
CONNECTING LINK NO. 1	RCM	Unpatented	60228
CONNECTING LINK NO. 2	RCM	Unpatented	60229
CONNECTING LINK NO. 3	RCM	Unpatented	60230
CONNECTING LINK NO. 4	RCM	Unpatented	60231
DAN 11	RCM	Unpatented	356190
DAN 14	RCM	Unpatented	356193
DAN 17	RCM	Unpatented	356196
DAN 18	RCM	Unpatented	356197
DAN 2	RCM	Unpatented	356181
DAN 24	RCM	Unpatented	356203
DAN 6	RCM	Unpatented	356185
DAN 7	RCM	Unpatented	356186
DAN 8	RCM	Unpatented	356187
GALAXY NO.1	RCM	Unpatented	359395
HARD ROCK NO. 11	RCM	Unpatented	60206
HARD ROCK NO. 12	RCM	Unpatented	60207
HARD ROCK NO. 13	RCM	Unpatented	60129
HARD ROCK NO. 14	RCM	Unpatented	60130
HARD ROCK NO. 2 Amended	RCM	Unpatented	60203
HARD ROCK NO. 6	RCM	Unpatented	60204
HARD ROCK NO. 7	RCM	Unpatented	60205
HARD ROCK NO. 8	RCM	Unpatented	60126
HORN SILVER Amended	RCM	Unpatented	60208
HORN SILVER NO. 1 Amended	RCM	Unpatented	60209
JANE	RCM	Unpatented	60210
LEGAL TENDER	RCM	Unpatented	60213
LEGAL TENDER 1 Amended	RCM	Unpatented	356884

Table C4. Active Mining Lode Claims for Apache Leap Withdrawal Area
(RCM will surrender all mineral rights of these claims)

Claim Name	Owner	Status	Arizona Mining Claim Numbers
LEGAL TENDER 2 Amended	RCM	Unpatented	356885
LEGAL TENDER 3 Amended	RCM	Unpatented	356886
LEGAL TENDER 4 Amended	RCM	Unpatented	356887
LEGAL TENDER 6 Amended	RCM	Unpatented	356889
LEGAL TENDER 7 Amended	RCM	Unpatented	356890
MONARCH #1	RCM	Unpatented	60131
NADENE Amended	RCM	Unpatented	60132
NADINE NO. 1 Amended	RCM	Unpatented	60133
NEW YORK Amended #2	RCM	Unpatented	60220
OAK NO. 24	RCM	Unpatented	60147
OAK NO. 25	RCM	Unpatented	60148
OAK NO. 26	RCM	Unpatented	60149
OAK NO. 27	RCM	Unpatented	60150
PINE NO. 1	RCM	Unpatented	60151
PINE NO. 2	RCM	Unpatented	60152
PINE NO. 3	RCM	Unpatented	60153
PINE NO. 4	RCM	Unpatented	60154
PINE NO. 5	RCM	Unpatented	60155
PINE NO. 6	RCM	Unpatented	60156
PINE NO. 9	RCM	Unpatented	60159
SAN JUAN	RCM	Unpatented	60244
TOUCH NOT NO. 2 Amended	RCM	Unpatented	60401

Table C5. Active Mining Lode Claims for Lower San Pedro parcel

Claim Name	Owner	Status	Arizona Mining Claim Numbers
THOR 1	Swift Current Land & Cattle LLC ¹	Patented	361010
THOR 2	Swift Current Land & Cattle LLC	Patented	361011
THOR 3	Swift Current Land & Cattle LLC	Patented	361012
THOR 4	Swift Current Land & Cattle LLC	Patented	361013
THOR 5	Swift Current Land & Cattle LLC	Patented	361014
THOR 6	Swift Current Land & Cattle LLC	Patented	361015
THOR 7	Swift Current Land & Cattle LLC	Patented	361016
THOR 8	Swift Current Land & Cattle LLC	Patented	361017
THOR 9	Swift Current Land & Cattle LLC	Patented	361018
THOR 10	Swift Current Land & Cattle LLC	Patented	361019
THOR 11	Swift Current Land & Cattle LLC	Patented	361020
THOR 12	Swift Current Land & Cattle LLC	Patented	361021
THOR 13	Swift Current Land & Cattle LLC	Patented	361022
THOR 14	Swift Current Land & Cattle LLC	Patented	361023
THOR 15	Swift Current Land & Cattle LLC	Patented	361024
THOR 16	Swift Current Land & Cattle LLC	Patented	361025
THOR 17	Swift Current Land & Cattle LLC	Patented	361026
THOR 18	Swift Current Land & Cattle LLC	Patented	361027
THOR 19	Swift Current Land & Cattle LLC	Patented	361028
THOR 20	Swift Current Land & Cattle LLC	Patented	361029
THOR 21	Swift Current Land & Cattle LLC	Patented	361030
THOR 22	Swift Current Land & Cattle LLC	Patented	361031
THOR 23	Swift Current Land & Cattle LLC	Patented	361032
THOR 24	Swift Current Land & Cattle LLC	Patented	361033
THOR 25	Swift Current Land & Cattle LLC	Patented	361034
THOR 26	Swift Current Land & Cattle LLC	Patented	361035
THOR 27	Swift Current Land & Cattle LLC	Patented	361036
THOR 28	Swift Current Land & Cattle LLC	Patented	361037
THOR 29	Swift Current Land & Cattle LLC	Patented	361038
THOR 30	Swift Current Land & Cattle LLC	Patented	361039
THOR 31	Swift Current Land & Cattle LLC	Patented	361040
THOR 32	Swift Current Land & Cattle LLC	Patented	361041
THOR 33	Swift Current Land & Cattle LLC	Patented	361042
THOR 34	Swift Current Land & Cattle LLC	Patented	361043
THOR 35	Swift Current Land & Cattle LLC	Patented	361044
THOR 36	Swift Current Land & Cattle LLC	Patented	361045
THOR 37	Swift Current Land & Cattle LLC	Patented	361046
THOR 38	Swift Current Land & Cattle LLC	Patented	361047
THOR 39	Swift Current Land & Cattle LLC	Patented	361048
THOR 40	Swift Current Land & Cattle LLC	Patented	361049
THOR 41	Swift Current Land & Cattle LLC	Patented	361050

¹ Swift Current Land & Cattle LLC is a subsidiary of Resolution Copper Company

APPENDIX D

Surface Water Rights Table

APPENDIX D. Surface Water Rights Table

OFFERED LANDS

Using parameters: TOWNSHIP=7;TWNDIR='N';RANGE=12;RNG_DIR='E';SECTION=3;STATUS='A';															
NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY
CLINE TRUST, GEORGE	BOX 297 TONTO BASIN, AZ 85553	36-27526.0	ACTIVE - ACTIVE			6/28/1979	J SLASH X SPRING	1/1/1880 12:00:00 AM		TONTO NATL FOREST	SALT RIVER	NE SW 3 7N 12E	POD	ANNUAL USE	6.4 AFA
CLINE TRUST, GEORGE	BOX 297 TONTO BASIN, AZ 85553	36-27526.0	ACTIVE - ACTIVE			6/28/1979	J SLASH X SPRING	1/1/1880 12:00:00 AM		TONTO NATL FOREST	SALT RIVER	NE SW 3 7N 12E	POD	IRRIGATION	
CLINE TRUST, GEORGE	BOX 297 TONTO BASIN, AZ 85553	36-27526.0	ACTIVE - ACTIVE			6/28/1979	J SLASH X SPRING	1/1/1880 12:00:00 AM		TONTO NATL FOREST	SALT RIVER	NE SW 3 7N 12E	POD	STOCK	

Using parameters: TOWNSHIP=9.5;TWNDIR='N';RANGE=5;RNG_DIR='E';SECTION=34,35;STATUS='A';															
Tangle Creek NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	35 9.5N 5E	POU	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	35 9.5N 5E	POU	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	35 9.5N 5E	POU	STOCK	36135 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SE SE 34 9.5N 5E	POU	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SE SE 34 9.5N 5E	POU	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SE SE 34 9.5N 5E	POU	STOCK	36135 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW NW 34 9.5N 5E	POD	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW NW 34 9.5N 5E	POD	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW NW 34 9.5N 5E	POD	STOCK	36135 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW SW 35 9.5N 5E	POU	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW SW 35 9.5N 5E	POU	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW SW 35 9.5N 5E	POU	STOCK	36135 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	NE SW SE 34 9.5N 5E	POU	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	NE SW SE 34 9.5N 5E	POU	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	NE SW SE 34 9.5N 5E	POU	STOCK	36135 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	NW SE SE 34 9.5N 5E	POU	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	NW SE SE 34 9.5N 5E	POU	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	NW SE SE 34 9.5N 5E	POU	STOCK	36135 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	NW SE SE 34 9.5N 5E	POU	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SE NW SE 34 9.5N 5E	POU	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SE NW SE 34 9.5N 5E	POU	STOCK	36135 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SE NW SE 34 9.5N 5E	POU	DOMESTIC	209500 GPA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW NE SE 34 9.5N 5E	POU	IRRIGATION	110 AFA
G&S INVESTMENTS	6750 N 19TH AVE PHOENIX, AZ 85015	3R-2335.2	ACTIVE - FULL ASSIGNMENT	1649	4167.1	10/14/1965	LX SPRING	10/14/1965	YAVAPAI	TONTO NATL FOREST	VERDE RIVER	SW NE SE 34 9.5N 5E	POU	STOCK	36135 GPA

Using parameters: TOWNSHIP=7;TWNDIR='N';RANGE=4;RNG_DIR='E';SECTION=21;STATUS='A';															
NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY
CARTWRIGHT, JACKSON M	P O BOX 346 CAVE CREEK, AZ 85331	36-61162.0	ACTIVE - ACTIVE			3/17/1978	6L RANCH SPRING	12/31/1866 12:C	MARICOPA		SALT RIVER	21 7N 4E	POU	ANNUAL USE	72000 GPA
CARTWRIGHT, JACKSON M	P O BOX 346 CAVE CREEK, AZ 85331	36-61162.0	ACTIVE - ACTIVE			3/17/1978	6L RANCH SPRING	12/31/1866 12:C	MARICOPA		SALT RIVER	21 7N 4E	POU	DOMESTIC	
CARTWRIGHT, JACKSON M	P O BOX 346 CAVE CREEK, AZ 85331	36-61162.0	ACTIVE - ACTIVE			3/17/1978	6L RANCH SPRING	12/31/1866 12:C	MARICOPA		SALT RIVER	21 7N 4E	POU	STOCK	
JOHNSON CATTLE CO	1132 W MCLELLAN RD MESA, AZ 85201	36-105175.0	ACTIVE - ACTIVE			5/2/2002	CAVE CREEK	12/31/1918	MARICOPA	TONTO NATL FOREST	SALT RIVER	NW NE 21 7N 4E	POU	IRRIGATION	100 AFA
JOHNSON CATTLE CO	1132 W MCLELLAN RD MESA, AZ 85201	36-105175.0	ACTIVE - ACTIVE			5/2/2002	CAVE CREEK	12/31/1918	MARICOPA	TONTO NATL FOREST	SALT RIVER	SW NE 21 7N 4E	POU	IRRIGATION	100 AFA

Using parameters: TOWNSHIP=14;TWNDIR='N';RANGE=12;RNG_DIR='E';SECTION=9;STATUS='A';															
NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY
COCONINO NATL FOREST	2323 E GREENLAW LN FLAGSTAFF, AZ 86001	33-90107.0	ACTIVE - INSTREAM FLOW			7/29/1985	EAST CLEAR	7/29/1985	COCONINO	COCONINO NATL FOREST	LITTLE COLORADO RIVER	NE NE 9 14N 12E	POU	WILDLIFE	.1 CFS
COCONINO NATL FOREST	2323 E GREENLAW LN FLAGSTAFF, AZ 86001	33-90107.0	ACTIVE - INSTREAM FLOW			7/29/1985	EAST CLEAR	7/29/1985	COCONINO	COCONINO NATL FOREST	LITTLE COLORADO RIVER	NW NE 9 14N 12E	POU	WILDLIFE	.1 CFS
COCONINO NATL FOREST	2323 E GREENLAW LN FLAGSTAFF, AZ 86001	33-90107.0	ACTIVE - INSTREAM FLOW			7/29/1985	EAST CLEAR	7/29/1985	COCONINO	COCONINO NATL FOREST	LITTLE COLORADO RIVER	NW SE 9 14N 12E	POU	WILDLIFE	.1 CFS
COCONINO NATL FOREST	2323 E GREENLAW LN FLAGSTAFF, AZ 86001	33-90107.0	ACTIVE - INSTREAM FLOW			7/29/1985	EAST CLEAR	7/29/1985	COCONINO	COCONINO NATL FOREST	LITTLE COLORADO RIVER	SE NE 9 14N 12E	POU	WILDLIFE	.1 CFS
COCONINO NATL FOREST	2323 E GREENLAW LN FLAGSTAFF, AZ 86001	33-90107.0	ACTIVE - INSTREAM FLOW			7/29/1985	EAST CLEAR	7/29/1985	COCONINO	COCONINO NATL FOREST	LITTLE COLORADO RIVER	SE NW 9 14N 12E	POU	WILDLIFE	.1 CFS
COCONINO NATL FOREST	2323 E GREENLAW LN FLAGSTAFF, AZ 86001	33-90107.0	ACTIVE - INSTREAM FLOW			7/29/1985	EAST CLEAR	7/29/1985	COCONINO	COCONINO NATL FOREST	LITTLE COLORADO RIVER	SW NE 9 14N 12E	POU	WILDLIFE	.1 CFS
COCONINO NATL FOREST	2323 E GREENLAW LN FLAGSTAFF, AZ 86001	33-90107.0	ACTIVE - INSTREAM FLOW			7/29/1985	EAST CLEAR	7/29/1985	COCONINO	COCONINO NATL FOREST	LITTLE COLORADO RIVER	SW NW 9 14N 12E	POU	WILDLIFE	.1 CFS

Using parameters: TOWNSHIP=2;TWNDIR='S';RANGE=12;RNG_DIR='E';SECTION=12;STATUS='A';																
NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77039.0	ACTIVE - ACTIVE	77039	77039	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NE 12 2S 12E	POD	STOCK	35844 GPA	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77039.0	ACTIVE - ACTIVE	77039	77039	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NE 12 2S 12E	POD	WILDLIFE	3259 GPA	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77039.0	ACTIVE - ACTIVE	77039	77039	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NE 12 2S 12E	POU	STOCK	35844 GPA	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77039.0	ACTIVE - ACTIVE	77039	77039	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NE 12 2S 12E	POU	WILDLIFE	3259 GPA	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POD	STOCK	35844 GPA	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POD	WILDLIFE	3259 GPA	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POU	STOCK	35844 GPA	
TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POU	WILDLIFE	3259 GPA	

Using parameters: TOWNSHIP=8;TWNDIR='S';RANGE=17;RNG_DIR='E';SECTION=17,18,19,20,21,22,23,24,25,26,27,28,29,30,31,32,33;STATUS='A';															
NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY
MAGMA COPPER COMPANY	PO BOX M SAN MANUEL, AZ 85631	36-102337.0	ACTIVE - ACTIVE			10/1/1990	SAN PEDRO RIVER	2/19/1887 12:00:00 AM		PRIVATE	SAN PEDRO RIVER	NE NE 29 8S 17E	POU	ANNUAL USE	1700 AFA
MAGMA COPPER COMPANY	PO BOX M SAN MANUEL, AZ 85631	36-102337.0	ACTIVE - ACTIVE			10/1/1990	SAN PEDRO RIVER	2/19/1887 12:00:00 AM		PRIVATE	SAN PEDRO RIVER	NE NE 29 8S 17E	POU	IRRIGATION	
MAGMA COPPER COMPANY	PO BOX M SAN MANUEL, AZ 85631	36-102337.0	ACTIVE - ACTIVE			10/1/1990	SAN PEDRO RIVER	2/19/1887 12:00:00 AM		PRIVATE	SAN PEDRO RIVER	NE NE 29 8S 17E	POU	STOCK	
MAGMA COPPER COMPANY	PO BOX M SAN MANUEL, AZ 85631	36-102337.0	ACTIVE - ACTIVE			10/1/1990	SAN PEDRO RIVER	2/19/1887 12:00:00 AM		PRIVATE	SAN PEDRO RIVER	NE NW 29 8S 17E	POU	ANNUAL USE	1700 AFA
MAGMA COPPER COMPANY	PO BOX M SAN MANUEL, AZ 85631	36-102337.0	ACTIVE - ACTIVE			10/1/1990	SAN PEDRO RIVER	2/19/1887 12:00:00 AM		PRIVATE	SAN PEDRO RIVER	NE NW 29 8S 17E	POU	IRRIGATION	

156412

APPENDIX D. Surface Water Rights Table

[illegible]

Dripping Springs

None

Appleton Ranch	Using parameters: TOWNSHIP=21;TWNDIR='S';RANGE=18;RNG_DIR='E';SECTION=28;STATUS='A'; TOWNSHIP=21;TWNDIR='S';RANGE=18;RNG_DIR='E';SECTION=14,15,16,17;STATUS='A';														
NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY
APPLETON TRUST, PETER BRYCE	5275 E CALLE VISTA DE COLORES TUCSON, AZ 85711	3R-1830.1	ACTIVE - FULL ASSIGNMENT	1236	2564	3/13/1958	FINLEY SP IN FINLEY GULCH	3/13/1958	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW SW 14 21S 18E	POD	STOCK	150000 GPA
APPLETON TRUST, PETER BRYCE	5275 E CALLE VISTA DE COLORES TUCSON, AZ 85711	3R-1830.1	ACTIVE - FULL ASSIGNMENT	1236	2564	3/13/1958	FINLEY SP IN FINLEY GULCH	3/13/1958	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW SW 14 21S 18E	POU	STOCK	150000 GPA
APPLETON TRUST, PETER BRYCE	5275 E CALLE VISTA DE COLORES TUCSON, AZ 85711	4A-4333.1	ACTIVE - FULL ASSIGNMENT	2640	2569	3/13/1958	FINLEY SPRING	3/13/1958	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 14 21S 18E	POD	STOCK	150000 GPA
APPLETON TRUST, PETER BRYCE	5275 E CALLE VISTA DE COLORES TUCSON, AZ 85711	4A-4333.1	ACTIVE - FULL ASSIGNMENT	2640	2569	3/13/1958	FINLEY SPRING	3/13/1958	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 14 21S 18E	POU	STOCK	150000 GPA
APPLETON, AMY	56 YALE STATION NEW HAVEN, CT 06520	38-94419.5	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	1/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NE 17 21S 18E	POD	WILDLIFE	
APPLETON, AMY	56 YALE STATION NEW HAVEN, CT 06520	38-94419.5	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	1/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NE 17 21S 18E	POU	WILDLIFE	
APPLETON, AMY	56 YALE STATION NEW HAVEN, CT 06520	38-94420.5	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE SE 17 21S 18E	POD	WILDLIFE	
APPLETON, AMY	56 YALE STATION NEW HAVEN, CT 06520	38-94420.5	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE SE 17 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94391.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/10/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94391.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/10/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94392.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/8/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94392.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/8/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94393.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94393.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94394.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE SE 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94394.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE SE 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94395.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	1/1/1965	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94395.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	1/1/1965	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94396.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94396.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94397.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94397.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94398.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POD	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94398.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POU	WILDLIFE	
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94399.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POD	WILDLIFE	

APPENDIX D. Surface Water Rights Table

APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94399.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/5/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94400.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/6/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94400.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/6/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94401.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/6/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94401.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/6/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94402.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/6/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94402.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/6/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94403.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/1/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94403.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/1/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94404.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/7/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE NW 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94404.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/7/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94405.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/7/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE NW 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94405.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/7/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94406.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/8/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE NW 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94406.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/8/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE NW 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94407.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/8/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94408.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/10/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94408.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/10/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94409.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/10/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POD	WILDLIFE		
APPLETON, ARIEL	3365 E 2ND ST TUCSON, AZ 85716	38-94409.0	ACTIVE - ACTIVE			11/18/1988	UNNAMED WASH	4/10/1966	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NE 15 21S 18E	POU	WILDLIFE		
APPLETON, ARIEL	P O BOX 890 SONOITA, AZ 85637	3R-1829.1	ACTIVE - FULL ASSIGNMENT	1235	2563	3/13/1958	TOBY CANYON	3/13/1958	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE NW 15 21S 18E	POD	STOCK	150000 GPA	
APPLETON, ARIEL	P O BOX 890 SONOITA, AZ 85637	3R-1829.1	ACTIVE - FULL ASSIGNMENT	1235	2563	3/13/1958	TOBY CANYON	3/13/1958	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE NW 15 21S 18E	POU	STOCK	150000 GPA	
APPLETON, MARC F	221-B HAMPTON DR LOS ANGELES, CA 90291	38-94410.0	ACTIVE - ACTIVE			11/18/1988	O'DONNELL CANYON	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE SW 14 21S 18E	POD	WILDLIFE		
APPLETON, MARC F	221-B HAMPTON DR LOS ANGELES, CA 90291	38-94410.0	ACTIVE - ACTIVE			11/18/1988	O'DONNELL CANYON	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE SW 14 21S 18E	POU	WILDLIFE		
APPLETON, MARC F	221-B HAMPTON DR LOS ANGELES, CA 90291	38-94411.0	ACTIVE - ACTIVE			11/18/1988	O'DONNELL CANYON	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE SW 14 21S 18E	POD	WILDLIFE		
APPLETON, MARC F	221-B HAMPTON DR LOS ANGELES, CA 90291	38-94411.0	ACTIVE - ACTIVE			11/18/1988	O'DONNELL CANYON	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NE SW 14 21S 18E	POU	WILDLIFE		
APPLETON, MARC F	221-B HAMPTON DR LOS ANGELES, CA 90291	38-94412.0	ACTIVE - ACTIVE			11/18/1988	O'DONNELL CANYON	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW SE 14 21S 18E	POD	WILDLIFE		
APPLETON, MARC F	221-B HAMPTON DR LOS ANGELES, CA 90291	38-94412.0	ACTIVE - ACTIVE			11/18/1988	O'DONNELL CANYON	4/5/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW SE 14 21S 18E	POU	WILDLIFE		
APPLETON, MARC F	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94419.1	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	1/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NE 17 21S 18E	POD	WILDLIFE		
APPLETON, MARC F	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94419.1	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	1/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NE 17 21S 18E	POU	WILDLIFE		
APPLETON, MARC F	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94420.1	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE SE 17 21S 18E	POD	WILDLIFE		
APPLETON, MARC F	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94420.1	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE SE 17 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94413.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94413.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94414.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94414.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94415.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94415.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94416.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94416.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94417.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94417.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/4/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW NW 14 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94418.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/3/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW SW 14 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94418.1	ACTIVE - FULL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/3/1967	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	NW SW 14 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94419.4	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	1/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NE 17 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94419.4	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	1/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SW NE 17 21S 18E	POU	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94420.4	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE SE 17 21S 18E	POD	WILDLIFE		
APPLETON, PETER BRYCE	431 W ROSCOE ST #7A CHICAGO, IL 60657	38-94420.4	ACTIVE - PARTIAL ASSIGNMENT			11/18/1988	UNNAMED WASH	4/1/1959	SANTA CRUZ	PRIVATE	SAN PEDRO RIVER	SE SE 17 21S 18E	POU	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88140.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW SE SE 14 21S 18E	POD	ANNUAL USE	.16 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88140.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW SE SE 14 21S 18E	POD	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88140.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW SE SE 14 21S 18E	POU	ANNUAL USE	.16 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88140.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW SE SE 14 21S 18E	POU	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88153.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE NW SW 15 21S 18E	POD	ANNUAL USE	.04 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88153.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE NW SW 15 21S 18E	POU	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88153.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE NW SW 15 21S 18E	POU	ANNUAL USE	.04 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88153.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE NW SW 15 21S 18E	POU	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88154.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SW 15 21S 18E	POD	ANNUAL USE	.47 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88154.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SW 15 21S 18E	POD	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88154.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SW 15 21S 18E	POU	ANNUAL USE	.47 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88154.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SW 15 21S 18E	POU	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88155.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE SW SW 15 21S 18E	POD	ANNUAL USE	.07 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88155.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE SW SW 15 21S 18E	POD	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88155.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE SW SW 15 21S 18E	POU	ANNUAL USE	.07 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88155.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE SW SW 15 21S 18E	POU	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88156.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SW 15 21S 18E	POD	ANNUAL USE	.11 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88156.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SW 15 21S 18E	POU	ANNUAL USE	.11 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88156.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SW 15 21S 18E	POU	WILDLIFE		
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88157.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW SE SW 15 21S 18E	POD	ANNUAL USE	.15 AFA	
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-88157.1	ACTIVE - FULL ASSIGNMENT			6/27/1979	UNNAMED TRIBUTARY	12/31/1960	S							

APPENDIX D. Surface Water Rights Table

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APPENDIX D. Surface Water Rights Table

BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95336.0	ACTIVE - ACTIVE	12/6/1989	O'DONNELL CANYON	1/1/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW SE 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95337.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED WASH	5/1/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW NW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95337.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED WASH	5/1/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW SW NW 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95338.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/1/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW NW NW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95338.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/1/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW NW NW 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95339.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/1/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW NW NW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95339.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/1/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW NW NW 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95340.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/8/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW NW NW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95340.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/8/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	SW NW NW 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95341.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/5/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	NE NW NW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95341.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	5/5/1959	SANTA CRUZ	BLM	SAN PEDRO RIVER	NE NW NW 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95342.0	ACTIVE - ACTIVE	12/6/1989	SOUTHWEST FORK POST	1/1/1961	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE SW NW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95342.0	ACTIVE - ACTIVE	12/6/1989	SOUTHWEST FORK POST	1/1/1961	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE SW NW 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95343.0	ACTIVE - ACTIVE	12/6/1989	SOUTHWEST FORK POST	1/1/1961	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW NW SW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95343.0	ACTIVE - ACTIVE	12/6/1989	SOUTHWEST FORK POST	1/1/1961	SANTA CRUZ	BLM	SAN PEDRO RIVER	NW NW SW 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95344.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	1/1/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE NE SE 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95344.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	1/1/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	SE NE SE 28 21S 18E	POU	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95345.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	1/1/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NE NW SW 28 21S 18E	POD	WILDLIFE
BLM PHOENIX	2015 W DEER VALLEY RD PHOENIX, AZ 85027	38-95345.0	ACTIVE - ACTIVE	12/6/1989	UNNAMED	1/1/1960	SANTA CRUZ	BLM	SAN PEDRO RIVER	NE NW SW 28 21S 18E	POU	WILDLIFE

SELECTED LANDS

Oak Flat	Using parameters: TOWNSHIP=1;TWNDR='S';RANGE=13;RNG_DIR='E';SECTION=6,28,29,31,32,33;STATUS='A';TOWNSHIP=2;TWNDR='S';RANGE=12;RNG_DIR='E';SECTION=1;STATUS='A';															
	NAME	ADDRESS	REG NO	STATUS	PERMIT NO	CERT NO	FILE DATE	SOURCE	PRIOR DATE	COUNTY	OWNER	WATERSHED	LEGAL	POU/POD	USE	QUANTITY
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23888.0	ACTIVE - ACTIVE		23888	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 32 1S 13E	POD	ANNUAL USE	.25 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23888.0	ACTIVE - ACTIVE		23888	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 32 1S 13E	POD	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23888.0	ACTIVE - ACTIVE		23888	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 32 1S 13E	POD	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23888.0	ACTIVE - ACTIVE		23888	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 32 1S 13E	POU	ANNUAL USE	.25 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23888.0	ACTIVE - ACTIVE		23888	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 32 1S 13E	POU	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23888.0	ACTIVE - ACTIVE		23888	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 32 1S 13E	POU	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23890.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NW 33 1S 13E	POD	ANNUAL USE	.04 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23890.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NW 33 1S 13E	POD	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23890.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NW 33 1S 13E	POD	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23890.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NW 33 1S 13E	POU	ANNUAL USE	.04 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23890.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NW 33 1S 13E	POU	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23890.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SW NW 33 1S 13E	POU	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23975.0	ACTIVE - ACTIVE		23975	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE NW 32 1S 13E	POD	ANNUAL USE	.04 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23975.0	ACTIVE - ACTIVE		23975	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE NW 32 1S 13E	POD	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23975.0	ACTIVE - ACTIVE		23975	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE NW 32 1S 13E	POD	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23975.0	ACTIVE - ACTIVE		23975	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE NW 32 1S 13E	POU	ANNUAL USE	.04 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23975.0	ACTIVE - ACTIVE		23975	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE NW 32 1S 13E	POU	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23975.0	ACTIVE - ACTIVE		23975	6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE NW 32 1S 13E	POU	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POD	STOCK	35844 GPA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POD	WILDLIFE	3259 GPA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POU	STOCK	35844 GPA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	33-77040.0	ACTIVE - ACTIVE	77040	77040	5/18/1979	UNNAMED WASH	5/18/1979	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	NW SE 1 2S 12E	POU	WILDLIFE	3259 GPA
	GIBSON ONE TWO WELL	102 MAGMA HEIGHTS SUPERIOR, AZ 85273	4A-486.1	ACTIVE - FULL ASSIGNMENT	362	122	8/1/1924	GIBSON ONE TWO WELL	8/1/1924	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 29 1S 13E	POU	STOCK	94339729 GPA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23891.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 28 1S 13E	POD	ANNUAL USE	.04 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23891.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 28 1S 13E	POD	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23891.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 28 1S 13E	POD	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23891.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 28 1S 13E	POU	ANNUAL USE	.04 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23891.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 28 1S 13E	POU	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23891.0	ACTIVE - ACTIVE			6/28/1979	UNNAMED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 28 1S 13E	POU	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23973.0	ACTIVE - ACTIVE			6/28/1979	NOT STATED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 29 1S 13E	POD	ANNUAL USE	.18 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23973.0	ACTIVE - ACTIVE			6/28/1979	NOT STATED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 29 1S 13E	POD	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23973.0	ACTIVE - ACTIVE			6/28/1979	NOT STATED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 29 1S 13E	POD	WILDLIFE	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23973.0	ACTIVE - ACTIVE			6/28/1979	NOT STATED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 29 1S 13E	POU	ANNUAL USE	.18 AFA
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23973.0	ACTIVE - ACTIVE			6/28/1979	NOT STATED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 29 1S 13E	POU	STOCK	
	TONTO NATL FOREST	2324 E MCDOWELL RD PHOENIX, AZ 85006	38-23973.0	ACTIVE - ACTIVE			6/28/1979	NOT STATED CANYON	12/31/1958	PINAL	TONTO NATL FOREST	UPPER GILA RIVER	SE SE 29 1S 13E	POU	WILDLIFE	

Cemetery

None

Superior Airport

None

Superior Airport Contiguous

None

APPENDIX E

US Fish and Wildlife Service Information,
Planning, and Conservation System Online

APPENDIX E - OAK FLAT



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Oak Flat Parcel

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0342

Event Code: 02EAAZ00-2015-E-00347

Project Type: Mining

Project Name: Land Exchange - Oak Flat Parcel

Project Description: Land Exchange

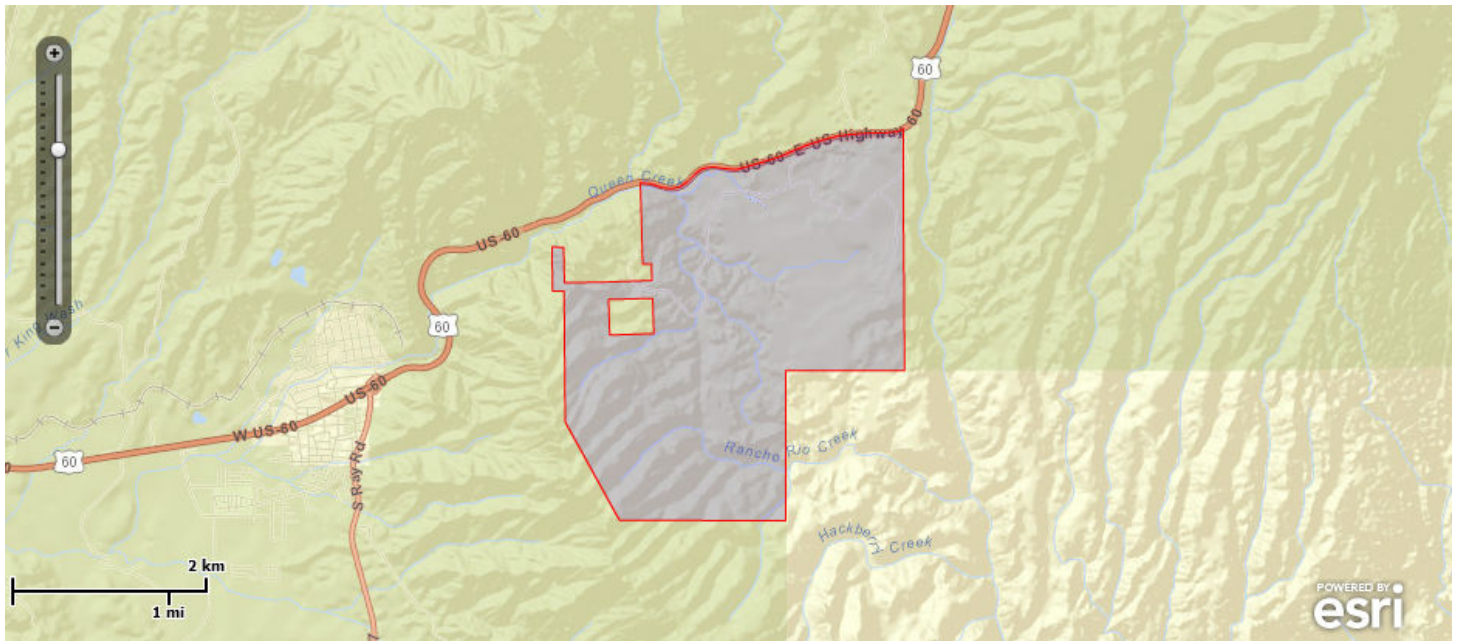
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Oak Flat Parcel

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.0748799 33.299857, -111.0761872 33.2998753, -111.0762087 33.3039684, -111.0749277 33.3039246, -111.0748183 33.3006323, -111.0651238 33.3008759, -111.0651813 33.3024034, -111.066152 33.3023782, -111.0664365 33.3099111, -111.0651737 33.3098069, -111.0640439 33.3094553, -111.063064 33.3093545, -111.0620851 33.3095167, -111.0611859 33.3100112, -111.0603898 33.3106977, -111.0596295 33.3111479, -111.0592231 33.3112584, -111.0583838 33.3113871, -111.0573199 33.3112238, -111.055779 33.311112, -111.0531636 33.3117306, -111.0509634 33.3123163, -111.048069 33.3133484, -111.0462045 33.3138308, -111.0443976 33.3142246, -111.0428341 33.3143895, -111.0410542 33.3144768, -111.0395704 33.3144903, -111.0378037 33.3146365, -111.0372551 33.3149188, -111.0372336 33.3071113, -111.0371391 33.2997071, -111.0371077 33.2925503, -111.0503402 33.2925175, -111.05033 33.2786266, -111.0687411 33.2787025, -111.07475 33.287775, -111.0748799 33.299857), (-111.0699482 33.2991107, -111.0698256 33.2958159, -111.0649373 33.2959359, -111.0650597 33.2992285, -111.0699482 33.2991107)))

Project Counties: Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Oak Flat Parcel

Endangered Species Act Species List

There are a total of 6 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Arizona Hedgehog cactus (<i>Echinocereus triglochidiatus</i> var. <i>arizonicus</i>)	Endangered		
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Sonoran desert tortoise (<i>Gopherus</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Oak Flat Parcel

<i>morafkai</i>			
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United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Oak Flat Parcel

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - FAIRVIEW CEMETERY



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Fairview Cemetery

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0348

Event Code: 02EAAZ00-2015-E-00352

Project Type: Mining

Project Name: Land Exchange - Fairview Cemetery

Project Description: Land Exchange

Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Fairview Cemetery

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.113937 33.2791319, -111.1139766 33.2791942, -111.1139483 33.2819636, -111.1095138 33.2820032, -111.1094798 33.2791658, -111.113937 33.2791319)))

Project Counties: Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Fairview Cemetery

Endangered Species Act Species List

There are a total of 6 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Flowering Plants			
Arizona Hedgehog cactus (<i>Echinocereus triglochidiatus</i> var. <i>arizonicus</i>)	Endangered		
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Sonoran desert tortoise (<i>Gopherus</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Fairview Cemetery

<i>morafkai</i>			
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United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Fairview Cemetery

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - SUPERIOR AIRPORT CONTIGUOUS PARCELS



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport Contiguous

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0350

Event Code: 02EAAZ00-2015-E-00354

Project Type: Mining

Project Name: Land Exchange - Superior Airport Contiguous

Project Description: Land Exchange

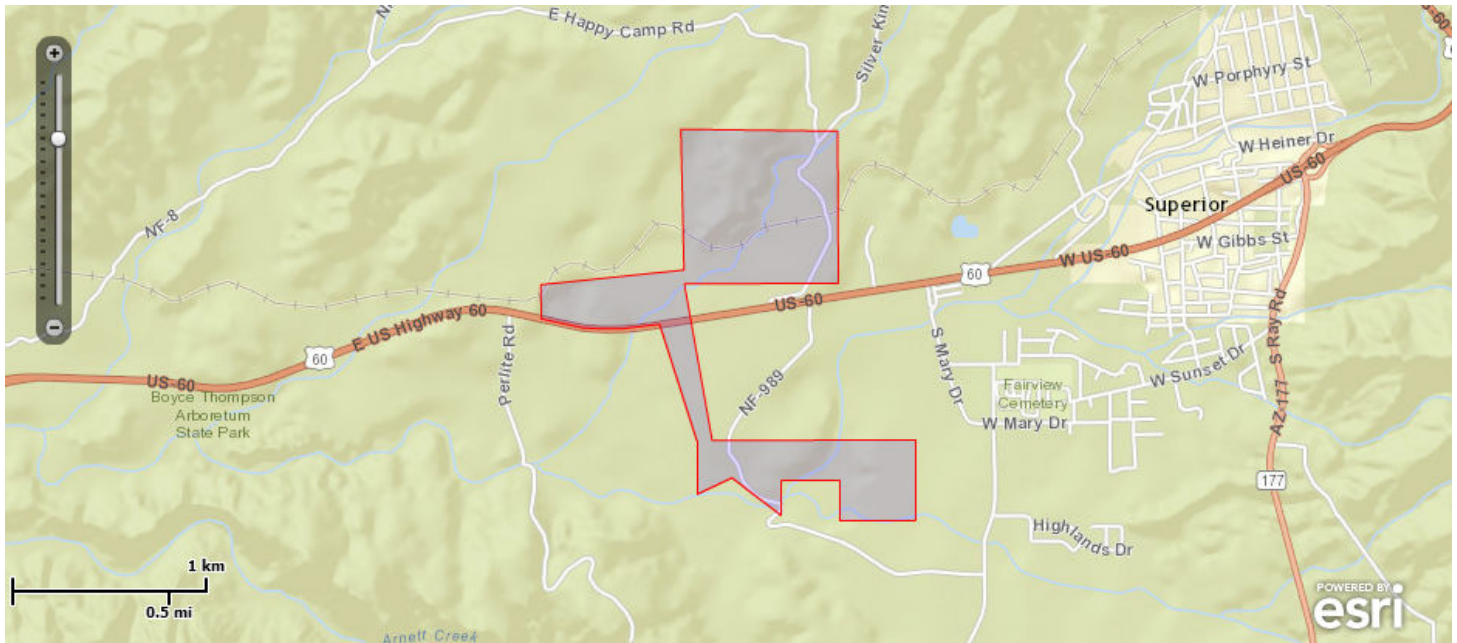
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport Contiguous

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.122421 33.2855973, -111.1309601 33.2855662, -111.1294159 33.2783258, -111.1181107 33.2783481, -111.1181032 33.2746498, -111.1223828 33.2746378, -111.1223886 33.2764562, -111.1256023 33.2764486, -111.1255961 33.2748653, -111.1283152 33.2765918, -111.1302727 33.2758351, -111.130285 33.2783241, -111.1323346 33.2837061, -111.1343566 33.2835024, -111.13558 33.2834823, -111.1365988 33.2835456, -111.1389097 33.283956, -111.1389198 33.2855375, -111.1309782 33.2862142, -111.1311598 33.2927233, -111.1224709 33.2926327, -111.122421 33.2855973)))

Project Counties: Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport Contiguous

Endangered Species Act Species List

There are a total of 7 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Flowering Plants			
Arizona Hedgehog cactus (<i>Echinocereus triglochidiatus</i> var. <i>arizonicus</i>)	Endangered		
Mammals			
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) Population: Entire	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport Contiguous

Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Sonoran desert tortoise (<i>Gopherus morafkai</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport Contiguous

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - SUPERIOR AIRPORT



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0343

Event Code: 02EAAZ00-2015-E-00348

Project Type: Mining

Project Name: Land Exchange - Superior Airport

Project Description: Land Exchange

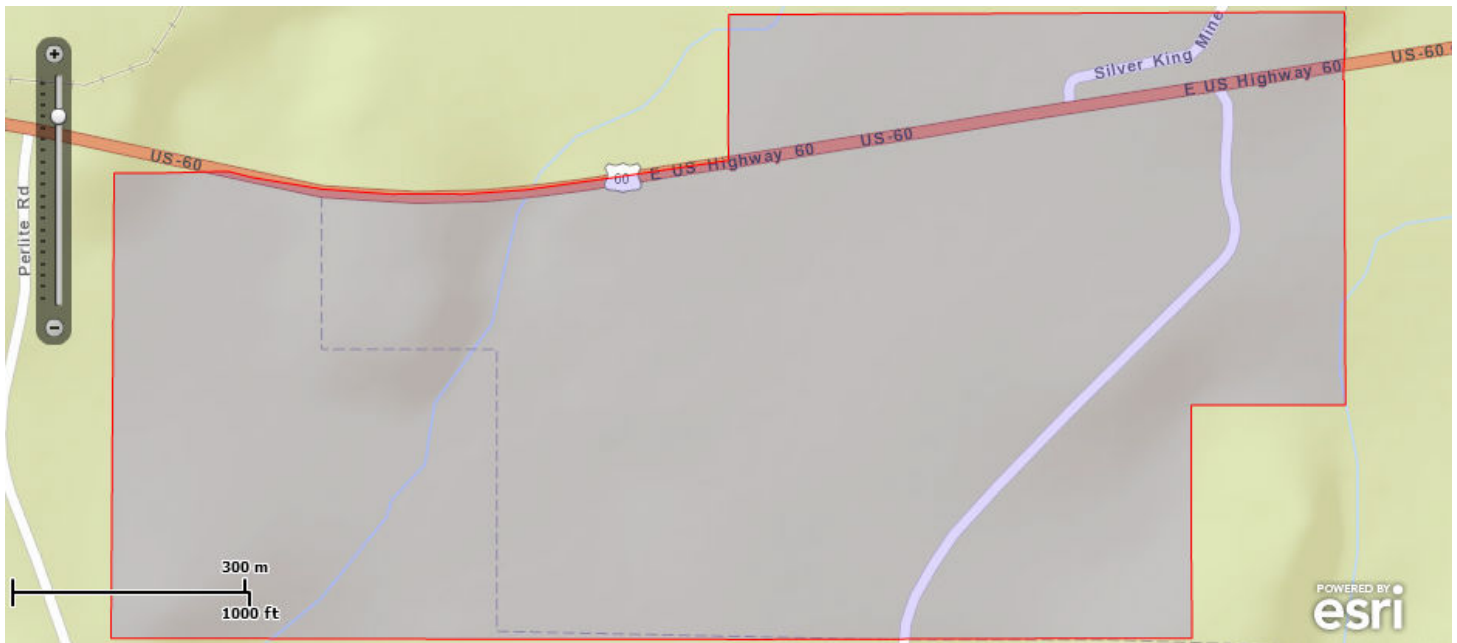
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.1309693 33.2838751, -111.1309601 33.2855662, -111.122421 33.2855973, -111.1224424 33.2848108, -111.1224086 33.2810409, -111.1245446 33.2810359, -111.12454 33.2783354, -111.1395259 33.2783378, -111.1394822 33.2837278, -111.1379061 33.2837507, -111.1365988 33.2835456, -111.13558 33.2834823, -111.134702 33.2834833, -111.1337772 33.2835344, -111.1309693 33.2838751)))

Project Counties: Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport

Endangered Species Act Species List

There are a total of 7 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Flowering Plants			
Arizona Hedgehog cactus (<i>Echinocereus triglochidiatus</i> var. <i>arizonicus</i>)	Endangered		
Mammals			
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) Population: Entire	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport

Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Sonoran desert tortoise (<i>Gopherus morafkai</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Superior Airport

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - TURKEY CREEK



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Turkey Creek

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0345

Event Code: 02EAAZ00-2015-E-00350

Project Type: Mining

Project Name: Land Exchange - Turkey Creek

Project Description: Land Exchange

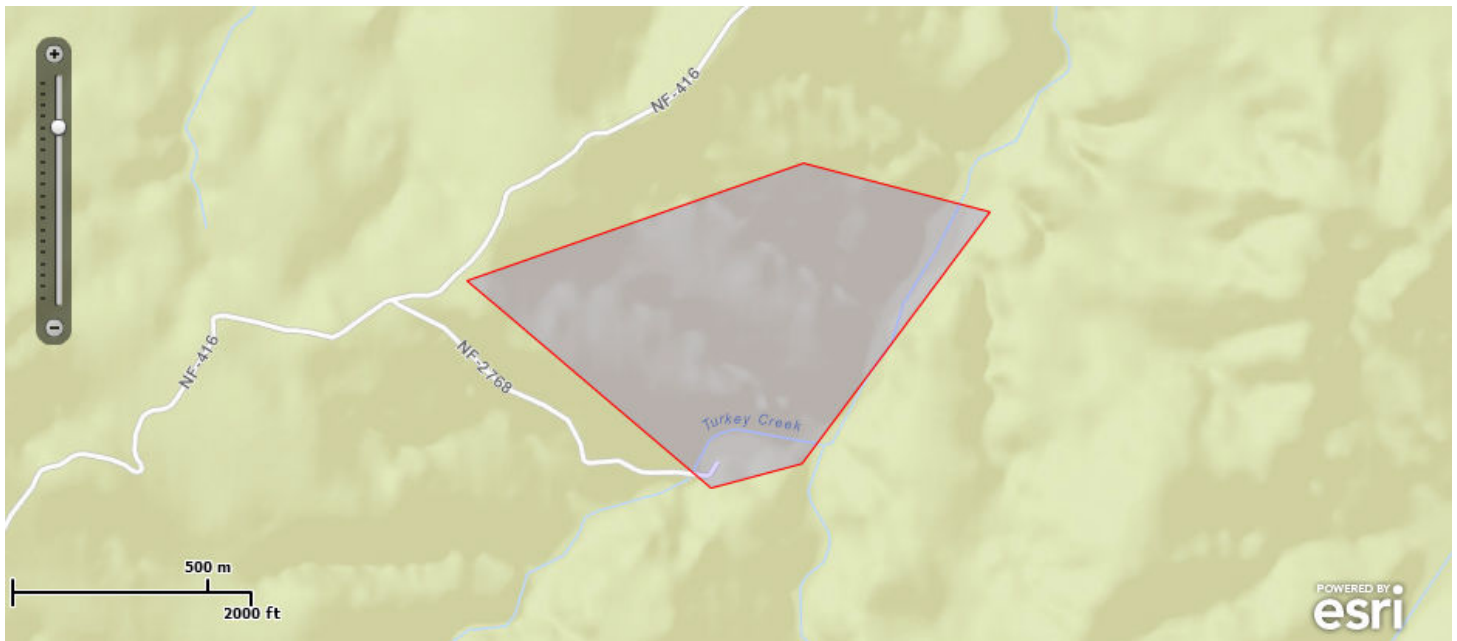
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Turkey Creek

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.123128 33.9788451, -111.1137919 33.9815474, -111.1086222 33.9804299, -111.1138426 33.9746372, -111.1163593 33.974072, -111.123128 33.9788451)))

Project Counties: Gila, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Turkey Creek

Endangered Species Act Species List

There are a total of 6 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Mexican Spotted owl (<i>Strix occidentalis lucida</i>) Population: Entire	Threatened	Final designated	
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Headwater chub (<i>Gila nigra</i>)	Candidate		
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Turkey Creek

Critical habitats that lie within your project area

The following critical habitats lie fully or partially within your project area.

Birds	Critical Habitat Type
Mexican Spotted owl (<i>Strix occidentalis lucida</i>) Population: Entire	Final designated

APPENDIX E - TANGLE CREEK



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Tangle Creek

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0344

Event Code: 02EAAZ00-2015-E-00349

Project Type: Mining

Project Name: Land Exchange - Tangle Creek

Project Description: Land Exchange

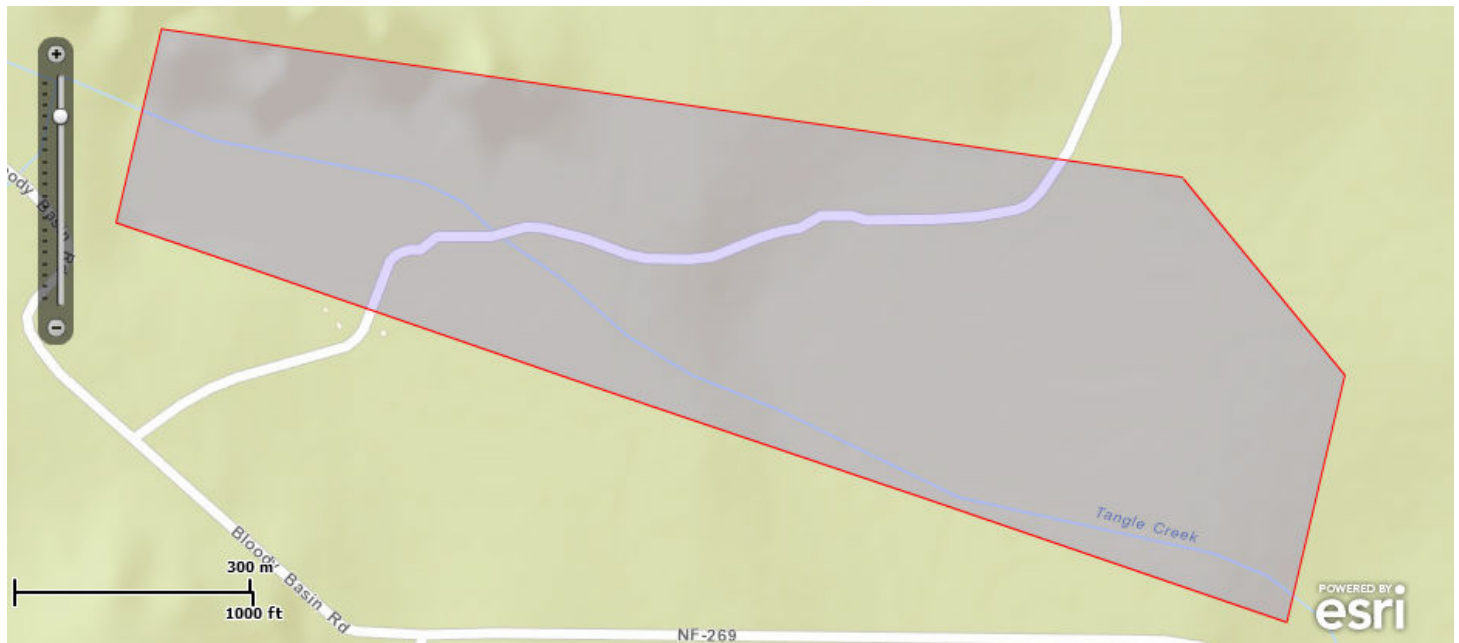
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Tangle Creek

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.8255462 34.1625946, -111.811392 34.1608962, -111.8091356 34.1586221, -111.809939 34.1557855, -111.8261714 34.1603723, -111.8255462 34.1625946)))

Project Counties: Yavapai, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Tangle Creek

Endangered Species Act Species List

There are a total of 9 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
Chiricahua leopard frog (<i>Lithobates chiricahuensis</i>) Population: Entire	Threatened	Final designated	
Birds			
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Colorado pikeminnow (<i>Ptychocheilus lucius</i>) Population: Salt and Verde R. drainages, AZ	Experimental Population, Non-Essential		
Headwater chub (<i>Gila nigra</i>)	Candidate		
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Tangle Creek

Mammals			
Black-Footed ferret (<i>Mustela nigripes</i>) Population: U.S.A. (specific portions of AZ, CO, MT, SD, UT, and WY)	Experimental Population, Non- Essential		
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Snails			
Page springsnail (<i>Pyrgulopsis morrisoni</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Tangle Creek

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - CAVE CREEK



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Cave Creek

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0339

Event Code: 02EAAZ00-2015-E-00344

Project Type: Mining

Project Name: Land Exchange - Cave Creek

Project Description: Land Exchange

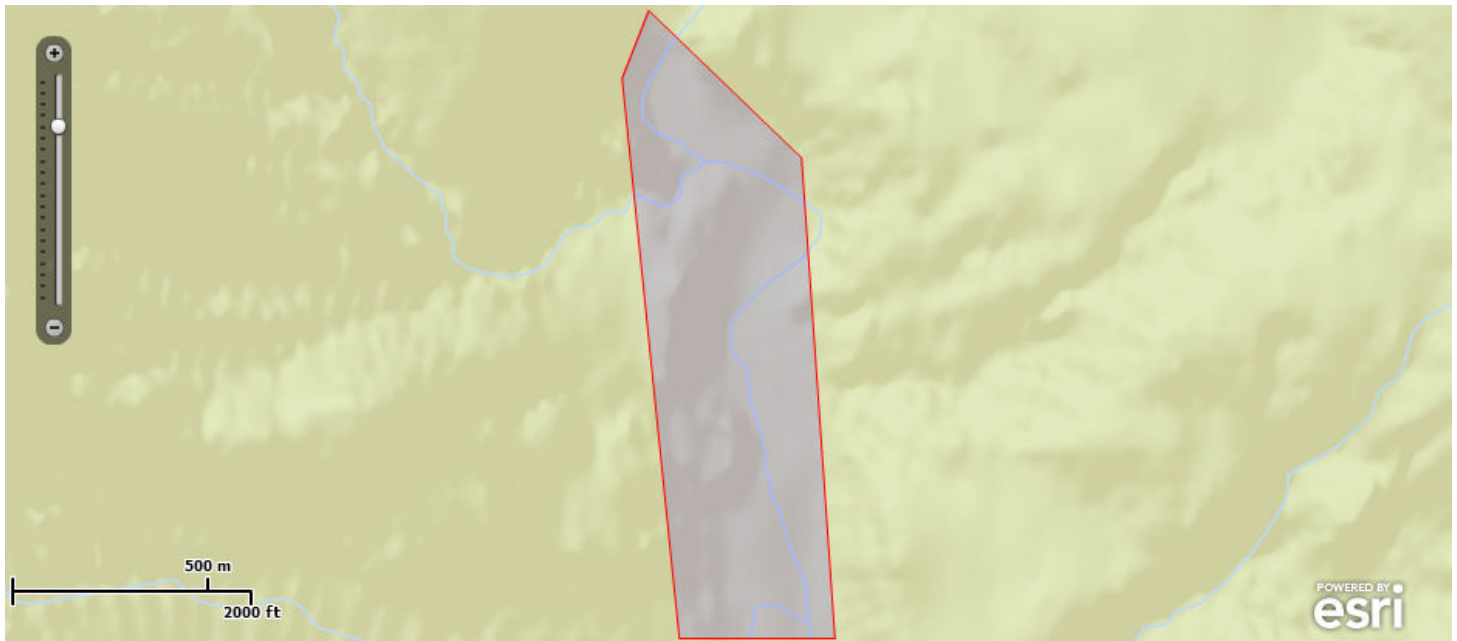
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Cave Creek

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.9534163 33.9422819, -111.9526727 33.9438342, -111.9484434 33.9404529, -111.94751 33.9294171, -111.9518288 33.9294176, -111.9534163 33.9422819)))

Project Counties: Maricopa, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Cave Creek

Endangered Species Act Species List

There are a total of 7 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
California Least tern (<i>Sterna antillarum browni</i>)	Endangered		
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Sprague's Pipit (<i>Anthus spragueii</i>)	Candidate		
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Mammals			
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) Population: Entire	Endangered		
Reptiles			



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Cave Creek

Sonoran desert tortoise (<i>Gopherus morafkai</i>)	Candidate		
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United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Cave Creek

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - EAST CLEAR CREEK



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - East Clear Creek

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0341

Event Code: 02EAAZ00-2015-E-00346

Project Type: Mining

Project Name: Land Exchange - East Clear Creek

Project Description: Land Exchange

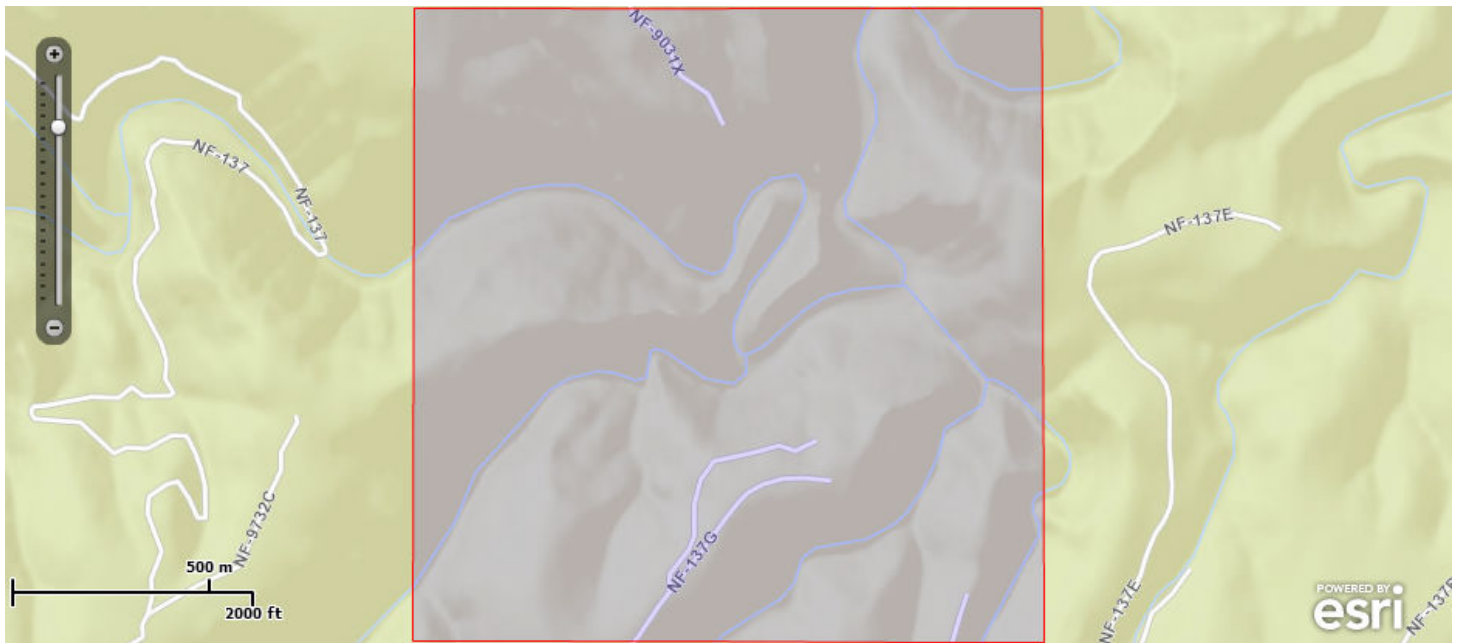
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - East Clear Creek

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.0900511 34.6239238, -111.0726443 34.6239171, -111.0725797 34.6094422, -111.0900914 34.6094929, -111.0900511 34.6239238)))

Project Counties: Coconino, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - East Clear Creek

Endangered Species Act Species List

There are a total of 8 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
Chiricahua leopard frog (<i>Lithobates chiricahuensis</i>) Population: Entire	Threatened	Final designated	
Birds			
Mexican Spotted owl (<i>Strix occidentalis lucida</i>) Population: Entire	Threatened	Final designated	
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Little Colorado spinedace (<i>Lepidomeda vittata</i>) Population: Entire	Threatened	Final designated	
Roundtail chub (<i>Gila robusta</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - East Clear Creek

Population: Lower Colorado River Basin DPS			
Mammals			
Black-Footed ferret (<i>Mustela nigripes</i>) Population: U.S.A. (specific portions of AZ, CO, MT, SD, UT, and WY)	Experimental Population, Non- Essential		
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - East Clear Creek

Critical habitats that lie within your project area

The following critical habitats lie fully or partially within your project area.

Birds	Critical Habitat Type
Mexican Spotted owl (<i>Strix occidentalis lucida</i>) Population: Entire	Final designated
Fishes	
Little Colorado spinedace (<i>Lepidomeda vittata</i>) Population: Entire	Final designated

APPENDIX E - APACHE LEAP SOUTH END



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Apache Leap South End

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0351

Event Code: 02EAAZ00-2015-E-00355

Project Type: Mining

Project Name: Land Exchange - Apache Leap South End

Project Description: Land Exchange

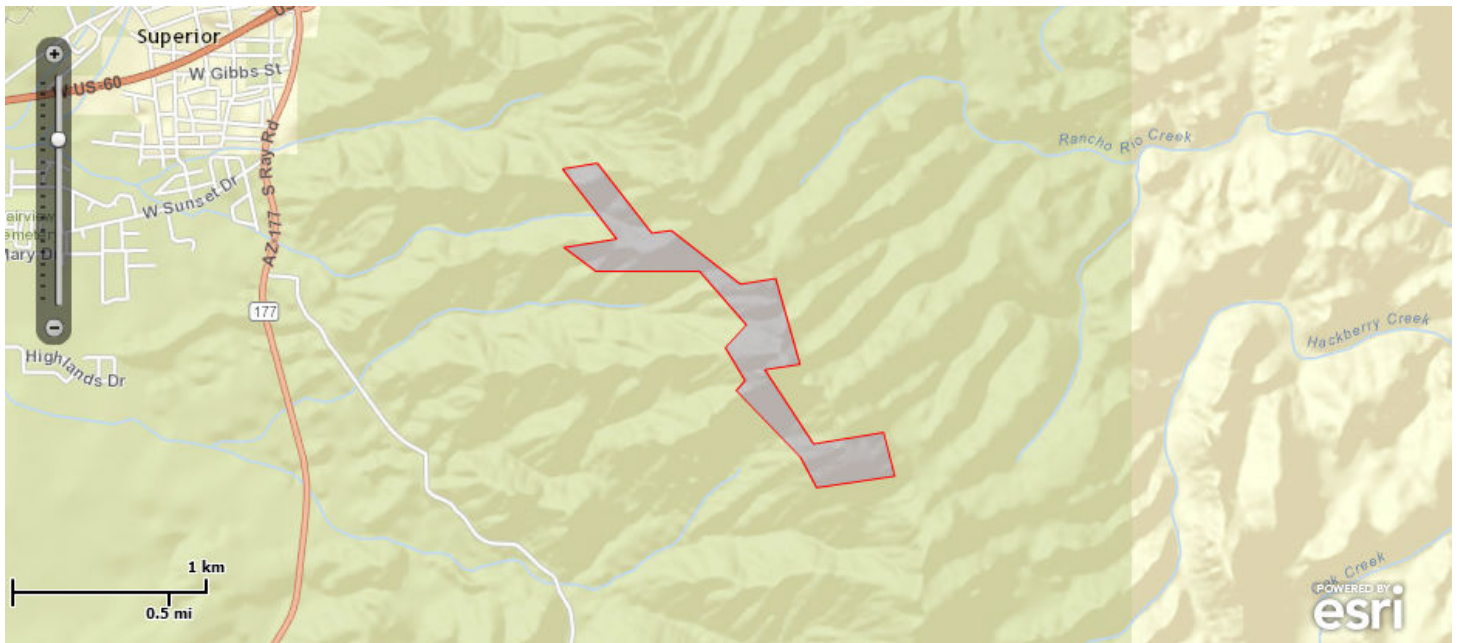
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Apache Leap South End

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-111.0818806 33.2830522, -111.0799472 33.2833189, -111.0769327 33.2800681, -111.0758575 33.280208, -111.0720221 33.2776985, -111.0700594 33.2779679, -111.0687126 33.2740021, -111.0706516 33.273739, -111.0679462 33.2703053, -111.0640715 33.2708297, -111.0634554 33.2688067, -111.067789 33.2682623, -111.0686935 33.2696842, -111.0722464 33.2727656, -111.071745 33.2732335, -111.0728497 33.2747654, -111.0716861 33.2758289, -111.074302 33.2783361, -111.0800754 33.2783314, -111.0817987 33.2794077, -111.078871 33.2798059, -111.0818806 33.2830522)))

Project Counties: Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Apache Leap South End

Endangered Species Act Species List

There are a total of 6 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Flowering Plants			
Arizona Hedgehog cactus (<i>Echinocereus triglochidiatus</i> var. <i>arizonicus</i>)	Endangered		
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Sonoran desert tortoise (<i>Gopherus</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Apache Leap South End

<i>morafkai</i>			
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United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Apache Leap South End

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - LOWER SAN PEDRO RIVER



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Lower San Pedro River

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0349

Event Code: 02EAAZ00-2015-E-00353

Project Type: Mining

Project Name: Land Exchange - Lower San Pedro River

Project Description: Land Exchange

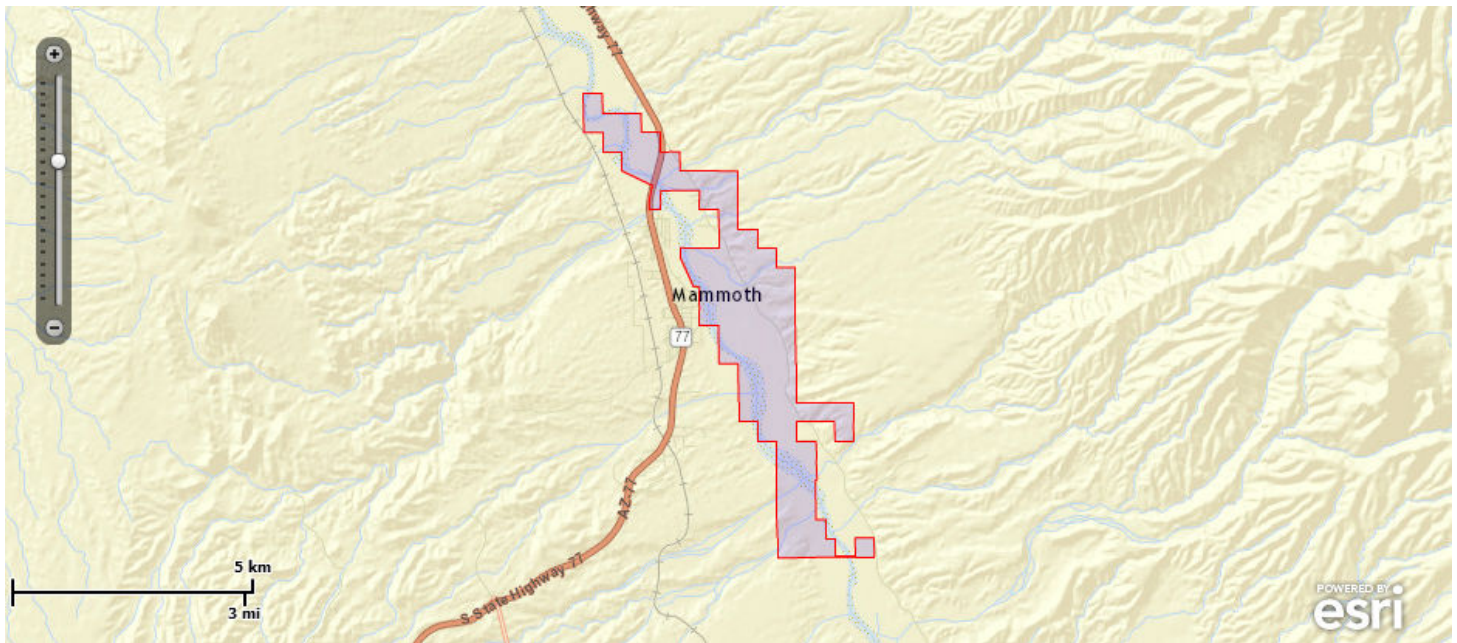
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Lower San Pedro River

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-110.6591422 32.7590248, -110.6590825 32.7554104, -110.6548228 32.7554385, -110.6505961 32.7554253, -110.6505323 32.7518102, -110.6462815 32.7517951, -110.6462455 32.7481846, -110.6419647 32.7481672, -110.6419211 32.7445547, -110.6376328 32.7445351, -110.6291486 32.7445713, -110.6291152 32.7337805, -110.6248658 32.7337835, -110.6248521 32.7301814, -110.6206002 32.7301793, -110.6206015 32.7265807, -110.6163506 32.7265882, -110.6163443 32.7157934, -110.6162323 32.7013555, -110.6034331 32.7013656, -110.6034014 32.694131, -110.6075775 32.6941283, -110.6076385 32.6977453, -110.6161757 32.6977389, -110.616119 32.6941222, -110.6117537 32.6941254, -110.611542 32.6869063, -110.6118734 32.6869033, -110.6118092 32.6794626, -110.6096399 32.6795143, -110.6096121 32.6759522, -110.6074455 32.67599, -110.6074215 32.6725636, -110.6030693 32.6725708, -110.6030916 32.6760659, -110.5989222 32.6761483, -110.5988575 32.6725054, -110.6117495 32.6724447, -110.6203572 32.6723225, -110.6204381 32.679632, -110.6204842 32.6941189, -110.624719 32.6941292, -110.6247235 32.6977444, -110.6289554 32.6977531, -110.628957 32.7013669, -110.6290494 32.7085964, -110.6332981 32.7086101, -110.6334101 32.7158453, -110.6376783 32.7158654, -110.6376437 32.7229039, -110.638929 32.7229232, -110.6419141 32.7284823, -110.6419033 32.7302063, -110.633356 32.7301854, -110.6333733 32.7373695, -110.6376203 32.7373612, -110.6376265 32.7409482, -110.6462068 32.7409839, -110.6462041 32.7373938, -110.6487976 32.7374035, -110.6487776 32.738509, -



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Lower San Pedro River

110.64861 32.7397671, -110.6483877 32.740697, -110.6480213 32.741825, -110.6547487
32.7445987, -110.6547734 32.748212, -110.6589632 32.7481812, -110.6590228 32.7517958, -
110.6632476 32.7517661, -110.6634369 32.7589976, -110.6591422 32.7590248)))

Project Counties: Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Lower San Pedro River

Endangered Species Act Species List

There are a total of 11 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Mexican Spotted owl (<i>Strix occidentalis lucida</i>) Population: Entire	Threatened	Final designated	
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Gila topminnow (<i>Poeciliopsis occidentalis</i>) Population: U.S.A. only	Endangered		
Loach minnow (<i>Tiaroga cobitis</i>) Population: Entire	Endangered	Final designated	
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Lower San Pedro River

spikedace (<i>Meda fulgida</i>) Population: Entire	Endangered	Final designated	
Mammals			
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) Population: Entire	Endangered		
ocelot (<i>Leopardus (=felis) pardalis</i>) Population: U.S.A.(AZ, TX) to Central and South America	Endangered		
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Sonoran desert tortoise (<i>Gopherus morafkai</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Lower San Pedro River

Critical habitats that lie within your project area

The following critical habitats lie fully or partially within your project area.

Birds	Critical Habitat Type
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Final designated
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Proposed
Reptiles	
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Proposed

APPENDIX E - DRIPPING SPRINGS



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Dripping Springs

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0340

Event Code: 02EAAZ00-2015-E-00345

Project Type: Mining

Project Name: Land Exchange - Dripping Springs

Project Description: Land Exchange

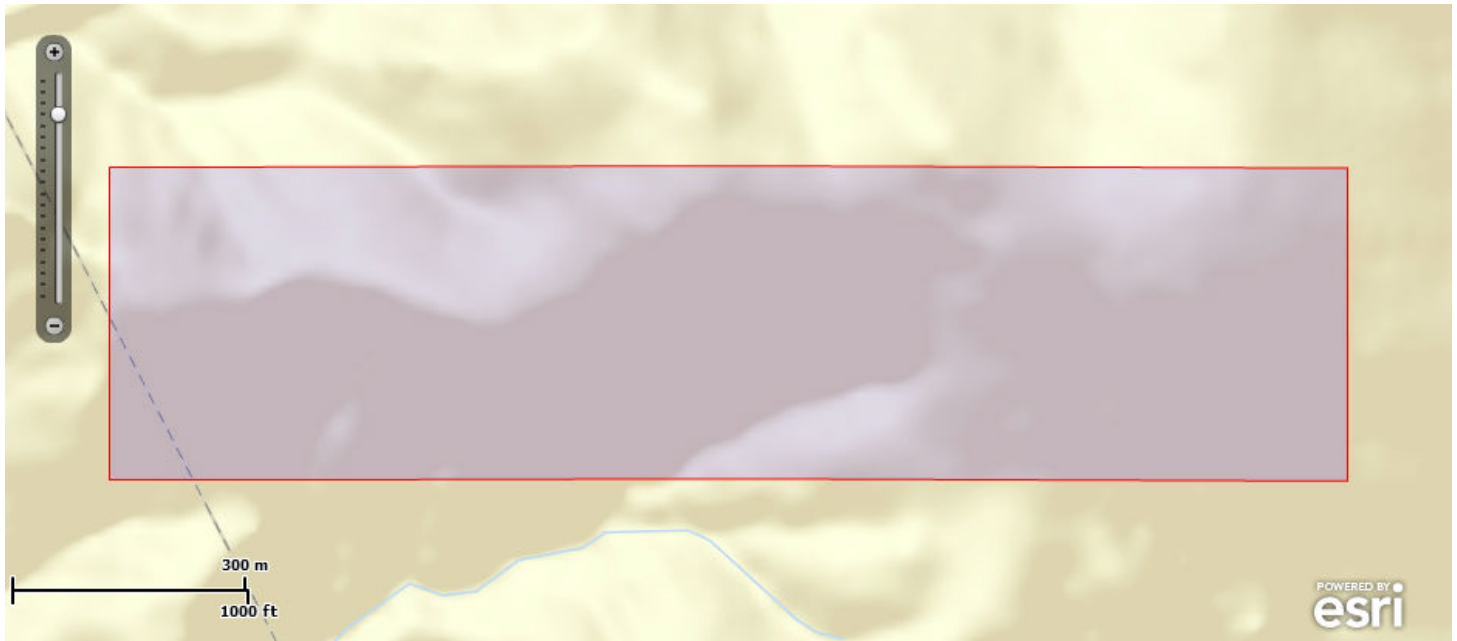
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Dripping Springs

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-110.8522192 33.0992512, -110.843639 33.0992666, -110.8350435 33.0992387, -110.8350405 33.095603, -110.8522176 33.0956179, -110.8522192 33.0992512)))

Project Counties: Gila, AZ | Pinal, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Dripping Springs

Endangered Species Act Species List

There are a total of 8 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Birds	Status	Has Critical Habitat	Condition(s)
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>) Population: Western U.S. DPS	Threatened	Proposed	
Fishes			
Headwater chub (<i>Gila nigra</i>)	Candidate		
Roundtail chub (<i>Gila robusta</i>) Population: Lower Colorado River Basin DPS	Candidate		
Mammals			
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) Population: Entire	Endangered		
ocelot (<i>Leopardus (=felis) pardalis</i>) Population: U.S.A.(AZ, TX) to Central and South America	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Dripping Springs

Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Sonoran desert tortoise (<i>Gopherus morafkai</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Dripping Springs

Critical habitats that lie within your project area

There are no critical habitats within your project area.

APPENDIX E - APPLETON RANCH



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Appleton Ranch

Official Species List

Provided by:

Arizona Ecological Services Field Office

2321 WEST ROYAL PALM ROAD, SUITE 103

PHOENIX, AZ 85021

(602) 242-0210

<http://www.fws.gov/southwest/es/arizona/>

<http://www.fws.gov/southwest/es/EndangeredSpecies/lists/>

Consultation Code: 02EAAZ00-2015-SLI-0347

Event Code: 02EAAZ00-2015-E-00351

Project Type: Mining

Project Name: Land Exchange - Appleton Ranch

Project Description: Land Exchange

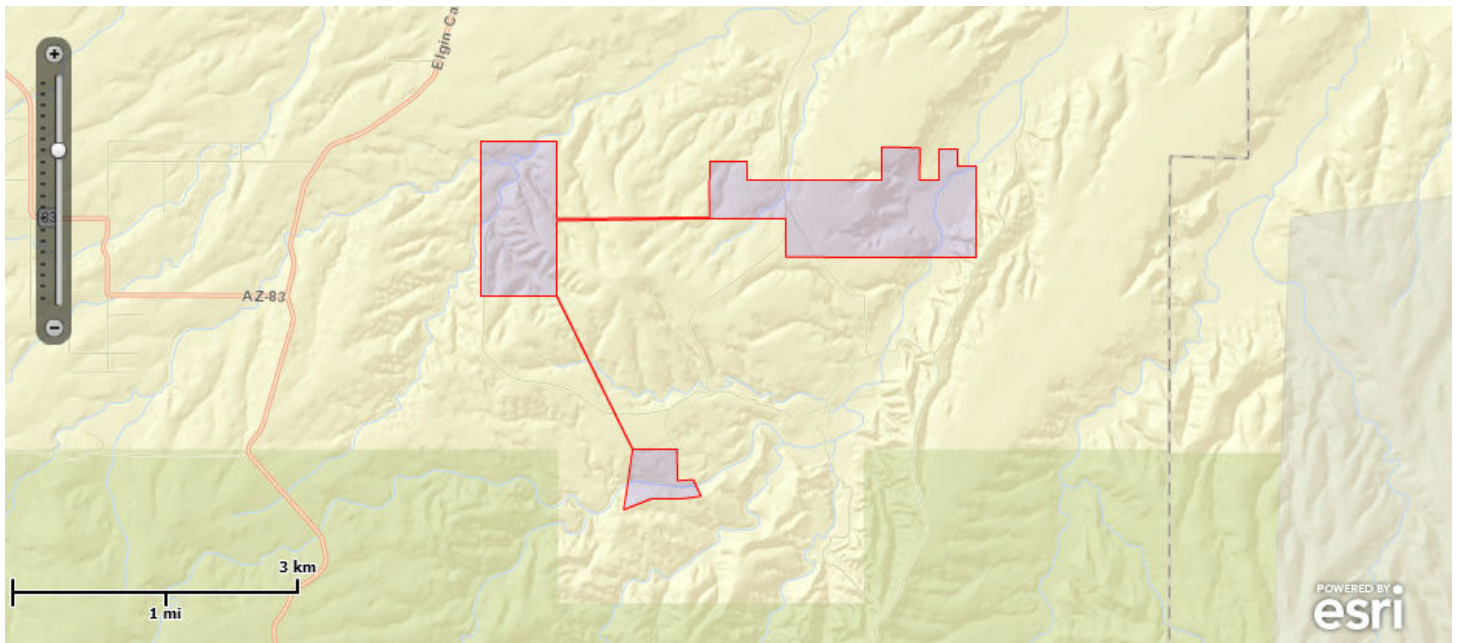
Please Note: The FWS office may have modified the Project Name and/or Project Description, so it may be different from what was submitted in your previous request. If the Consultation Code matches, the FWS considers this to be the same project. Contact the office in the 'Provided by' section of your previous Official Species list if you have any questions or concerns.



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Appleton Ranch

Project Location Map:



Project Coordinates: MULTIPOLYGON (((-110.5116204 31.6080082, -110.528552 31.6077936, -110.5285562 31.6007415, -110.5201187 31.5862243, -110.5151879 31.5862275, -110.5151465 31.5832124, -110.5134031 31.5833132, -110.5125224 31.5817446, -110.5147344 31.5814976, -110.5180878 31.5814984, -110.5211322 31.5804589, -110.5201238 31.586194, -110.5286031 31.6007415, -110.5370419 31.600743, -110.5370364 31.6152586, -110.5285475 31.6152712, -110.5285518 31.6080064, -110.5116205 31.6081116, -110.5116255 31.6133705, -110.5073908 31.6133547, -110.5073889 31.6116319, -110.4925496 31.611606, -110.4925427 31.6147766, -110.4882659 31.6146544, -110.4882927 31.6115904, -110.4862054 31.6115826, -110.4862049 31.6145955, -110.4840538 31.614534, -110.4840545 31.6129054, -110.4819686 31.612897, -110.4819707 31.6043394, -110.5031479 31.6043677, -110.5031498 31.607997, -110.5116204 31.6080082))))

Project Counties: Santa Cruz, AZ



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Appleton Ranch

Endangered Species Act Species List

There are a total of 18 threatened, endangered, or candidate species on your species list. Species on this list should be considered in an effects analysis for your project and could include species that exist in another geographic area. For example, certain fish may appear on the species list because a project could affect downstream species. Critical habitats listed under the **Has Critical Habitat** column may or may not lie within your project area. See the **Critical habitats within your project area** section further below for critical habitat that lies within your project. Please contact the designated FWS office if you have questions.

Amphibians	Status	Has Critical Habitat	Condition(s)
Arizona Treefrog (<i>Hyla wrightorum</i>) Population: Huachuca/Canelo Population	Candidate		
Chiricahua leopard frog (<i>Lithobates chiricahuensis</i>) Population: Entire	Threatened	Final designated	
Sonora Tiger Salamander (<i>Ambystoma tigrinum stebbinsi</i>) Population: Entire	Endangered		
Birds			
Mexican Spotted owl (<i>Strix occidentalis lucida</i>) Population: Entire	Threatened	Final designated	
Southwestern Willow flycatcher (<i>Empidonax traillii extimus</i>) Population: Entire	Endangered	Final designated	
Sprague's Pipit (<i>Anthus spragueii</i>)	Candidate		
Yellow-Billed Cuckoo (<i>Coccyzus americanus</i>)	Threatened	Proposed	



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Appleton Ranch

Population: Western U.S. DPS			
Fishes			
Desert pupfish (<i>Cyprinodon macularius</i>) Population: Entire	Endangered	Final designated	
Gila chub (<i>Gila intermedia</i>) Population: Entire	Endangered	Final designated	
Gila topminnow (<i>Poeciliopsis occidentalis</i>) Population: U.S.A. only	Endangered		
Flowering Plants			
Canelo Hills ladies'-tresses (<i>Spiranthes delitescens</i>)	Endangered		
Huachuca water-umbel (<i>Lilaeopsis schaffneriana</i> var. <i>recurva</i>)	Endangered	Final designated	
Insects			
Stephan's Riffle beetle (<i>Heterelmis stephani</i>)	Candidate		
Mammals			
jaguar (<i>Panthera onca</i>) Population: U.S.A(AZ,CA,LA,NM,TX),Mexico,Central and South America	Endangered	Final designated	
Lesser Long-Nosed bat (<i>Leptonycteris curasoae yerbabuenae</i>) Population: Entire	Endangered		
ocelot (<i>Leopardus (=felis) pardalis</i>)	Endangered		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Appleton Ranch

Population: U.S.A.(AZ, TX) to Central and South America			
Reptiles			
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Threatened	Proposed	
Snails			
Huachuca springsnail (<i>Pyrgulopsis thompsoni</i>)	Candidate		



United States Department of Interior
Fish and Wildlife Service

Project name: Land Exchange - Appleton Ranch

Critical habitats that lie within your project area

The following critical habitats lie fully or partially within your project area.

Mammals	Critical Habitat Type
jaguar (<i>Panthera onca</i>) Population: U.S.A(AZ,CA,LA,NM,TX),Mexico, Central and South America	Final designated
Reptiles	
Northern Mexican gartersnake (<i>Thamnophis eques megalops</i>)	Proposed

APPENDIX F

Arizona Game and Fish Heritage Data
Management System Online Query

APPENDIX F - OAK FLAT

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Oak Flat Parcel

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

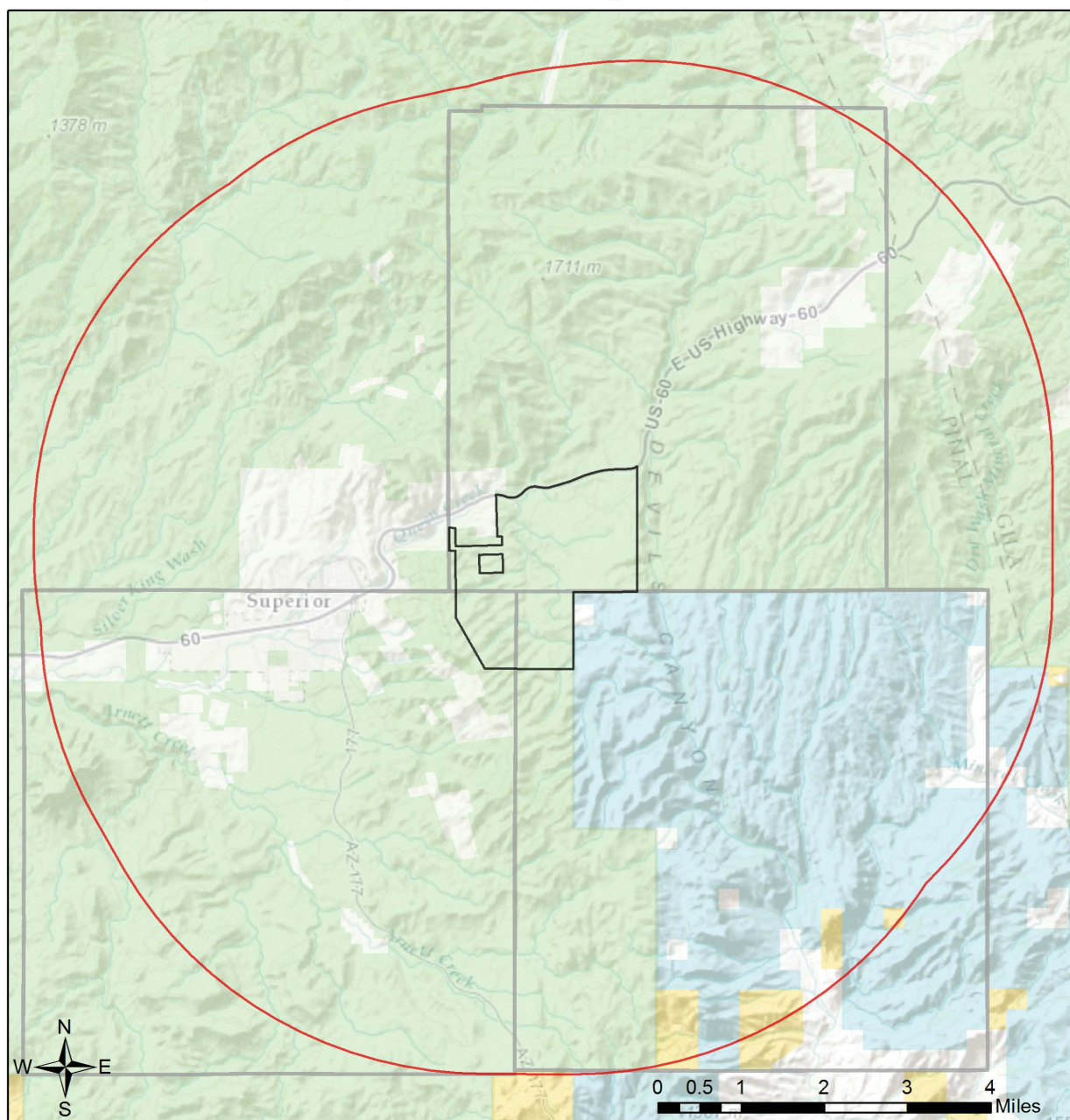
Project ID:

HGIS-00736

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Oak Flat Parcel

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 2,417.00

Lat/Long (DD): 33.2967 / -111.0557

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T1S, R13E; T2S, R13E; T2S, R12E

USGS Quad(s): SUPERIOR

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S		1B
Bat Colony						
Boyce Thompson Arboretum and Arnett -Queen Creeks	Important Bird Area					
Buteogallus anthracinus	Common Black Hawk				WSC	1C
CH for Gila intermedia	Gila chub Designated Critical Habitat					
CH for Strix occidentalis lucida	Mexican spotted owl Designated Critical Habitat					
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
Cyprinodon macularius	Desert Pupfish	LE			WSC	1A
Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	LE			HS	
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	WSC	1A
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Leopardus pardalis	Ocelot	LE			WSC	1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Myotis ciliolabrum	Western Small-footed Myotis	SC				
Myotis yumanensis	Yuma Myotis	SC				1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A
Xantusia bezyi	Bezy's Night Lizard		S			1B

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - FAIRVIEW CEMETERY

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Fairview Cemetery

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

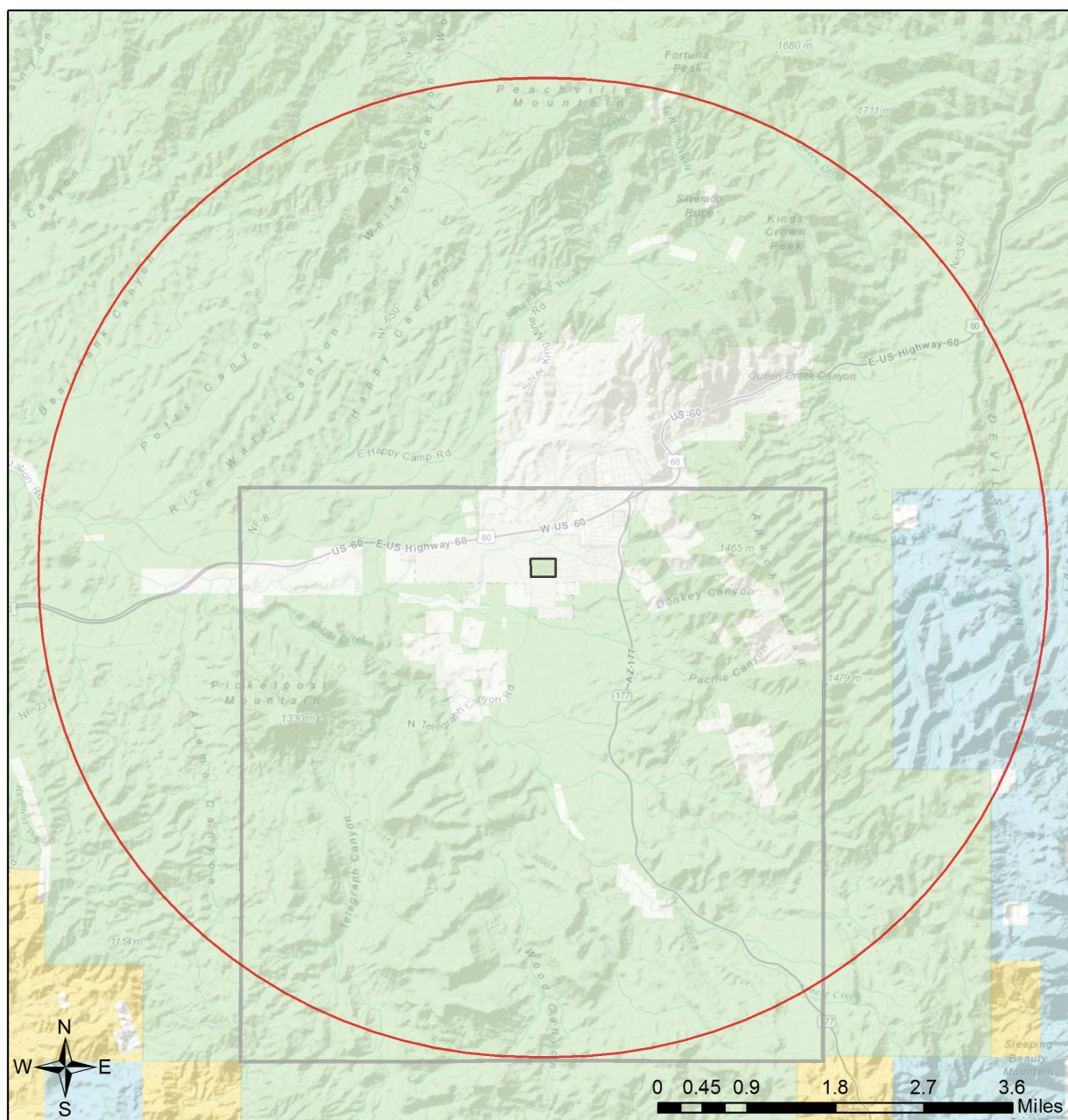
Project ID:

HGIS-00729

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Fairview Cemetery

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 30.33
 Lat/Long (DD): 33.2806 / -111.1117
 County(s): Pinal
 AGFD Region(s): Mesa
 Township/Range(s): T2S, R12E
 USGS Quad(s): SUPERIOR

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Bat Colony						
Boyce Thompson Arboretum and Arnett -Queen Creeks	Important Bird Area					
Buteogallus anthracinus	Common Black Hawk				WSC	1C
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
Cyprinodon macularius	Desert Pupfish	LE			WSC	1A
Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	LE			HS	
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	WSC	1A
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Myotis yumanensis	Yuma Myotis	SC				1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A
Xantusia bezyi	Bezy's Night Lizard		S			1B

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - SUPERIOR AIRPORT CONTIGUOUS PARCELS

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Superior Airport Contiguous

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

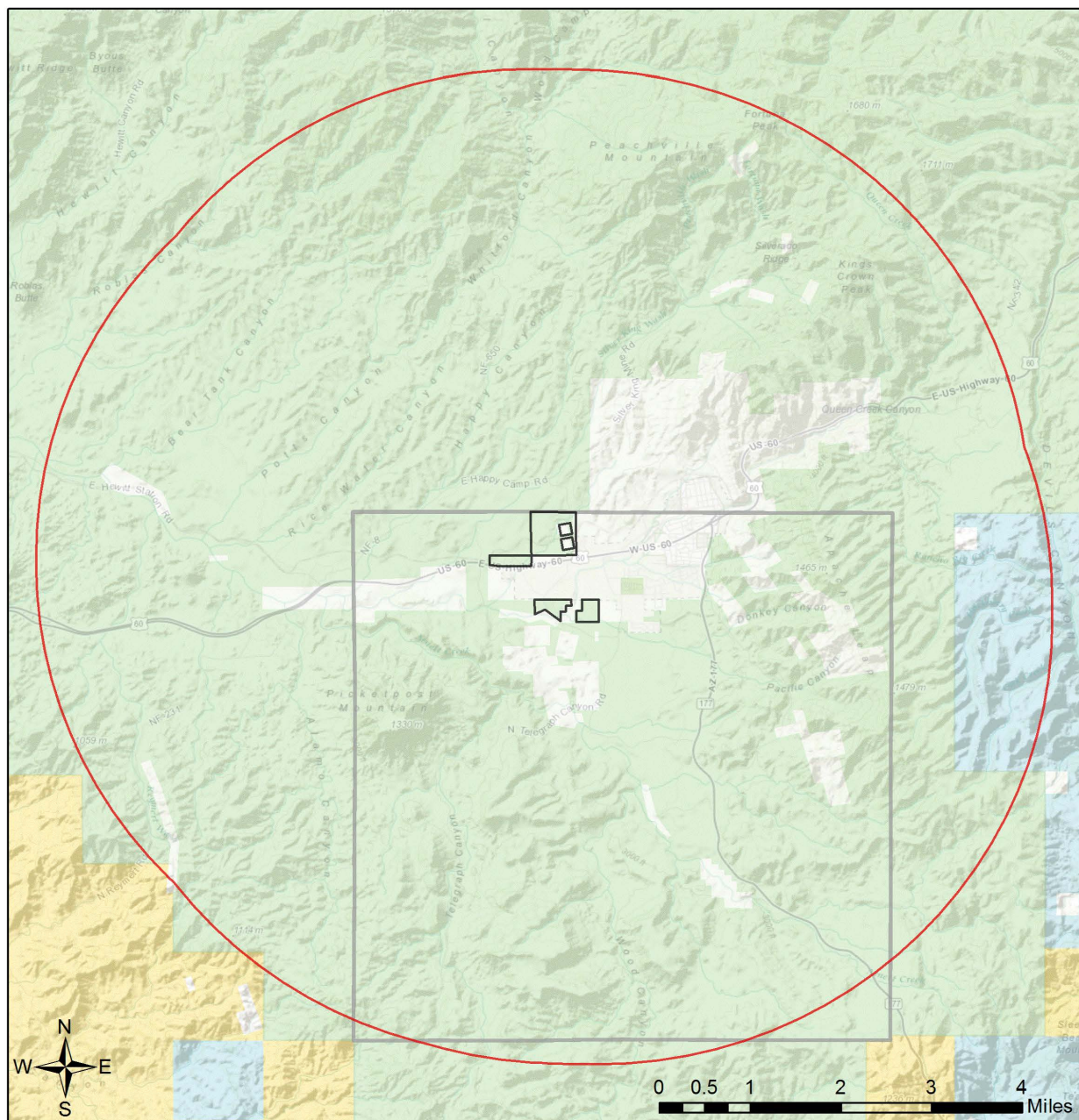
CONSULTING

Project ID:

HGIS-00731

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Superior Airport Contiguous Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 244.75

Lat/Long (DD): 33.2891 / -111.1290

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T2S, R12E

USGS Quad(s): PICKETPOST MOUNTAIN; SUPERIOR

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Bat Colony						
Boyce Thompson Arboretum and Arnett -Queen Creeks	Important Bird Area					
Buteogallus anthracinus	Common Black Hawk				WSC	1C
Cyprinodon macularius	Desert Pupfish	LE			WSC	1A
Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	LE			HS	
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	WSC	1A
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Myotis yumanensis	Yuma Myotis	SC				1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A
Xantusia bezyi	Bezy's Night Lizard		S			1B

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - SUPERIOR AIRPORT

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Superior Airport

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

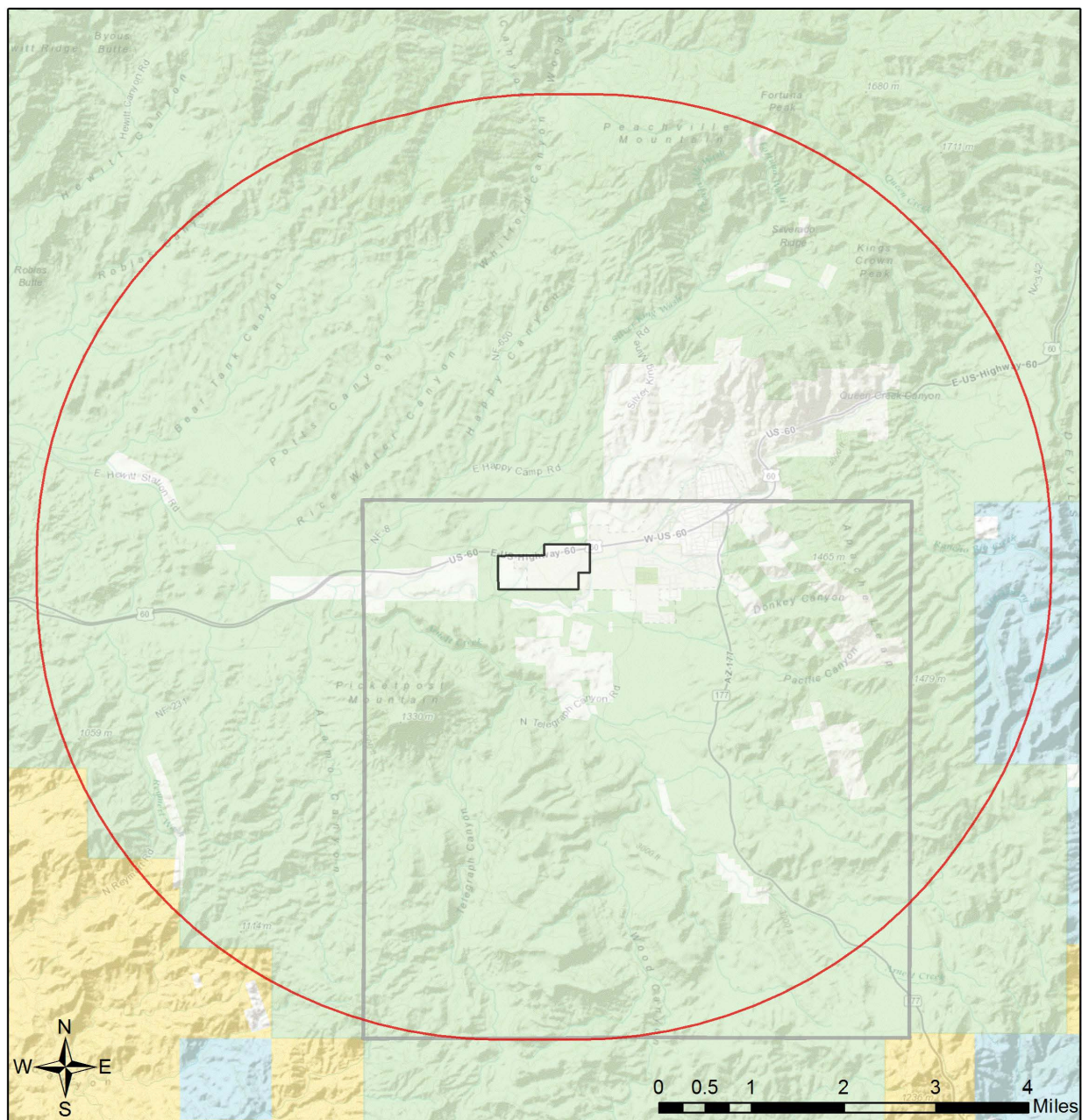
Project ID:

HGIS-00730

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Superior Airport

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 263.36

Lat/Long (DD): 33.2817 / -111.1308

County(s): Pinal

AGFD Region(s): Mesa

Township/Range(s): T2S, R12E

USGS Quad(s): PICKETPOST MOUNTAIN; SUPERIOR

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Bat Colony						
Boyce Thompson Arboretum and Arnett -Queen Creeks	Important Bird Area					
Buteogallus anthracinus	Common Black Hawk				WSC	1C
Cyprinodon macularius	Desert Pupfish	LE			WSC	1A
Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	LE			HS	
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	WSC	1A
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Myotis yumanensis	Yuma Myotis	SC				1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A
Xantusia bezyi	Bezy's Night Lizard		S			1B

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - TURKEY CREEK

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Turkey Creek

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

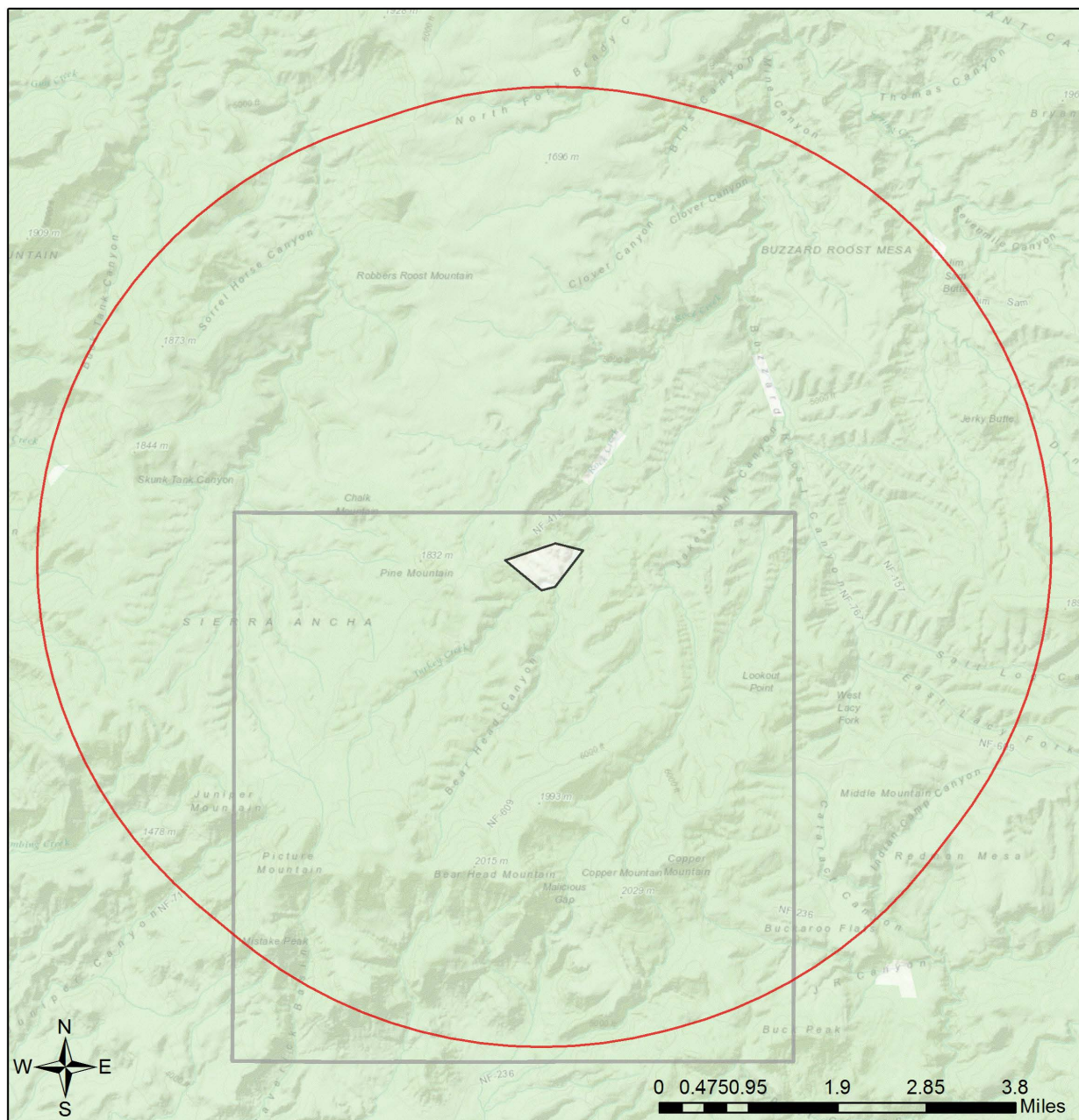
Project ID:

HGIS-00733

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Turkey Creek

Topo Basemap With Township/Ranges and Land Ownership



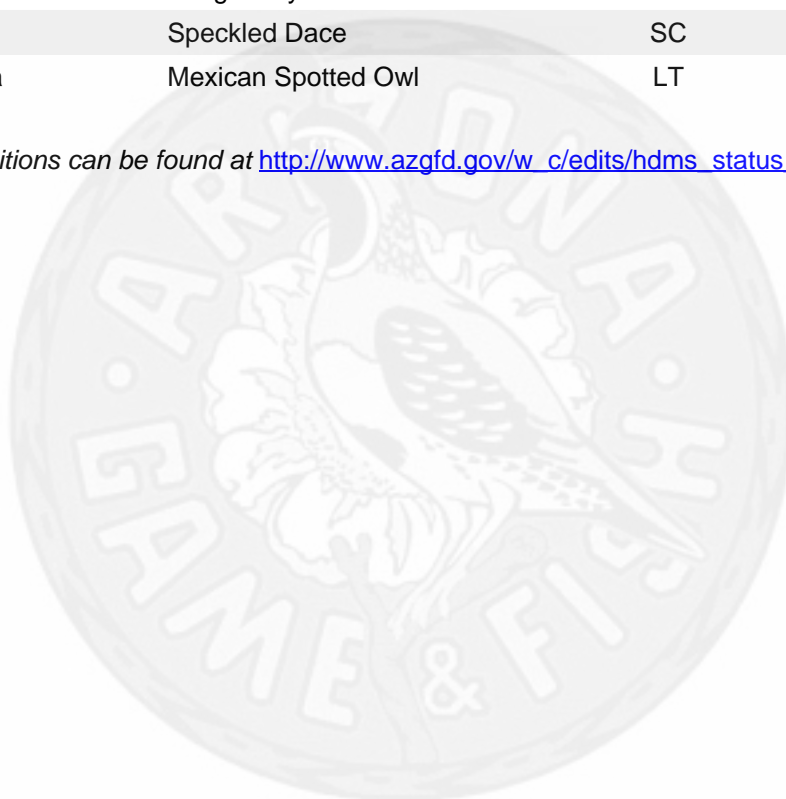
	Project Boundary		Mixed/Other	Project Size (acres): 146.78
	Buffered Project Boundary		National Park/Mon.	Lat/Long (DD): 33.9782 / -111.1155
	Township/Range		Private	County(s): Gila
	AZ Game and Fish Dept.		State and Regional Parks	AGFD Region(s): Mesa
	BLM		State Trust	Township/Range(s): T7N, R12E
	BOR		US Forest Service	USGS Quad(s): COPPER MOUNTAIN
	Indian Res.		Wildlife Area/Refuge	
	Military			

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Accipiter gentilis	Northern Goshawk	SC	S	S	WSC	1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Bat Colony						
CH for Meda fulgida	Spikedace Designated Critical Habitat					
CH for Strix occidentalis lucida	Mexican spotted owl Designated Critical Habitat					
Catostomus clarkii	Desert Sucker	SC	S	S		1B
Gila nigra	Headwater Chub	C*	S			1A
Haliaeetus leucocephalus pop. 3	Bald Eagle - Sonoran Desert Population	SC,BG A	S	S	WSC	1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Myotis thysanodes	Fringed Myotis	SC				
Rhinichthys osculus	Speckled Dace	SC		S		1B
Strix occidentalis lucida	Mexican Spotted Owl	LT			WSC	1A

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.



APPENDIX F - TANGLE CREEK

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Tangle Creek

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

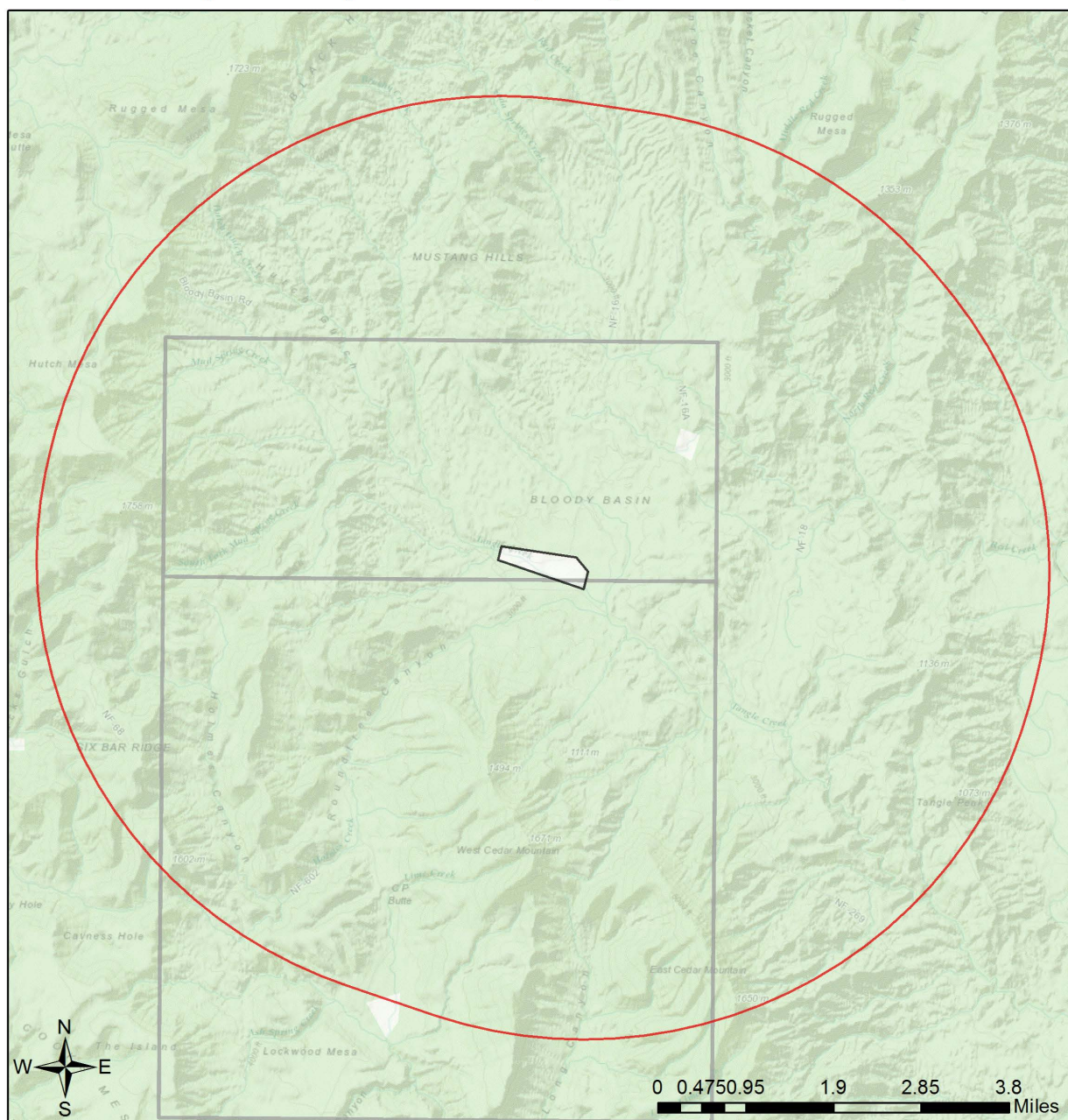
Project ID:

HGIS-00732

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Tangle Creek

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 147.94
 Lat/Long (DD): 34.1596 / -111.8169
 County(s): Yavapai
 AGFD Region(s): Mesa
 Township/Range(s): T9.5N, R5E; T9N, R5E
 USGS Quad(s): BLOODY BASIN

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Agave toumeyana var. bella	Toumey Agave				SR	
Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S		1B
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Buteogallus anthracinus	Common Black Hawk				WSC	1C
CH for Empidonax traillii extimus	Southwestern willow flycatcher Designated Critical Habitat					
CH for Xyrauchen texanus	Razorback sucker Designated Critical Habitat					
Carex ultra	Arizona Giant Sedge		S	S		
Catostomus clarkii	Desert Sucker	SC	S	S		1B
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
Cylloepus parkeri	Parker's Cylloepus Riffle Beetle	SC	S			
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC,BG A	S	S	WSC	1A
Haliaeetus leucocephalus pop. 3	Bald Eagle - Sonoran Desert Population	SC,BG A	S	S	WSC	1A
Heuchera eastwoodiae	Eastwood Alum Root		S			
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
PCH for Thamnophis eques megalops	Northern Mexican gartersnake Proposed Critical Habitat					
PCH for Thamnophis rufipunctatus	Narrow-headed gartersnake Proposed Critical Habitat					
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A
Ptychocheilus lucius	10J area for Colorado pikeminnow					
Salt and Verde Riparian Ecosystem	Important Bird Area					

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - CAVE CREEK

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Cave Creek

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

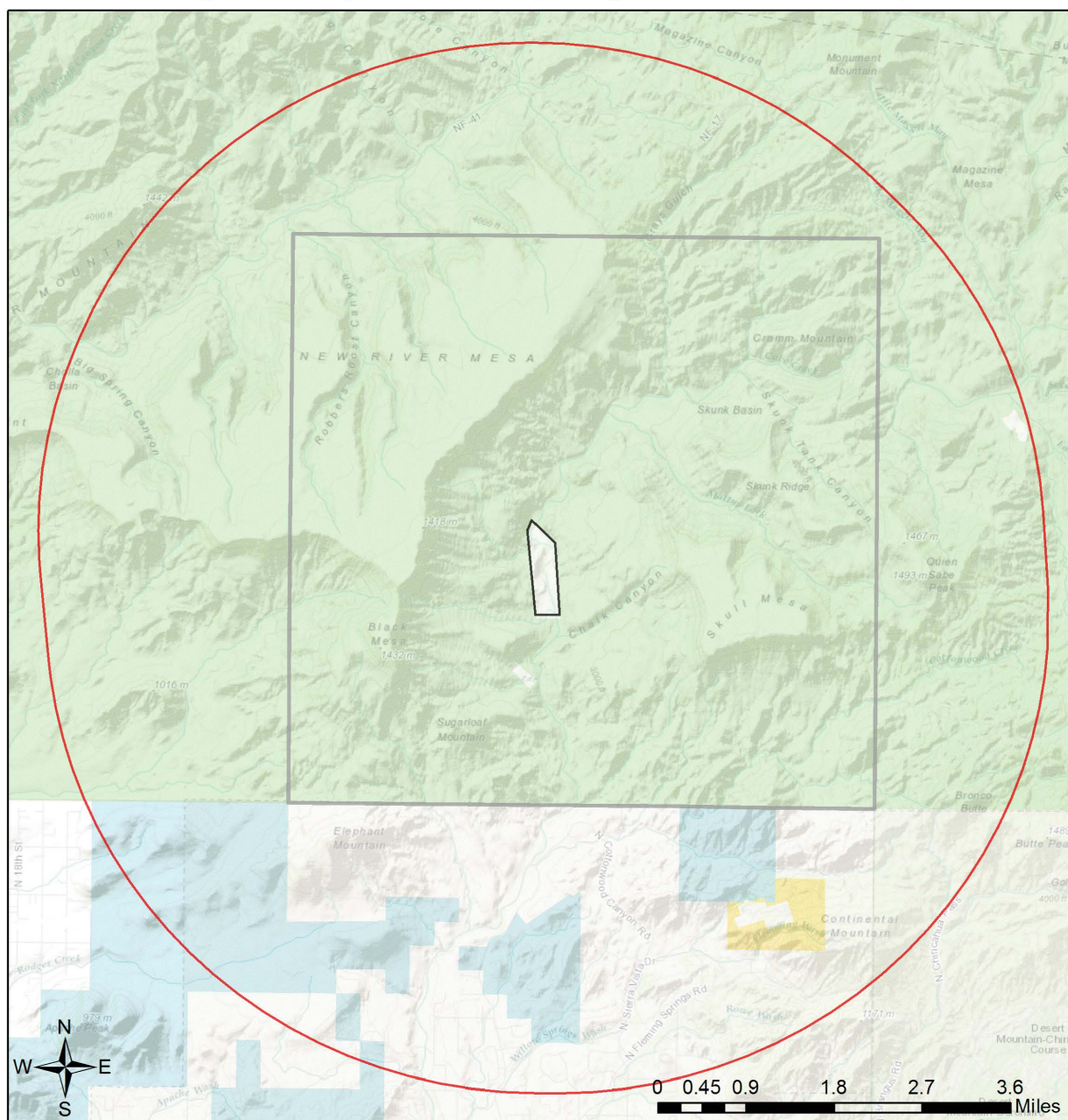
Project ID:

HGIS-00726

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Cave Creek

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 149.18
Lat/Long (DD): 33.9360 / -111.9504
County(s): Maricopa
AGFD Region(s): Mesa
Township/Range(s): T7N, R4E
USGS Quad(s): NEW RIVER MESA

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Agave murpheyi	Hohokam Agave	SC	S	S	HS	
Agave toumeyana var. bella	Toumey Agave				SR	
Agave x arizonica	Arizona agave	No status			HS	
Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S		1B
Anaxyrus microscaphus	Arizona Toad	SC				1B
Buteogallus anthracinus	Common Black Hawk				WSC	1C
Cave Creek Riparian Maricopa County	Important Bird Area					
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
Cyprinodon macularius	Desert Pupfish	LE			WSC	1A
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	WSC	1A
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Heuchera eastwoodiae	Eastwood Alum Root		S			
Lasiurus blossevillii	Western Red Bat		S		WSC	1B
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Mammillaria viridiflora	Varied Fishhook Cactus				SR	
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - EAST CLEAR CREEK

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - East Clear Creek

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

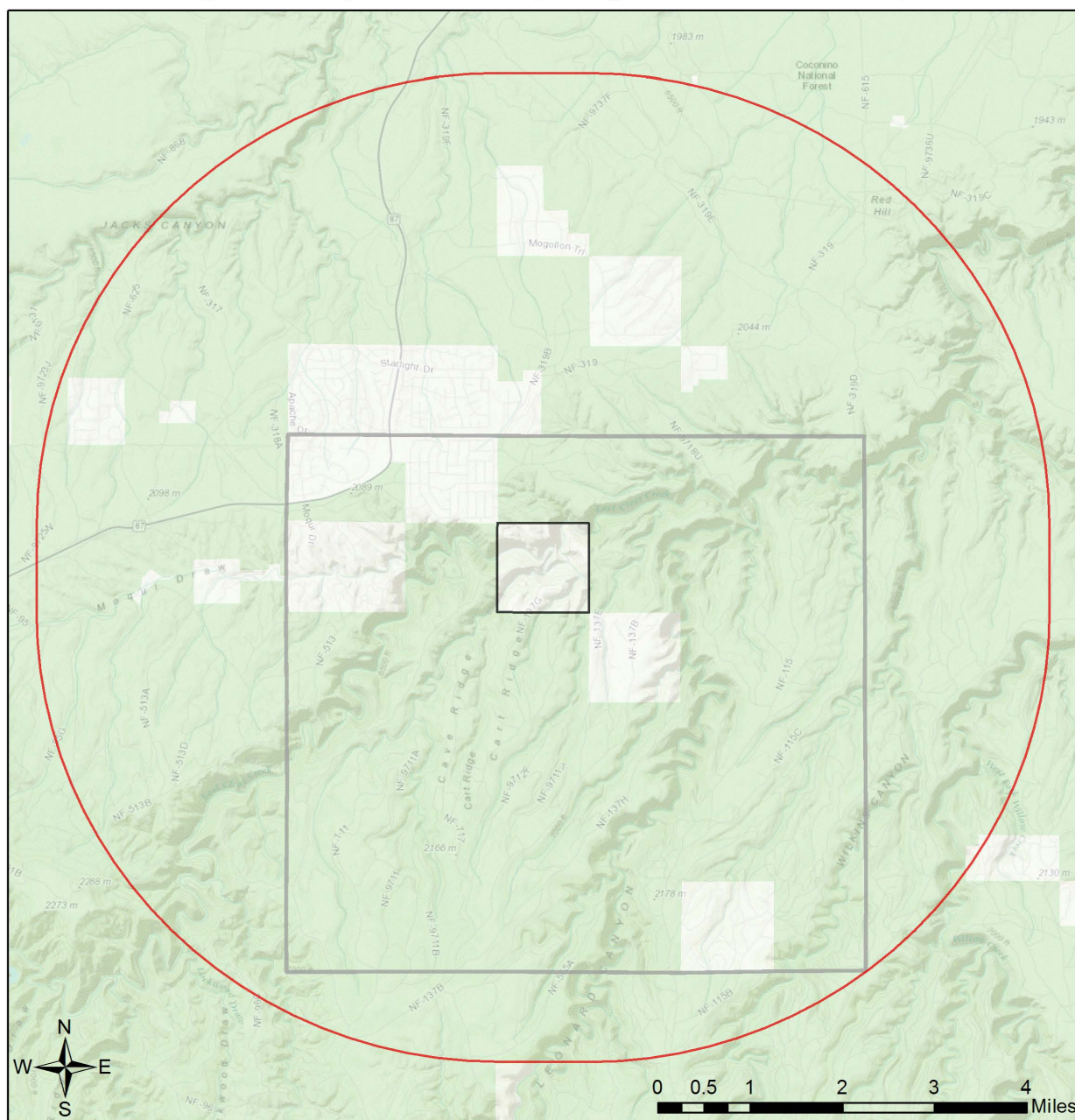
Project ID:

HGIS-00728

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - East Clear Creek

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 633.87
 Lat/Long (DD): 34.6167 / -111.0813
 County(s): Coconino
 AGFD Region(s): Flagstaff
 Township/Range(s): T14N, R12E
 USGS Quad(s): LEONARD CANYON

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Accipiter gentilis	Northern Goshawk	SC	S	S	WSC	1B
Anaxyrus microscaphus	Arizona Toad	SC				1B
Anodonta californiensis	California Floater	SC	S			1A
CH for Lepidomeda vittata	Little Colorado spinedace Designated Critical Habitat					
CH for Strix occidentalis lucida	Mexican spotted owl Designated Critical Habitat					
Catostomus sp. 3	Little Colorado Sucker	SC	S	S	WSC	1A
Erigeron saxatilis	Rock Fleabane		S			
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	WSC	1A
Haliaeetus leucocephalus (wintering pop.)	Bald Eagle - Winter Population	SC,BG A	S	S	WSC	1A
Lepidomeda vittata	Little Colorado Spinedace	LT			WSC	1A
Lithobates chiricahuensis	Chiricahua Leopard Frog	LT			WSC	1A
Lithobates pipiens	Northern Leopard Frog		S	S	WSC	1A
Rhinichthys osculus	Speckled Dace	SC		S		1B
Strix occidentalis lucida	Mexican Spotted Owl	LT			WSC	1A

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - APACHE LEAP SOUTH END

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Apache Leap South End

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

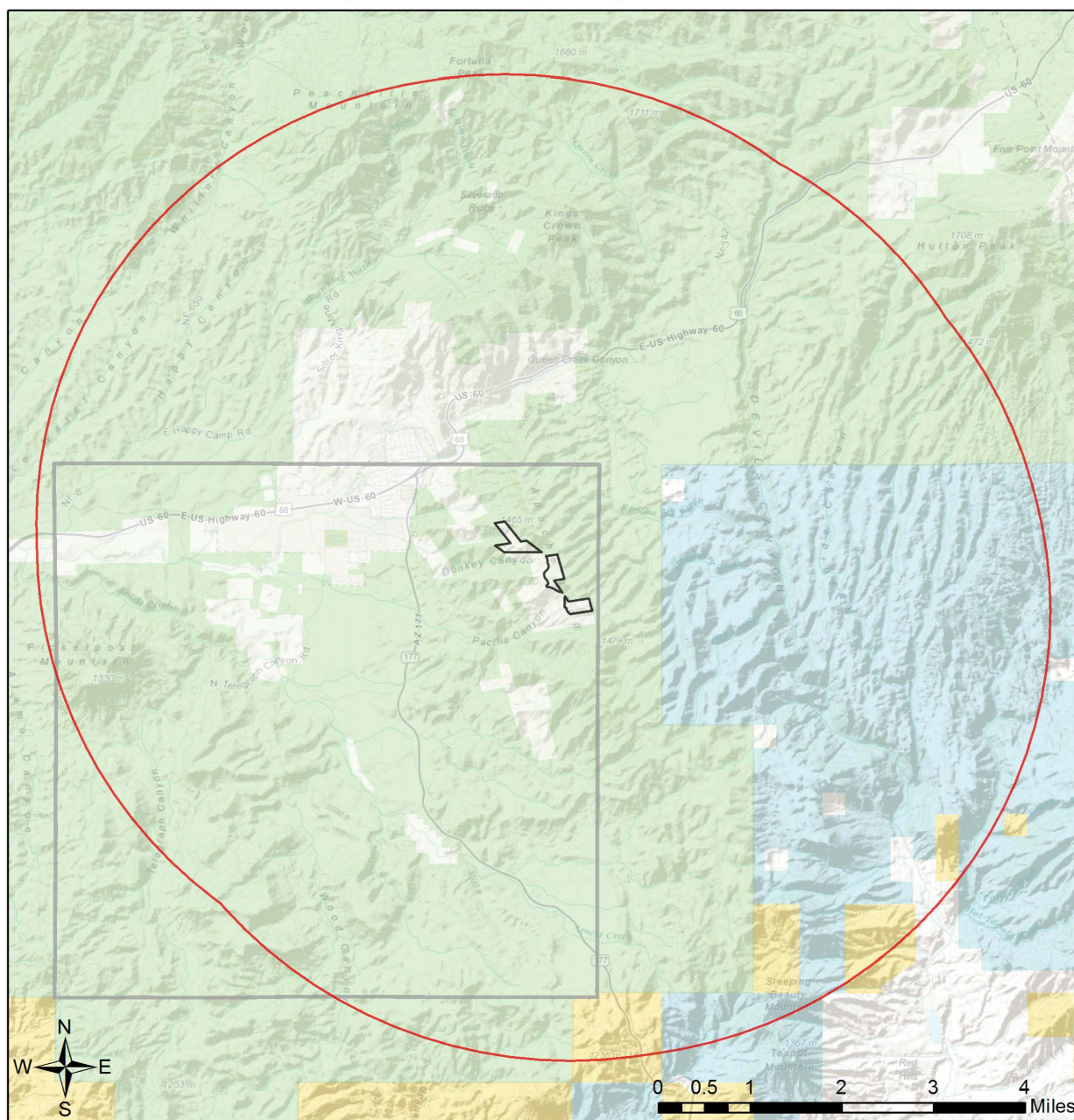
Project ID:

HGIS-00724

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Apache Leap South End

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 105.12
Lat/Long (DD): 33.2801 / -111.0782
County(s): Pinal
AGFD Region(s): Mesa
Township/Range(s): T2S, R12E
USGS Quad(s): SUPERIOR

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Agosia chrysogaster chrysogaster	Gila Longfin Dace	SC		S		1B
Bat Colony						
Boyce Thompson Arboretum and Arnett -Queen Creeks	Important Bird Area					
Buteogallus anthracinus	Common Black Hawk				WSC	1C
CH for Gila intermedia	Gila chub Designated Critical Habitat					
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
Cyprinodon macularius	Desert Pupfish	LE			WSC	1A
Echinocereus triglochidiatus var. arizonicus	Arizona Hedgehog Cactus	LE			HS	
Eumops perotis californicus	Greater Western Bonneted Bat	SC		S		1B
Falco peregrinus anatum	American Peregrine Falcon	SC	S	S	WSC	1A
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Leopardus pardalis	Ocelot	LE			WSC	1A
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Myotis yumanensis	Yuma Myotis	SC				1B
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A
Xantusia bezyi	Bezy's Night Lizard		S			1B

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - LOWER SAN PEDRO RIVER

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Lower San Pedro River

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

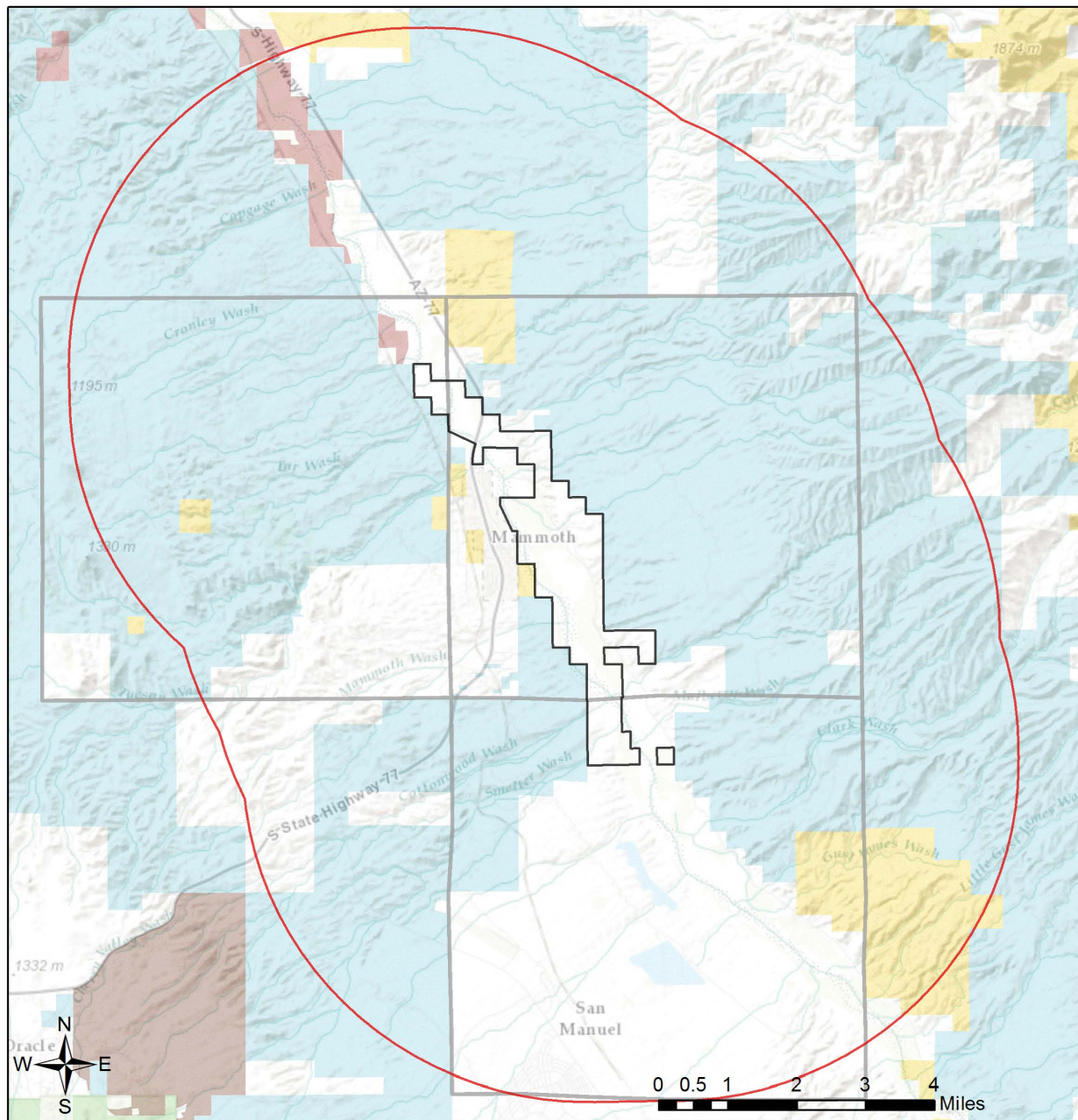
Project ID:

HGIS-00735

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Lower San Pedro River

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 3,105.98

Lat/Long (DD): 32.7157 / -110.6278

County(s): Pinal

AGFD Region(s): Tucson

Township/Range(s): T8S, R17E; T8S, R16E; T9S, R17E

USGS Quad(s): LOOKOUT MOUNTAIN; CLARK RANCH +

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Buteo plagiatus	Gray Hawk	SC			WSC	
CH for Empidonax traillii extimus	Southwestern willow flycatcher Designated Critical Habitat					
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
Dendrocygna autumnalis	Black-bellied Whistling-Duck				WSC	1C
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE			WSC	1A
Eriogonum capillare	San Carlos Wild-buckwheat	SC			SR	
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Heloderma suspectum suspectum	Reticulate Gila Monster					1A
Ictinia mississippiensis	Mississippi Kite				WSC	1B
Lithobates yavapaiensis	Lowland Leopard Frog	SC	S	S	WSC	1A
Lower San Pedro River IBA	Important Bird Area					
Opuntia versicolor	Stag-horn Cholla				SR	
PCH for Coccyzus americanus	Yellow-billed Cuckoo Proposed Critical Habitat					
PCH for Thamnophis eques megalops	Northern Mexican gartersnake Proposed Critical Habitat					
Santa Catalina/Rincon - Galiuro Linkage Design	Wildlife Corridor					
Terrapene ornata luteola	Desert Box Turtle			S		1A
Tyrannus crassirostris	Thick-billed Kingbird		S		WSC	1B

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - DRIPPING SPRINGS

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Dripping Springs

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

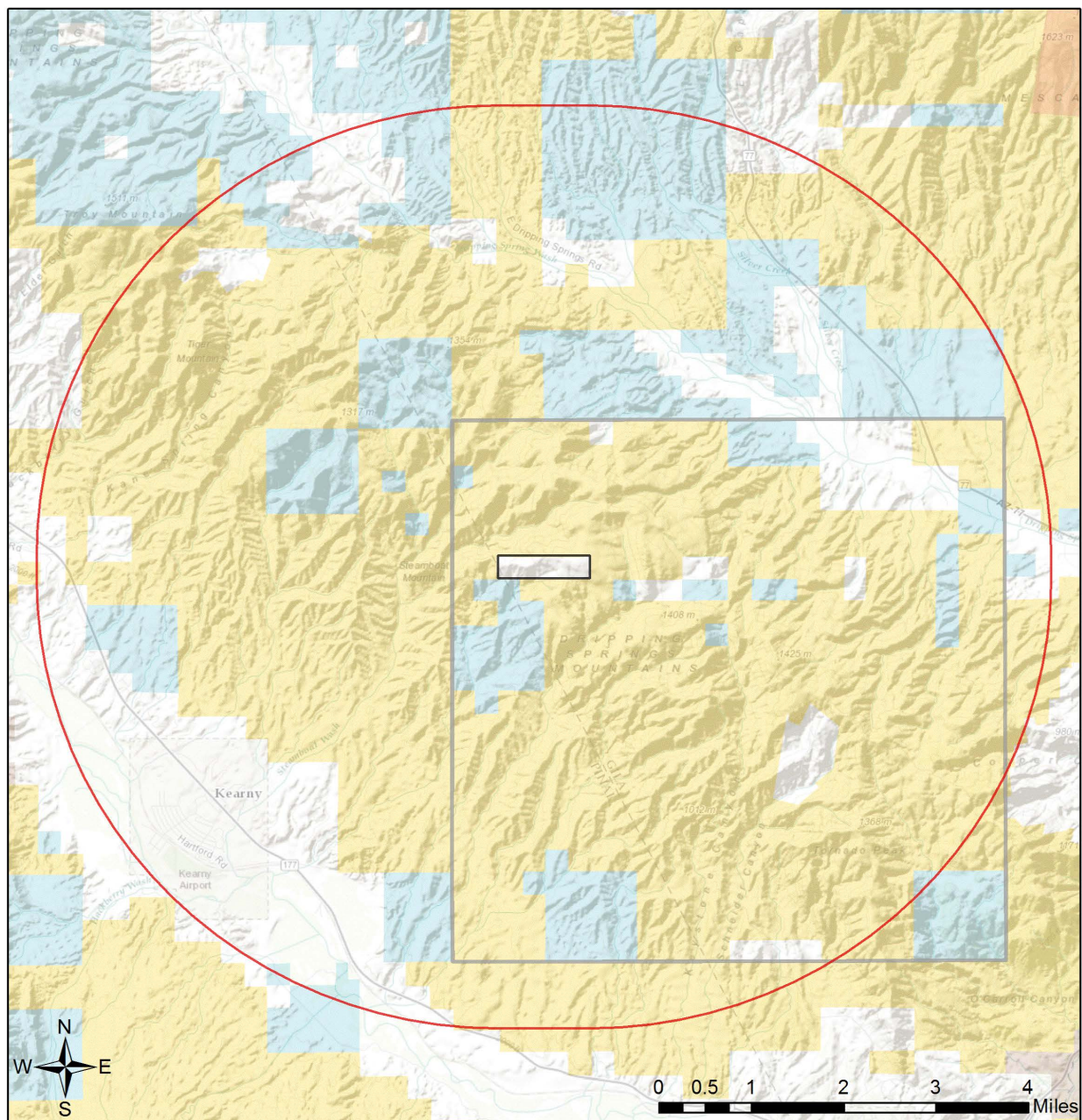
Project ID:

HGIS-00727

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Dripping Springs

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 159.63
 Lat/Long (DD): 33.0974 / -110.8436
 County(s): Gila; Pinal
 AGFD Region(s): Mesa
 Township/Range(s): T4S, R15E
 USGS Quad(s): HAYDEN

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Abutilon parishii	Pima Indian Mallow	SC	S	S	SR	
Aquila chrysaetos	Golden Eagle	BGA		S		1B
Bat Colony						
CH for Empidonax traillii extimus	Southwestern willow flycatcher Designated Critical Habitat					
Coccyzus americanus	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
Corynorhinus townsendii pallescens	Pale Townsend's Big-eared Bat	SC	S	S		1B
Empidonax traillii extimus	Southwestern Willow Flycatcher	LE			WSC	1A
Eriogonum capillare	San Carlos Wild-buckwheat	SC			SR	
Gopherus morafkai	Sonoran Desert Tortoise	C*	S		WSC	1A
Haliaeetus leucocephalus pop. 3	Bald Eagle - Sonoran Desert Population	SC,BG A	S	S	WSC	1A
Ictinia mississippiensis	Mississippi Kite				WSC	1B
Macrotus californicus	California Leaf-nosed Bat	SC		S	WSC	1B
Mammillaria viridiflora	Varied Fishhook Cactus				SR	
PCH for Coccyzus americanus	Yellow-billed Cuckoo Proposed Critical Habitat					
Terrapene ornata luteola	Desert Box Turtle			S		1A

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX F - APPLETON RANCH

Arizona Environmental Online Review Tool Report



Arizona Game and Fish Department Mission

To conserve Arizona's diverse wildlife resources and manage for safe, compatible outdoor recreation opportunities for current and future generations.

Project Name:

Land Exchange - Appleton Ranch

Project Description:

Land Exchange

Project Type:

Mining, Extraction Other minerals (copper, limestone, cinders, shale, salt), Other minerals (copper, limestone, cinders, shale, salt)

Contact Person:

Organization:

WestLand Resources, Inc.

On Behalf Of:

CONSULTING

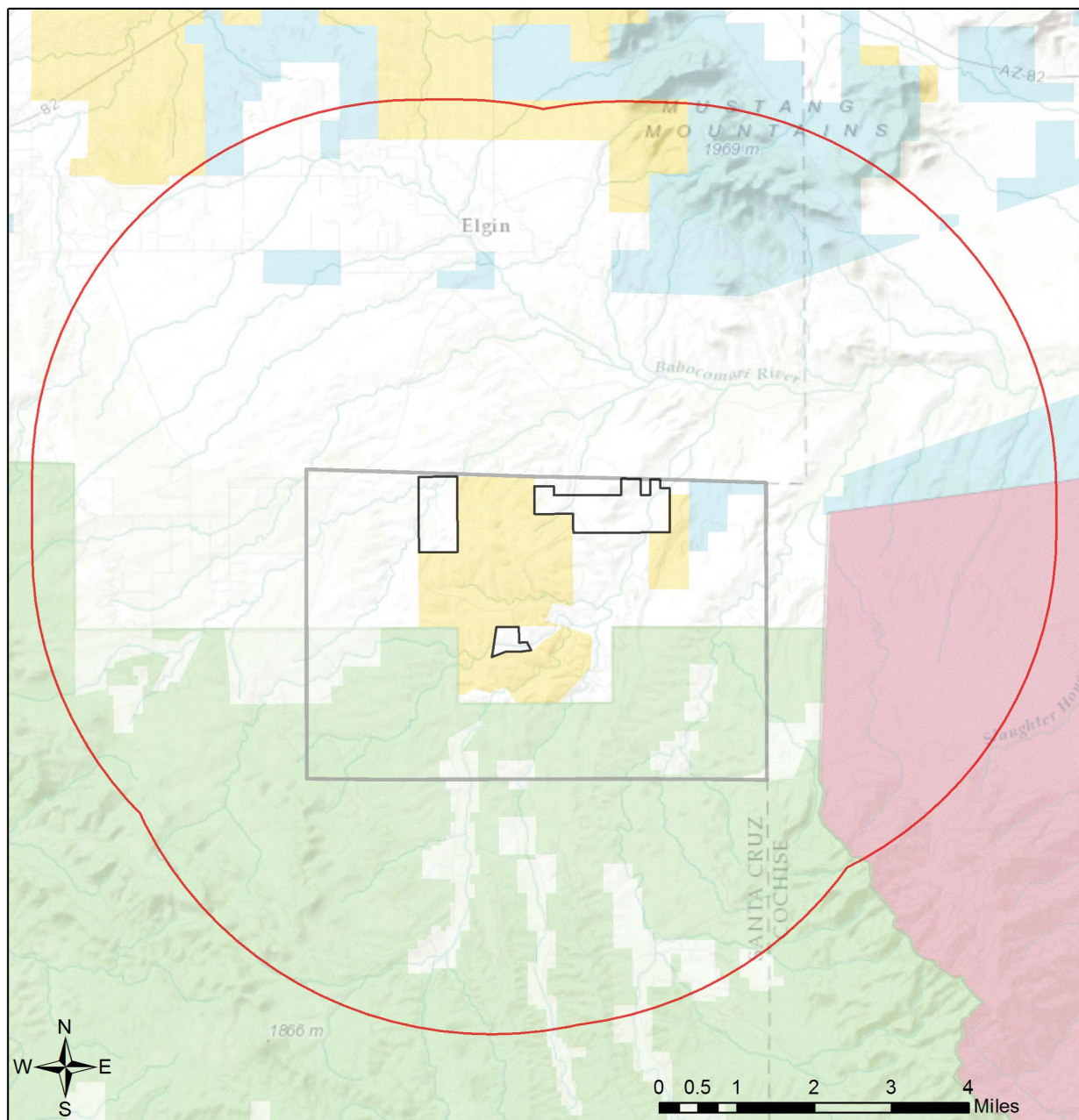
Project ID:

HGIS-00725

Please review the entire report for project type and/or species recommendations for the location information entered. Please retain a copy for future reference.

Land Exchange - Appleton Ranch

Topo Basemap With Township/Ranges and Land Ownership



- | | |
|---------------------------|--------------------------|
| Project Boundary | Mixed/Other |
| Buffered Project Boundary | National Park/Mon. |
| Township/Range | Private |
| AZ Game and Fish Dept. | State and Regional Parks |
| BLM | State Trust |
| BOR | US Forest Service |
| Indian Res. | Wildlife Area/Refuge |
| Military | |

Project Size (acres): 955.82

Lat/Long (DD): 31.6080 / -110.4968

County(s): Santa Cruz

AGFD Region(s): Tucson

Township/Range(s): T21S, R18E

USGS Quad(s): PYEATT RANCH; O'DONNELL CANYON

Sources: Esri, HERE, DeLorme, TomTom, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), swisstopo, MapmyIndia, © OpenStreetMap contributors, and the GIS User Community

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
<i>Agosia chrysogaster chrysogaster</i>	Gila Longfin Dace	SC		S		1B
<i>Allium glandulosum</i>	Gland Onion				SR	
<i>Ammodramus bairdii</i>	Baird's Sparrow	SC	S		WSC	1C
<i>Ammodramus savannarum ammoregus</i>	Arizona grasshopper sparrow		S	S		1B
<i>Anthus spragueii</i>	Sprague's Pipit	C*			WSC	1A
Appleton-Whittell Research Ranch of the National Audubon Society	Important Bird Area					
<i>Asclepias uncialis</i>	Greene Milkweed	SC	S			
<i>Baiomys taylori</i>	Northern Pygmy Mouse		S			
Bat Colony						
<i>Browallia eludens</i>	Bush-violet	SC	S			
<i>Buteo plagiatus</i>	Gray Hawk	SC			WSC	
CH for <i>Gila intermedia</i>	Gila chub Designated Critical Habitat					
CH for <i>Panthera onca</i>	Jaguar Designated Critical Habitat					
CH for <i>Strix occidentalis lucida</i>	Mexican spotted owl Designated Critical Habitat					
<i>Catostomus clarkii</i>	Desert Sucker	SC	S	S		1B
<i>Catostomus insignis</i>	Sonora Sucker	SC	S	S		1B
<i>Choeronycteris mexicana</i>	Mexican Long-tongued Bat	SC	S	S	WSC	1C
<i>Coccyzus americanus</i>	Yellow-billed Cuckoo (Western DPS)	LT	S		WSC	1A
<i>Corynorhinus townsendii pallescens</i>	Pale Townsend's Big-eared Bat	SC	S	S		1B
<i>Coursetia glabella</i>	Smooth Baby-bonnets	SC	S			
<i>Crotalus lepidus klauberi</i>	Banded Rock Rattlesnake					1A
<i>Crotalus willardi willardi</i>	Arizona Ridge-nosed Rattlesnake		S		WSC	1A
<i>Cyprinodon macularius</i>	Desert Pupfish	LE			WSC	1A
<i>Erigeron arisolius</i>	Arid Throne Fleabane		S			
<i>Gila intermedia</i>	Gila Chub	LE			WSC	1A
Huachuca Mountains, Coronado National Forest	Important Bird Area					
<i>Hyla wrightorum</i> (Huachuca/Canelo Hills Pop.)	Arizona Treefrog (Huachuca/Canelo DPS)	C,DPS	S			1A
<i>Lasiurus blossevillii</i>	Western Red Bat		S		WSC	1B
<i>Leptonycteris curasoae yerbabuenae</i>	Lesser Long-nosed Bat	LE			WSC	1A
<i>Lilaeopsis schaffneriana</i> ssp. <i>recurva</i>	Huachuca Water-umbel	LE			HS	
<i>Lithobates chiricahuensis</i>	Chiricahua Leopard Frog	LT			WSC	1A
<i>Lithobates yavapaiensis</i>	Lowland Leopard Frog	SC	S	S	WSC	1A
<i>Lobelia fenestralis</i>	Leafy Lobelia				SR	
<i>Myotis velifer</i>	Cave Myotis	SC		S		1B
PCH for <i>Thamnophis eques megalops</i>	Northern Mexican gartersnake Proposed Critical Habitat					

Special Status Species and Special Areas Documented within 5 Miles of Project Vicinity

Scientific Name	Common Name	FWS	USFS	BLM	State	SGCN
Patagonia - Santa Rita Linkage Design	Wildlife Corridor					
Pectis imberbis	Beardless Chinch Weed	SC	S			
Phemeranthus humilis	Pinos Altos Flameflower	SC	S		SR	
Poeciliopsis occidentalis occidentalis	Gila Topminnow	LE			WSC	1A
Pyrgulopsis thompsoni	Huachuca Springsnail	C*	S	S		1A
Santa Rita - Tumacacori Linkage Design	Wildlife Corridor					
Sceloporus slevini	Slevin's Bunchgrass Lizard		S	S		1B
Senticolis triaspis intermedia	Northern Green Ratsnake		S			1B
Spiranthes delitescens	Canelo Hills Ladies'-tresses	LE			HS	
Terrapene ornata luteola	Desert Box Turtle			S		1A
Thamnophis eques megalops	Northern Mexican Gartersnake	LT	S		WSC	1A
Tragia laciniata	Sonoran Noseburn		S			

Note: Status code definitions can be found at http://www.azgfd.gov/w_c/edits/hdms_status_definitions.shtml.

APPENDIX G

Encumbrances from Title Documents
for Offered Lands

APPENDIX G. Encumbrances from Title Documents for Offered Lands

TURKEY CREEK

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on February 8, 2004 (Lawyers Title 2004a) the following exceptions were noted in Schedule B – Section II:

1. Taxes and assessments collectible by the County Treasurer not yet due and payable for the 2004 year.
2. The lack of a legal right of access recorded in insurable form to and from said land to a public street.

TANGLE CREEK

In the Commitment for Title Insurance issued by Chicago Title Insurance Company on December 1, 2004 (Chicago Title 2004) the following special exceptions were noted in Schedule B:

1. Taxes for the full year 2005. First half due on October 1, delinquent on November 1, 2005. Second Half due on March 1, delinquent on May 1, 2006.
2. Water rights, claims or title to water, whether or not of public record.
3. Reservations contained in the patent from the United States of America or the state.
4. Any rights, easements, interests or claims which may exist by reason of or be reflected by the facts shown on the Retracement and Remonumentation Survey recorded in Book 12, Page 20 of Maps.
5. Certificate of Water Right recorded in Book 2203, Page 629, and Revised in Book 2399, Page 269 of Official Records. (Shown for information purposes only, as Water Rights are not insured herein.)
6. Any rules or regulations prescribed by the Secretary of Agriculture concerning the use of National Forest Service roadway system which provides access to the within described property.

CAVE CREEK

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on March 10, 2004 (Lawyers Title 2004b) the following special exceptions were noted in Schedule B – Section II:

1. OBLIGATIONS imposed upon said land by its inclusion within any district formed pursuant to Title 48, Arizona Revised Statutes, excluding however Municipal or County Improvement Districts.
2. TAXES AND ASSESSMENTS collectible by the County Treasurer, a lien not yet due and payable for the following year: 2004
3. ANY ACTION that may be taken by Flood Control District named below to acquire property or rights of way for flood control as disclosed by instrument: Recorded in Document No. District

APPENDIX G. Encumbrances from Title Documents for Offered Lands

4. MATTERS SHOWN ON SURVEY: Recorded in Book 330 of Maps Page 38 98-708623 Maricopa County.
5. THE LACK of a legal right of access recorded in insurable form to and from said land to a public street.

EAST CLEAR CREEK

In the Commitment for Title Insurance issued by Transnation Title Insurance Company on April 15, 2005 (Transnation 2005) the following exceptions were noted in Schedule B – Section II:

1. OBLIGATIONS imposed upon said land by its inclusion within any district formed pursuant to Title 48, Arizona Revised Statutes, excluding however Municipal or County Improvement Districts.
2. TAXES AND ASSESSMENTS collectible by the County Treasurer, a lien not yet due and payable for the following year: 2005
3. THE RIGHTS of the United States of America the State of Arizona and/or other parties to any portion of the within property lying within the bed, or former bed, of any water course, as that term is defined under Arizona law.
4. ANY TERMS, CONDITIONS, RULES OR RESTRICTIONS imposed, upon the right of access to the land described in Schedule A, by the United States of America acting by and through the Forest Service, Department of Agriculture.

APACHE LEAP SOUTH END

There is no Title Policy available for this parcel, and the Warranty Deed (Pinal County 2005) makes no mention of encumbrances.

LOWER SAN PEDRO RIVER

In the Commitment for Title Insurance issued by First American Title Insurance Company on March 26, 2004 (First American 2004) the following exceptions were noted in Schedule B – Section II:

1. Taxes for the full year of 2003. (The first half is due October 1, 2003 and is delinquent November 1, 2003. The second half is due March 1, 2004 and is delinquent May 1, 2004.)
2. Any charge upon said land by reason of its inclusion in Central Arizona Water Conservation District.
3. The rights or claims of title, if any, by the State of Arizona to any portion of the property described in Schedule A being located in the bed of any river or dry wash.
4. Terms, covenants and conditions as set forth in instrument recorded in Docket 1987, Page 335. (Affects Parcel No. 2 and other property)

APPENDIX G. Encumbrances from Title Documents for Offered Lands

5. The terms and provisions contained in the document entitled "Pipe Line License" recorded January 18, 1955 as Docket 117, Page 306 of Official Records.
6. An easement for electric power line and incidental purposes in the document recorded as Book 54 of Deeds, Page 579 and Page 580 of Official Records. (Affects Parcel No. 11 and 13)
7. An easement for electric power line and incidental purposes in the document recorded as Book 55 of Deeds, Page 347 of Official Records. (Affects Parcel No. 11 and 13)
8. An easement for railroad, telephone and telegraph lines and incidental purposes in the document recorded as Docket 113, Page 473 of Official Records. (Affects Parcel No. 14 and other property)
9. An easement for public highway and incidental purposes in the document recorded as Docket 139, Page 463 of Official Records. (Affects Parcel No. 11 and 13)
10. An easement for communication lines and incidental purposes in the document recorded as Docket 184, Page 473 of Official Records. (Affects Parcel No. 6 and 8)
11. An easement for pipe line and incidental purposes in the document recorded as Docket 191, Page 568 of Official Records. (Affects Parcel No. 11 and 13)
12. An easement for roadway purposes and incidental purposes in the document recorded as Docket 242, Page 104 of Official Records. (Affects Parcel No. 10)
13. An easement for roadway and incidental purposes in the document recorded as Docket 297, Page 319 of Official Records. (Affects Parcel No. 13 and other property)
14. An easement for transmission lines and incidental purposes in the document recorded as Docket 358, Page 574 of Official Records. (Affects Parcel No. 8 and 9)
15. An easement for electric power transmission system and incidental purposes in the document recorded as Docket 362, Page 595 of Official Records. (Affects Parcel No. 3)
16. An easement for electric power transmission line and incidental purposes in the document recorded as Docket 413, Page 322 of Official Records. (Affects Parcel No. 11)
17. An easement for electric lines and incidental purposes in the document recorded as Docket 686, Page 465 of Official Records (Affects Parcel No. 5)
18. An easement for electric lines and incidental purposes in the document recorded as Docket 687, Page 292 of Official Records. (Affects Parcel No. 9)
19. An easement for haul road and incidental purposes in the document recorded as Docket 870, Page 260 of Official Records. (Affects Parcel No. 11)
20. An easement for drainage and incidental purposes in the document recorded as Docket 2076, Page 792 of Official Records. (Affects Parcel No. 11)
21. An easement for access road, power transmission site and communications and incidental purposes in the document recorded as 1999-045692 of Official Records. (Affects Parcel No. 7, 8 and 9)

APPENDIX G. Encumbrances from Title Documents for Offered Lands

22. An easement for power line and roadway and incidental purposes in the document recorded as 2003-065283 of Official Records.

DRIPPING SPRINGS

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on February 5, 2007 (Lawyers Title 2007) the following exceptions were noted in Schedule B – Part II:

1. Taxes and assessments collectible by the County Treasurer not yet due and payable for the following year: 2007
2. The lack of a legal right of access recorded in insurable form to and from said land to a public street. Notwithstanding the affirmative assurance of paragraph 4, the Company is unwilling to insure access.

APPLETON RANCH

In the Commitment for Title Insurance issued by Lawyers Title Insurance Company on February 2, 2004 (Lawyers Title 2004c) the following exceptions were noted in Schedule B – Part II:

1. RESERVATIONS contained in the Patent from the United States of America, reading as follows: SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America recorded in Book 12 of Deeds at Page 22. Affects the south half of Lot 4 and the south half of the North half of Section 15.
2. RESERVATIONS contained in the Patent from the United States of America, reading as follows: SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 13 of Miscellaneous Records at Page 606. Affects Lots 2 and 3, Southwest quarter of Northeast quarter; south half of Northwest quarter; North half of Southwest quarter and Northwest quarter of Southeast quarter of Section 14.
3. RESERVATIONS contained in the Patent from the United States of America, reading as follows: SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 13 of Miscellaneous Records at

APPENDIX G. Encumbrances from Title Documents for Offered Lands

Page 607. Affects Northeast quarter of the Southeast quarter of Section 15 and Lot 4 of Section 14.

4. RESERVATIONS contained in the Patent from the United States of America, reading as follows: SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 15 of Deeds at Page 124. Affects Northwest quarter of Southeast quarter of Section 15.
5. RESERVATIONS contained in the Patent from the United States of America, reading as follows: SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 15 of Deeds at Page 196. Affects North half of Northeast quarter of Section 28.
6. RESERVATIONS contained in the Patent from the State of Arizona, reading as follows:
 - a) Excepting and reserving unto the United States rights of way for ditches and canals constructed by their authority.
 - b) This Patent is issued subject to any and all easements or rights of way heretofore legally obtained and now in full force and effect in Book 26 of Deeds at Page 208. Affects East half of Section 17.
7. RESERVATIONS contained in the Patent from the United States of America, reading as follows: SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Docket 37 at Page 501. Affects south half of Northeast quarter and the Northwest quarter of Section 28.
8. TAXES for the year 2004, a lien not yet due and payable.
9. RIGHT OF ENTRY to prospect for, mine and remove the minerals in said land as reserved in Patent to said land. Affects Parcels 4 and 6
10. Reservation of all oil, coal and other minerals as set forth in Deed recorded in Book 16 of Deeds at Page 372.
11. Reservation of one half of all mineral rights as set forth in Deed recorded in Docket 16 at Page 383.
12. Reservation of a 55% interest in all oil, gas, coal and other minerals as set forth in Deed recorded in Book 33 of Deeds at Page 178.

APPENDIX G. Encumbrances from Title Documents for Offered Lands

13. Reservation of oil, gas, mineral, water and other subsurface rights as set forth in the following Deeds recorded in Docket 416 at Page 474, Docket 416 at Page 475, Docket 416 at Page 476, Docket 416 at Page 477, Docket 416 at Page 478, Docket 416 at Page 479, Docket 416 at Page 480, Docket 416 at Page 481, Docket 416 at Page 482, Docket 416 at Page 483, Docket 416 at Page 484, Docket 416 at Page 485, Docket 416 at Page 486, Docket 416 at Page 488.
14. All oil, gas, mineral, water and other subsurface rights conveyed by Deed recorded in Docket 508 at Page 804.
15. EASEMENT and rights incident thereto, as set forth in instrument: Recorded in Book 22 of Miscellaneous Records. Page 157. Purpose electric transmission lines and related facilities (affects the Northeast quarter of the Northwest quarter and the West half of the Northeast quarter of Section 14).
16. EASEMENT and rights incident thereto, as set forth in instrument: Recorded in Docket 27, Page 281. Purpose telephone and telegraph lines (affects the East 10 feet of Section 15).
17. EASEMENT and rights incident thereto, as set forth in instrument: Recorded in Docket 427, Page 338. Purpose ingress and egress (affects an undefined portion of Section 14).
18. EASEMENT and rights incident thereto, as set forth in instrument: Recorded in Docket 468, Page 651. Purpose ingress and egress (affects Section 15).
19. EASEMENT and rights incident thereto, as set forth in instrument: Recorded in Docket 517, Page 155. Purpose electric transmission or distribution line (affects an undefined portion of Section 28).
20. EASEMENT and rights incident thereto, as set forth in instrument: Recorded in Docket 559, Page 680. Purpose telecommunications facility (affects Section 15).

APPENDIX G. Encumbrances from Title Documents for Offered Lands

REFERENCES

- Chicago Title Insurance Company. 2005. ALTA Extended Owner's Policy. Escrow/Title No. 37040063. December 1, 2004. Document on file at Resolution Copper Mining LLC, Superior, Arizona.
- First American Title Insurance Company. 2004. ALTA Standard Owners 1992 policy of insurance. File No. NCS-44196-4335. March 26, 2004. Document on file at Resolution Copper Mining LLC, Superior, Arizona.
- Lawyers Title Insurance Corporation. 2004a. ALTA Owners Policy 10-17-92. File No. N0443066. February 8, 2004. Document on file at Resolution Copper Mining LLC, Superior, Arizona.
- _____. 2004b. ALTA Standard Owners Policy 10-17-92. File No. 01343452. March 10, 2004. Document on file at Resolution Copper Mining LLC, Superior, Arizona.
- _____. 2004c. ALTA Standard Owners Policy 10-17-92. File No. 01320924. February 2, 2004. Document on file at Resolution Copper Mining LLC, Superior, Arizona.
- _____. 2007. ALTA Standard Owners Policy 10-17-92. File No. 00210001. February 5, 2007. Document on file at Resolution Copper Mining LLC, Superior, Arizona.
- Pinal County. 2005. Certified copy dated January 31, 2005 of Special Warranty Deed for property [Apache Leap South End] conveyed by BHP Copper to Resolution Copper Mining, LLC on August 12, 2004. 2005. Original Special Warranty Deed inadvertently filed in Maricopa County on August 12, 2004. Copy on file, Pinal County Records Office.
- Transnation Title Insurance Company. 2005. ALTA Standard Owners 1992 policy of insurance. File No. 01323006. December 8, 2005. Document on file at Resolution Copper Mining LLC, Superior, Arizona.

APPENDIX H

Title Documents for Offered Lands

APPENDIX H - TURKEY CREEK



JX - Turkey Creek

1850 North Central Avenue
Suite 300
Phoenix, AZ 85004
Watts 1.800.523.0358
Facsimile 1.602.263.0433
Main 1.602.287.3500

February 15, 2006

SWIFT CURRENT LAND & CATTLE LLC
2525 E. ARIZONA BILTMORE CIRCLE #C135
Phoenix, AZ 85016

RE: **H.E.S. 151, Gila, AZ**
Escrow No.: **N0443066 - 001 - JM1**
Seller/Buyer: **BP & A HOLDINGS, INC., AS INTERMEDIARY FOR. and . / SWIFT CURRENT LAND & CATTLE LLC**

In connection with the above referenced escrow, enclosed herewith please find the following papers indicated with a ☒

<input checked="" type="checkbox"/>	ORIGINAL TITLE POLICY
<input checked="" type="checkbox"/>	COPY OF RECORDED DEED
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	
<input type="checkbox"/>	

Please review the enclosed information. If you should have any questions, please do not hesitate to contact me.

Sincerely,
Lawyers Title Insurance Corporation


Juliana McCabe
Commercial Escrow Officer

ISSUED BY
LAWYERS TITLE INSURANCE CORPORATION

Commitment For
Title Insurance



LAWYERS TITLE INSURANCE CORPORATION, a Virginia corporation, herein called the Company, for valuable consideration, hereby commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest covered hereby in the land described or referred to in Schedule A, upon payment of the premiums and charges therefor; all subject to the provisions of Schedules A and B and to the Conditions and Stipulations hereof.

This Commitment shall be effective only when the identity of the proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A hereof by the Company, either at the time of the issuance of this Commitment or by subsequent endorsement.

This Commitment is preliminary to the issuance of such policy or policies of title insurance and all liability and obligations hereunder shall cease and terminate six (6) months after the effective date hereof or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue such policy or policies is not the fault of the Company.

IN WITNESS WHEREOF, **LAWYERS TITLE INSURANCE CORPORATION** has caused its corporate name and seal to be hereunto affixed by its duly authorized officers, the Commitment to become valid when countersigned by an authorized officer or agent of the Company.

Attest:

A handwritten signature in cursive script, appearing to read 'J. D. Welch'.

Secretary



LAWYERS TITLE INSURANCE CORPORATION

By:

A handwritten signature in cursive script, appearing to read 'Janet A. Albert'.

President

DISCLOSURE NOTICES

GOOD FUNDS LAW

Effective August 22, 2002, Arizona Revised Statutes Section 6-843 regulates the disbursement of escrow funds by an escrow agent. The law requires that funds be deposited in the escrow agent's escrow account and available for withdrawal prior to disbursement. Funds deposited with the Company by wire transfer may be disbursed upon receipt. Funds deposited with the Company in the form of cashier's checks, certified checks or teller's checks may be disbursed the next business day after the day of deposit. If funds are deposited with the Company by other methods, recording and/or disbursement may be delayed.

Privacy Notice (15 U.S.C. 6801 and 16 CFR Part 313):

We collect nonpublic personal information about you from information you provide on forms and documents and from other people such as your lender, real estate agent, attorney, escrow, etc. We do not disclose any nonpublic personal information about our customers or former customers to anyone, except as permitted by law. We restrict access to nonpublic personal information about you to those employees who need to know that information in order to provide products or services to you. We maintain physical, electronic and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

PURCHASER DWELLING ACTIONS NOTICE

Pursuant to Arizona Revised Statutes Section 12-1363.N, notice is hereby provided to the purchaser of a dwelling of the provisions of Arizona Revised Statutes Sections 12-1361, 1362 and 1363. These statutory sections set forth the requirements to be met by a purchaser prior to bringing an action against the seller of a dwelling arising out of or related to the design, construction, condition or sale of the dwelling. "Dwelling" means a single or multifamily unit designed for residential use and common areas and improvements owned or maintained by an association or its members. "Seller" means any person, firm, partnership, corporation, association or other organization engaged in the business of designing, constructing or selling dwellings. The complete statutory sections can be viewed on the Arizona State Legislature's web site: www.azleg.state.az.us/ars/ars.htm.

NOTICE:

Pursuant to Arizona Revised Statutes 11-480, effective January 1, 1991, the County Recorder may not accept documents for recording that do not comply with the following:

- a Print must be ten-point type (pica) or larger.
- b Margins of at least one-half inch along the left and right sides one-half inch across the bottom and at least two inches on top for recording and return address information.
- c Each instrument shall be no larger than 8 ½ inches in width and 14 inches in length.

COMMITMENT FOR TITLE INSURANCE

Issued by

Lawyers Title Insurance Corporation

SCHEDULE A

1. Effective Date: **February 8, 2004**
2. Policy or Policies to be issued: **ALTA Owners Policy 10-17-92**
Proposed Insured: **SWIFT CURRENT LAND & CATTLE LLC, an Arizona limited liability company**
Liability: **\$800,000.00**
Policy or Policies to be issued: **None**
Proposed Insured:
Liability: **\$**
Policy or Policies to be issued: **None**
Proposed Insured:
Liability: **\$**
3. The estate or interest in the land described or referred to in the Commitment and covered herein is **A FEE** and is at the effective date hereof vested in:

GEORGE C. RANDALL and VICTORIA RANDALL, husband and wife and FRED M. RANDALL and KAREN RANDALL, husband and wife
4. The land referred to in this Commitment is situated in the County of Gila, State of ARIZONA, and is described as follows:

As Fully Set forth on Exhibit "A" attached hereto and by this reference incorporated herein.

Countersigned By:

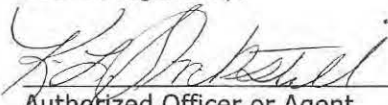

Authorized Officer or Agent

EXHIBIT "A"

Homestead Entry Survey No. 151, Gila County, Arizona

SCHEDULE B – SECTION I

The following are requirements to be complied with:

- A. The following are the requirements to be complied with prior to the issuance of said policy or policies. Any other instrument recorded subsequent to the date hereof may appear as an exception under Schedule B of the policy to be issued. Unless otherwise noted, all documents must be recorded in the office of the Recorder of the County in which said property is located.

Note: Pursuant to Arizona Revised Statutes 11-480, effective January 1, 1991, the County Recorder may not accept documents for recording that do not comply with the following:

- (a) Print must be ten-point type (pica) or larger.
- (b) Margins of at least one-half inch along the left and right sides one-half inch across the bottom and at least two inches on top for recording and return address information.
- (c) Each instrument shall be no larger than 8-1/2 inches in width and 14 inches in length.

1. Record Deed from Vestee to Proposed Insured Owner.

Tax Note:

Year	: 2003
Parcel No.	: 201-05-001
District	: 3300
Total Tax	: \$ 24.24
First Half	: \$ 12.12 Paid
Second Half	: \$ 12.12 Paid

Privacy Notice (15 U.S.C. 6801 and 16 CFR Part 313): We collect nonpublic personal information about you from information you provide on forms and documents and from other people such as your lender, real estate agent, attorney, escrow, etc. We do not disclose any nonpublic personal information about our customers or former customers to anyone, except as permitted by law. We restrict access to nonpublic personal information about you to those employees who need to know that information in order to provide products or services to you. We maintain physical, electronic and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

END OF SCHEDULE B – SECTION I

SCHEDULE B – SECTION II EXCEPTIONS

Schedule B of policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

A. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this commitment.

1. Taxes and assessments collectible by the County Treasurer not yet due and payable for the following year:

Year : 2004

2. The lack of a legal right of access recorded in insurable form to and from said land to a public street.

Notwithstanding the affirmative assurance of paragraph 4, the Company is unwilling to insure access.

END OF SCHEDULE B – SECTION II

SOS

COMMITMENT CONDITIONS AND STIPULATIONS

1. The term mortgage, when used herein, shall include deed of trust, trust deed, or other security instrument.
2. If the proposed insured has or acquires actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act or reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the proposed Insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien, encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions and Stipulations.
3. Liability of the Company under this Commitment shall be only to the named proposed insured and such parties included under the definition of insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith, (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policy or policies committed for and such liability is subject to the insuring provisions, the Conditions and Stipulations, and the Exclusions from Coverage of the form of policy or policies committed for in favor of the proposed insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.
4. Any action or actions or rights of action that the proposed insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment.

AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (10-17-92) WITH ALTA ENDORSEMENT-FORM 1 COVERAGE

and

AMERICAN LAND TITLE ASSOCIATION LEASEHOLD LOAN POLICY (10-17-92) WITH ALTA ENDORSEMENT-FORM 1 COVERAGE EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorney's fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
5. Any statutory lien for services, labor or materials (or the claim of priority of any statutory lien for services, labor or materials over the lien of the insured mortgage) arising from an improvement or work related to the land which is contracted for and commenced subsequent to Date of Policy and is not financed in whole or in part by proceeds of the indebtedness secured by the insured mortgage which at Date of Policy the insured has advanced or is obligated to advance.
7. Any claim which arises out of the transaction creating the interest of the mortgagee insured by this Policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the interest of the insured mortgagee being deemed a fraudulent conveyance or fraudulent transfer, or
 - (b) the subordination of the interest of the insured mortgagee as a result of the application of the doctrine of equitable subordination; or
 - (c) the transaction creating the interest of the insured mortgagee being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records. Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (10-17-92)

And

AMERICAN LAND TITLE ASSOCIATION LEASEHOLD OWNER'S POLICY (10-17-92) EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental policy power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by the policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
 - (b) the transaction creating the estate or interest insured by the policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage Policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records. Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

**AMERICAN LAND TITLE ASSOCIATION
HOMEOWNER'S POLICY OF TITLE INSURANCE (10/17/98)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes ordinances, laws and regulations concerning:
 - a. building
 - b. zoning
 - c. land use
 - d. improvements on the Land
 - e. land division
 - f. environmental protection

This Exclusion does not apply to violations or the enforcement of these matters if notice of the violation or enforcement appears in the Public Records at the Policy Date.

This Exclusion does not limit the coverage described in Covered Risk 14, 15, 16, 17 or 24.

2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at the Policy Date.
3. The right to take the Land by condemning it, unless:
 - a. a notice of exercising the right appears in the Public Records at the Policy Date; or
 - b. the taking happened before the Policy date and is binding on You if You bought the Land without knowing of the taking.
4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they appear in the Public Records;
 - b. that are known to You at the Policy Date, but not to Us, unless they appear in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date – this does not limit the coverage described in Covered Risk 7, 8d, 22, 23, 24 or 25.
5. Failure to pay value for Your Title.
5. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 18.

**AMERICAN LAND TITLE ASSOCIATION
RESIDENTIAL TITLE INSURANCE POLICY (6-2-87)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, you are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes building and zoning ordinances and also laws and regulations concerning:
 - Land use
 - Improvements on the land
 - Land division
 - Environmental protection

This exclusion does not apply to violations or the enforcement of these matters which appear in the public records at Policy Date.

This exclusion does not limit the zoning coverage described in items 12 and 13 of Covered Title Risks.

2. The right to take the land by condemning it, unless;
 - A notice of exercising the right appears in the public records on the Policy Date
 - The taking happened prior to the Policy Date and is binding on you if you bought the land without knowing of the taking
3. Title Risks:
 - That are created, allowed, or agreed to by you
 - That are known to you, but not to us, on the Policy Date – unless they appeared in the Public Records
 - That result in no loss to you
 - That first affect your title after the Policy Date – this does not limit the labor and material lien coverage in Item B of Covered Title Risks
4. Failure to pay value for your title.
5. Lack of a right:
 - To any land outside the area specifically described and referred to in Item 3 of Schedule A
 - OR
 - In streets, alleys, or waterways that touch your land

This exclusion does not limit the access coverage in Item 5 of Covered Title Risks



NATIONAL HEADQUARTERS
RICHMOND, VIRGINIA

OWNER'S POLICY

POLICY NO.:
N04-43066 / 00208380

EFFECTIVE DATE OF POLICY:
December 15, 2005 at 4:00 p.m.

AMOUNT OF INSURANCE:

\$845,000.00

SCHEDULE A

1. Name of Insured:

Swift Current Land & Cattle LLC, an Arizona limited liability company

2. The estate or interest in the land which is covered by this policy is:

FEE

3. Title to the estate or interest in the land is vested in:

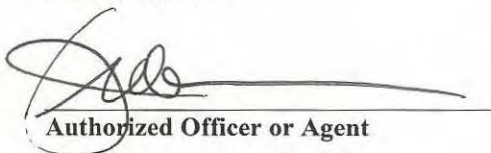
Swift Current Land & Cattle LLC, an Arizona limited liability company

4. The land referred to in this policy is described as follows:

Homestead Entry Survey No. 151, Gila County, Arizona

Countersigned:

PRO FORMA


Authorized Officer or Agent

SCHEDULE B

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees, or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, and agreements, covenants, conditions or rights incident thereto, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.
6. Lack of a legal right of access in insurable form to and from said land to a public street.

END OF SCHEDULE B

OWNER'S POLICY OF TITLE INSURANCE

Issued by **Lawyers Title Insurance Corporation**



Lawyers Title Insurance Corporation is a member of the LandAmerica family of title insurance underwriters.

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS, LAWYERS TITLE INSURANCE CORPORATION, a Virginia corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

IN WITNESS WHEREOF, LAWYERS TITLE INSURANCE CORPORATION has caused its corporate name and seal to be hereunto affixed by its duly authorized officers, the Policy to become valid when countersigned by an authorized officer or agent of the Company.

LAWYERS TITLE INSURANCE CORPORATION

Attest:


Secretary



By:



President

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the Insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
 - (b) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

CONDITIONS AND STIPULATIONS

1. DEFINITION OF TERMS.

The following terms when used in this policy mean:

(a) "insured": the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors.

(b) "insured claimant": an insured claiming loss or damage.

(c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of the public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.

(d) "land": the land described or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.

(e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument.

(f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a)(iv) of the Exclusions From Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States district court for the district in which the land is located.

(g) "unmarketability of the title": an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE.

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either (i) an estate or interest in the land, or (ii) an indebtedness secured by a purchase money mortgage given to the insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT.

The insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 4(a) below, (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

4. DEFENSE AND PROSECUTION OF ACTIONS; DUTY OF INSURED CLAIMANT TO COOPERATE.

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title or interest as insured, but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by the insured in the defense of those causes of action which allege matters not insured by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction

and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

5. PROOF OF LOSS OR DAMAGE.

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY.

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

CONTROL NUMBER

B27-0151012

CONDITIONS AND STIPULATIONS

(Continued)

7. DETERMINATION, EXTENT OF LIABILITY AND COINSURANCE.

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

- (a) The liability of the Company under this policy shall not exceed the least of:
- (i) the Amount of Insurance stated in Schedule A; or,
 - (ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.
- (b) In the event the Amount of Insurance stated in Schedule A at the Date of Policy is less than 80 percent of the value of the insured estate or interest or the full consideration paid for the land, whichever is less, or if subsequent to the Date of Policy an improvement is erected on the land which increases the value of the insured estate or interest by at least 20 percent over the Amount of Insurance stated in Schedule A, then this Policy is subject to the following:

- (i) where no subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that the amount of insurance at Date of Policy bears to the total value of the insured estate or interest at Date of Policy; or
- (ii) where a subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that 120 percent of the Amount of Insurance stated in Schedule A bears to the sum of the Amount of Insurance stated in Schedule A and the amount expended for the improvement.

The provisions of this paragraph shall not apply to costs, attorneys' fees and expenses for which the Company is liable under this policy, and shall only apply to that portion of any loss which exceeds, in the aggregate, 10 percent of the Amount of Insurance stated in Schedule A.

- (c) The Company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

8. APPORTIONMENT.

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

9. LIMITATION OF LIABILITY.

- (a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

- (b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

- (c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY.

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

11. LIABILITY NONCUMULATIVE.

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

12. PAYMENT OF LOSS.

- (a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

- (b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

13. SUBROGATION UPON PAYMENT OR SETTLEMENT.

- (a) The Company's Right of Subrogation.

Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

- (b) The Company's Rights Against Non-insured Obligors.

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

14. ARBITRATION.

Unless prohibited by applicable law, either the Company or the insured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. All arbitrable matters when the Amount of insurance is \$1,000,000 or less shall be arbitrated at the option of either the Company or the insured. All arbitrable matters when the Amount of Insurance is in excess of \$1,000,000 shall be arbitrated only when agreed to by both the Company and the insured. Arbitration pursuant to this policy and under the Rules in effect on the date the demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT.

- (a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

- (b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.

- (c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

16. SEVERABILITY.

In the event any provision of the policy is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

17. NOTICES, WHERE SENT.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to: Consumer Affairs Department, P.O. Box 27567, Richmond, Virginia 23261-7567.

OWNER'S POLICY OF TITLE INSURANCE

American Land Title Association (10/17/92)

Issued by

**Lawyers Title
Insurance Corporation**

Lawyers Title Insurance Corporation
is a member of the LandAmerica family of title insurance
underwriters.



LandAmerica Financial Group, Inc.
101 Gateway Centre Parkway
Richmond, Virginia 23235-5153
www.landam.com

THANK YOU.

Title insurance provides for the protection of your real estate investment. We suggest you keep this policy in a safe place where it can be readily available for future reference.

If you have questions about title insurance or the coverage provided by this policy, contact the office that issued this policy, or you may call or write:

Lawyers Title Insurance Corporation
Consumer Affairs
P.O. Box 27567
Richmond, Virginia 23261-7567
telephone, toll free: 800 446-7086
web: www.landam.com

We thank you for choosing to do business with Lawyers Title Insurance Corporation, and look forward to meeting your future title insurance needs.

Lawyers Title Insurance Corporation
is a member of the LandAmerica family of title insurance
underwriters.



APPENDIX H - TANGLE CREEK

CHICAGO TITLE INSURANCE COMPANY

COMMITMENT FOR TITLE INSURANCE

SCHEDULE A

Reference No.: 20004184-BEB

- | | |
|--|-------------------------------|
| 1. Effective Date: December 1, 2004 at 7:30 A.M. | Escrow/Title No.: 37040063- |
| | Title Officer: Mark Cheney |
| 2. ALTA Form Policy or Policies to be Issued: | 1 st amendment/amf |
| A. Owner's Policy | |
| Extended Owner's Policy | Amount: \$ 700,000.00 |
| Proposed Insured: | |
| SWIFT CURRENT LAND & CATTLE COMPANY, L.L.C., an Arizona limited liability company | |
| B. Loan Policy | |
| None | Amount: \$ |
| Proposed Insured: | |
| C. Loan Policy | |
| None | Amount: \$ |
| Proposed Insured: | |
3. The Estate or Interest in the land described or referred to in this Commitment, and covered herein is:
FEE SIMPLE
4. Title to the Estate or Interest is at the effective date hereby Vested in:
GARRY J. SHUSTER NO. 3 FAMILY LIMITED PARTNERSHIP, an Arizona limited partnership
5. The land referred to in this Commitment is situated in the County of Yavapai, State of Arizona, and is described as follows:
See Exhibit A attached hereto and made a part hereof.

CHICAGO TITLE INSURANCE COMPANY

SCHEDULE B — SECTION 1

REQUIREMENTS

Escrow/Title No.: 37040063-

The following are the requirements to be complied with:

1. Payment to or for the account of the Grantors or Mortgagors of the full consideration for the estate to be insured.
2. Instruments in insurable form which must be executed, delivered and duly filed for record:

SPECIAL REQUIREMENTS:

3. Furnish plat of survey of the subject property by a Registered Land Surveyor which meets the minimum standard detail requirements for ALTA/ACSM Land Title Surveys, adopted by the American Congress on Surveying and mapping (ACSM) in 1999. Chicago Title Insurance company requires that said survey includes at least Numbers 1, 6, 8, 10, 11 (a) and (b), 14, 15 and 16 of Table A, Optional Survey Responsibilities and Specifications. It is recommended that the surveyor contact the Company prior to starting the survey if any questions exist regarding Company requirements for said survey.

Note: If an ALTA 3.1 Zoning Endorsement is required, Items 7a, 7b and 7c of Table A will also be required. If "parking" is to be added to the endorsement, the number and type of parking spaces must be shown on the survey. Property use information must also be provided to Chicago Title Insurance Company

4. Provide Chicago Title Insurance Company with a current copy of the limited partnership agreement of GARRY J. SHUSTER NO. 3 FAMILY LIMITED PARTNERSHIP, an Arizona limited partnership, and all amendments thereto.
5. Certification by GARRY J. SHUSTER, general partner of GARRY J. SHUSTER NO. 3 FAMILY LIMITED PARTNERSHIP, an Arizona limited partnership, that there have been no amendments other than those disclosed to Chicago Title Insurance Company on _____, and further certification that said partnership has not been terminated.
6. Provide Chicago Title Insurance Company with a copy, filed with the Arizona corporation commission, of the Articles of Organization, and copies of any management agreements or operating agreements and a current list of all members for SWIFT CURRENT LAND & CATTLE COMPANY, L.L.C., an Arizona limited liability company.
7. Proper showing as to the parties in possession, or parties with a right of possession to the premises being insured herein, including either copies of all unrecorded lease, a current rent roll or an affidavit by the proper parties as to the current tenants, whether by lease or month to month tenancies, and certification that the rights disclosed are all the rights affecting the property.

Note: If no unrecorded leases or month to month tenancies exist, certification to that fact will be required.

8. Record Deed from Vestee to Proposed Insured Owner.

Note: 2004 taxes: All paid; Parcel No. 501-25-002-4; Total Tax: (See Tax Inquiry sheets.)
(Please contact the Treasurer's Office at 928-771-3233 to verify any amounts due prior to remittance.)

CHICAGO TITLE INSURANCE COMPANY

SCHEDULE B — SECTION 1

REQUIREMENTS — (CONTINUED)

Escrow/Title No.: 37040063-

NOTE: Pursuant to Arizona Revised Statutes 11-480, the County Recorder may not accept documents for recording that do not comply with the following:

- (a) Print must be ten point type or larger;
- (b) Margins of at least one-half inch along all sides, including top and bottom, except the top of the first page which must be at least two inches for recording data and return address information.
The margin must be clear of all information including but not limited to, notaries, signatures, and page numbers.
- (c) Each instrument shall be no larger than 8-1/2 inches in width and 14 inches in length.

(In addition to the above, since our Recorder's Office is scanning documents, they will not accept faxed documents, even with original signatures and notary acknowledgments.)

NOTE: Arizona notaries who have renewed their commission after July 20, 1996 **MUST** use an ink seal, embossed seals will no longer be accepted subsequent to such renewal.

CHICAGO TITLE INSURANCE COMPANY

SCHEDULE B — SECTION 2

Escrow/Title No.: 37040063-

Schedule B of the Policy or Policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the company:

1. Defects, liens, encumbrances, adverse claims or other matters, if any created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed insured acquires for value of record the estate or interest or mortgage thereon covered by the Commitment.
2. Any American Land Title Association Policy issued pursuant hereto (except extended coverage) will contain under Schedule B the standard exceptions set forth at the inside cover hereof.

SPECIAL EXCEPTIONS:

1. Taxes for the full year 2004. First half due on October 1, delinquent on November 1, 2004. Second Half due on March 1, delinquent on May 1, 2005.
2. Water rights, claims or title to water, whether or not of public record.
3. Reservations contained in the patent from the United States of America or the state.
4. Any rights, easements, interests or claims which may exist by reason of or be reflected by the facts shown on the Retracement and Remonumentation Survey recorded in Book 12, Page 20 of Maps.
5. Certificate of Water Right recorded in Book 2203, page 629, and Revised in Book 2399, page 269 of Official Records. (Shown for information purposes only, as Water Rights are not insured herein.)
6. Any rules or regulations prescribed by the Secretary of Agriculture concerning the use of National Forest Service roadway system which provides access to the within described property.
7. Right of way for Tangle Creek.
8. Rights of lessees under unrecorded leases.
9. Any rights, interests or claims which may exist by reason of the following matters disclosed by ALTA/ASCM Survey Job No. performed by :
 - a. Rights of parties in possession of land lying of a which appears to encroach over approximately
 - b. Encroachment of a onto .
 - c. Right of way for as disclosed by .
 - d. Rights of parties in possession or using the land lying of a which is located approximately from the property line.

Exhibit A

H. E. Survey No. 416, embracing a portion of, approximately, Section 2, Township 9 North, AND Sections 34 and 35, Township 9 ½ North, ALL in Range 5 East of the Gila and Salt River Base and Meridian, more particularly described s follows:

BEGINNING at Corner No. 1, from which U.S. Location Monument No. 38 H. E. S. bears North 41°25' East, 154.16 chains distant; thence South 39°33' East, 16.24 chains to Corner No. 2; thence South 13°12' West, 16.07 chains to Corner No. 3; thence North 71°15' West, 78.71 chains to Corner No. 4; thence North 13°11' East, 12.59 chains to Corner No. 5; thence South 81°44' East, 65.73 chains to Corner No. 1, the POINT OF BEGINNING.

AND as further described and set forth on Map recorded in Book 12 of Maps, page 20, records of Yavapai County, Arizona.



CHICAGO TITLE INSURANCE COMPANY

914 E. Gurley St. Ste 100, Prescott, AZ 86301 • Phone: (928) 778-7800 • Fax: (928) 445-6482

March 29, 2005

Swift Current Lane & Cattle Co.
Mr. F.D. Hegner
2525 E. Arizona Biltmore Circle, Ste. C-135
Phoenix, AZ 85016

Our Order No. 37040063

Enclosed please find your policy of Title Insurance.

If you have any questions regarding the policy or any of the provisions thereof, feel free to contact this office.

Thank you for allowing us to be of service in this matter.

Very truly yours,

Chicago Title Insurance Company

Vicki Sharples
Policy Typist

Enclosure

STOPA

AMERICAN LAND TITLE ASSOCIATION
OWNER'S POLICY
(10-17-92)

CHICAGO TITLE INSURANCE COMPANY

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS, CHICAGO TITLE INSURANCE COMPANY, a Missouri corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

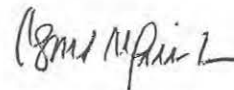
The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

In Witness Whereof, CHICAGO TITLE INSURANCE COMPANY has caused this policy to be signed and sealed as of Date of Policy shown in Schedule A, the policy to become valid when countersigned by an authorized signatory.

Issued by:
CHICAGO TITLE INSURANCE COMPANY
914 E. GURLEY STREET
PRESCOTT, ARIZONA 86301

CHICAGO TITLE INSURANCE COMPANY

By:



President



ATTEST



Secretary

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the Insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (i) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
 - (ii) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (a) to timely record the instrument of transfer; or
 - (b) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

CHICAGO TITLE INSURANCE COMPANY

STANDARD OWNERS POLICY

SCHEDULE A

Policy No. 37040063-1

Date of Policy : March 25, 2005 at 3:52 p.m.

Amount of Insurance: \$ 887,000.00

1. Name of Insured:

SWIFT CURRENT LAND & CATTLE COMPANY, L.L.C., an Arizona Limited Liability Company

2. The Estate or Interest in the land which is covered by this policy is:

FEE SIMPLE

3. Title to the Estate or Interest in said land is at the effective date hereby Vested in:

SWIFT CURRENT LAND & CATTLE COMPANY, L.L.C., an Arizona Limited Liability Company

4. The land referred to in this Policy is situated in the County of Yavapai, State of Arizona, and is described as follows:

See Exhibit A attached hereto and made a part hereof.

CHICAGO TITLE INSURANCE COMPANY

STANDARD OWNERS POLICY

SCHEDULE B

Policy No. 37040063-1

EXCEPTIONS:

THIS POLICY DOES NOT INSURE AGAINST LOSS OR DAMAGE AND THE COMPANY WILL NOT PAY COSTS, ATTORNEY'S FEES OR EXPENSES WHICH ARISE BY REASON OF:

GENERAL EXCEPTIONS:

1. Taxes or Assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements or claims of easements which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) Reservations contained in patents or in acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a) (b), and (c) are shown by the public records.
6. Any lien, or right to a lien, for services, labor, or material heretofore or hereafter furnished, imposed by law and not shown by the public records.

SPECIAL EXCEPTIONS:

1. Taxes for the full year 2005. First half due on October 1, delinquent on November 1, 2005. Second Half due on March 1, delinquent on May 1, 2006.
2. Water rights, claims or title to water, whether or not of public record.
3. Reservations contained in the patent from the United States of America or the state.
4. Any rights, easements, interests or claims which may exist by reason of or be reflected by the facts shown on the Retracement and Remonumentation Survey recorded in Book 12, Page 20 of Maps.
5. Certificate of Water Right recorded in Book 2203, page 629, and Revised in Book 2399, page 269 of Official Records. (Shown for information purposes only, as Water Rights are not insured herein.)
6. Any rules or regulations prescribed by the Secretary of Agriculture concerning the use of National Forest Service roadway system which provides access to the within described property.
7. Right of way for Tangle Creek.

CHICAGO TITLE INSURANCE COMPANY

STANDARD OWNERS FORM

SCHEDULE B

(Continued)

Policy No. 37040063-1

Countersigned at Prescott, Arizona

By: 

Authorized Signatory

This Policy is invalid unless the cover sheet and
Schedule B are attached.

Exhibit A

H. E. Survey No. 416, embracing a portion of, approximately, Section 2, Township 9 North, AND Sections 34 and 35, Township 9 ½ North, ALL in Range 5 East of the Gila and Salt River Base and Meridian, more particularly described as follows:

BEGINNING at Corner No. 1, from which U.S. Location Monument No. 38 H. E. S. bears North 41°25' East, 154.16 chains distant; thence South 39°33' East, 16.24 chains to Corner No. 2; thence South 13°12' West, 16.07 chains to Corner No. 3; thence North 71°15' West, 78.71 chains to Corner No. 4; thence North 13°11' East, 12.59 chains to Corner No. 5; thence South 81°44' East, 65.73 chains to Corner No. 1, the POINT OF BEGINNING.

AND as further described and set forth on Map recorded in Book 12 of Maps, page 20, records of Yavapai County, Arizona.

CONDITIONS AND STIPULATIONS

1. DEFINITION OF TERMS

The following terms when used in this policy mean:

(a) "insured": the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors.

(b) "insured claimant": an insured claiming loss or damage.

(c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of the public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.

(d) "land": the land described or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.

(e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument.

(f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a)(iv) of the Exclusions From Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States district court for the district in which the land is located.

(g) "unmarketability of the title": an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either (i) an estate or interest in the land, or (ii) an indebtedness secured by a purchase money mortgage given to the insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT

The insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 4(a) below, (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

4. DEFENSE AND PROSECUTION OF ACTIONS; DUTY OF INSURED CLAIMANT TO COOPERATE

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title or interest as insured, but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by the insured in the defense of those causes of action which allege matters not insured against by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

5. PROOF OF LOSS OR DAMAGE

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

7. DETERMINATION, EXTENT OF LIABILITY AND COINSURANCE

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of:

(i) the Amount of Insurance stated in Schedule A; or,
(ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

(b) In the event the Amount of Insurance stated in Schedule A at the Date of Policy is less than 80 percent of the value of the insured estate or interest or the full consideration paid for the land, whichever is less, or if subsequent to the Date of Policy an improvement is erected on the land which increases the value of the insured estate or interest by at least 20 percent over the Amount of Insurance stated in Schedule A, then this Policy is subject to the following:

(i) where no subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that the amount of insurance at Date of Policy bears to the total value of the insured estate or interest at Date of Policy; or

(ii) where a subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that 120 percent of the Amount of Insurance stated in Schedule A bears to the sum of the Amount of Insurance stated in Schedule A and the amount expended for the improvement.

The provisions of this paragraph shall not apply to costs, attorneys' fees and expenses for which the Company is liable under this policy, and shall only apply to that portion of any loss which exceeds, in the aggregate, 10 percent of the Amount of Insurance stated in Schedule A.

(c) The Company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

8. APPORTIONMENT

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

9. LIMITATION OF LIABILITY

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

11. LIABILITY NONCUMULATIVE

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

12. PAYMENT OF LOSS

(a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

13. SUBROGATION UPON PAYMENT OR SETTLEMENT

(a) The Company's Right of Subrogation.

Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

(b) The Company's Rights Against Non-insured Obligors.

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

14. ARBITRATION

Unless prohibited by applicable law, either the Company or the insured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. All arbitrable matters when the Amount of Insurance is \$1,000,000 or less shall be arbitrated at the option of either the Company or the insured. All arbitrable matters when the Amount of Insurance is in excess of \$1,000,000 shall be arbitrated only when agreed to by both the Company and the insured. Arbitration pursuant to this policy and under the Rules in effect on the date the demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT

(a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

(b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.

(c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

16. SEVERABILITY

In the event any provision of the policy is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

17. NOTICES, WHERE SENT

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to the Company at the issuing office or to:

Chicago Title Insurance Company
Claims Department
171 North Clark Street
Chicago, Illinois 60601-3294

FILE COPY

Western
Land
Group, Inc.

507 S. Sherman Street, Denver, CO 80209 • (303) 715-3570 Office • (303) 715-3569 Fax • email: apoe@westernlandgroup.com

FAX COVER SHEET

Date: January 15, 2004

To: Bruno Hegner

Fax: (602) 956-0332

From: Adam Poe

Phone: 303-715-3570

Fax: 303-715-3569

Number of Pages Including Cover:

Message:

Bruno:

Here's the owner's title policy from 1988 for Tangle Creek. It's clean. Shuster tells me an update will be the same.

I'd like to get them a clean copy of the contract today or tomorrow. Would you like them to sign before Rickus?

ap

BILL MOORE
2200 N. CENTRAL AVE., #205
PHOENIX, AZ 85004-1419
PHONE: (602) 253-1812
FAX: (602) 253-9188
EMAIL: bmoorephx@aol.com

NO. OF PAGES
INCLUDING COVER (7)

***** FAX *****

DATE: 1/14/04
TO: Adam Poe
COMPANY: Western Land Group, Inc.
FAX: 303 715-3569
FROM: Bill Moore
SUBJECT: LX Bar Ranch / Tangle Creek
Tonto National Forest

REMARKS: Title Policy enclosed.

If you guys don't have a preference for title/escrow company. We would like to
use: Bruce Barnes
Fidelity National Title
2390 E. Camelback Road, Ste 120
Phoenix, AZ 85016
(602) 224-8404
bbarnes@fnf.com

Bill Moore

Jan 15 04 09:30a
01/14/2004 15:56

Western Land Group, Inc. 303-715-3569
602-253-9188 SHUSTER FOUNDATION

P. 3
PAGE 02/07

Loan Policy - Form 1
7)
DA 1001 (9/87)



LK BAR
TANLE CREEK

POLICY OF TITLE INSURANCE

ISSUED BY

First American Title Insurance Company of Arizona

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS, FIRST AMERICAN TITLE INSURANCE COMPANY OF ARIZONA, an Arizona corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the Insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land;
5. The invalidity or unenforceability of the lien of the insured mortgage upon the title;
6. The priority of any lien or encumbrance over the lien of the insured mortgage;
7. Lack of priority of the lien of the insured mortgage over any statutory lien for services, labor or material:
 - (a) arising from an improvement or work related to the land which is contracted for or commenced prior to Date of Policy; or
 - (b) arising from an improvement or work related to the land which is contracted for or commenced subsequent to Date of Policy and which is financed in whole or in part by proceeds of the indebtedness secured by the insured mortgage which at Date of Policy the insured has advanced or is obligated to advance;
8. Any assessments for street improvements under construction or completed at Date of Policy which now have gained or hereafter may gain priority over the insured mortgage; or
9. The invalidity or unenforceability of any assignment of the insured mortgage, provided the assignment is shown in Schedule A, or the failure of the assignment shown in Schedule A to vest title to the insured mortgage in the named insured assignee free and clear of all liens.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title or the lien of the insured mortgage, as insured, but only to the extent provided in the Conditions and Stipulations.

IN WITNESS WHEREOF, First American Title Insurance Company of Arizona has caused this policy to be signed and sealed by its duly authorized officers as of Date of Policy shown in Schedule A.

First American Title Insurance Company of Arizona



BY *J. Brumley* PRESIDENT
ATTEST *Editha J. Dean* SECRETARY

FIRST AMERICAN TITLE INSURANCE COMPANY OF ARIZONA

SCHEDULE A

Policy No. 97334-M

Policy Amount: \$384,000.00

Effective Date: September 9, 1988
4:30 p.m.

Type of Coverage: A.L.T.A. EXTENDED LENDER'S (6-1-87)

1. Name of Insured:

G & S INVESTMENTS
an Arizona general partnership

2. The fee estate or interest in the land described in this Schedule and which is encumbered by this insured mortgage is at Date of Policy vested in:

EUNICE B. VEAZEY
a widow

3. The mortgage, herein referred to as the insured mortgage, and assignments thereof, if any are described as follows:

A Deed of Trust given to secure an indebtedness in the original principal amount of \$525,000.00, dated September 8, 1988, recorded September 9, 1988, in Book 2078 of Official Records, Pages 637-639.

TRUSTOR : EUNICE B. VEAZEY, a widow

TRUSTEE : FIRST AMERICAN TITLE INSURANCE COMPANY OF ARIZONA,
an Arizona corporation

BENEFICIARY: G & S INVESTMENTS, an Arizona general partnership

4. The land referred to in this Policy is located in Yavapai County, Arizona, and is described as:

SEE EXHIBIT "A" ATTACHED HERETO AND BY REFERENCE MADE PART HEREOF

EXHIBIT "A"

H. E. Survey No. 416, embracing a portion of, approximately, Section Two (2), in Township Nine (9) North AND Sections Thirty-four (34) and Thirty-five (35), in Township Nine and One-half (9½) North. ALL in Range Five (5) East of the Gila and Salt River Base and Meridian, more particularly described as follows:

BEGINNING at Corner No. 1, from which U. S. Location Monument No. 38 H. E. S. bears North 41°25' East, 154.16 chains distant; thence South 39°33' East, 16.24 chains to Corner No. 2; thence South 13°12' West, 16.07 chains to Corner No. 3; thence North 71°15' West, 78.71 chains to Corner No. 4; thence North 13°11' East, 12.59 chains to Corner No. 5; thence South 81°44' East, 65.73 chains to Corner No. 1, the POINT OF BEGINNING.

AND AS further described and set forth on Map recorded in Book 12 of Maps, Page 20.

ENDORSEMENT

First American Title Insurance Company of Arizona

THIS ENDORSEMENT IS EFFECTIVE ONLY IF DESCRIBED IN THE ENDORSEMENT SCHEDULE CONTAINED IN THIS POLICY AND SHALL BE EFFECTIVE AS OF THE DATE SET FORTH IN SAID SCHEDULE.

The Company assures the insured that as of the effective date hereof there is located on said land the improvements as described in said Endorsement Schedule and that the map attached to this policy shows the correct location and dimensions of the land described in Schedule A as disclosed by those records which under the recording laws impart constructive notice as to said land.

The Company hereby insures the insured against loss which said insured shall sustain in the event that the assurance herein shall prove to be incorrect.

The total liability of the Company under this policy and any endorsement therein shall not exceed, in the aggregate, the face amount of this policy and costs which the Company is obligated under the Conditions and Stipulations hereof to pay.

This endorsement is made a part of this policy and is subject to the Schedules, Conditions and Stipulations therein, except as modified by the provisions hereof.

First American Title Insurance Company of Arizona



LTAA ENDORSEMENT No. 5
TYPE OF IMPROVEMENT
FATGOA 1056 (Rev. 4/87)

FIRST AMERICAN TITLE INSURANCE COMPANY OF ARIZONA**Policy No.: 97334-M****ENDORSEMENT SCHEDULE**

The following endorsements are hereby incorporated and attached to this Policy of Title Insurance and are effective as of the effective date set forth in Schedule A hereof unless otherwise specified in this Schedule.

L.T.A.A. No. 3R Endorsement (Covenants, conditions, restrictions, encroachments, mineral rights)

L.T.A.A. No. 5 Endorsement (Location and dimensions of land and improvements located thereon)

Type of Improvement: VACANT LAND

NOTE: There may be endorsements issued in connection with this Policy which are not referenced in this Schedule, however, said endorsements must contain the Policy number, date and facsimile authorized signature.

APPENDIX H - CAVE CREEK



FILE COPY

1850 North Central Avenue
Suite 300
Phoenix, AZ 85004
Watts 1.800.523.0358
Facsimile 1.602.263.0433
Main 1.602.287.3500

April 6, 2004

HAND DELIVERED

Swift Current Land & Cattle LLC
2525 E. Arizona Biltmore Cr., Suite C-135
Phoenix, AZ 85016

Re: Lawyers Title Insurance Corporation Escrow No.: N04-43147 KLS
Property: H.E.S. 317, Maricopa County, AZ
JOHNSON CATTLE COMPANY/SWIFT CURRENT LAND & CATTLE LLC

Gentlemen:

Enclosed is one copy of Lawyers Title Insurance Corporation Title Commitment No. 1343452 with Effective Date of March 10, 2004. Also enclosed is a copy of the Assessor's Map and one copy of each of the recorded documents referred to in Exceptions No. 3 and 4 of Schedule B-Section II.

If you have any questions regarding these enclosures, please call me at (602) 287-3526, or send via e-mail to: kstockstill@landam.com.

Very truly yours,

LANDAMERICA FINANCIAL GROUP, INC.
for its subsidiary, LAWYERS TITLE INSURANCE CORPORATION

A handwritten signature in cursive script, appearing to read 'K. L. Stockstill'.

Karma L. Stockstill
National Accounts Administrator

KLS/hs

cc: James M. Balogh, Esq. (Hand Delivered w/copy of each enclosure)
Johnson Cattle Company (US Mail w/copy of each enclosure)
Mr. Edward Childers, Dan Schwartz Realty (Hand Delivered w/copy of each enclosure)
Mr. Con Engelhorn, Headquarters West, Ltd. (Hand Delivered w/copy of each enclosure)

Your Solution for Real Estate Transaction Management

Title and Escrow (Commonwealth, Lawyers Title, Transnation) • Engineering & Environmental Assessment • Valuation • Survey •
Zoning • Tax Services • Flood Certificates • UCC Insurance • 1031 Exchanges • Environmental Insurance • International



LAWYERS TITLE INSURANCE CORPORATION, a Virginia corporation, herein called the Company, for valuable consideration, hereby commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest covered hereby in the land described or referred to in Schedule A, upon payment of the premiums and charges therefor; all subject to the provisions of Schedules A and B and to the Conditions and Stipulations hereof .

This Commitment shall be effective only when the identity of the proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A hereof by the Company, either at the time of the issuance of this Commitment or by subsequent endorsement.

This Commitment is preliminary to the issuance of such policy or policies of title insurance and all liability and obligations hereunder shall cease and terminate six (6) months after the effective date hereof or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue such policy or policies is not the fault of the Company.

IN WITNESS WHEREOF, **LAWYERS TITLE INSURANCE CORPORATION** has caused its corporate name and seal to be hereunto affixed by its duly authorized officers, the Commitment to become valid when countersigned by an authorized officer or agent of the Company.

LAWYERS TITLE INSURANCE CORPORATION

Attest:

Handwritten signature of J. D. Webb in cursive.

Secretary



By:

Handwritten signature of Janet A. Alpert in cursive.

President

DISCLOSURE NOTICES

Good Funds Law

Arizona Revised Statutes Section 6-843 regulates the disbursement of escrow funds by an escrow agent. The law requires that funds be deposited in the escrow agent's escrow account and available for withdrawal prior to disbursement. Funds deposited with the Company by wire transfer may be disbursed upon receipt. Funds deposited with the Company in the form of cashier's checks, certified checks or teller's checks, or checks which are made by an affiliate of a state or federally regulated depository institution when the check is drawn on that institution, may be disbursed the same day as deposited. If funds are deposited with the Company by other methods, recording and/or disbursement may be delayed.

Privacy Notice (15 U.S.C. 6801 and 16 CFR Part 313):

We collect nonpublic personal information about you from information you provide on forms and documents and from other people such as your lender, real estate agent, attorney, escrow, etc. We do not disclose any nonpublic personal information about our customers or former customers to anyone, except as permitted by law. We restrict access to nonpublic personal information about you to those employees who need to know that information in order to provide products or services to you. We maintain physical, electronic and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

PURCHASER DWELLING ACTIONS NOTICE

Pursuant to Arizona Revised Statutes Section 12-1363.N, notice is hereby provided to the purchaser of a dwelling of the provisions of Arizona Revised Statutes Sections 12-1361, 1362 and 1363. These statutory sections set forth the requirements to be met by a purchaser prior to bringing an action against the seller of a dwelling arising out of or related to the design, construction, condition or sale of the dwelling. "Dwelling" means a single or multifamily unit designed for residential use and common areas and improvements owned or maintained by an association or its members. "Seller" means any person, firm, partnership, corporation, association or other organization engaged in the business of designing, constructing or selling dwellings. The complete statutory sections can be viewed on the Arizona State Legislature's web site: www.azleg.state.az.us/ars/ars.htm.

NOTICE:

Pursuant to Arizona Revised Statutes 11-480, effective January 1, 1991, the County Recorder may not accept documents for recording that do not comply with the following:

- a Print must be ten-point type (pica) or larger.
- b Margins of at least one-half inch along the left and right sides one-half inch across the bottom and at least two inches on top for recording and return address information.
- c Each instrument shall be no larger than 8 ½ inches in width and 14 inches in length.

Karma L. Stockstill
Lawyers Title Insurance Corporation
LandAmerica Commercial Services
1850 N. Central Ave., Suite 300
Phoenix, Az 85004

Escrow no. N04-43147 KLS

COMMITMENT FOR TITLE INSURANCE

Issued by

Lawyers Title Insurance Corporation

SCHEDULE A

1. Effective Date: **March 10, 2004** at 7:30 a.m. File No.: 01343452
2. Policy or Policies to be issued: **ALTA Std. Owners Policy 10-17-92**
Proposed Insured: **Swift Current Land & Cattle LLC,, an Arizona limited liability company**
Liability: **\$1,647,650.00**
Policy or Policies to be issued: **None**
Proposed Insured:
Liability: \$
Policy or Policies to be issued: **None**
Proposed Insured:
Liability: \$
3. The estate or interest in the land described or referred to in the Commitment and covered herein is **A FEE**.
4. Title to the said estate or interest in said land is at the effective date hereof vested in:
Johnson Cattle Company, an Arizona partnership
5. The land referred to in this Commitment is situated in the County of Maricopa, State of ARIZONA, and is described as follows:
As fully set forth on "Exhibit A" attached hereto and by this reference incorporated herein

Title Officer: **Anthony Choe/TC3**
Typist: **tc3**
Amended: **No.**

EXHIBIT "A"

H. E. Survey No. 317, embracing a portion of, approximately, Section 21, Township 7 North, Range 4 East of the Gila and Salt River Base and Meridian, Maricopa County, Arizona, more particularly described as follows:

BEGINNING at Corner No. 1, from which U. S. Location Monument No. 317, H.E.S. bears South 59 degrees 57 minutes East 10-58/100ths chains distant;

THENCE South 46 degrees 12 minutes East 26-94/100ths chains to Corner No. 2;

THENCE South 04 degrees 03 minutes East 61 chains to Corner No. 3;

THENCE West 19-84/100ths chains to Corner No. 4;

THENCE North 05 degrees 51 minutes West 71-34/100ths chains to Corner No. 5;

THENCE North 21 degrees 46 minutes East 9-22/100ths chains to Corner No. 1, the POINT OF BEGINNING, according to the Official Plat of the Survey of the said Land, returned to the General Land Office by the Surveyor-General.

**SCHEDULE B – SECTION I
REQUIREMENTS**

The following are the requirements to be complied with prior to the issuance of said policy or policies. Any other instrument recorded subsequent to the date hereof may appear as an exception under Schedule B of the policy to be issued. Unless otherwise noted, all documents must be recorded in the office of the Recorder of the County in which said property is located.

1. PAY second installment 2003 taxes, Parcel No. 219-09-001 7.
2. RECORD Certificate of Partnership executed by all partners for Johnson Cattle Company, an Arizona partnership.
3. Submit fully executed copy of the partnership agreement (and all amendments) of the partnership named below for examination. The right is reserved to make additional requirements upon such examination.

Johnson Cattle Company, an Arizona partnership

4. RECORD Deed from Johnson Cattle Company, an Arizona partnership to buyer(s).

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

ACCESS NOTE: A cursory search of the title does not indicate a right of access to this property. In order to identify the properties that need to be searched for the purpose of determining the existence of such right, the company requires a sketch showing the physical route taken to and from said land. No further search for access will be attempted until such sketch is received. In the event this transaction is closed prior to a final determination of the existence of an insurable right of access, exception no. 5 shall remain as an item in Schedule B.

TAX NOTE:

Year	2003
Parcel No.	219-09-001 7
Total Tax	\$102.16
First Half	\$Paid
Second Half	\$51.08

Arb No. 219-09-001

END OF SCHEDULE B – SECTION I

**SCHEDULE B – SECTION II
EXCEPTIONS**

Schedule B of policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

- A. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this commitment.
- 1. OBLIGATIONS imposed upon said land by its inclusion within any district formed pursuant to Title 48, Arizona Revised Statutes, excluding however Municipal or County Improvement Districts.
- 2. TAXES AND ASSESSMENTS collectible by the County Treasurer, a lien not yet due and payable for the following year:

2004
- 3. ANY ACTION that may be taken by Flood Control District named below to acquire property or rights of way for flood control as disclosed by instrument:

Recorded in Document No. 98-708623
District Maricopa County
- 4. MATTERS SHOWN ON SURVEY:

Recorded in Book 330 of Maps
Page 38
- 5. THE LACK of a legal right of access recorded in insurable form to and from said land to a public street.

END OF SCHEDULE B – SECTION II

COMMITMENT CONDITIONS AND STIPULATIONS

1. The term mortgage, when used herein, shall include deed of trust, trust deed, or other security instrument.
2. If the proposed insured has or acquires actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act or reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the proposed Insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien, encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions and Stipulations.
3. Liability of the Company under this Commitment shall be only to the named proposed insured and such parties included under the definition of insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith, (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policy or policies committed for and such liability is subject to the insuring provisions, the Conditions and Stipulations, and the Exclusions from Coverage of the form of policy or policies committed for in favor of the proposed insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.
4. Any action or actions or rights of action that the proposed insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment.

AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (10-17-92) WITH ALTA ENDORSEMENT-FORM 1 COVERAGE and AMERICAN LAND TITLE ASSOCIATION LEASEHOLD LOAN POLICY (10-17-92) WITH ALTA ENDORSEMENT-FORM 1 COVERAGE EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land, (ii) the character, dimensions or location of any improvement now or hereafter erected on the land, (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part, or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy, (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any statutory lien for services, labor or materials (or the claim of priority of any statutory lien for services, labor or materials over the lien of the insured mortgage) arising from an improvement or work related to the land which is contracted for and commenced subsequent to Date of Policy and is not financed in whole or in part by proceeds of the indebtedness secured by the insured mortgage which at Date of Policy the insured has advanced or is obligated to advance.
7. Any claim which arises out of the transaction creating the interest of the mortgagee insured by this Policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the interest of the insured mortgagee being deemed a fraudulent conveyance or fraudulent transfer, or
 - (b) the subordination of the interest of the insured mortgagee as a result of the application of the doctrine of equitable subordination, or
 - (c) the transaction creating the interest of the insured mortgagee being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (10-17-92) And AMERICAN LAND TITLE ASSOCIATION LEASEHOLD OWNER'S POLICY (10-17-92) EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land, (ii) the character, dimensions or location of any improvement now or hereafter erected on the land, (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part, or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy, (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by the policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer, or
 - (b) the transaction creating the estate or interest insured by the policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

The above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage Policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims, (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof, (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

**AMERICAN LAND TITLE ASSOCIATION
HOMEOWNER'S POLICY OF TITLE INSURANCE (10/17/98)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from

1. Governmental police power, and the existence or violation of any law or government regulation. This includes ordinances, laws and regulations concerning
 - a. building
 - b. zoning
 - c. land use
 - d. improvements on the Land
 - e. land division
 - f. environmental protection

This Exclusion does not apply to violations or the enforcement of these matters if notice of the violation or enforcement appears in the Public Records at the Policy Date.
This Exclusion does not limit the coverage described in Covered Risk 14, 15, 16, 17 or 24.

2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at the Policy Date.
3. The right to take the Land by condemning it, unless:
 - a. a notice of exercising the right appears in the Public Records at the Policy Date, or
 - b. the taking happened before the Policy date and is binding on You if You bought the Land without knowing of the taking.
4. Risks
 - a. that are created, allowed, or agreed to by You, whether or not they appear in the Public Records;
 - b. that are known to You at the Policy Date, but not to Us, unless they appear in the Public Records at the Policy Date,
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date – this does not limit the coverage described in Covered Risk 7, 8d, 22, 23, 24 or 25
5. Failure to pay value for Your Title.
6. Lack of a right
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 18.

**AMERICAN LAND TITLE ASSOCIATION
RESIDENTIAL TITLE INSURANCE POLICY (6-2-87)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, you are not insured against loss, costs, attorneys' fees, and expenses resulting from

1. Governmental police power, and the existence or violation of any law or government regulation. This includes building and zoning ordinances and also laws and regulations concerning
 - Land use
 - Improvements on the land
 - Land division
 - Environmental protection

This exclusion does not apply to violations or the enforcement of these matters which appear in the public records at Policy Date.
This exclusion does not limit the zoning coverage described in items 12 and 13 of Covered Title Risks.

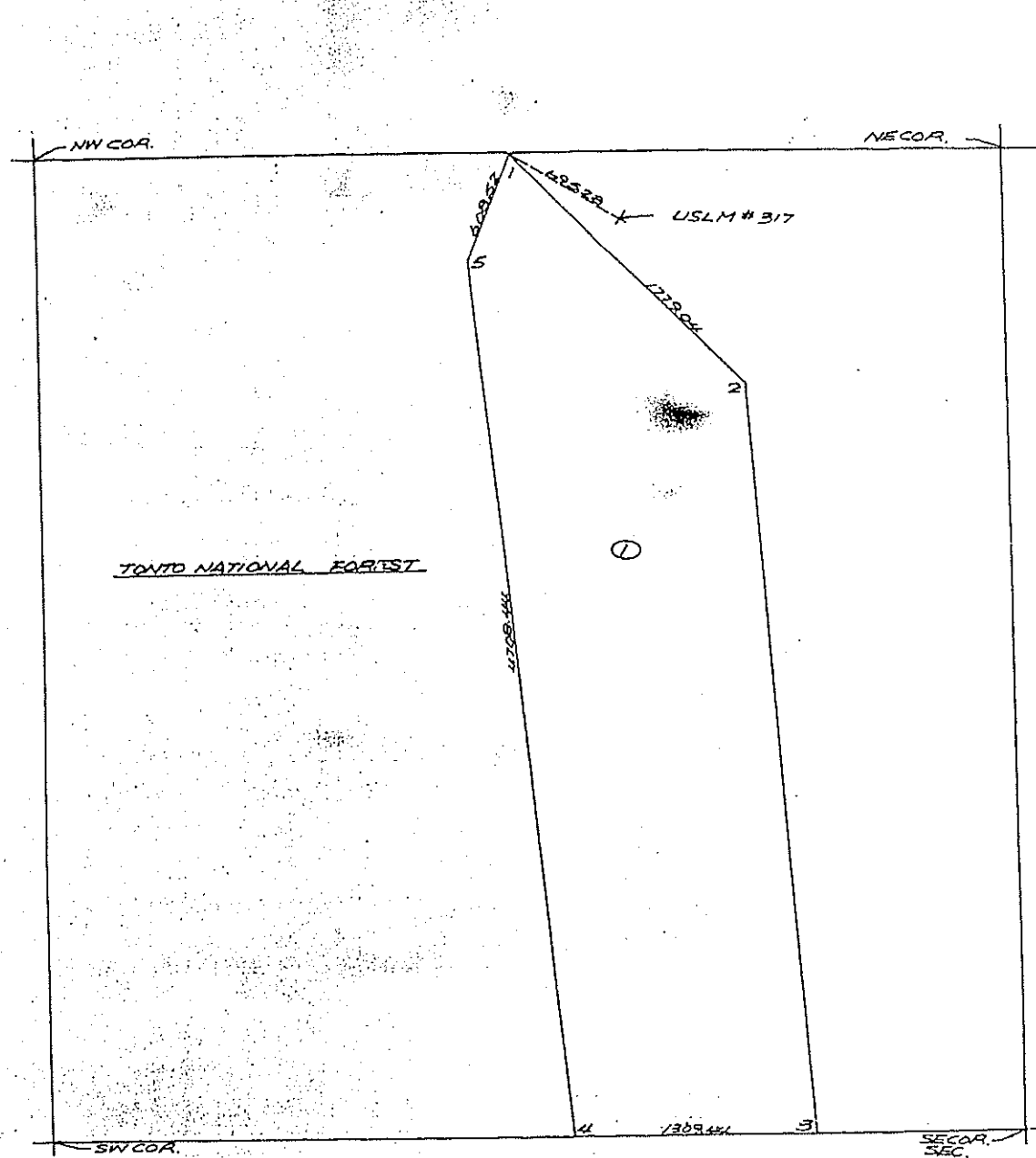
2. The right to take the land by condemning it, unless;
 - A notice of exercising the right appears in the public records on the Policy Date
 - The taking happened prior to the Policy Date and is binding on you if you bought the land without knowing of the taking
3. Title Risks:
 - That are created, allowed, or agreed to by you
 - That are known to you, but not to us, on the Policy Date – unless they appeared in the Public Records
 - That result in no loss to you
 - That first affect your title after the Policy Date – this does not limit the labor and material lien coverage in Item B of Covered Title Risks
4. Failure to pay value for your title.
5. Lack of a right:
 - To any land outside the area specifically described and referred to in Item 3 of Schedule A
 - OR
 - In streets, alleys, or waterways that touch your land

This exclusion does not limit the access coverage in Item 5 of Covered Title Risks

POR. SEC. 21 T-7N R-4E
HOMESTEAD ENTRY SURVEY # 317 (149.30 Ac)

BOOK 219
MAP 9

ASSESSOR'S MAP

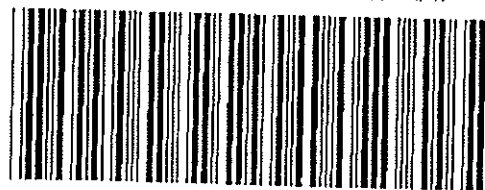


5/08

When recorded mail to:

FLOOD CONTROL

JOHN PALMERI



OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL

98-0708623 08/13/98 08:35

CATHY 2 OF 2

CAPTION HEADING: _____

DO NOT REMOVE

This is part of the official document.

hazard along Cave Creek from Cave Buttes Dam north to the County boundary. The Study shall recommend a preferred alternative for alleviating the flooding hazard; and,

BE IT FURTHER RESOLVED that the Chief Engineer and General Manager is directed to negotiate and prepare intergovernmental agreements with the City of Phoenix and others, if appropriate, for the coordination of the Upper Cave Creek Watercourse Master Plan Study; subject to the ratification and approval of this Board; and,

BE IT FURTHER RESOLVED that the Chief Engineer and General Manager is hereby authorized and directed to negotiate with landowners and/or appropriate agencies to obtain rights-of-entry and all other necessary land rights required for the Upper Cave Creek Watercourse Master Plan Study at locations identified as below; and,

BE IT FURTHER RESOLVED that the Chief Engineer and General Manager of the District is hereby authorized and directed to hire, retain, or otherwise utilize the professional services of the County Attorney's Office or private counsel to initiate and prosecute actions and proceedings in the manner required by law to condemn any and all rights-of-entry, easements, or real property required for the Upper Cave Creek Watercourse Master Plan which cannot be obtained by donation or purchase in the following locations:

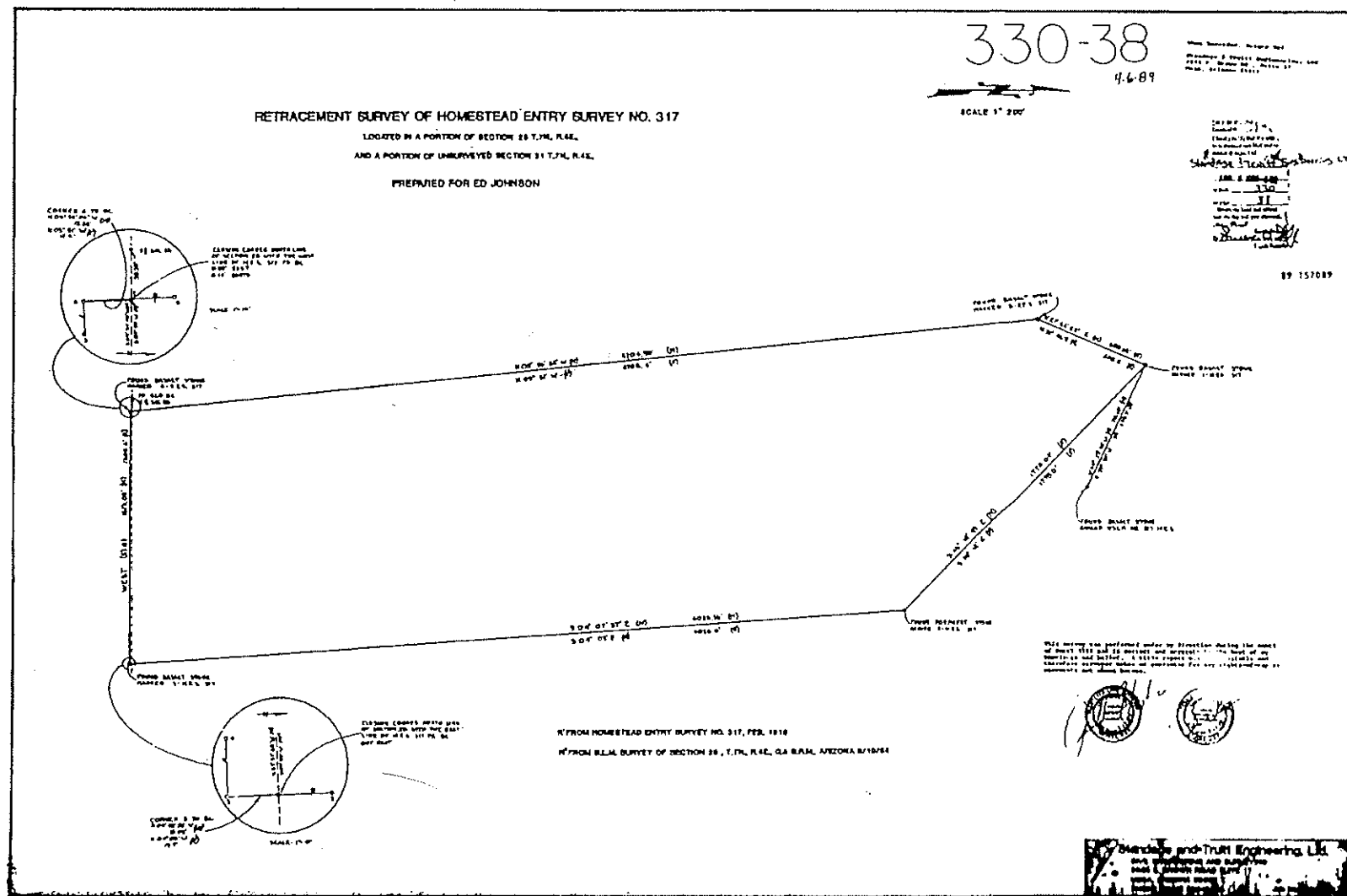
Sections 2, 3, 4, Township 4 North, Range 3 East,
Sections 1, 2, 10, 11, 12, 13, 14, 15, 22, 23, 24, 25, 26, 27, 28, 32, 33, 34, 35,
Township 5 North, Range 3 East,
Sections 4, 5, 6, 7, 8, 18, Township 5 North, Range 4 East,
Section 36, Township 6 North, Range 3 East,
Sections 3, 4, 5, 6, 7, 8, 9, 10, 16, 17, 18, 19, 20, 21, 28, 29, 30, 31, 32, 33,
Township 6 North, Range 4 East,
Sections 1, 2, 3, 4, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 20, 21, 22, 27, 28, 29, 32,
33, 34, Township 7 North, Range 4 East,
Sections 4, 5, 6, 7, 8, 9, 16, 17, 18, Township 7 North, Range 5 East,
Sections 28, 29, 30, 31, 32, 33, Township 8 North, Range 5 East; of the Gila and
Salt River Base and Meridian, Maricopa County, Arizona.

Dated this 5TH day of November, 1997.

ATTEST:


Chairman, Board of Directors


Clerk of the Board



APPENDIX H - EAST CLEAR CREEK



TRANSNATION TITLE INSURANCE COMPANY

223 N. San Francisco
Flagstaff, AZ 86001
Phone: (928) 774-7191
Fax: (928) 774-2167

December 8, 2005

Swift Current Land & Cattle LLC
2525 East Arizona Biltmore Cir Suite C-135
Phoenix, Arizona 85016

YOUR REF: **01491899**
OUR NO.: **01491899**

Attached is your ALTA Standard Owners 1992 policy of title insurance, per your instructions.



Transnation Title Insurance Company, an Arizona Corporation herein called the Company, for a valuable consideration, hereby commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the proposed insured named in Schedule A, as owner or mortgagee of the estate or interest covered hereby in the land described or referred to in Schedule A, upon payment of the premiums and charges therefor; all subject to the exceptions and conditions and stipulations shown herein, the Exclusions from Coverage, the Schedule B exceptions, and the conditions and stipulations of the policy or policies requested. (See back cover for printed Exclusions from Coverage and Schedule B exceptions contained in various policy forms.)

This Commitment shall be effective only when the identity of the proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A hereof by the Company. either at the time of the issuance of this Commitment or by subsequent endorsements and is subject to the Conditions and Stipulations on the back cover.

This Commitment is preliminary to the issuance of such policy or policies of title insurance and all liability and obligations hereunder shall cease and terminate six months after the effective date hereof or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue such policy or policies is not the fault of the Company.

IN WITNESS WHEREOF, Transnation Title Insurance Company has caused its corporate name and seal to be hereunto affixed by its duly authorized officers on the date shown in Schedule A.

TRANSNATION TITLE INSURANCE COMPANY

Attest:

A handwritten signature in cursive script, likely belonging to the Secretary.

Secretary



A handwritten signature in cursive script, likely belonging to the President.

President

DISCLOSURE NOTICES

Good Funds Law

Arizona Revised Statutes Section 6-843 regulates the disbursement of escrow funds by an escrow agent. The law requires that funds be deposited in the escrow agent's escrow account and available for withdrawal prior to disbursement. Funds deposited with the Company by wire transfer may be disbursed upon receipt. Funds deposited with the Company in the form of cashier's checks, certified checks or teller's checks, or checks which are made by an affiliate of a state or federally regulated depository institution when the check is drawn on that institution, may be disbursed the same day as deposited. If funds are deposited with the Company by other methods, recording and/or disbursement may be delayed.

Privacy Notice (15 U.S.C. 6801 and 16 CFR Part 313):

We collect nonpublic personal information about you from information you provide on forms and documents and from other people such as your lender, real estate agent, attorney, escrow, etc. We do not disclose any nonpublic personal information about our customers or former customers to anyone, except as permitted by law. We restrict access to nonpublic personal information about you to those employees who need to know that information in order to provide products or services to you. We maintain physical, electronic and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

PURCHASER DWELLING ACTIONS NOTICE

Pursuant to Arizona Revised Statutes Section 12-1363.N, notice is hereby provided to the purchaser of a dwelling of the provisions of Arizona Revised Statutes Sections 12-1361, 1362 and 1363. These statutory sections set forth the requirements to be met by a purchaser prior to bringing an action against the seller of a dwelling arising out of or related to the design, construction, condition or sale of the dwelling. "Dwelling" means a single or multifamily unit designed for residential use and common areas and improvements owned or maintained by an association or its members. "Seller" means any person, firm, partnership, corporation, association or other organization engaged in the business of designing, constructing or selling dwellings. The complete statutory sections can be viewed on the Arizona State Legislature's web site: www.azleg.state.az.us/ars/ars.htm.

NOTICE:

Pursuant to Arizona Revised Statutes 11-480, effective January 1, 1991, the County Recorder may not accept documents for recording that do not comply with the following:

- a Print must be ten-point type (pica) or larger.
- b Margins of at least one-half inch along the left and right sides one-half inch across the bottom and at least two inches on top for recording and return address information.
- c Each instrument shall be no larger than 8 ½ inches in width and 14 inches in length.

Escrow Officer: **Not Applicable**
Transnation Title Insurance Company
223 N. San Francisco
Flagstaff, AZ 86001

COMMITMENT FOR TITLE INSURANCE

Issued by

Transnation Title Insurance Company

SCHEDULE A

1. Effective Date: **April 15, 2005** at 7:30 a.m. File No.: 01323006
2. Policy or Policies to be issued: **ALTA Standard Owners 1992**

Proposed Insured: **Swift Current Land & Cattle LLC, an Arizona limited liability company**

Liability: **\$TO COME**

Policy or Policies to be issued: **None**

Policy or Policies to be issued: **None**
3. The estate or interest in the land described or referred to in the Commitment and covered herein is **A FEE**.
4. Title to the said estate or interest in said land is at the effective date hereof vested in:

Clear Creek 640, LLC, an Arizona limited liability company
5. The land referred to in this Commitment is situated in the County of Coconino, State of ARIZONA, and is described as follows:

As fully set forth on "Exhibit A" attached hereto and by this reference incorporated herein.

Title Officer: **Betty McIntosh/BDM**

Typist: **b18**

Amended: May 17, 2005 **No. 2**

Page 3 of 8

EXHIBIT "A"

All of Section 9, Township 14 North, Range 12 East of the Gila and Salt River Base and Meridian, Coconino County, Arizona.

Including all oil, gas and other minerals in, on or under or which may be produced from said land.

**SCHEDULE B – SECTION I
REQUIREMENTS**

The following are the requirements to be complied with prior to the issuance of said policy or policies. Any other instrument recorded subsequent to the date hereof may appear as an exception under Schedule B of the policy to be issued. Unless otherwise noted, all documents must be recorded in the office of the Recorder of the County in which said property is located.

1. PAYMENT OF any and all assessments.
2. FURNISH copy of filed Articles of organization of the limited liability company named below which states whether said limited liability company is member managed or manager managed:

Clear Creek 640, LLC, an Arizona limited liability company

3. SUBMIT fully executed copy of the Operating Agreement (and all amendments) of the limited liability company named below for examination. The right is reserved to make additional requirements upon said examination.

Clear Creek 640, LLC, an Arizona limited liability company

4. RECORD Deed from Clear Creek 640, LLC, an Arizona limited liability company to Trust for the Public Land.

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

TAX NOTE:

Year	2004
Parcel No.	403-13-006E/8
Total Tax	\$14.30
First Half	\$paid
Second Half	\$paid

ARB No. 403-13-002P

END OF SCHEDULE B – SECTION I

**SCHEDULE B – SECTION II
EXCEPTIONS**

Schedule B of policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

- A. Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this commitment.

- 1. OBLIGATIONS imposed upon said land by its inclusion within any district formed pursuant to Title 48, Arizona Revised Statutes, excluding however Municipal or County Improvement Districts.

- 2. TAXES AND ASSESSMENTS collectible by the County Treasurer, a lien not yet due and payable for the following year:

2005

- 3. THE RIGHTS of the United States of America the State of Arizona and/or other parties to any portion of the within property lying within the bed, or former bed, of any water course, as that term is defined under Arizona law.

- 4. ANY TERMS, CONDITIONS, RULES OR RESTRICTIONS imposed, upon the right of access to the land described in Schedule A, by the United States of America acting by and through the Forest Service, Department of Agriculture.

END OF SCHEDULE B – SECTION II

COMMITMENT CONDITIONS AND STIPULATIONS

1. The term mortgage, when used herein, shall include deed of trust, trust deed, or other security instrument.
2. If the proposed insured has or acquires actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act or reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the proposed Insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien, encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions and Stipulations.
3. Liability of the Company under this Commitment shall be only to the named proposed insured and such parties included under the definition of insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith, (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policy or policies committed for and such liability is subject to the insuring provisions, the Conditions and Stipulations, and the Exclusions from Coverage of the form of policy or policies committed for in favor of the proposed insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.
4. Any action or actions or rights of action that the proposed insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment

AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (10-17-92)
WITH ALTA ENDORSEMENT-FORM 1 COVERAGE
and
AMERICAN LAND TITLE ASSOCIATION LEASEHOLD LOAN POLICY (10-17-92)
WITH ALTA ENDORSEMENT-FORM 1 COVERAGE
EXCLUSIONS FROM COVERAGE

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1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental policy power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the land is situated.
5. Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law.
6. Any statutory lien for services, labor or materials (or the claim of priority of any statutory lien for services, labor or materials over the lien of the insured mortgage) arising from an improvement or work related to the land which is contracted for and commenced subsequent to Date of Policy and is not financed in whole or in part by proceeds of the indebtedness secured by the insured mortgage which at Date of Policy the insured has advanced or is obligated to advance.
7. Any claim which arises out of the transaction creating the interest of the mortgagee insured by this Policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the interest of the insured mortgagee being deemed a fraudulent conveyance or fraudulent transfer, or
 - (b) the subordination of the interest of the insured mortgagee as a result of the application of the doctrine of equitable subordination; or
 - (c) the transaction creating the interest of the insured mortgagee being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

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This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

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2. Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (10-17-92)
And
AMERICAN LAND TITLE ASSOCIATION LEASEHOLD OWNER'S POLICY (10-17-92)
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 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by the policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer, or
 - (b) the transaction creating the estate or interest insured by the policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

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2. Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

**AMERICAN LAND TITLE ASSOCIATION
HOMEOWNER'S POLICY OF TITLE INSURANCE (10/17/98)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes ordinances, laws and regulations concerning:
 - a. building
 - b. zoning
 - c. land use
 - d. improvements on the Land
 - e. land division
 - f. environmental protectionThis Exclusion does not apply to violations or the enforcement of these matters if notice of the violation or enforcement appears in the Public Records at the Policy Date.
This Exclusion does not limit the coverage described in Covered Risk 14, 15, 16, 17 or 24.
2. The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at the Policy Date.
3. The right to take the Land by condemning it, unless:
 - a. a notice of exercising the right appears in the Public Records at the Policy Date; or
 - b. the taking happened before the Policy date and is binding on You if You bought the Land without knowing of the taking.
4. Risks:
 - a. that are created, allowed, or agreed to by You, whether or not they appear in the Public Records;
 - b. that are known to You at the Policy Date, but not to Us, unless they appear in the Public Records at the Policy Date;
 - c. that result in no loss to You; or
 - d. that first occur after the Policy Date – this does not limit the coverage described in Covered Risk 7, 8d, 22, 23, 24 or 25.
5. Failure to pay value for Your Title.
6. Lack of a right:
 - a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
 - b. in streets, alleys, or waterways that touch the land.This Exclusion does not limit the coverage described in Covered Risk 11 or 18.

**AMERICAN LAND TITLE ASSOCIATION
RESIDENTIAL TITLE INSURANCE POLICY (6-2-87)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, you are not insured against loss, costs, attorneys' fees, and expenses resulting from:

1. Governmental police power, and the existence or violation of any law or government regulation. This includes building and zoning ordinances and also laws and regulations concerning:
 - Land use
 - Improvements on the land
 - Land division
 - Environmental protectionThis exclusion does not apply to violations or the enforcement of these matters which appear in the public records at Policy Date.
This exclusion does not limit the zoning coverage described in items 12 and 13 of Covered Title Risks.
2. The right to take the land by condemning it, unless;
 - A notice of exercising the right appears in the public records on the Policy Date
 - The taking happened prior to the Policy Date and is binding on you if you bought the land without knowing of the taking
3. Title Risks:
 - That are created, allowed, or agreed to by you
 - That are known to you, but not to us, on the Policy Date – unless they appeared in the Public Records
 - That result in no loss to you
 - That first affect your title after the Policy Date – this does not limit the labor and material lien coverage in Item B of Covered Title Risks
4. Failure to pay value for your title.
5. Lack of a right:
 - To any land outside the area specifically described and referred to in Item 3 of Schedule A
 - OR
 - In streets, alleys, or waterways that touch your landThis exclusion does not limit the access coverage in Item 5 of Covered Title Risks

OWNER'S POLICY OF TITLE INSURANCE

Issued by **Transnation Title Insurance Company**



Transnation Title Insurance Company is a member of the LandAmerica family of title insurance underwriters.

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS, TRANSNATION TITLE INSURANCE COMPANY, an Arizona corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

IN WITNESS WHEREOF, TRANSNATION TITLE INSURANCE COMPANY has caused its corporate name and seal to be hereunto affixed by its duly authorized officers, the Policy to become valid when countersigned by an authorized officer or agent of the Company.

TRANSNATION TITLE INSURANCE COMPANY

Attest:


Secretary



By:


President

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

1. (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land; (ii) the character, dimensions or location of any improvement now or hereafter erected on the land; (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
(b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the Insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
 - (b) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

1. DEFINITION OF TERMS.

The following terms when used in this policy mean:

- (a) "insured": the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors.
- (b) "insured claimant": an insured claiming loss or damage.
- (c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of the public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.
- (d) "land": the land described or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.
- (e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument.
- (f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a) (iv) of the Exclusions From Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States district court for the district in which the land is located.
- (g) "unmarketability of the title": an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE.

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either (i) an estate or interest in the land, or (ii) an indebtedness secured by a purchase money mortgage given to the insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT.

The insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 4(a) below, (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

4. DEFENSE AND PROSECUTION OF ACTIONS; DUTY OF INSURED CLAIMANT TO COOPERATE.

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title or interest as insured, but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by the insured in the defense of those causes of action which allege matters not insured by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a

court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

5. PROOF OF LOSS OR DAMAGE.

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY.

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay. Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

Conditions and Stipulations Continued Inside Cover

CONTROL NO. A37-1016713

CONDITIONS AND STIPULATIONS
(Continued)

7. DETERMINATION, EXTENT OF LIABILITY AND COINSURANCE.

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of:

- (i) the Amount of Insurance stated in Schedule A; or,
- (ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

(b) In the event the Amount of Insurance stated in Schedule A at the Date of Policy is less than 80 percent of the value of the insured estate or interest or the full consideration paid for the land, whichever is less, or if subsequent to the Date of Policy an improvement is erected on the land which increases the value of the insured estate or interest by at least 20 percent over the Amount of Insurance stated in Schedule A, then this Policy is subject to the following:

- (i) where no subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that the amount of insurance at Date of Policy bears to the total value of the insured estate or interest at Date of Policy; or
- (ii) where a subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that 120 percent of the Amount of Insurance stated in Schedule A bears to the sum of the Amount of Insurance stated in Schedule A and the amount expended for the improvement.

The provisions of this paragraph shall not apply to costs, attorneys' fees and expenses for which the Company is liable under this policy, and shall only apply to that portion of any loss which exceeds, in the aggregate, 10 percent of the Amount of Insurance stated in Schedule A.

(c) The Company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

8. APPORTIONMENT.

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

9. LIMITATION OF LIABILITY.

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY.

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

11. LIABILITY NONCUMULATIVE.

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

12. PAYMENT OF LOSS.

(a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

13. SUBROGATION UPON PAYMENT OR SETTLEMENT.

(a) The Company's Right of Subrogation.

Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

(b) The Company's Rights Against Non-insured Obligors.

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

14. ARBITRATION.

Unless prohibited by applicable law, either the Company or the insured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. All arbitrable matters when the Amount of insurance is \$1,000,000 or less shall be arbitrated at the option of either the Company or the insured. All arbitrable matters when the Amount of Insurance is in excess of \$1,000,000 shall be arbitrated only when agreed to by both the Company and the insured. Arbitration pursuant to this policy and under the Rules in effect on the date the demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT.

(a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

(b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.

(c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

16. SEVERABILITY.

In the event any provision of the policy is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

17. NOTICES, WHERE SENT.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to: Consumer Affairs Department, P.O. Box 27567, Richmond, Virginia 23261-7567.

POLICY OF TITLE INSURANCE
Issued by
Transnation Title Insurance Company
SCHEDULE A

Amount of Insurance: **\$3,400,000.00**

Policy/File No.: **01491899**

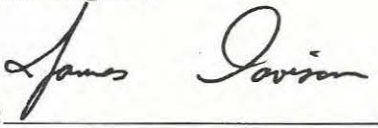
Date of Policy: **October 14, 2005 at Fee No. 3349408**

Name of Insured:

Swift Current Land & Cattle LLC, an Arizona Limited Liability Company

1. The estate or interest referred to herein is at the Date of Policy vested in:
Swift Current Land & Cattle LLC, an Arizona Limited Liability Company
2. The estate or interest in the land described herein and which is covered by this policy is:
A FEE
3. The land referred to in this policy is situated in the County of Coconino, State of ARIZONA, and is more particularly described in Exhibit "A" attached hereto and made a part hereof.

Countersigned:

BY: 

Authorized Officer or Agent

EXHIBIT "A"

All of Section 9, Township 14 North, Range 12 East of the Gila and Salt River Base and Meridian, Coconino County, Arizona.

Including all oil, gas and other minerals in, on or under or which may be produced from said land.

SCHEDULE B
EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage, nor against costs, attorneys fees or expenses, any or all of which arise by reason of the following:

PART I

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

Proceedings by a public agency which may result in taxes or assessments, or notices or such proceedings, whether or not shown by the records of such agency or by the public records.
2. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortages in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, and agreements, covenants, conditions or rights incident thereto, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

SCHEDULE B
EXCEPTIONS FROM COVERAGE

PART II

THIS POLICY DOES NOT INSURE AGAINST LOSS OR DAMAGE BY REASON OF THE FOLLOWING:

1. OBLIGATIONS imposed upon said land by its inclusion within any district formed pursuant to Title 48, Arizona Revised Statutes, excluding however Municipal or County Improvement Districts.
2. THE RIGHTS of the United States of America the State of Arizona and/or other parties to any portion of the within property lying within the bed, or former bed, of any water course, as that term is defined under Arizona law.
3. ANY TERMS, CONDITIONS, RULES OR RESTRICTIONS imposed, upon the right of access to the land described in Schedule A, by the United States of America acting by and through the Forest Service, Department of Agriculture.
4. TAXES AND ASSESSMENTS collectible by the County Treasurer, a lien payable but not yet due for the following year:

Second half of 2005

OWNER'S POLICY OF TITLE INSURANCE

American Land Title Association (10/17/92)

Issued by
**Transnation Title
Insurance Company**

Transnation Title Insurance Company
is a member of the LandAmerica family of title insurance
underwriters.



LandAmerica Financial Group, Inc.
101 Gateway Centre Parkway
Richmond, Virginia 23235-5153
www.landam.com

THANK YOU.

Title insurance provides for the protection of your real estate investment. We suggest you keep this policy in a safe place where it can be readily available for future reference.

If you have questions about title insurance or the coverage provided by this policy, contact the office that issued this policy, or you may call or write:

Transnation Title Insurance Company
Consumer Affairs
P.O. Box 27567
Richmond, Virginia 23261-7567
telephone, toll free: 800 446-7086
web: www.landam.com

We thank you for choosing to do business with Transnation Title Insurance Company, and look forward to meeting your future title insurance needs.

Transnation Title Insurance Company
is a member of the LandAmerica family of title insurance
underwriters.



APPENDIX H - APACHE LEAP SOUTH END



OFFICIAL RECORDS OF
PINAL COUNTY RECORDER
LAURA DEAN-LYTLE

DATE/TIME: 01/31/05 1428
FEE: \$39.00
PAGES: 31
FEE NUMBER: 2005-009840

WHEN RECORDED, PLEASE RETURN TO:



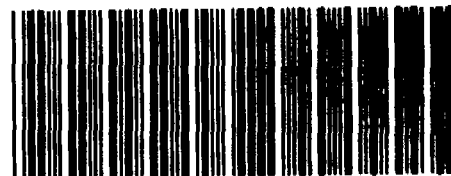
A Rio Tinto Company

2525 E. Arizona Biltmore Circle
Suite C-135
Phoenix, AZ 85016
Tel.: (602) 956-0223

This Special Warranty Deed dated August 12th, 2004, was inadvertently recorded in Maricopa County. Please accept this certified copy from Maricopa County as the recorded document.

Daniel L. Mead for Resolution Copper

- Hold Plu
Southwest
Delivery
Solutions
36



OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
2004-0973524 08/20/04 16:06
1 OF 2

WHEN RECORDED, RETURN TO:

WHEN RECORDED, RETURN TO:

Parsons Behle & Latimer
One Utah Center
201 South Main Street, Suite 1800
Salt Lake City, Utah 84111
Attn: Patricia J. Winmill

SPECIAL WARRANTY DEED

FOR GOOD AND VALUABLE CONSIDERATION, the receipt and sufficiency of which are hereby expressly acknowledged, **BHP COPPER INC.**, a Delaware corporation, formerly known as Magma Copper Company ("Grantor"), does hereby convey to **RESOLUTION COPPER MINING LLC**, a Delaware limited liability company, of 2525 East Arizona Biltmore Circle, Suite C-135, Phoenix, AZ 85016, ("Grantee") the following described property situated in Pinal County, Arizona (the "Property"):

See Exhibit A attached hereto and made a part hereof.

together with all improvements, buildings, structures and fixtures located thereon; all easements, if any, benefiting the Property; all rights, benefits, privileges and appurtenances pertaining to the Property, including any right, title and interest of Grantor in and to any property lying in or under the bed of any street, alley, road or right-of-way, open or proposed, abutting or adjacent to the Property; the strips, gaps or gores, if any, between the Property and abutting property, and further, without any warranty or representation whatsoever, the Grantor hereby quit claims to the Grantee any and all water rights appurtenant to the Property.

Subject to all Permitted Encumbrances, as that capitalized term is defined in that certain Earn-In Agreement dated April 17, 2001, between Grantor and Kennecott Exploration Company.

Grantor hereby binds itself and its successors to warrant and defend the title, as against all acts of Grantor herein and no other, subject to the matters above set forth. EXCEPT AS OTHERWISE SET FORTH ABOVE, THE PROPERTY TRANSFERRED HEREBY IS CONVEYED ON AN "AS-IS" AND "WHERE-IS" BASIS.

IN WITNESS WHEREOF, Grantor has executed this Special Warranty Deed effective as of March 31, 2004.

GRANTOR:

BHP COPPER INC., a Delaware corporation

By: *Ben Wickers*

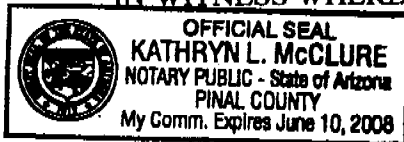
Name: BEN WICKERS

Its: PRESIDENT

STATE OF Arizona)
) ss.
County of Pinal)

On this, the 12 day of August, 2004, before me, the undersigned Notary Public, personally appeared Ben Wickers, the President of BHP COPPER INC., a Delaware corporation, known to me to be the person whose name is subscribed to the foregoing instrument and acknowledged that he/she executed the same on behalf of the limited partnership for the purposes therein contained.

IN WITNESS WHEREOF, I hereunto set my hand and official seal.



Kathryn L. McClure
Notary Public

My commission expires:

6-10-08

Exhibit A
to SPECIAL WARRANTY DEED
From BHP COPPER INC to RESOLUTION COPPER MINING LLC

The following described real property consisting of fee lands and patented mining claims and millsites situated in Pinal County, Arizona, and more particularly described as follows:

1. PARCEL NO. 1:

Lot 10 of Section 25, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 15.78 acres, more or less.

2. PARCEL NO. 2:

Lots 9, 10, 11, 15 and 16 of Section 26, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 233.01 acres, more or less.

3. PARCEL NO. 3:

The Southeast Quarter of Section 27, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 160.00 acres, more or less.

4. PARCEL NO. 4:

Lot 1, the Northwest Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$), the West Half of the Southwest Quarter of the Southeast Quarter (W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$), the North Half of the Northeast Quarter (N $\frac{1}{2}$ NE $\frac{1}{4}$) and the Southwest Quarter of the Northeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 34, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 211.85 acres, more or less.

5. PARCEL NO. 5:

The Northeast Quarter of the Southeast Quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$), the West Half of the Southeast Quarter of the Southeast Quarter (W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$), the East Half of the Southwest Quarter of the Southeast Quarter (E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 34, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 80 acres, more or less.

6. PARCEL NO. 6:

Lots 12, 13, 14, 15 and the North half of the Northwest of the Southwest of Section 35, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 90.82 acres, more or less.

EXCEPT "any portion of Lot 15 lying Easterly of the Easterly Line of Porphyry Street as described in Docket 1559, Page 191."

7. PARCEL NO. 7:

Lots 2, 3, 11, and 17 of Section 35, Township 1 South, Range 12 East. G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 58.47 acres, more or less.

8. PARCEL NO. 8:

Lots 5, 7, 8 and 9 of Section 36, Township 1 South, Range 12 East. G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 70.79 acres, more or less.

9. PARCEL NO. 9:

Lot 9 of Section 2, Township 2 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 1.64 acres, more or less.

10. PARCEL NO. 10:

Lot 21 of Section 3, Township 2 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 18.01 acres, more or less.

EXCEPT "any portion lying Southerly of the Northerly line of Main Street (old highway 60)."

11. PARCEL NO. 11:

Lots 8 and 9 of Section 3, Township 2 South, Range 12 East, G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 35.33 acres, more or less.

EXCEPT "any portion lying Southerly of the Northerly line of Main Street (old highway 60)."

12. PARCEL NO. 12:

The North Half of the Northeast Quarter ($N\frac{1}{2}NE\frac{1}{4}$), and the North Half of the South Half of the Northeast Quarter ($N\frac{1}{2}S\frac{1}{2}NE\frac{1}{4}$) of Section 4, Township 2 South, Range 12 East. G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 120 acres, more or less.

EXCEPT "all that portion of the surface only to a depth of 40 feet of the East Half of Section 4, Township 2 South, Range 12 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona, described as follows:

BEGINNING at the center quarter of said Section 4;

THENCE North 00 degrees 36 minutes 58 seconds West along the West line of said East half, 1205.62 feet to the Southerly line of the BHP ARIZONA RAILROAD COMPANY right-of-way;

THENCE along said Southerly line the following four courses:

- (1) along a non-tangent curve, the center of which bears North 42 degrees 19 minutes 01 seconds West, having a radius of 528.50 feet, through a central angle of 35 degrees 47 minutes 49 seconds and arc distance of 330.19 feet;
- (2) North 11 degrees 53 minutes 10 seconds East, 172.82 feet;
- (3) along a tangent curve, concave to the South, having a radius of 358.50 feet, through a central angle of 108 degrees 29 minutes 33 seconds an arc distance of 678.84 feet;
- (4) South 59 degrees 37 minutes 17 seconds East, 671.26 feet to the East line of the West half of the Northeast quarter of said Section 4;

THENCE South 00 degrees 34 minutes 55 seconds East, along said East line, 1069.41 feet to a point on the North line of property described in Warranty Deed, recorded in Docket 1709, Page 240, Pinal County Records;

THENCE South 89 degrees 18 minutes 32 seconds West, 327.80 feet to the Northwest corner of property described in said Warranty Deed;

THENCE South 00 degrees 35 minutes 26 seconds East, 431.35 feet to a point on the Northerly right-of-way line of U.S. 60 & 70;

THENCE South 80 degrees 39 minutes 39 seconds West, along said Northerly right-of-way line, 994.71 feet to the West line of said East half;

THENCE North 00 degrees 36 minutes 58 seconds West, 113.49 feet to the POINT OF BEGINNING."

13. PARCEL NO. 13:

The Surprisor No. 2 patented lode mining claim, Lot No. 38, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 6258 from the United States of America to Charles L. Hastings, dated July 31, 1882, and recorded as Fee No. 1999-027022 of the official records of Pinal County, comprising 18.32 acres, more or less.

14. PARCEL NO. 14:

The Windsor patented lode mining claim, Lot No. 37, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set

forth in Mineral Patent No. 6257 from the United States of America to Charles L. Hastings, dated July 31, 1882, and recorded as Fee No. 1999-027023 of the official records of Pinal County, containing 19.08 acres more or less.

15. PARCEL NO. 15:

The Hub patented lode mining claim, Lot No. 41, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 9362 from the United States of America to Silver Queen Mining Co., dated June 2, 1884, and recorded in Book 19 of Mining Deeds, page 159 of the official records of Pinal County, containing 10.16 acres more or less.

16. PARCEL NO. 16:

The Irene patented lode mining claim, Lot No. 42, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 10228 from the United States of America to Silver Queen Mining Co., dated October 21, 1885, and recorded in Book 19 of Mining Deeds, page 165 of the official records of Pinal County, containing 20.66 acres more or less.

17. PARCEL NO. 17:

The Mowry patented lode mining claim, Lot No. 44, embracing a portion of Section 23, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 11374 from the United States of America to Mowry Silver Mining Co., dated December 16, 1886, and recorded in Book 6 of Mining Deeds, page 358 of the official records of Pinal County, containing 14.35 acres more or less.

18. PARCEL NO. 18:

The Bilk patented lode mining claim, Lot No. 45, embracing a portion of Section 24, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 23791 from the United States of America to Mowry Silver Mining Co., dated January 4, 1894, and recorded in Book 6 of Mining Deeds, page 361 of the official records of Pinal County, containing 13.665 acres, more or less.

EXCEPT "that portion of the ground hereinbefore described, embraced in said mining claim in lot No. 44, and also all that portion of said Bilk vein or lode, . . ."

19. PARCEL NO. 19:

The Silver and Copper Pocket, Queen No. 2, Silver Tip, and Blackfoot patented lode mining claims, Mineral Survey No. 2144, embracing a portion of Section 25 and 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 44500 from the United States of America to Joseph Cope, dated November 13, 1906, and

recorded in Book 23, of Mining Deeds, page 199 of the official records of Pinal County, Arizona containing 80.457 acres, more or less.

20. PARCEL NO. 20:

The Sunnyside, Caldonia, Republic, Golden Eagle, Skyward, New Calumet, Excelsior, Golden Eagle Extension, and Gold Crown patented lode mining claims, Mineral Survey No. 2860, embracing a portion of Sections 35, and 36, Township 1 South, Range 12 East, and Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 335073 from the United States of America to Lake Superior and Arizona Mining & Smelting Co., dated May 20, 1913, and recorded in Book 1-A of Mining Deeds, page 178 of the official records of Pinal County, comprising 136.336 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claims or Surveys Nos. 342, 350 and 2144, said Lots Nos. 37 and 38; and said Monarch Gold Crown No. 2, and Shark lode claims, unsurveyed, . . ."

21. PARCEL NO. 21:

The Square Deal patented lode mining claim, Mineral Survey No. 2860, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 893409 from the United States of America to Magma Copper Co., dated January 19, 1923, and recorded in Book 4 of Mining Deeds, pages 105 of the official records of Pinal County, containing 18.397 acres, more or less.

EXCEPT "any portion lying Westerly of the Westerly line of highway as shown on Plat of Square Deal Subdivision."

22. PARCEL NO. 22:

The San Francisco, Rain Cloud, Oakland, and Oversight patented lode mining claims, Mineral Survey No. 2930A, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 375319 from the United States of America to Queen Copper Mining Co., dated September 16, 1914, and recorded in Book 1-A of Mining Deeds, page 221 of the official records of Pinal County, containing 79.118 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Sunnyside lode claim Survey No. 2860 . . ."

23. PARCEL NO. 23:

The Shark, Monarch, Reddy Pay, Jumbo, Fraction, Oversight No. 1 and Oversight No. 3 patented lode mining claims, Mineral Survey No. 2994, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 397044 from the United States of America to Magma Copper Co..

dated April 8, 1914, and recorded in Book 1-A of Mining Deeds, page 245 of the official records of Pinal County, containing 79.248 acres, more or less.

EXCEPT "all that portion of the ground, hereinbefore described, embraced in said Queen No. 2 and Silver and Copper Pocket lode claims, Survey No. 2144 and said Caledonia and Republic lode claims, Survey No. 2860, . . ."

24. PARCEL NO. 24:

The Selma and Skiberean patented lode mining claims, Mineral Survey No. 2837, embracing a portion of Sections 1 and 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 413338 from the United States of America to Consolidated Holding and Trust Co., dated June 12, 1914, and recorded in Book 2 of Mining Deeds, page 306 of the official records of Pinal County, containing 29.608 acres, more or less.

25. PARCEL NO. 25:

The Sacramento patented lode mining claim and the Queen Annex patented millsite, Mineral Survey Nos. 2930A and 2930B, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 431461 from the United States of America to Queen Copper Mining Co., dated September 16, 1914, and recorded in Book 1-A of Mining Deeds, page 288 of the official records of Pinal County, such mining claim containing 10.07 acres and such millsite containing 4.995 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Oakland and San Francisco lode claims Survey No. 2930 A, and also all that portion of the Sacramento vein or lode, . . ."

26. PARCEL NO. 26:

The Queen Fraction patented lode mining claim, Mineral Survey No. 2930A, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 431460 from the United States of America to Queen Copper Mining Co., dated September 16, 1914, and recorded in Book 1-A of Mining Deeds, page 286 of the official records of Pinal County, containing 6.747 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Oakland lode claim Survey No. 2930 A, . . ."

27. PARCEL NO. 27:

The David Harum, Interloper, Virginian and Taft patented lode mining claims, Mineral Survey No. 3106, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 524455 from the United States of America to William A. Davidson, dated March 13, 1916, and recorded in Book 2 of

Mining Deeds, pages 285-287 of the official records of Pinal County, Arizona containing 67.908 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claim or Lot No. 38 and said Gold Crown No. 2 lode claim, unsurveyed, . . ."

28. PARCEL NO. 28:

The Silverside patented lode mining claim, Mineral Survey No. 2929, embracing a portion of Section 26, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 330214 from the United States of America to Queen Copper Mining Co., dated May 2, 1913, and recorded in Book 1A of Mining Deeds, page 168 of the official records of Pinal County, containing 19.449 acres, more or less.

29. PARCEL NO. 29:

The Silver Tip Extension, Oversight No. 1, Shark, Reddy Pay, Jumbo and Monarch patented millsites, Mineral Survey No. 3144, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 562248 from the United States of America to Magma Copper Co., dated January 18, 1917, and recorded in Book 2 of Mining Deeds, page 324 of the official records of Pinal County, containing 26.414 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claim or Survey No. 2930A, . . ."

30. PARCEL NO. 30:

The Lone Star patented lode mining claim, Mineral Survey No. 3096, embracing a portion of Section 11, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 627987 from the United States of America to Consolidated Holding and Trust Co. & The Calumet and Arizona Mining Co., and Frank Snyder, dated April 29, 1918, and recorded in Book 3 of Mining Deeds, page 81 of the official records of Pinal County, containing 18.818 acres, more or less.

31. PARCEL NO. 31:

The Panic patented lode mining claim, Mineral Survey No. 2836, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 633038 from the United States of America to Consolidated Holding and Trust Co., dated June 4, 1918, and recorded in Book 4 of Mining Deeds, page 174 of the official records of Pinal County, containing 18.131 acres, more or less.

32. PARCEL NO. 32:

The Iron Cap and Mountain View patented lode mining claims, Mineral Survey No. 3094, embracing a portion of Section 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 631620 from the United States of America to Consolidated Holding and Trust Co. & The Calumet and Arizona Mining Co., dated May 24, 1918, and recorded in Book 3 of Mining Deeds, page 86 of the official records of Pinal County, Arizona, containing 37.636 acres, more or less.

33. PARCEL NO. 33:

The Hillside, Monte Carlo, Touch Not, Touch Not No. 3, Rawhide and Belmont patented lode mining claims, Mineral Survey No. 2838, embracing a portion of Sections 1 and 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 658231 from the United States of America to Consolidated Holding and Trust Co., dated January 10, 1919, and recorded in Book 3 of Mining Deeds, page 219 of the official records of Pinal County, comprising 113.998 acres.

34. PARCEL NO. 34:

The Pacific No. 1, Pacific No. 7, Pacific No. 13, Pacific No. 19, Pacific No. 25, Pacific No. 32 and Grand patented lode mining claims, Mineral Survey No. 3581, embracing a portion of Sections 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 838255 from the United States of America to Grand Pacific Mining Co., dated December 21, 1921, and recorded in Book 3 of Mining Deeds, page 561 of the official records of Pinal County, comprising 123.454 acres, more or less.

35. PARCEL NO. 35:

The Gerald Cansler patented lode mining claim, Mineral Survey No. 3483, embracing a portion of Section 26, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 857949 from the United States of America to Magma Chief Copper Co., dated April 6, 1922, and recorded in Book 5 of Mining Deeds, page 36 of the official records of Pinal County, comprising 20.452 acres, more or less.

36. PARCEL NO. 36:

The Silver Tip Extension and Horse Shoe patented lode mining claims, Mineral Survey No. 2995, embracing a portion of Sections 25 and 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 867990 from the United States of America to Magma Copper Co., dated June 14, 1922, and recorded in Book 4 of Mines of Mining Deeds, page 15, of the official records of Pinal County, comprising 40.966 acres, more or less.

37. PARCEL NO. 37:

The Long Wedge, Picket Post, Palace, Watson and Tuna patented lode mining claims, Mineral Survey No. 3482, embracing a portion of Sections 25 and 26, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 876071 from the United States of America to Magma Chief Copper Co., dated August 14, 1922, and recorded in Book 5 of Mining Deeds, page 32 of the official records of Pinal County, comprising 84.77 acres, more or less.

38. PARCEL NO. 38:

The Maine #1, Maine #2, Maine #3, Gold Crown #1 and Gold Crown #2 patented lode mining claims, Mineral Survey No. 3669A, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 982602 from the United States of America to Queen Creek Copper Co., dated July 22, 1926, and recorded in Book 5 of Mining Deeds, page 26 of the official records of Pinal County, comprising 79.55 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Golden Eagle Extension lode claim Survey No. 2860; said Interloper lode claim Survey No. 3106; and that portion of said Gold Crown lode claim Survey No. 2860 designated as Tracts A and B, hereinafter described; beginning for the description of Tract "A" at corner No. 1 of said Maine #2 lode claim; thence north sixty-six degrees forty-nine minutes east ten and thirty-one-hundredths feet, thence south sixteen degrees twenty-six minutes east fifty-five and twenty-four-hundredths feet, thence south seventy-seven degrees forty-eight minutes west eighty-two-hundredths of a foot, thence north twenty-six degrees twenty minutes west fifty-four and seventy-nine-hundredths feet to the place of beginning; beginning for the description of Tract "B" at corner No. 1 of said Maine #2 lode claim, thence south twenty-six degrees twenty minutes east fifty-four and seventy-nine-hundredths feet, thence south seventy-seven degrees forty-eight minutes west two hundred eight-seven and twelve-hundredths feet, thence north sixty-six degrees forty-nine minutes east two hundred seventy-eight and eighty-seven-hundredths feet to the place of beginning; . . ."

39. PARCEL NO. 39:

The Overlook patented lode mining claim, Mineral Survey No. 4092, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1039436 from the United States of America to Magma Copper Co., dated August 6, 1930, and recorded in Book 5 of Mining Deeds, page 359 of the official records of Pinal County, comprising 20.638 acres, more or less.

40. PARCEL NO. 40:

The Silver Tip Extension No. 1 patented lode mining claim, Mineral Survey No. 4093, embracing a portion of Section 25, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1039437 from the United States

of America to Magma Copper Co., dated August 6, 1930, and recorded in Book 5 of Mining Deeds, page 357 of the official records of Pinal County, comprising 20.388 acres, more or less.

41. PARCEL NO. 41:

The Elm No. 1, Elm, Hard Rock No. 10, San Francisco, Queen Fraction, Oversight, New Calumet, Excelsior, Gold Crown, Golden Eagle Extension, Caledonia, Safety, Republic, Skyward, Oak No. 12, Aldridge, Hard Rock No. 8, Hard Rock No. 9, Windsor, Golden Eagle, Sacramento, Rain Cloud patented millsites, Mineral Survey No. 4095, embracing a portion of Sections 34 and 35, Township 1 South, Range 12 East, and Section 3, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1042131 from the United States of America to Magma Copper Co., dated November 18, 1930, and recorded in Book 5 of Mining Deeds, page 378 of the official records of Pinal County, comprising 106.849 acres, more or less.

42. PARCEL NO. 42:

The Yellow Coat, Florence Adams, North Queen, Black Rock and Baltic patented lode mining claims, Mineral Survey No. 4149, embracing a portion of Section 25, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 10962423 from the United States of America to Magma Copper Co., dated March 30, 1933, and recorded in Book 52, page 135 of the official records of Pinal County, comprising 69.191 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claims or Surveys Nos. 350 and 2929; and Watson, Picket Post, Palace and Tuna lode claims Survey No. 3484; and said Blackfoot lode claim Survey No. 2144 . . ."

43. PARCEL NO. 43:

The Spring patented lode mining claim, Mineral Survey No. 4150, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1062846 from the United States of America to Magma Copper Co., dated April 11, 1933, and recorded in Book 52, page 159 of the official records of Pinal County, comprising 15.894 acres, more or less.

44. PARCEL NO. 44:

The Irene, Silver Tip, Surpriser No. 2, Silver and Copper Pocket, Oakland, Square Deal, Overlook, Horse Shoe and Fraction patented millsites, Mineral Survey No. 4152, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1077084 from the United States of America to Magma Copper Co., dated July 29, 1935, and recorded in Book 6 of Mining Deeds, page 103 of the official records of Pinal County, comprising 42.779 acres, more or less; but excluding any portion that overlaps any property within the town of Superior city limits as of March 1, 2004.

45. PARCEL NO. 45:

The Horseshoe No. 1, Horseshoe No. 2 and Silver Tip Extension No. 2 patented lode mining claims, Mineral Survey No. 4231, embracing a portion of Sections 25 and 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1114857 from the United States of America to Magma Copper Co., dated October 8, 1942, and recorded in Book 6 of Mining Deeds, page 520 of the official records of Pinal County, comprising 49.828 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claims or Surveys Nos. 4150 and 4093; and said Silver Tip Extension No. 1 lode claim, Survey No. 2995, . . ."

46. PARCEL NO. 46:

The Lake Erie No. 3 and Lake Erie No. 4 patented lode mining claims, Mineral Survey No. 4235, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1119466 from the United States of America to Magma Copper Co., dated February 14, 1945, and recorded in Book 7 of Mining Deeds, page 11 of the official records of Pinal County, comprising 32.211 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claim or Survey No. 2994 and said Silver and Copper Pocket lode claim, Survey No. 2144, . . ."

47. PARCEL NO. 47:

The Happy Hunch and Magma Extension patented lode mining claims, Mineral Survey No. 4499A, and the Happy Hunch and Magma Extension patented millsites, Mineral Survey No. 4499B, embracing a portion of Sections 34 and 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-62-0113 from the United States of America to Magma Copper Co., dated June 1, 1962, and recorded in Docket 326, page 418 of the official records of Pinal County, such mining claims comprising 28.717 acres, more or less, and such millsites comprising 7.145 acres, more or less.

EXCEPT "all of that portion of ground within the boundaries of the Sacramento and Oakland mining claims, Survey No. 2930A; . . ."

48. PARCEL NO. 48:

The Elm, Elm No. 1, Elm No. 2 and Red Cloud patented lode mining claims, Mineral Survey Nos. 4500 and 4500A, embracing portions of Section 2 of Township 2 South, Range 12 East and Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-63-0087 from the United States of America to Magma Copper Co., dated February 15, 1963, and recorded in Docket 345, page 82 of the official records of Pinal County, comprising 37.72 acres, more or less.

EXCEPT "all of that portion of ground within the boundaries of the Excelsior lode claim, Survey No. 2860; the Golden Eagle Extension lode claim, Survey No. 2860; and the Main #2 lode claim, Survey 3669A; . . ."

49. PARCEL NO. 49:

The Magma, Magma No. 1 and Lake Erie No. 8 patented lode mining claims, Mineral Survey No. 4502, embracing a portion of Section 36 of Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-63-0007 from the United States of America to Magma Copper Co., dated July 13, 1962, and recorded in Docket 329, page 551 of the official records of Pinal County, comprising 60.681 acres, more or less.

50. PARCEL NO. 50:

The Ash No. 2, Ash No. 3, Blackfoot No. 4, "Life Saver," Horseshoe No. 3, New Lake, Oak, Oak No. 2, Silver Tip Extension No. 3, Whitefoot No. 1, White Foot No. 2 and White-Foot No. 3 patented lode mining claims, Mineral Survey No. 4633, embracing portions of Sections 25 and 36 of Township 1 South, Range 12 East, and Sections 30 and 31, Township 1 South, Range 13 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-68-0020 from the United States of America to Magma Copper Co., dated September 29, 1967, and recorded in Docket 518, page 934, of the official records of Pinal County, comprising 200.88 acres, more or less.

EXCEPT "all of those portions of ground within the boundaries of the Spring lode claim, Survey No. 4150, Horseshoe No. 2 lode claim, Survey No. 4231, Magma and Magma No. 1 lode claims, Survey No. 4502 . . ."

51. PARCEL NO. 51:

The East No. 1, East No. 2, East No. 6, East No. 7, East No. 11, East No. 12 and East No. 13 patented lode mining claims, Mineral Survey No. 4674, embracing portions of Sections 29 and 32, Township 1 South, Range 13 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-70-0081 from the United States of America to Magma Copper Co., dated May 4, 1970, and recorded in Docket 598, page 498 of the official records of Pinal County, comprising 139.404 acres, more or less.

52. PARCEL NO. 52:

The Blackfoot No. 2 and Blackfoot No. 3 patented lode mining claims, Mineral Survey No. 4501, embracing a portion of Section 25, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-63-0006 from the United States of America to Magma Copper Co., dated July 13, 1962, and recorded in Docket 329, page 540 of the official records of Pinal County, comprising 40.939 acres, more or less.

53. PARCEL NO. 53:

The Oak No. 4, Oak No. 7, Oak No. 14, Oak No. 16 and Oak No. 17 patented lode mining claims, Mineral Survey Nos. 4633 and 4797, embracing portions of Sections 31 and 32, Township 1 South, Range 13 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-96-0027 from the United States of America to Magma Copper Co., dated September 10, 1996, and recorded as Document Fee No. 1996-032585 of the official records of Pinal County, comprising 99.96 acres, more or less.

EXCEPT "all of that portion of the ground within the boundaries of the East No. 1 lode claim, Mineral Survey Number 4674 exclusive of its conflict with Oak No. 4 lode claim, East No. 2 lode claim, Mineral Survey Number 4674 and East No. 3 lode claim, Mineral Survey Number 4674; ..."

20040973524
OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL



The foregoing instrument is
a full, true and correct
copy of the original record
in this office.

Attest: 01/27/2005 2:14:24 PM

By *Helen Purcell* Recorder

AFFIDAVIT OF PROPERTY



OFFICIAL RECORDS OF
MARICOPA COUNTY RECORDER
HELEN PURCELL
2004-0973524 08/20/04 16:06

1. ASSESSOR'S PARCEL IDENTIFICATION NUMBER(s)
Primary Parcel: 105-02-001-A
BOOK MAP PARCEL SPLIT LETTER
Does this sale include any parcels that are being split / divided?
Check one: Yes ☐ No ☒
How many parcels, other than the Primary Parcel, are included in this sale? 48
Please list the additional parcels below (no more than four):
(1) 105-15-002 (3) 105-03-023
(2) 105-15-001 (4) 106-06-002

9. F
(a) C
(b) D
(c) Di
(d) Fi
Validated
(e) AS
AS ** AFFIDAVIT ** REIT29
Verify Pri.
Use Code: Full Cash Value: \$

2. SELLER'S NAME AND ADDRESS:
BHP Copper Inc.
1360 10th Oak Blvd.
Houston, TX 77056-3020
3. (a) BUYER'S NAME AND ADDRESS:
Resolution Copper Mining LLC
2525 East Arizona Biltmore Cir.
STE C-135, Phoenix, AZ 85016
(b) Are the Buyer and Seller related? Yes X No ☐
If Yes, state relationship: LLC Member/LLC

10. TYPE OF DEED OR INSTRUMENT (Check Only One Box):
a. ☐ Warranty Deed d. ☐ Contract or Agreement
b. ☒ Special Warranty Deed e. ☐ Quit Claim Deed
c. ☐ Joint Tenancy Deed f. ☐ Other:

4. ADDRESS OF PROPERTY:
N/A
5. MAIL TAX BILL TO:
Resolution Copper Mining LLC
2525 East Arizona Biltmore Cir.
STE C-135, Phoenix, AZ 85016

11. SALE PRICE: \$ N/A 00
12. DATE OF SALE (Numeric Digits): 05/04
Month Year
(For example: 03/05 for March 2005)
13. DOWN PAYMENT: \$ N/A 00

6. PROPERTY TYPE (for Primary Parcel): NOTE: Check Only One Box
a. ☐ Vacant Land f. ☐ Commercial or Industrial Use
b. ☐ Single Family Residence g. ☐ Agricultural
c. ☐ Condo or Townhouse h. ☐ Mobile or Manufactured Home
d. ☐ 2-4 Plex i. ☒ Other Use: Specify: Mining
e. ☐ Apartment Building

14. METHOD OF FINANCING:
a. ☐ Cash (100% of Sale Price) e. ☐ New loan(s) from financial institution:
b. ☐ Exchange or trade (1) ☐ Conventional (2) ☐ VA (3) ☐ FHA
c. ☐ Assumption of existing loan(s) L. ☒ Other financing: Specify: Exchange for LLC
d. ☐ Seller Loan (Carryback)

7. RESIDENTIAL BUYER'S USE: If you checked b, c, d or h in item 6 above, please check one of the following:
☐ To be occupied by owner or "family member." ☐ To be rented to someone other than "family member."
See reverse side for definition of a "family member."

15. PERSONAL PROPERTY (see reverse side for definition): Interest
(a) Did the Sale Price in item #11 include Personal Property that impacted the Sale Price by 5% or more? Yes ☐ No ☒ N/A
(b) If Yes, provide the dollar amount of the Personal Property:
\$ 00 AND

8. NUMBER OF UNITS: 0
For Apartment Properties, Motels, Hotels, Mobile Home Parks, RV Parks, Mini-Storage Properties, etc.

16. PARTIAL INTEREST: If only a partial ownership interest is being sold, briefly describe the partial interest: _____

THE UNDERSIGNED BEING DULY SWORN, ON OATH, SAYS THAT THE FOREGOING INFORMATION IS A TRUE AND CORRECT STATEMENT OF THE FACTS PERTAINING TO THE TRANSFER OF THE ABOVE DESCRIBED PROPERTY.

Signature of Seller/Agent: [Signature]
State of Arizona County of Pinal
Subscribed and sworn to before me on this 12 day of August 2004
Notary Public: Kathryn L. McClure
Notary Expiration Date: 12-10-08

17. PARTY COMPLETING AFFIDAVIT (Name, Address, Phone):
Resolution Copper Mining LLC
See above
Phone (602) 956-0223

18. LEGAL DESCRIPTION (attach copy if necessary):
See Attached Exhibit A.

Signature of Buyer/Agent: [Signature]
State of ARIZONA County of MARICOPA
Subscribed and sworn to before me on this 18 day of August 2004
Notary Public: [Signature]
Notary Expiration Date: 09/09/07

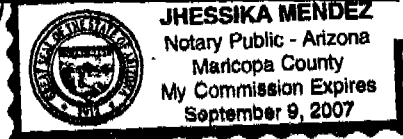
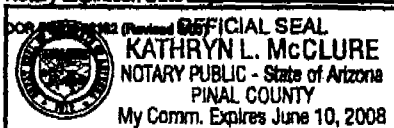


Exhibit A**to AFFIDAVIT OF PROPERTY VALUE
submitted by BHP COPPER INC and RESOLUTION COPPER MINING LLC**

The following described real property consisting of fee lands and patented mining claims and millsites situated in Pinal County, Arizona, and more particularly described as follows:

1. PARCEL NO. 1:

Lot 10 of Section 25, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 15.78 acres, more or less.

2. PARCEL NO. 2:

Lots 9, 10, 11, 15 and 16 of Section 26, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 233.01 acres, more or less.

3. PARCEL NO. 3:

The Southeast Quarter of Section 27, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 160.00 acres, more or less.

4. PARCEL NO. 4:

Lot 1, the Northwest Quarter of the Southeast Quarter (NW $\frac{1}{4}$ SE $\frac{1}{4}$), the West Half of the Southwest Quarter of the Southeast Quarter (W $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$), the North Half of the Northeast Quarter (N $\frac{1}{2}$ NE $\frac{1}{4}$) and the Southwest Quarter of the Northeast Quarter (SW $\frac{1}{4}$ NE $\frac{1}{4}$) of Section 34, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 211.85 acres, more or less.

5. PARCEL NO. 5:

The Northeast Quarter of the Southeast Quarter (NE $\frac{1}{4}$ SE $\frac{1}{4}$), the West Half of the Southeast Quarter of the Southeast Quarter (W $\frac{1}{2}$ SE $\frac{1}{4}$ SE $\frac{1}{4}$), the East Half of the Southwest Quarter of the Southeast Quarter (E $\frac{1}{2}$ SW $\frac{1}{4}$ SE $\frac{1}{4}$) of Section 34, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 80 acres, more or less.

6. PARCEL NO. 6:

Lots 12, 13, 14, 15 and the North half of the Northwest of the Southwest of Section 35, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 90.82 acres, more or less.

EXCEPT "any portion of Lot 15 lying Easterly of the Easterly Line of Porphyry Street as described in Docket 1559, Page 191."

7. PARCEL NO. 7:

Lots 2, 3, 11, and 17 of Section 35, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 58.47 acres, more or less.

8. PARCEL NO. 8:

Lots 5, 7, 8 and 9 of Section 36, Township 1 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 70.79 acres, more or less.

9. PARCEL NO. 9:

Lot 9 of Section 2, Township 2 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 1.64 acres, more or less.

10. PARCEL NO. 10:

Lot 21 of Section 3, Township 2 South, Range 12 East, G&SR Mer., patented under Patent No. 02-73-0048, dated March 27, 1973, containing 18.01 acres, more or less.

EXCEPT "any portion lying Southerly of the Northerly line of Main Street (old highway 60)."

11. PARCEL NO. 11:

Lots 8 and 9 of Section 3, Township 2 South, Range 12 East, G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 35.33 acres, more or less.

EXCEPT "any portion lying Southerly of the Northerly line of Main Street (old highway 60)."

12. PARCEL NO. 12:

The North Half of the Northeast Quarter ($N\frac{1}{2}NE\frac{1}{4}$), and the North Half of the South Half of the Northeast Quarter ($N\frac{1}{2}S\frac{1}{2}NE\frac{1}{4}$) of Section 4, Township 2 South, Range 12 East, G&SR Mer., patented under Patent No. 1038030, dated June 6, 1930, containing 120 acres, more or less.

EXCEPT "all that portion of the surface only to a depth of 40 feet of the East Half of Section 4, Township 2 South, Range 12 East of the Gila and Salt River Base and Meridian, Pinal County, Arizona, described as follows:

BEGINNING at the center quarter of said Section 4;

THENCE North 00 degrees 36 minutes 58 seconds West along the West line of said East half, 1205.62 feet to the Southerly line of the BHP ARIZONA RAILROAD COMPANY right-of-way;

THENCE along said Southerly line the following four courses:

- (1) along a non-tangent curve, the center of which bears North 42 degrees 19 minutes 01 seconds West, having a radius of 528.50 feet, through a central angle of 35 degrees 47 minutes 49 seconds and arc distance of 330.19 feet;
- (2) North 11 degrees 53 minutes 10 seconds East, 172.82 feet;
- (3) along a tangent curve, concave to the South, having a radius of 358.50 feet, through a central angle of 108 degrees 29 minutes 33 seconds an arc distance of 678.84 feet;
- (4) South 59 degrees 37 minutes 17 seconds East, 671.26 feet to the East line of the West half of the Northeast quarter of said Section 4;

THENCE South 00 degrees 34 minutes 55 seconds East, along said East line, 1069.41 feet to a point on the North line of property described in Warranty Deed, recorded in Docket 1709, Page 240, Pinal County Records;

THENCE South 89 degrees 18 minutes 32 seconds West, 327.80 feet to the Northwest corner of property described in said Warranty Deed;

THENCE South 00 degrees 35 minutes 26 seconds East, 431.35 feet to a point on the Northerly right-of-way line of U.S. 60 & 70;

THENCE South 80 degrees 39 minutes 39 seconds West, along said Northerly right-of-way line, 994.71 feet to the West line of said East half;

THENCE North 00 degrees 36 minutes 58 seconds West, 113.49 feet to the POINT OF BEGINNING."

13. PARCEL NO. 13:

The Surprisor No. 2 patented lode mining claim, Lot No. 38, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 6258 from the United States of America to Charles L. Hastings, dated July 31, 1882, and recorded as Fee No. 1999-027022 of the official records of Pinal County, comprising 18.32 acres, more or less.

14. PARCEL NO. 14:

The Windsor patented lode mining claim, Lot No. 37, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set

forth in Mineral Patent No. 6257 from the United States of America to Charles L. Hastings, dated July 31, 1882, and recorded as Fee No. 1999-027023 of the official records of Pinal County, containing 19.08 acres more or less.

15. PARCEL NO. 15:

The Hub patented lode mining claim, Lot No. 41, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 9362 from the United States of America to Silver Queen Mining Co., dated June 2, 1884, and recorded in Book 19 of Mining Deeds, page 159 of the official records of Pinal County, containing 10.16 acres more or less.

16. PARCEL NO. 16:

The Irene patented lode mining claim, Lot No. 42, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 10228 from the United States of America to Silver Queen Mining Co., dated October 21, 1885, and recorded in Book 19 of Mining Deeds, page 165 of the official records of Pinal County, containing 20.66 acres more or less.

17. PARCEL NO. 17:

The Mowry patented lode mining claim, Lot No. 44, embracing a portion of Section 23, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 11374 from the United States of America to Mowry Silver Mining Co., dated December 16, 1886, and recorded in Book 6 of Mining Deeds, page 358 of the official records of Pinal County, containing 14.35 acres more or less.

18. PARCEL NO. 18:

The Bilk patented lode mining claim, Lot No. 45, embracing a portion of Section 24, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 23791 from the United States of America to Mowry Silver Mining Co., dated January 4, 1894, and recorded in Book 6 of Mining Deeds, page 361 of the official records of Pinal County, containing 13.665 acres, more or less.

EXCEPT "that portion of the ground hereinbefore described, embraced in said mining claim in lot No. 44, and also all that portion of said Bilk vein or lode, . . ."

19. PARCEL NO. 19:

The Silver and Copper Pocket, Queen No. 2, Silver Tip, and Blackfoot patented lode mining claims, Mineral Survey No. 2144, embracing a portion of Section 25 and 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 44500 from the United States of America to Joseph Cope, dated November 13, 1906, and

recorded in Book 23, of Mining Deeds, page 199 of the official records of Pinal County, Arizona containing 80.457 acres, more or less.

20. PARCEL NO. 20:

The Sunnyside, Caldonia, Republic, Golden Eagle, Skyward, New Calumet, Excelsior, Golden Eagle Extension, and Gold Crown patented lode mining claims, Mineral Survey No. 2860, embracing a portion of Sections 35, and 36, Township 1 South, Range 12 East, and Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 335073 from the United States of America to Lake Superior and Arizona Mining & Smelting Co., dated May 20, 1913, and recorded in Book 1-A of Mining Deeds, page 178 of the official records of Pinal County, comprising 136.336 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claims or Surveys Nos. 342, 350 and 2144, said Lots Nos. 37 and 38; and said Monarch, Gold Crown No. 2, and Shark lode claims, unsurveyed, . . ."

21. PARCEL NO. 21:

The Square Deal patented lode mining claim, Mineral Survey No. 2860, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 893409 from the United States of America to Magma Copper Co., dated January 19, 1923, and recorded in Book 4 of Mining Deeds, pages 105 of the official records of Pinal County, containing 18.397 acres, more or less.

EXCEPT "any portion lying Westerly of the Westerly line of highway as shown on Plat of Square Deal Subdivision."

22. PARCEL NO. 22:

The San Francisco, Rain Cloud, Oakland, and Oversight patented lode mining claims, Mineral Survey No. 2930A, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 375319 from the United States of America to Queen Copper Mining Co., dated September 16, 1914, and recorded in Book 1-A of Mining Deeds, page 221 of the official records of Pinal County, containing 79.118 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Sunnyside lode claim Survey No. 2860 . . ."

23. PARCEL NO. 23:

The Shark, Monarch, Reddy Pay, Jumbo, Fraction, Oversight No. 1 and Oversight No. 3 patented lode mining claims, Mineral Survey No. 2994, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 397044 from the United States of America to Magma Copper Co.,

dated April 8, 1914, and recorded in Book 1-A of Mining Deeds, page 245 of the official records of Pinal County, containing 79.248 acres, more or less.

EXCEPT "all that portion of the ground, hereinbefore described, embraced in said Queen No. 2 and Silver and Copper Pocket lode claims, Survey No. 2144 and said Caledonia and Republic lode claims, Survey No. 2860, . . ."

24. PARCEL NO. 24:

The Selma and Skiberean patented lode mining claims, Mineral Survey No. 2837, embracing a portion of Sections 1 and 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 413338 from the United States of America to Consolidated Holding and Trust Co., dated June 12, 1914, and recorded in Book 2 of Mining Deeds, page 306 of the official records of Pinal County, containing 29.608 acres, more or less.

25. PARCEL NO. 25:

The Sacramento patented lode mining claim and the Queen Annex patented millsite, Mineral Survey Nos. 2930A and 2930B, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 431461 from the United States of America to Queen Copper Mining Co., dated September 16, 1914, and recorded in Book 1-A of Mining Deeds, page 288 of the official records of Pinal County, such mining claim containing 10.07 acres and such millsite containing 4.995 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Oakland and San Francisco lode claims Survey No. 2930 A, and also all that portion of the Sacramento vein or lode, . . ."

26. PARCEL NO. 26:

The Queen Fraction patented lode mining claim, Mineral Survey No. 2930A, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 431460 from the United States of America to Queen Copper Mining Co., dated September 16, 1914, and recorded in Book 1-A of Mining Deeds, page 286 of the official records of Pinal County, containing 6.747 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Oakland lode claim Survey No. 2930 A, . . ."

27. PARCEL NO. 27:

The David Harum, Interloper, Virginian and Taft patented lode mining claims, Mineral Survey No. 3106, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 524455 from the United States of America to William A. Davidson, dated March 13, 1916, and recorded in Book 2 of

Mining Deeds, pages 285-287 of the official records of Pinal County, Arizona containing 67.908 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claim or Lot No. 38 and said Gold Crown No. 2 lode claim, unsurveyed, . . ."

28. PARCEL NO. 28:

The Silverside patented lode mining claim, Mineral Survey No. 2929, embracing a portion of Section 26, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 330214 from the United States of America to Queen Copper Mining Co., dated May 2, 1913, and recorded in Book 1A of Mining Deeds, page 168 of the official records of Pinal County, containing 19.449 acres, more or less.

29. PARCEL NO. 29:

The Silver Tip Extension, Oversight No. 1, Shark, Reddy Pay, Jumbo and Monarch patented millsites, Mineral Survey No. 3144, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 562248 from the United States of America to Magma Copper Co., dated January 18, 1917, and recorded in Book 2 of Mining Deeds, page 324 of the official records of Pinal County, containing 26.414 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claim or Survey No. 2930A, . . ."

30. PARCEL NO. 30:

The Lone Star patented lode mining claim, Mineral Survey No. 3096, embracing a portion of Section 11, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 627987 from the United States of America to Consolidated Holding and Trust Co. & The Calumet and Arizona Mining Co., and Frank Snyder, dated April 29, 1918, and recorded in Book 3 of Mining Deeds, page 81 of the official records of Pinal County, containing 18.818 acres, more or less.

31. PARCEL NO. 31:

The Panic patented lode mining claim, Mineral Survey No. 2836, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 633038 from the United States of America to Consolidated Holding and Trust Co., dated June 4, 1918, and recorded in Book 4 of Mining Deeds, page 174 of the official records of Pinal County, containing 18.131 acres, more or less.

32. PARCEL NO. 32:

The Iron Cap and Mountain View patented lode mining claims, Mineral Survey No. 3094, embracing a portion of Section 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 631620 from the United States of America to Consolidated Holding and Trust Co. & The Calumet and Arizona Mining Co., dated May 24, 1918, and recorded in Book 3 of Mining Deeds, page 86 of the official records of Pinal County, Arizona, containing 37.636 acres, more or less.

33. PARCEL NO. 33:

The Hillside, Monte Carlo, Touch Not, Touch Not No. 3, Rawhide and Belmont patented lode mining claims, Mineral Survey No. 2838, embracing a portion of Sections 1 and 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 658231 from the United States of America to Consolidated Holding and Trust Co., dated January 10, 1919, and recorded in Book 3 of Mining Deeds, page 219 of the official records of Pinal County, comprising 113.998 acres.

34. PARCEL NO. 34:

The Pacific No. 1, Pacific No. 7, Pacific No. 13, Pacific No. 19, Pacific No. 25, Pacific No. 32 and Grand patented lode mining claims, Mineral Survey No. 3581, embracing a portion of Sections 12, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 838255 from the United States of America to Grand Pacific Mining Co., dated December 21, 1921, and recorded in Book 3 of Mining Deeds, page 561 of the official records of Pinal County, comprising 123.454 acres, more or less.

35. PARCEL NO. 35:

The Gerald Cansler patented lode mining claim, Mineral Survey No. 3483, embracing a portion of Section 26, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 857949 from the United States of America to Magma Chief Copper Co., dated April 6, 1922, and recorded in Book 5 of Mining Deeds, page 36 of the official records of Pinal County, comprising 20.452 acres, more or less.

36. PARCEL NO. 36:

The Silver Tip Extension and Horse Shoe patented lode mining claims, Mineral Survey No. 2995, embracing a portion of Sections 25 and 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 867990 from the United States of America to Magma Copper Co., dated June 14, 1922, and recorded in Book 4 of Mining Deeds, page 15, of the official records of Pinal County, comprising 40.966 acres, more or less.

37. PARCEL NO. 37:

The Long Wedge, Picket Post, Palace, Watson and Tuna patented lode mining claims, Mineral Survey No. 3482, embracing a portion of Sections 25 and 26, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 876071 from the United States of America to Magma Chief Copper Co., dated August 14, 1922, and recorded in Book 5 of Mining Deeds, page 32 of the official records of Pinal County, comprising 84.77 acres, more or less.

38. PARCEL NO. 38:

The Maine #1, Maine #2, Maine #3, Gold Crown #1 and Gold Crown #2 patented lode mining claims, Mineral Survey No. 3669A, embracing a portion of Section 2, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 982602 from the United States of America to Queen Creek Copper Co., dated July 22, 1926, and recorded in Book 5 of Mining Deeds, page 26 of the official records of Pinal County, comprising 79.55 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said Golden Eagle Extension lode claim Survey No. 2860; said Interloper lode claim Survey No. 3106; and that portion of said Gold Crown lode claim Survey No. 2860 designated as Tracts A and B, hereinafter described; beginning for the description of Tract "A" at corner No. 1 of said Maine #2 lode claim; thence north sixty-six degrees forty-nine minutes east ten and thirty-one-hundredths feet, thence south sixteen degrees twenty-six minutes east fifty-five and twenty-four-hundredths feet, thence south seventy-seven degrees forty-eight minutes west eighty-two-hundredths of a foot, thence north twenty-six degrees twenty minutes west fifty-four and seventy-nine-hundredths feet to the place of beginning; beginning for the description of Tract "B" at corner No. 1 of said Maine #2 lode claim, thence south twenty-six degrees twenty minutes east fifty-four and seventy-nine-hundredths feet, thence south seventy-seven degrees forty-eight minutes west two hundred eight-seven and twelve-hundredths feet, thence north sixty-six degrees forty-nine minutes east two hundred seventy-eight and eighty-seven-hundredths feet to the place of beginning; . . ."

39. PARCEL NO. 39:

The Overlook patented lode mining claim, Mineral Survey No. 4092, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1039436 from the United States of America to Magma Copper Co., dated August 6, 1930, and recorded in Book 5 of Mining Deeds, page 359 of the official records of Pinal County, comprising 20.638 acres, more or less.

40. PARCEL NO. 40:

The Silver Tip Extension No. 1 patented lode mining claim, Mineral Survey No. 4093, embracing a portion of Section 25, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1039437 from the United States

of America to Magma Copper Co., dated August 6, 1930, and recorded in Book 5 of Mining Deeds, page 357 of the official records of Pinal County, comprising 20.388 acres, more or less.

41. PARCEL NO. 41:

The Elm No. 1, Elm, Hard Rock No. 10, San Francisco, Queen Fraction, Oversight, New Calumet, Excelsior, Gold Crown, Golden Eagle Extension, Caledonia, Safety, Republic, Skyward, Oak No. 12, Aldridge, Hard Rock No. 8, Hard Rock No. 9, Windsor, Golden Eagle, Sacramento, Rain Cloud patented millsites, Mineral Survey No. 4095, embracing a portion of Sections 34 and 35, Township 1 South, Range 12 East, and Section 3, Township 2 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1042131 from the United States of America to Magma Copper Co., dated November 18, 1930, and recorded in Book 5 of Mining Deeds, page 378 of the official records of Pinal County, comprising 106.849 acres, more or less.

42. PARCEL NO. 42:

The Yellow Coat, Florence Adams, North Queen, Black Rock and Baltic patented lode mining claims, Mineral Survey No. 4149, embracing a portion of Section 25, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 10962423 from the United States of America to Magma Copper Co., dated March 30, 1933, and recorded in Book 52, page 135 of the official records of Pinal County, comprising 69.191 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claims or Surveys Nos. 350 and 2929; and Watson, Picket Post, Palace and Tuna lode claims Survey No. 3484; and said Blackfoot lode claim Survey No. 2144 ..."

43. PARCEL NO. 43:

The Spring patented lode mining claim, Mineral Survey No. 4150, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1062846 from the United States of America to Magma Copper Co., dated April 11, 1933, and recorded in Book 52, page 159 of the official records of Pinal County, comprising 15.894 acres, more or less.

44. PARCEL NO. 44:

The Irene, Silver Tip, Surpriser No. 2, Silver and Copper Pocket, Oakland, Square Deal, Overlook, Horse Shoe and Fraction patented millsites, Mineral Survey No. 4152, embracing a portion of Section 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1077084 from the United States of America to Magma Copper Co., dated July 29, 1935, and recorded in Book 6 of Mining Deeds, page 103 of the official records of Pinal County, comprising 42.779 acres, more or less; but excluding any portion that overlaps any property within the town of Superior city limits as of March 1, 2004.

45. PARCEL NO. 45:

The Horseshoe No. 1, Horseshoe No. 2 and Silver Tip Extension No. 2 patented lode mining claims, Mineral Survey No. 4231, embracing a portion of Sections 25 and 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1114857 from the United States of America to Magma Copper Co., dated October 8, 1942, and recorded in Book 6 of Mining Deeds, page 520 of the official records of Pinal County, comprising 49.828 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claims or Surveys Nos. 4150 and 4093; and said Silver Tip Extension No. 1 lode claim, Survey No. 2995, ..."

46. PARCEL NO. 46:

The Lake Erie No. 3 and Lake Erie No. 4 patented lode mining claims, Mineral Survey No. 4235, embracing a portion of Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 1119466 from the United States of America to Magma Copper Co., dated February 14, 1945, and recorded in Book 7 of Mining Deeds, page 11 of the official records of Pinal County, comprising 32.211 acres, more or less.

EXCEPT "all that portion of the ground hereinbefore described, embraced in said mining claim or Survey No. 2994 and said Silver and Copper Pocket lode claim, Survey No. 2144, ..."

47. PARCEL NO. 47:

The Happy Hunch and Magma Extension patented lode mining claims, Mineral Survey No. 4499A, and the Happy Hunch and Magma Extension patented millsites, Mineral Survey No. 4499B, embracing a portion of Sections 34 and 35, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-62-0113 from the United States of America to Magma Copper Co., dated June 1, 1962, and recorded in Docket 326, page 418 of the official records of Pinal County, such mining claims comprising 28.717 acres, more or less, and such millsites comprising 7.145 acres, more or less.

EXCEPT "all of that portion of ground within the boundaries of the Sacramento and Oakland mining claims, Survey No. 2930A; ..."

48. PARCEL NO. 48:

The Elm, Elm No. 1, Elm No. 2 and Red Cloud patented lode mining claims, Mineral Survey Nos. 4500 and 4500A, embracing portions of Section 2 of Township 2 South, Range 12 East and Section 36, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-63-0087 from the United States of America to Magma Copper Co., dated February 15, 1963, and recorded in Docket 345, page 82 of the official records of Pinal County, comprising 37.72 acres, more or less.

EXCEPT "all of that portion of ground within the boundaries of the Excelsior lode claim, Survey No. 2860; the Golden Eagle Extension lode claim, Survey No. 2860; and the Main #2 lode claim, Survey 3669A; ..."

49. PARCEL NO. 49:

The Magma, Magma No. 1 and Lake Erie No. 8 patented lode mining claims, Mineral Survey No. 4502, embracing a portion of Section 36 of Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-63-0007 from the United States of America to Magma Copper Co., dated July 13, 1962, and recorded in Docket 329, page 551 of the official records of Pinal County, comprising 60.681 acres, more or less.

50. PARCEL NO. 50:

The Ash No. 2, Ash No. 3, Blackfoot No. 4, "Life Saver," Horseshoe No. 3, New Lake, Oak, Oak No. 2, Silver Tip Extension No. 3, Whitefoot No. 1, White Foot No. 2 and White-Foot No. 3 patented lode mining claims, Mineral Survey No. 4633, embracing portions of Sections 25 and 36 of Township 1 South, Range 12 East, and Sections 30 and 31, Township 1 South, Range 13 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-68-0020 from the United States of America to Magma Copper Co., dated September 29, 1967, and recorded in Docket 518, page 934, of the official records of Pinal County, comprising 200.88 acres, more or less.

EXCEPT "all of those portions of ground within the boundaries of the Spring lode claim, Survey No. 4150, Horseshoe No. 2 lode claim, Survey No. 4231, Magma and Magma No. 1 lode claims, Survey No. 4502 ..."

51. PARCEL NO. 51:

The East No. 1, East No. 2, East No. 6, East No. 7, East No. 11, East No. 12 and East No. 13 patented lode mining claims, Mineral Survey No. 4674, embracing portions of Sections 29 and 32, Township 1 South, Range 13 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-70-0081 from the United States of America to Magma Copper Co., dated May 4, 1970, and recorded in Docket 598, page 498 of the official records of Pinal County, comprising 139.404 acres, more or less.

52. PARCEL NO. 52:

The Blackfoot No. 2 and Blackfoot No. 3 patented lode mining claims, Mineral Survey No. 4501, embracing a portion of Section 25, Township 1 South, Range 12 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-63-0006 from the United States of America to Magma Copper Co., dated July 13, 1962, and recorded in Docket 329, page 540 of the official records of Pinal County, comprising 40.939 acres, more or less.

53. PARCEL NO. 53:

The Oak No. 4, Oak No. 7, Oak No. 14, Oak No. 16 and Oak No. 17 patented lode mining claims, Mineral Survey Nos. 4633 and 4797, embracing portions of Sections 31 and 32, Township 1 South, Range 13 East, G&SR Mer., a more particular description of which is set forth in Mineral Patent No. 02-96-0027 from the United States of America to Magma Copper Co., dated September 10, 1996, and recorded as Document Fee No. 1996-032585 of the official records of Pinal County, comprising 99.96 acres, more or less.

EXCEPT "all of that portion of the ground within the boundaries of the East No. 1 lode claim, Mineral Survey Number 4674 exclusive of its conflict with Oak No. 4 lode claim, East No. 2 lode claim, Mineral Survey Number 4674 and East No. 3 lode claim, Mineral Survey Number 4674; ..."

APPENDIX H - LOWER SAN PEDRO RIVER



First American

First American Title Insurance Company
National Commercial Services
4801 East Washington Street
Phoenix, AZ 85034
Phn - (602) 685-7000

Bruno Hegner
Swift Current Land & Cattle, LLC
2425 E. Arizona Biltmore Circle, Suite 135
Phoenix, AZ 85016

September 23, 2004

Title Officer: Ron B. Robertson
Phone: (602) 685-7736

Order Number: NCS-44196-4335

Property: , , AZ

Attached please find the following item(s):

A Policy of Title Insurance

Thank You for your confidence and support. We at First American Title Company maintain the fundamental principle:

Customer First!

First American Title Insurance Company

Policy of Title Insurance



ISSUED BY

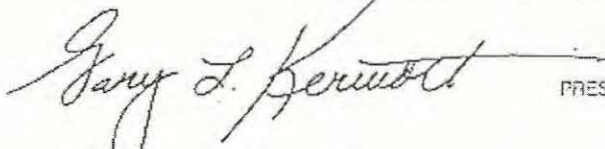
First American Title Insurance Company

SUBJECT TO THE EXCLUSIONS FROM COVERAGE, THE EXCEPTIONS FROM COVERAGE CONTAINED IN SCHEDULE B AND THE CONDITIONS AND STIPULATIONS, FIRST AMERICAN TITLE INSURANCE COMPANY, a California corporation, herein called the Company, insures, as of Date of Policy shown in Schedule A, against loss or damage, not exceeding the Amount of Insurance stated in Schedule A, sustained or incurred by the insured by reason of:

1. Title to the estate or interest described in Schedule A being vested other than as stated therein;
2. Any defect in or lien or encumbrance on the title;
3. Unmarketability of the title;
4. Lack of a right of access to and from the land.

The Company will also pay the costs, attorneys' fees and expenses incurred in defense of the title, as insured, but only to the extent provided in the Conditions and Stipulations.

First American Title Insurance Company

BY  PRESIDENT

ATTEST  SECRETARY



First American Title Insurance Company

SCHEDULE A

Type of Coverage: **ALTA Standard Owner's (1992)**

Amount of Insurance: \$3,500,000.00

Policy Number: NCS-44196-4335

Date of Policy: March 26, 2004 at 2004-021434

1. Name of insured:

Swift Current Land & Cattle LLC, an Arizona limited liability company

2. The estate or interest in the land which is covered by this policy is:

Fee Simple

3. Title to the estate or interest in the land is vested in:

Swift Current Land & Cattle LLC, an Arizona limited liability company

4. The land referred to in this policy is described as follows:

Real property in the County of Pinal, State of Arizona, described as follows:

PARCEL 1:

THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER OF SECTION 3, TOWNSHIP 9 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 2:

LOTS 3 AND 4; THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER; THE WEST HALF OF THE NORTHWEST OF THE SOUTHEAST QUARTER; THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER; THE SOUTHWEST QUARTER; AND THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER OF SECTION 4, TOWNSHIP 9 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 3:

THE WEST HALF OF THE NORTHWEST QUARTER; THE NORTH HALF OF THE SOUTHWEST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHWEST QUARTER; THE SOUTHWEST QUARTER OF THE SOUTHWEST QUARTER; THE NORTH HALF OF THE NORTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER; AND THE NORTH HALF OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 33, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 4:

THE NORTH HALF OF THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 32, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 5:

THE EAST HALF AND THE EAST HALF OF THE NORTHWEST QUARTER OF SECTION 29, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 6:

THE WEST HALF OF THE WEST HALF OF SECTION 28, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 7:

THE SOUTHWEST QUARTER OF THE NORTHWEST QUARTER AND THE WEST HALF OF THE SOUTHWEST QUARTER OF SECTION 21, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 8:

THE WEST HALF; THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER; THE NORTH HALF OF THE NORTHEAST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

EXCEPTING A PARCEL OF LAND LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 17 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 20;

THENCE SOUTH 88 DEGREES 25 MINUTES 07 SECONDS WEST ALONG THE CENTER SECTION LINE OF SAID SECTION 20 FOR A DISTANCE OF 1165.09 FEET TO THE POINT OF BEGINNING OF THE LAND TO BE DESCRIBED;

THENCE SOUTH 88 DEGREES 25 MINUTES 07 SECONDS WEST FOR A DISTANCE OF 39.66 FEET ALONG THE ABOVE SAID CENTER SECTION LINE TO A POINT HEREAFTER REFERRED TO AS POINT "A";

THENCE SOUTH 88 DEGREES 25 MINUTES 07 SECONDS WEST ALONG THE ABOVE SAID CENTER SECTION LINE FOR A DISTANCE OF 376.27 FEET TO A SET 5/8 INCH REBAR;

THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST FOR A DISTANCE OF 133.54 FEET TO A POINT HEREAFTER REFERRED TO AS POINT "B";

THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST FOR A DISTANCE OF 442.77 FEET TO A SET 5/8 INCH REBAR;

THENCE NORTH 72 DEGREES 29 MINUTES 09 SECONDS EAST FOR A DISTANCE OF 435.98 FEET TO A SET 5/8 INCH REBAR;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST FOR A DISTANCE OF 696.04 FEET TO THE POINT OF BEGINNING.

PARCEL 9:

THE NORTH HALF OF THE SOUTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE SOUTHEAST QUARTER AND THE SOUTHWEST QUARTER OF THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

EXCEPTING A PARCEL OF LAND LOCATED IN THE NORTHEAST QUARTER OF SECTION 20, TOWNSHIP 8 SOUTH, RANGE 17 EAST, OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA, DESCRIBED AS FOLLOWS:

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 20;

THENCE SOUTH 88 DEGREES 25 MINUTES 07 SECONDS WEST ALONG THE CENTER SECTION LINE EOF SAID SECTION 20 FOR A DISTANCE OF 1165.09 FEET TO THE POINT OF BEGINNING OF THE LAND TO BE DESCRIBED;

THENCE SOUTH 88 DEGREES 25 MINUTES 07 SECONDS WEST FOR A DISTANCE OF 39.66 FEET ALONG THE ABOVE SAID CENTER SECTION LINE TO A POINT HEREAFTER REFERRED TO AS POINT "A";

THENCE SOUTH 88 DEGREES 25 MINUTES 07 SECONDS WEST ALONG THE ABOVE SAID CENTER SECTION LINE FOR A DISTANCE OF 376.27 FEET TO A SET 5/8 INCH REBAR;

THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST FOR A DISTANCE EOF 133.54 FEET TO A POINT HEREAFTER REFERRED TO AS POINT "B";

THENCE NORTH 00 DEGREES 00 MINUTES 00 SECONDS EAST FOR A DISTANCE OF 442.77 FEET TO A SET 5/8 INCH REBAR;

THENCE NORTH 72 DEGREES 29 MINUTES 09 SECONDS EAST FOR A DISTANCE OF 435.98 FEET TO A SET 5/8 INCH REBAR;

THENCE SOUTH 00 DEGREES 00 MINUTES 00 SECONDS EAST FOR A DISTANCE OF 696.04 FEET TO THE POINT OF BEGINNING.

PARCEL 10:

THE EAST HALF OF THE NORTHEAST QUARTER AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 19, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA;

EXCEPT THAT PORTION THEREOF CONVEYED BY FRANK SMITH COMPANY, A CORPORATION TO ARIZONA RARE METALS COMPANY, A CORPORATION, BY DEED DATED APRIL 7, 1916, RECORDED APRIL 15, 1916, IN BOOK 30 OF DEEDS, PAGE 402, RECORDS OF PINAL COUNTY, ARIZONA; AND

EXCEPT THAT PORTION THEREOF LYING WITHIN THE SANTA CATALINA MILLSITE; AND

EXCEPT THAT PORTION THEREOF LYING WITHIN THE TOWNSITE OF MAMMOTH, ACCORDING TO THE PLAT THEREOF OF RECORD IN THE OFFICE OF THE COUNTY RECORDER OF PINAL COUNTY, ARIZONA; AND

FURTHER EXCEPT THAT PORTION DESCRIBED AS COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 19;

THENCE SOUTH 88 DEGREES 45 MINUTES 05 SECONDS WEST ALONG THE CENTER SECTION LINE A DISTANCE OF 532.18 FEET TO THE POINT OF BEGINNING OF THE LAND TO BE DESCRIBED BED;

THENCE SOUTH 36 DEGREES 30 MINUTES 39 SECONDS EAST FOR A DISTANCE OF 124.13 FEET TO A SET 5/8 INCH STEEL PIN;

THENCE SOUTH 57 DEGREES 29 MINUTES 27 SECONDS WEST FOR A DISTANCE OF 260.64 FEET TO A SET 5/8 INCH STEEL PIN ON THE EAST LINE OF MAMMOTH TOWNSITE;

THENCE NORTH 36 DEGREES 30 MINUTES 39 SECONDS WEST FOR A DISTANCE OF 224.71 FEET ALONG THE EAST LINE OF MAMMOTH TOWNSITE TO A FOUND ONE INCH STEEL PIN;

THENCE NORTH 48 DEGREES 14 MINUTES 43 SECONDS WEST FOR A DISTANCE OF 77.89 FEET ALONG THE EAST LINE OF MAMMOTH TOWNSITE TO A FOUND ONE INCH STEEL PIN;

THENCE NORTH 88 DEGREES 45 MINUTES 05 SECONDS EAST FOR A DISTANCE OF 337.83 FEET TO THE POINT OF BEGINNING; AND

FURTHER EXCEPT THAT PORTION DESCRIBED AS COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 19;

THENCE SOUTH 88 DEGREES 45 MINUTES 05 SECONDS WEST ALONG THE CENTER SECTION LINE A DISTANCE OF 532.18 FEET TO A POINT;

THENCE SOUTH 36 DEGREES 30 MINUTES 39 SECONDS EAST A DISTANCE OF 124.13 FEET TO THE POINT OF BEGINNING;

THENCE SOUTH 36 DEGREES 30 MINUTES 39 SECONDS EAST FOR A DISTANCE OF 307.55 TO A SET 5/8 INCH STEEL PIN ON THE NORTH RIGHT-OF-WAY LINE OF BLUEBIRD STREET;

THENCE SOUTH 53 DEGREES 29 MINUTES 21 SECONDS WEST FOR A DISTANCE OF 260.00 FEET ALONG THE NORTH RIGHT-OF-WAY LINE OF BLUEBIRD STREET TO A FOUND 1/2 INCH REBAR;

THENCE NORTH 36 DEGREES 30 MINUTES 39 SECONDS WEST FOR A DISTANCE OF 325.74 FEET ALONG THE EAST LINE OF MAMMOTH TOWNSITE TO A SET 5/8 INCH REBAR;

THENCE NORTH 57 DEGREES 29 MINUTES 27 SECONDS EAST FOR A DISTANCE OF 260.64 FEET TO THE POINT OF BEGINNING; AND,

FURTHER EXCEPT THAT PORTION OF THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SAID SECTION 19, DESCRIBED AS FOLLOWS;

COMMENCING AT THE EAST QUARTER CORNER OF SAID SECTION 19;

THENCE SOUTH 01 DEGREES 26 MINUTES 07 SECONDS EAST, A DISTANCE OF 756.29 FEET ALONG THE EAST LINE OF SAID SECTION 19 TO THE POINT OF BEGINNING OF THE LAND TO BE DESCRIBED;

THENCE SOUTH 01 DEGREES 26 MINUTES 07 SECONDS EAST FOR A DISTANCE OF 452.53 FEET ALONG THE EAST LINE OF SAID SECTION 19 TO A POINT;

THENCE NORTH 36 DEGREES 30 MINUTES 10 SECONDS WEST FOR A DISTANCE OF 814.85 FEET ALONG THE EAST LINE OF MAMMOTH TOWNSITE TO A POINT ON THE SOUTH RIGHT-OF-WAY LINE OF BLUEBIRD STREET;

THENCE NORTH 53 DEGREES 29 MINUTES 21 SECONDS EAST FOR A DISTANCE OF 260.00 FEET ALONG THE SOUTH RIGHT-OF-WAY LINE OF BLUEBIRD STREET TO A POINT;

THENCE SOUTH 36 DEGREES 30 MINUTES 10 SECONDS EAST FOR A DISTANCE OF 444.50 FEET TO THE POINT OF BEGINNING.

PARCEL 11:

LOT 1; THE NORTH HALF OF THE NORTHEAST QUARTER; THE NORTHEAST QUARTER OF THE NORTHWEST QUARTER AND THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SECTION 18, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA;

EXCEPT ANY PORTION LYING WITHIN STATE HIGHWAY 77-177 RIGHT OF WAY; AND

EXCEPT THAT PART OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 18, DESCRIBED AS:

COMMENCING AT THE SOUTHWEST CORNER OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 18, SAID POINT BEING THE POINT OF BEGINNING OF THE LAND TO BE DESCRIBED;

THENCE NORTH 00 DEGREES 15 MINUTES 15 SECONDS WEST ALONG THE WEST LINE OF SAID SECTION 18 A DISTANCE OF 85.86 FEET TO A POINT;

THENCE NORTH 39 DEGREES 54 MINUTES 19 SECONDS EAST A DISTANCE OF 1231.61 FEET TO A POINT;

THENCE SOUTH 63 DEGREES 21 MINUTES 53 SECONDS EAST A DISTANCE OF 1316.37 FEET TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF STATE ROUTE NO. 77;

THENCE SOUTH 16 DEGREES 00 MINUTES 53 SECONDS WEST ALONG SAID RIGHT-OF-WAY LINE A DISTANCE OF 174.25 FEET TO A RIGHT-OF-WAY MONUMENT;

THENCE SOUTHWESTERLY ALONG A SPIRAL TRANSITION CURVE TO THE LEFT HAVING A CORD OF 284.12 FEET AND A CORD BEARING OF SOUTH 15 MINUTES 07 DEGREES 09 MINUTES WEST;

THENCE NORTH 89 DEGREES 57 MINUTES 37 SECONDS WEST A DISTANCE OF 1844.22 FEET TO THE POINT OF BEGINNING; AND

EXCEPT THAT PART OF THE NORTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 18, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF SAID SECTION 18, SAID POINT BEING THE POINT OF BEGINNING OF THE LAND TO BE DESCRIBED;

THENCE SOUTH 69 DEGREES 27 MINUTES 06 SECONDS EAST A DISTANCE OF 849.67 FEET TO A POINT;

THENCE SOUTH 39 DEGREES 54 MINUTES 19 SECONDS WEST A DISTANCE OF 1231.61 FEET TO A POINT ON THE WEST LINE OF SAID SECTION 18;

THENCE NORTH 00 DEGREES 15 MINUTES 15 SECONDS WEST ALONG THE WEST LINE OF SAID SECTION 18 A DISTANCE OF 1243.02 FEET TO THE POINT OF BEGINNING; AND

FURTHER EXCEPT THAT PARCEL OF SAID SECTION 18:

BEGINNING AT THE CENTER OF SECTION 18;

THENCE SOUTH 89 DEGREES 52 MINUTES 44 SECONDS WEST FOR A DISTANCE OF 940.24 FEET TO THE SOUTHEAST CORNER OF SAID PARCEL AND THE TRUE POINT OF BEGINNING;

THENCE ALONG A CURVE TO THE RIGHT HAVING A RADIUS OF 4683.66 FEET AND A ARC LENGTH OF 428.49 FEET, BEING SUBTENDED BY A CORD OF NORTH 01 DEGREES 08 MINUTES 41 SECONDS EAST FOR A DISTANCE OF 428.34 FEET;

THENCE SOUTH 85 DEGREES 30 MINUTES 57 SECONDS WEST FOR A DISTANCE OF 202.88 FEET;

THENCE SOUTH 03 DEGREES 22 MINUTES 03 SECONDS WEST FOR A DISTANCE OF 413.57 FEET;

THENCE NORTH 89 DEGREES 52 MINUTES 44 SECONDS EAST FOR A DISTANCE OF 218.00 FEET TO THE TRUE POINT OF BEGINNING; AND

FURTHER EXCEPT A PARCEL OF LAND IN SAID SECTION 18:

BEGINNING AT THE WEST QUARTER CORNER OF SAID SECTION 18;

THENCE NORTH 89 DEGREES 44 MINUTES 58 SECONDS EAST 1302.21 FEET TO THE TRUE POINT OF BEGINNING;

THENCE NORTH 00 DEGREES 11 MINUTES 27 SECONDS EAST ALONG THE WEST BOUNDARY OF THE SOUTHEAST QUARTER OF THE NORTHWEST QUARTER OF SAID SECTION 18, 827.62 FEET;

THENCE SOUTH 89 DEGREES 48 MINUTES 33 SECONDS EAST 427.50 FEET TO THE WESTERLY RIGHT OF WAY LINE FOR STATE ROUTE 77;

THENCE SOUTHWESTERLY ALONG THE RIGHT OF WAY FOR STATE ROUTE 77 ON A NON TANGENT CURVE TO THE LEFT HAVING A RADIUS OF 4744.57 FEET, PASSING THROUGH A CENTRAL ANGLE OF 04 DEGREES 49 MINUTES 46 SECONDS, AN ARC LENGTH OF 399.91 FEET;

THENCE SOUTH 85 DEGREES 37 MINUTES 00 SECONDS WEST, 202.84 FEET;

THENCE SOUTH 03 DEGREES 22 MINUTES 53 SECONDS WEST, 413.69 FEET TO THE EAST-WEST CENTER LINE OF SAID SECTION 18;

THENCE SOUTH 89 DEGREES 53 MINUTES 28 SECONDS WEST ALONG THE EAST-WEST CENTERLINE OF SAID SECTION 18, 160.58 FEET TO THE TRUE POINT OF BEGINNING; AND

FURTHER EXCEPT THAT PART OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 18, DESCRIBED AS FOLLOWS:

COMMENCING AT THE NORTHWEST CORNER OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 18;

THENCE SOUTH 89 DEGREES 57 MINUTES 37 SECONDS EAST FOR A DISTANCE OF 1312.20 FEET ALONG THE NORTH LINE OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 18 TO THE POINT OF BEGINNING OF THE LAND TO BE DESCRIBED:

THENCE SOUTH 89 DEGREES 57 MINUTES 37 SECONDS EAST FOR A DISTANCE OF 532.02 FEET ALONG THE NORTH LINE OF THE SOUTH HALF OF THE NORTHWEST QUARTER OF SAID SECTION 18 TO A POINT ON THE WEST RIGHT-OF-WAY LINE OF STATE ROUTE 77;

THENCE ALONG A CURVE CONCAVE TO THE LEFT, HAVING A RADIUS OF 4744.57 FEET AND AN ARC LENGTH OF 506.39 FEET, BEING SUBTENDED BY A CHORD OF SOUTH 12 DEGREES 06 MINUTES 45 SECONDS WEST, FOR A DISTANCE OF 506.15 FEET ALONG THE WEST RIGHT-OF-WAY LINE OF STATE ROUTE 77;

THENCE NORTH 89 DEGREES 53 MINUTES 41 SECONDS WEST FOR A DISTANCE OF 427.07 FEET ALONG THE NORTH PROPERTY LINE OF THE DIALYSIS CENTER TO A PLASTIC CAP RLS 29869;

THENCE NORTH 00 DEGREES 08 MINUTES 42 SECONDS EAST FOR A DISTANCE OF 494.47 FEET TO THE POINT OF BEGINNING.

PARCEL 12:

THE NORTHWEST QUARTER; THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER AND THE EAST HALF OF THE SOUTHWEST QUARTER OF SECTION 17, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

PARCEL 13:

LOTS 2, 3 AND 4; THE EAST HALF OF THE SOUTHWEST QUARTER AND THE SOUTHWEST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 7, TOWNSHIP 8 SOUTH, RANGE 17 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

EXCEPT ANY PORTION LYING WITHIN THE STATE ROUTE 77 RIGHT OF WAY.

PARCEL 14:

THE WEST HALF OF THE NORTHEAST QUARTER; THE SOUTHEAST QUARTER OF THE NORTHEAST QUARTER; AND THE NORTHEAST QUARTER OF THE SOUTHEAST QUARTER OF SECTION 12, TOWNSHIP 8 SOUTH, RANGE 16 EAST OF THE GILA AND SALT RIVER BASE AND MERIDIAN, PINAL COUNTY, ARIZONA.

SCHEDULE B

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

PART ONE

SECTION ONE

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
2. Any facts, rights, interests, or claims which are not shown by the public records but which could be ascertained by an inspection of said land or by making inquiry of persons in possession thereof.
3. Easements, claims of easement or encumbrances which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by public records.
5. Unpatented mining claims; reservations or exceptions in patents or in Acts authorizing the issuance thereof; water rights, claims or title to water.
6. Any lien, or right to a lien, for services, labor or material heretofore or hereafter furnished, imposed by law and not shown by the public records.

SECTION TWO

1. Taxes for the full year of 2003.
(The first half is due October 1, 2003 and is delinquent November 1, 2003. The second half is due March 1, 2004 and is delinquent May 1, 2004 .)
2. Any charge upon said land by reason of its inclusion in Central Arizona Water Conservation District.
3. The rights or claims of title, if any, by the State of Arizona to any portion of the property described in Schedule A being located in the bed of any river or dry wash.
4. Terms, covenants and conditions as set forth in instrument recorded in Docket 1987, Page 335.

(Affects Parcel No. 2 and other property)

5. The terms and provisions contained in the document entitled "Pipe Line License" recorded January 18, 1955 as Docket 117, Page 306. of Official Records.

6. An easement for electric power line and incidental purposes in the document recorded as Book 54 of Deeds, Page 579 and Page 580 of Official Records.

(Affects Parcel No. 11 and 13)
7. An easement for electric power line and incidental purposes in the document recorded as Book 55 of Deeds, Page 347 of Official Records.

(Affects Parcel No. 11 and 13)
8. An easement for railroad, telephone and telegraph lines and incidental purposes in the document recorded as Docket 113, Page 473 of Official Records.

(Affects Parcel No. 14 and other property)
9. An easement for public highway and incidental purposes in the document recorded as Docket 139, Page 463 of Official Records.

(Affects Parcel No. 11 and 13)
10. An easement for communication lines and incidental purposes in the document recorded as Docket 184, Page 473 of Official Records.

(Affects Parcel No. 6 and 8)
11. An easement for pipe line and incidental purposes in the document recorded as Docket 191, Page 568 of Official Records.

(Affects Parcel No. 11 and 13)
12. An easement for roadway purposes and incidental purposes in the document recorded as Docket 242, Page 104 of Official Records.

(Affects Parcel No. 10)
13. An easement for roadway and incidental purposes in the document recorded as Docket 297, Page 319 of Official Records.

(Affects Parcel No. 13 and other property)
14. An easement for transmission lines and incidental purposes in the document recorded as Docket 358, Page 574 of Official Records.

(Affects Parcel No. 8 and 9)

15. An easement for electric power transmission system and incidental purposes in the document recorded as Docket 362, Page 595 of Official Records.

(Affects Parcel No. 3)
16. An easement for electric power transmission line and incidental purposes in the document recorded as Docket 413, Page 322 of Official Records.

(Affects Parcel No. 11)
17. An easement for electric lines and incidental purposes in the document recorded as Docket 686, Page 465 of Official Records.

(Affects Parcel No. 5)
18. An easement for electric lines and incidental purposes in the document recorded as Docket 687, Page 292 of Official Records.

(Affects Parcel No. 9)
19. An easement for haul road and incidental purposes in the document recorded as Docket 870, Page 260 of Official Records.

(Affects Parcel No. 11)
20. An easement for drainage and incidental purposes in the document recorded as Docket 2076, Page 792 of Official Records.

(Affects Parcel No. 11)
21. An easement for access road, power transmission site and communications and incidental purposes in the document recorded as 1999-045692 of Official Records.

(Affects Parcel No. 7, 8 and 9)
22. An easement for power line and roadway and incidental purposes in the document recorded as 2003-065283 of Official Records.

EXCLUSIONS FROM COVERAGE

The following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

- 1.(a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to
 - (i) the occupancy, use, or enjoyment of the land;
 - (ii) the character, dimensions or location of any improvement now or hereafter erected on the land;
 - (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or
 - (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental police power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
2. Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.
3. Defects, liens, encumbrances, adverse claims, or other matters:
 - (a) created, suffered, assumed or agreed to by the insured claimant;
 - (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
 - (c) resulting in no loss or damage to the insured claimant;
 - (d) attaching or created subsequent to Date of Policy; or
 - (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.
4. Any claim, which arises out of the transaction vesting in the Insured the estate or interest insured by this policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:
 - (i) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
 - (ii) the transaction creating the estate or interest insured by this policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (a) to timely record the instrument of transfer; or
 - (b) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

CONDITIONS AND STIPULATIONS

1. DEFINITION OF TERMS.

The following terms when used in this policy mean:

- (a) "insured": the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors.
- (b) "insured claimant": an insured claiming loss or damage.
- (c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of any public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.
- (d) "land": the land described or referred to in Schedule (A), and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule (A), nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.
- (e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument.
- (f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a)(iv) of the Exclusions from Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States district court for the district in which the land is located.
- (g) "unmarketability of the title": an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE.

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either

- (i) an estate or interest in the land, or
- (ii) an indebtedness secured by a purchase money mortgage given to an insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT.

The insured shall notify the Company promptly in writing

- (i) in case of any litigation as set forth in Section 4(a) below,

(ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy, or

(iii) if title to the estate or interest, an insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

4. DEFENSE AND PROSECUTION OF ACTIONS; DUTY OF INSURED CLAIMANT TO COOPERATE.

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title or interest as insured but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy.

The Company shall have the right to select counsel of its choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by an insured in the defense of those causes of action which allege matters not insured against by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to an insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement; and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

5. PROOF OF LOSS OR DAMAGE.

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY.

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties other than the insured or an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b) (i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

7. DETERMINATION, EXTENT OF LIABILITY AND COINSURANCE.

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of:

(i) the Amount of Insurance stated in Schedule A; or,

(ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

(b) In the event the Amount of Insurance stated in Schedule A at the Date of Policy is less than 80 percent of the value of the insured estate or interest or the full consideration paid for the land, whichever is less, or if subsequent to the Date of Policy an improvement is erected on the land which increases the value of the insured estate or interest by at least 20 percent over the Amount of Insurance stated in Schedule A, then this Policy is subject to the following:

(i) where no subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that the amount of insurance at Date of Policy bears to the total value of the insured estate or interest at Date of Policy; or (ii) where a subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that 120 percent of the Amount of Insurance stated in Schedule A bears to the sum of the Amount of Insurance stated in Schedule A and the amount expended for the improvement. The provisions of this paragraph shall not apply to costs, attorneys' fees and expenses for which the Company is liable under this policy, and shall only apply to that portion of any loss which exceeds, in the aggregate, 10 percent of the Amount of Insurance stated in Schedule A.

(c) The Company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

8. APPORTIONMENT.

If the land described in Schedule (A)(C) consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

9. LIMITATION OF LIABILITY.

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY.

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

11. LIABILITY NONCUMULATIVE.

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

12. PAYMENT OF LOSS.

(a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

13. SUBROGATION UPON PAYMENT OR SETTLEMENT.

(a) The Company's Right of Subrogation.

Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

(b) The Company's Rights Against Non-insured Obligors.

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

14. ARBITRATION.

Unless prohibited by applicable law, either the Company or the insured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. All arbitrable matters when the Amount of Insurance is \$1,000,000 or less shall be arbitrated at the option of either the Company or the insured. All arbitrable matters when the Amount of Insurance is in excess of \$1,000,000 shall be arbitrated only when agreed to by both the Company and the insured. Arbitration pursuant to this policy and under the Rules in effect on the date the demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT.

- (a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.
- (b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.
- (c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

16. SEVERABILITY.

In the event any provision of the policy is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

17. NOTICES, WHERE SENT.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to the Company at 1 First American Way, Santa Ana, California 92707, or to the office which issued this policy.

APPENDIX H - DRIPPING SPRINGS



1850 North Central Avenue
Suite 300
Phoenix, AZ 85004
Watts 1.800.523.0358
Facsimile 1.602.263.0433
Main 1.602.287.3500

February 26, 2007

SWIFT CURRENT LAND & CATTLE LLC
2525 E. ARIZONA BILTMORE CIR
C135
PHOENIX, AZ 85016

VIA US MAIL

Re: , , AZ
Parcel: 101-01-005


Escrow No.: 00546557 - 001 - JM1

Enclosed herein please find the following documents in connection with the closing of the above referenced escrow:

☒ TITLE POLICY

Thank you for your business! It has been a pleasure working with you. If you should have any questions, please do not hesitate to contact me.

Sincerely,
Lawyers Title Insurance Corporation


Juliana McCabe
Escrow Officer

CONDITIONS AND STIPULATIONS

1. DEFINITION OF TERMS.

The following terms when used in this policy mean:

(a) "insured": the insured named in Schedule A, and, subject to any rights or defenses the Company would have had against the named insured, those who succeed to the interest of the named insured by operation of law as distinguished from purchase including, but not limited to, heirs, distributees, devisees, survivors, personal representatives, next of kin, or corporate or fiduciary successors.

(b) "insured claimant": an insured claiming loss or damage.

(c) "knowledge" or "known": actual knowledge, not constructive knowledge or notice which may be imputed to an insured by reason of the public records as defined in this policy or any other records which impart constructive notice of matters affecting the land.

(d) "land": the land described or referred to in Schedule A, and improvements affixed thereto which by law constitute real property. The term "land" does not include any property beyond the lines of the area described or referred to in Schedule A, nor any right, title, interest, estate or easement in abutting streets, roads, avenues, alleys, lanes, ways or waterways, but nothing herein shall modify or limit the extent to which a right of access to and from the land is insured by this policy.

(e) "mortgage": mortgage, deed of trust, trust deed, or other security instrument.

(f) "public records": records established under state statutes at Date of Policy for the purpose of imparting constructive notice of matters relating to real property to purchasers for value and without knowledge. With respect to Section 1(a)(iv) of the Exclusions From Coverage, "public records" shall also include environmental protection liens filed in the records of the clerk of the United States district court for the district in which the land is located.

(g) "unmarketability of the title": an alleged or apparent matter affecting the title to the land, not excluded or excepted from coverage, which would entitle a purchaser of the estate or interest described in Schedule A to be released from the obligation to purchase by virtue of a contractual condition requiring the delivery of marketable title.

2. CONTINUATION OF INSURANCE AFTER CONVEYANCE OF TITLE.

The coverage of this policy shall continue in force as of Date of Policy in favor of an insured only so long as the insured retains an estate or interest in the land, or holds an indebtedness secured by a purchase money mortgage given by a purchaser from the insured, or only so long as the insured shall have liability by reason of covenants of warranty made by the insured in any transfer or conveyance of the estate or interest. This policy shall not continue in force in favor of any purchaser from the insured of either (i) an estate or interest in the land, or (ii) an indebtedness secured by a purchase money mortgage given to the insured.

3. NOTICE OF CLAIM TO BE GIVEN BY INSURED CLAIMANT.

The insured shall notify the Company promptly in writing (i) in case of any litigation as set forth in Section 4(a) below, (ii) in case knowledge shall come to an insured hereunder of any claim of title or interest which is adverse to the title to the estate or interest, as insured, and which might cause loss or damage for which the Company may be liable by virtue of this policy, or (iii) if title to the estate or interest, as insured, is rejected as unmarketable. If prompt notice shall not be given to the Company, then as to the insured all liability of the Company shall terminate with regard to the matter or matters for which prompt notice is required; provided, however, that failure to notify the Company shall in no case prejudice the rights of any insured under this policy unless the Company shall be prejudiced by the failure and then only to the extent of the prejudice.

4. DEFENSE AND PROSECUTION OF ACTIONS; DUTY OF INSURED CLAIMANT TO COOPERATE.

(a) Upon written request by the insured and subject to the options contained in Section 6 of these Conditions and Stipulations, the Company, at its own cost and without unreasonable delay, shall provide for the defense of an insured in litigation in which any third party asserts a claim adverse to the title or interest as insured, but only as to those stated causes of action alleging a defect, lien or encumbrance or other matter insured against by this policy. The Company shall have the right to select counsel of its choice (subject to the right of the insured to object for reasonable cause) to represent the insured as to those stated causes of action and shall not be liable for and will not pay the fees of any other counsel. The Company will not pay any fees, costs or expenses incurred by the insured in the defense of those causes of action which allege matters not insured by this policy.

(b) The Company shall have the right, at its own cost, to institute and prosecute any action or proceeding or to do any other act which in its opinion may be necessary or desirable to establish the title to the estate or interest, as insured, or to prevent or reduce loss or damage to the insured. The Company may take any appropriate action under the terms of this policy, whether or not it shall be liable hereunder, and shall not thereby concede liability or waive any provision of this policy. If the Company shall exercise its rights under this paragraph, it shall do so diligently.

(c) Whenever the Company shall have brought an action or interposed a defense as required or permitted by the provisions of this policy, the Company may pursue any litigation to final determination by a court of competent jurisdiction

and expressly reserves the right, in its sole discretion, to appeal from any adverse judgment or order.

(d) In all cases where this policy permits or requires the Company to prosecute or provide for the defense of any action or proceeding, the insured shall secure to the Company the right to so prosecute or provide defense in the action or proceeding, and all appeals therein, and permit the Company to use, at its option, the name of the insured for this purpose. Whenever requested by the Company, the insured, at the Company's expense, shall give the Company all reasonable aid (i) in any action or proceeding, securing evidence, obtaining witnesses, prosecuting or defending the action or proceeding, or effecting settlement, and (ii) in any other lawful act which in the opinion of the Company may be necessary or desirable to establish the title to the estate or interest as insured. If the Company is prejudiced by the failure of the insured to furnish the required cooperation, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such cooperation.

5. PROOF OF LOSS OR DAMAGE.

In addition to and after the notices required under Section 3 of these Conditions and Stipulations have been provided the Company, a proof of loss or damage signed and sworn to by the insured claimant shall be furnished to the Company within 90 days after the insured claimant shall ascertain the facts giving rise to the loss or damage. The proof of loss or damage shall describe the defect in, or lien or encumbrance on the title, or other matter insured against by this policy which constitutes the basis of loss or damage and shall state, to the extent possible, the basis of calculating the amount of the loss or damage. If the Company is prejudiced by the failure of the insured claimant to provide the required proof of loss or damage, the Company's obligations to the insured under the policy shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, with regard to the matter or matters requiring such proof of loss or damage.

In addition, the insured claimant may reasonably be required to submit to examination under oath by any authorized representative of the Company and shall produce for examination, inspection and copying, at such reasonable times and places as may be designated by any authorized representative of the Company, all records, books, ledgers, checks, correspondence and memoranda, whether bearing a date before or after Date of Policy, which reasonably pertain to the loss or damage. Further, if requested by any authorized representative of the Company, the insured claimant shall grant its permission, in writing, for any authorized representative of the Company to examine, inspect and copy all records, books, ledgers, checks, correspondence and memoranda in the custody or control of a third party, which reasonably pertain to the loss or damage. All information designated as confidential by the insured claimant provided to the Company pursuant to this Section shall not be disclosed to others unless, in the reasonable judgment of the Company, it is necessary in the administration of the claim. Failure of the insured claimant to submit for examination under oath, produce other reasonably requested information or grant permission to secure reasonably necessary information from third parties as required in this paragraph shall terminate any liability of the Company under this policy as to that claim.

6. OPTIONS TO PAY OR OTHERWISE SETTLE CLAIMS; TERMINATION OF LIABILITY.

In case of a claim under this policy, the Company shall have the following additional options:

(a) To Pay or Tender Payment of the Amount of Insurance.

To pay or tender payment of the amount of insurance under this policy together with any costs, attorneys' fees and expenses incurred by the insured claimant, which were authorized by the Company, up to the time of payment or tender of payment and which the Company is obligated to pay.

Upon the exercise by the Company of this option, all liability and obligations to the insured under this policy, other than to make the payment required, shall terminate, including any liability or obligation to defend, prosecute, or continue any litigation, and the policy shall be surrendered to the Company for cancellation.

(b) To Pay or Otherwise Settle With Parties Other than the Insured or With the Insured Claimant.

(i) to pay or otherwise settle with other parties for or in the name of an insured claimant any claim insured against under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay; or

(ii) to pay or otherwise settle with the insured claimant the loss or damage provided for under this policy, together with any costs, attorneys' fees and expenses incurred by the insured claimant which were authorized by the Company up to the time of payment and which the Company is obligated to pay.

Upon the exercise by the Company of either of the options provided for in paragraphs (b)(i) or (ii), the Company's obligations to the insured under this policy for the claimed loss or damage, other than the payments required to be made, shall terminate, including any liability or obligation to defend, prosecute or continue any litigation.

CONDITIONS AND STIPULATIONS

(Continued)

7. DETERMINATION, EXTENT OF LIABILITY AND COINSURANCE.

This policy is a contract of indemnity against actual monetary loss or damage sustained or incurred by the insured claimant who has suffered loss or damage by reason of matters insured against by this policy and only to the extent herein described.

(a) The liability of the Company under this policy shall not exceed the least of:

- (i) the Amount of Insurance stated in Schedule A; or,
- (ii) the difference between the value of the insured estate or interest as insured and the value of the insured estate or interest subject to the defect, lien or encumbrance insured against by this policy.

(b) In the event the Amount of Insurance stated in Schedule A at the Date of Policy is less than 80 percent of the value of the insured estate or interest or the full consideration paid for the land, whichever is less, or if subsequent to the Date of Policy an improvement is erected on the land which increases the value of the insured estate or interest by at least 20 percent over the Amount of Insurance stated in Schedule A, then this Policy is subject to the following:

(i) where no subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that the amount of insurance at Date of Policy bears to the total value of the insured estate or interest at Date of Policy; or

(ii) where a subsequent improvement has been made, as to any partial loss, the Company shall only pay the loss pro rata in the proportion that 120 percent of the Amount of Insurance stated in Schedule A bears to the sum of the Amount of Insurance stated in Schedule A and the amount expended for the improvement.

The provisions of this paragraph shall not apply to costs, attorneys' fees and expenses for which the Company is liable under this policy, and shall only apply to that portion of any loss which exceeds, in the aggregate, 10 percent of the Amount of Insurance stated in Schedule A.

(c) The Company will pay only those costs, attorneys' fees and expenses incurred in accordance with Section 4 of these Conditions and Stipulations.

8. APPORTIONMENT.

If the land described in Schedule A consists of two or more parcels which are not used as a single site, and a loss is established affecting one or more of the parcels but not all, the loss shall be computed and settled on a pro rata basis as if the amount of insurance under this policy was divided pro rata as to the value on Date of Policy of each separate parcel to the whole, exclusive of any improvements made subsequent to Date of Policy, unless a liability or value has otherwise been agreed upon as to each parcel by the Company and the insured at the time of the issuance of this policy and shown by an express statement or by an endorsement attached to this policy.

9. LIMITATION OF LIABILITY.

(a) If the Company establishes the title, or removes the alleged defect, lien or encumbrance, or cures the lack of a right of access to or from the land, or cures the claim of unmarketability of title, all as insured, in a reasonably diligent manner by any method, including litigation and the completion of any appeals therefrom, it shall have fully performed its obligations with respect to that matter and shall not be liable for any loss or damage caused thereby.

(b) In the event of any litigation, including litigation by the Company or with the Company's consent, the Company shall have no liability for loss or damage until there has been a final determination by a court of competent jurisdiction, and disposition of all appeals therefrom, adverse to the title as insured.

(c) The Company shall not be liable for loss or damage to any insured for liability voluntarily assumed by the insured in settling any claim or suit without the prior written consent of the Company.

10. REDUCTION OF INSURANCE; REDUCTION OR TERMINATION OF LIABILITY.

All payments under this policy, except payments made for costs, attorneys' fees and expenses, shall reduce the amount of the insurance pro tanto.

11. LIABILITY NONCUMULATIVE.

It is expressly understood that the amount of insurance under this policy shall be reduced by any amount the Company may pay under any policy insuring a mortgage to which exception is taken in Schedule B or to which the insured has agreed, assumed, or taken subject, or which is hereafter executed by an insured and which is a charge or lien on the estate or interest described or referred to in Schedule A, and the amount so paid shall be deemed a payment under this policy to the insured owner.

12. PAYMENT OF LOSS.

(a) No payment shall be made without producing this policy for endorsement of the payment unless the policy has been lost or destroyed, in which case proof of loss or destruction shall be furnished to the satisfaction of the Company.

(b) When liability and the extent of loss or damage has been definitely fixed in accordance with these Conditions and Stipulations, the loss or damage shall be payable within 30 days thereafter.

13. SUBROGATION UPON PAYMENT OR SETTLEMENT.

(a) The Company's Right of Subrogation.

Whenever the Company shall have settled and paid a claim under this policy, all right of subrogation shall vest in the Company unaffected by any act of the insured claimant.

The Company shall be subrogated to and be entitled to all rights and remedies which the insured claimant would have had against any person or property in respect to the claim had this policy not been issued. If requested by the Company, the insured claimant shall transfer to the Company all rights and remedies against any person or property necessary in order to perfect this right of subrogation. The insured claimant shall permit the Company to sue, compromise or settle in the name of the insured claimant and to use the name of the insured claimant in any transaction or litigation involving these rights or remedies.

If a payment on account of a claim does not fully cover the loss of the insured claimant, the Company shall be subrogated to these rights and remedies in the proportion which the Company's payment bears to the whole amount of the loss.

If loss should result from any act of the insured claimant, as stated above, that act shall not void this policy, but the Company, in that event, shall be required to pay only that part of any losses insured against by this policy which shall exceed the amount, if any, lost to the Company by reason of the impairment by the insured claimant of the Company's right of subrogation.

(b) The Company's Rights Against Non-insured Obligors.

The Company's right of subrogation against non-insured obligors shall exist and shall include, without limitation, the rights of the insured to indemnities, guaranties, other policies of insurance or bonds, notwithstanding any terms or conditions contained in those instruments which provide for subrogation rights by reason of this policy.

14. ARBITRATION.

Unless prohibited by applicable law, either the Company or the insured may demand arbitration pursuant to the Title Insurance Arbitration Rules of the American Arbitration Association. Arbitrable matters may include, but are not limited to, any controversy or claim between the Company and the insured arising out of or relating to this policy, any service of the Company in connection with its issuance or the breach of a policy provision or other obligation. All arbitrable matters when the Amount of insurance is \$1,000,000 or less shall be arbitrated at the option of either the Company or the insured. All arbitrable matters when the Amount of Insurance is in excess of \$1,000,000 shall be arbitrated only when agreed to by both the Company and the insured. Arbitration pursuant to this policy and under the Rules in effect on the date the demand for arbitration is made or, at the option of the insured, the Rules in effect at Date of Policy shall be binding upon the parties. The award may include attorneys' fees only if the laws of the state in which the land is located permit a court to award attorneys' fees to a prevailing party. Judgment upon the award rendered by the Arbitrator(s) may be entered in any court having jurisdiction thereof.

The law of the situs of the land shall apply to an arbitration under the Title Insurance Arbitration Rules.

A copy of the Rules may be obtained from the Company upon request.

15. LIABILITY LIMITED TO THIS POLICY; POLICY ENTIRE CONTRACT.

(a) This policy together with all endorsements, if any, attached hereto by the Company is the entire policy and contract between the insured and the Company. In interpreting any provision of this policy, this policy shall be construed as a whole.

(b) Any claim of loss or damage, whether or not based on negligence, and which arises out of the status of the title to the estate or interest covered hereby or by any action asserting such claim, shall be restricted to this policy.

(c) No amendment of or endorsement to this policy can be made except by a writing endorsed hereon or attached hereto signed by either the President, a Vice President, the Secretary, an Assistant Secretary, or validating officer or authorized signatory of the Company.

16. SEVERABILITY.

In the event any provision of the policy is held invalid or unenforceable under applicable law, the policy shall be deemed not to include that provision and all other provisions shall remain in full force and effect.

17. NOTICES WHERE SENT.

All notices required to be given the Company and any statement in writing required to be furnished the Company shall include the number of this policy and shall be addressed to: Consumer Affairs Department, P.O. Box 27567, Richmond, Virginia 23261-7567.

OWNER'S POLICY OF TITLE INSURANCE

American Land Title Association (10/17/92)

Issued by

**Lawyers Title
Insurance Corporation**

Lawyers Title Insurance Corporation
is a member of the LandAmerica family of title insurance
underwriters.



LandAmerica Financial Group, Inc.
101 Gateway Centre Parkway
Richmond, Virginia 23235-5153
www.landam.com

Form 3 1190-74B

THANK YOU.

Title insurance provides for the protection of your real estate investment. We suggest you keep this policy in a safe place where it can be readily available for future reference.

If you have questions about title insurance or the coverage provided by this policy, contact the office that issued this policy, or you may call or write:

Lawyers Title Insurance Corporation
Consumer Affairs
P.O. Box 27567
Richmond, Virginia 23261-7567
telephone, toll free: 800 446-7086
web: www.landam.com

We thank you for choosing to do business with Lawyers Title Insurance Corporation, and look forward to meeting your future title insurance needs.

Lawyers Title Insurance Corporation
is a member of the LandAmerica family of title insurance
underwriters.



Lawyers Title Insurance Corporation

SCHEDULE A

Policy No: A75-2364549

File No: 00210001-

Reference No.

Liability Amount

\$ 250,000.00

Effective Date

February 5, 2007

1:48 p.m.

Premium: 747.00

INSURED

SWIFT CURRENT LAND & CATTLE LLC, an Arizona limited liability company

1. Title to the estate or interest covered by this policy at the date hereof is vested in:

Swift Current Land & Cattle LLC, an Arizona limited liability company

2. The estate or interest in the land described or referred to in this Schedule covered by this policy is a:
fee.

3. The land referred to in this policy is located in Gila County, Arizona, and is described as follows:

PARCEL NO. 1

The North half of the Southeast quarter of Section 7, Township 4 South, Range 15 East of the Gila and Salt River Base and Meridian, Gila County, Arizona.

PARCEL NO. 2

The North half of the Southwest quarter of Section 8, Township 4 South, Range 15 East of the Gila and Salt River Base and Meridian, Gila County, Arizona.

Lawyers Title Insurance Corporation

BY 

AUTHORIZED SIGNATORY

mcs

Lawyers Title Insurance Corporation

Policy No: A75-2364549

File No: 00210001-

Reference No.

SCHEDULE B

This policy does not insure against loss or damage, nor against any costs, attorneys' fees or expenses, any or all of which arise by reason of the following:

PART I

1. Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.

Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.

2. Any facts, rights, interests or claims which are not shown by the public records but which could be ascertained by an inspection of the land or which may be asserted by persons in possession thereof.
3. Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
4. Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
5. (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, and agreements, covenants, conditions or rights incident thereto, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

Lawyers Title Insurance Corporation

Policy No: A75-2364549

File No: 00210001-

Reference No.

PART II

(All recording data refer to records in the office of the County Recorder of the County in which the land is situated.)

1. Taxes and assessments collectible by the County Treasurer not yet due and payable for the following year:

Year : 2007

2. The lack of a legal right of access recorded in insurable form to and from said land to a public street.

Notwithstanding the affirmative assurance of paragraph 4, the Company is unwilling to insure access.

END OF EXCEPTIONS

APPENDIX H - APPLETON RANCH

Corporation Service Company
2711 Centerville Road Suite 400, Wilmington, DE, 19808
(888) 690-2882 sop@cscinfo.com

United States Corporation Company

The Prentice-Hall Corporation System, Inc.

NOTICE OF SERVICE OF PROCESS

Date Processed: 01-MAR-04

Transmittal #: AZ2020736C

ALL

To: MS. SHANNON CROMPTON
RIO TINTO SERVICES, INC.
1343 SOUTH 1800 EAST
SALT LAKE CITY UT 84108

Redirect sent to:

TYPE OF REPRESENTATION: Statutory

We enclose the following documents which were served upon:

Corporation Service Company

as registered agent in Arizona

for

SWIFT CURRENT LAND & CATTLE, LLC (ID#: 2166382)

Documents were served on 01-MAR-04 via Regular Mail (First Class)

ID#: N/A

Title of Action: LANDAMERICA LAWYERS TITLE
vs. SWIFT CURRENT LAND & CATTLE, LLC
Court: NONE STATED

Case #: FILE NO. 01320924

Nature of Case:

RE: INSURANCE AND REQUIREMENTS

☐ Summons
☐ Complaint
☐ Garnishment
☐ Subpoena

☐ Notice of Mechanic's Lien
☐ Notice of Attorney's Lien
☐ Notice of Default Judgment

☐ A self-addressed stamped
envelope enclosed
☐ Duplicate copies of the Notice
and Acknowledgement enclosed

☒ Other: LETTER; ETC.

Answer Due: SEE DOCUMENT

Documents Sent: Federal Express

Call Placed: No call placed

Comments: NONE

ID#:

Spoke to: N/A

Attorney for Claimant:

ALEXA RAMIREZ
LAWYERS TITLE OF ARIZONA
1780 N. MASTICK WAY, SUITE F
NOGALES, AZ 85621
NONE STATED

Form Prepared By: Shanna Brewer

Original Client Copy - for your records

The information on this transmittal is provided for use in forwarding the attached documents. This information does not constitute a legal opinion as to the facts or details of this action. These should be obtained from the documents themselves. The receiver of this transmittal is responsible for interpreting the documents and for taking appropriate action. If you have received only a copy of the transmittal, you should be aware that the documents have been sent to the original addressee. You should contact that addressee for details or interpretations of the content of those documents.

108-18²/₂

SAN IGNACIO
DEL BARLOMARI

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			(12 B)		
(12 H)			(12 B)		
(20)			(12 A)		

LAWYERS TITLE
OF ARIZONA
THIS MAP IS FURNISHED FOR REFERENCE ONLY
AND DOES NOT CONSTITUTE A SURVEY

SCA

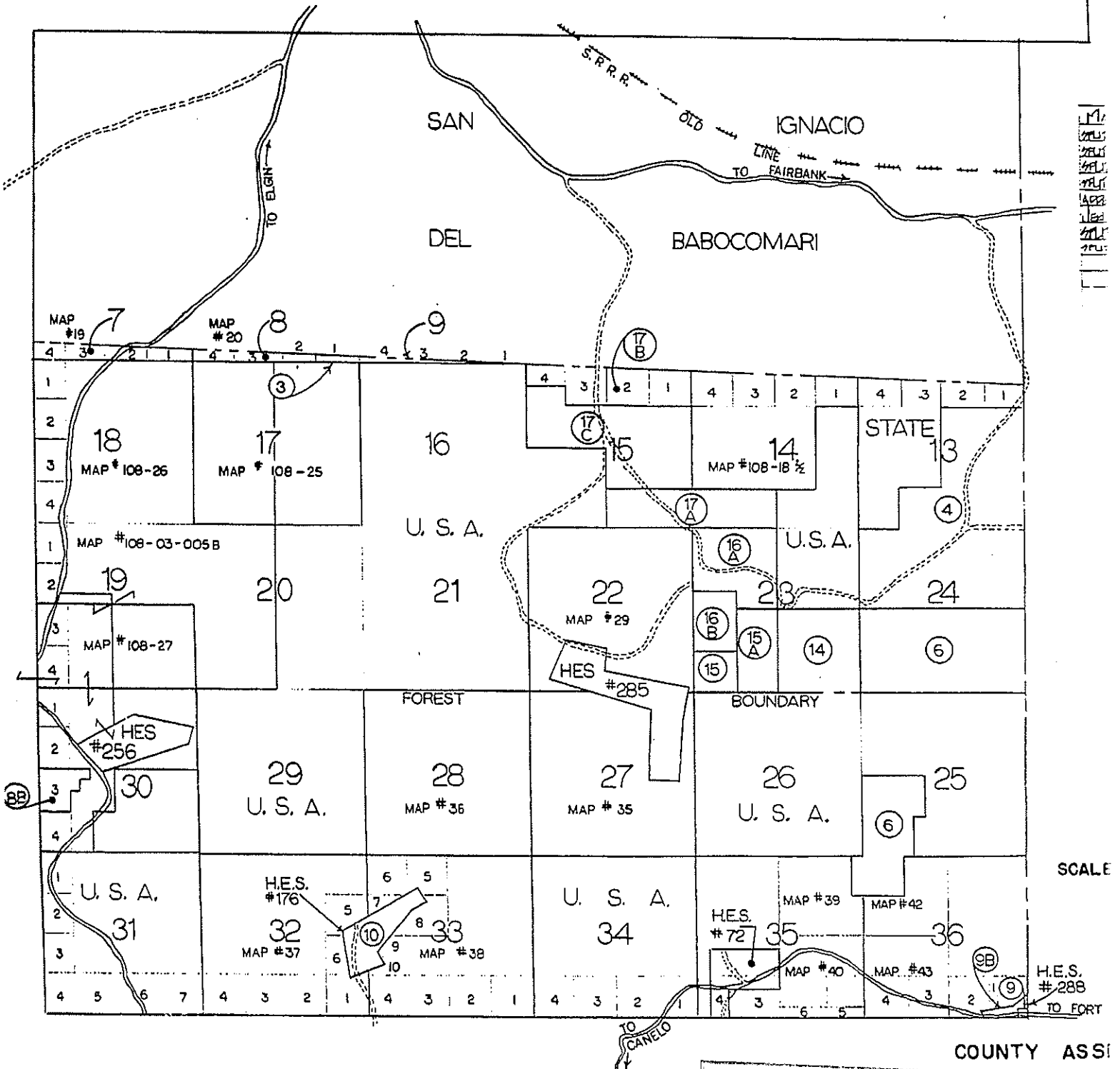
COUNTY ASSESSOR'S

SEC.

TN. 21S

RG. 18E

108 - 18½



TOWNSHIP 21S RANGE 18E SECTION 28

THIS MAP IS FOR REFERENCE ONLY AND DOES NOT CONSTITUTE A SURVEY

LAWYER'S TITLE OF ARIZONA MAP IS FOR REFERENCE ONLY AND DOES NOT CONSTITUTE A SURVEY

TOWNSHIP 21 S RANGE 18 E

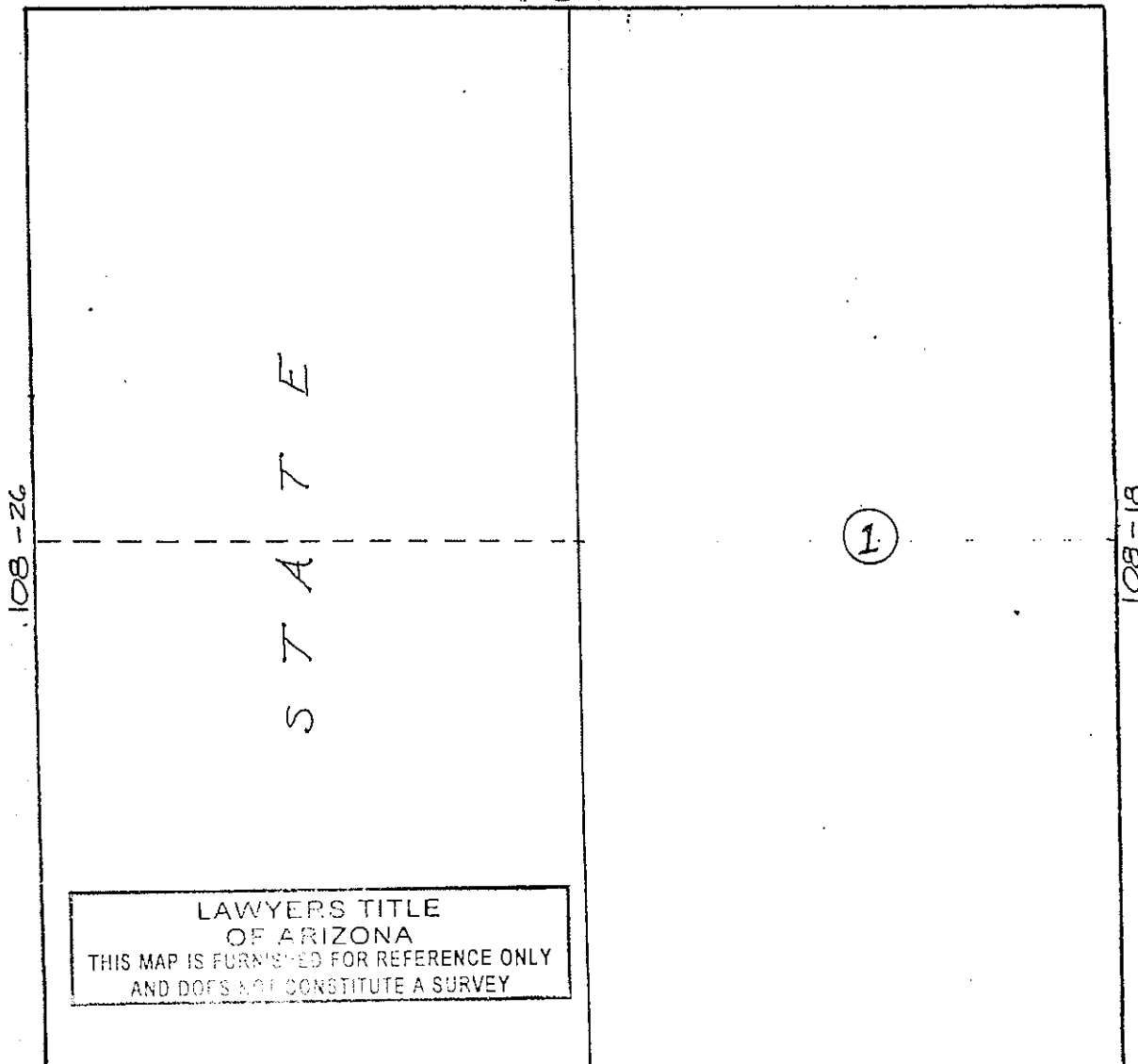
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SECTION 17

250

108-20



LAWYERS TITLE
OF ARIZONA
THIS MAP IS FURNISHED FOR REFERENCE ONLY
AND DOES NOT CONSTITUTE A SURVEY

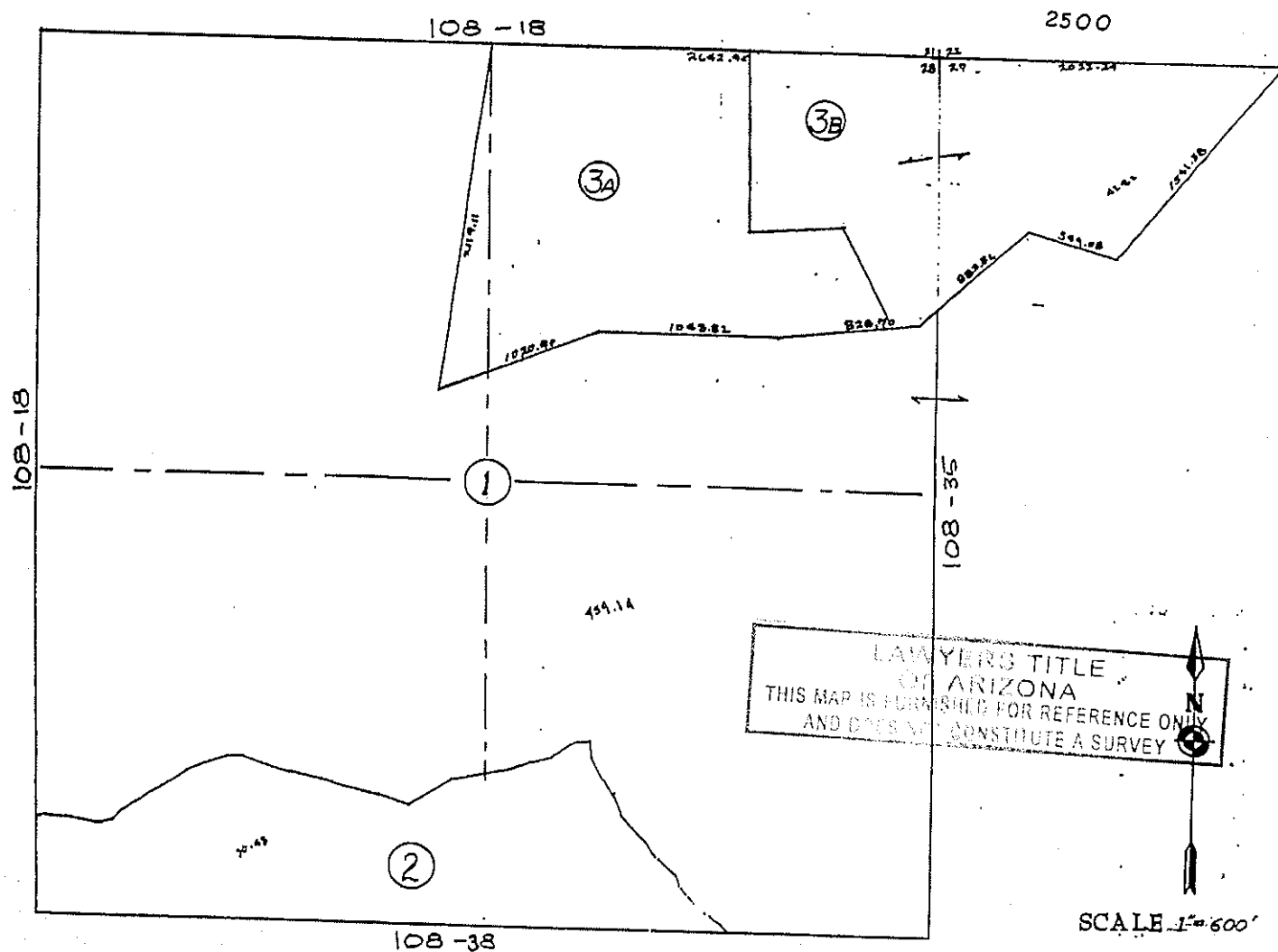
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21S -18E -17

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TOWNSHIP 24S RANGE 18E
SECTION 28

108 36



ISSUED BY
LAWYERS TITLE INSURANCE CORPORATION

Commitment For
Title Insurance



LAWYERS TITLE INSURANCE CORPORATION, a Virginia corporation, herein called the Company, for valuable consideration, hereby commits to issue its policy or policies of title insurance, as identified in Schedule A, in favor of the proposed Insured named in Schedule A, as owner or mortgagee of the estate or interest covered hereby in the land described or referred to in Schedule A, upon payment of the premiums and charges therefor; all subject to the provisions of Schedules A and B and to the Conditions and Stipulations hereof.

This Commitment shall be effective only when the identity of the proposed Insured and the amount of the policy or policies committed for have been inserted in Schedule A hereof by the Company, either at the time of the issuance of this Commitment or by subsequent endorsement.

This Commitment is preliminary to the issuance of such policy or policies of title insurance and all liability and obligations hereunder shall cease and terminate six (6) months after the effective date hereof or when the policy or policies committed for shall issue, whichever first occurs, provided that the failure to issue such policy or policies is not the fault of the Company.

IN WITNESS WHEREOF, **LAWYERS TITLE INSURANCE CORPORATION** has caused its corporate name and seal to be hereunto affixed by its duly authorized officers, the Commitment to become valid when countersigned by an authorized officer or agent of the Company.

LAWYERS TITLE INSURANCE CORPORATION

Attest:

A handwritten signature in cursive script, appearing to read 'J. D. Webb'.

Secretary



By:

A handwritten signature in cursive script, appearing to read 'Janet A. Alpert'.

President

DISCLOSURE NOTICES

Good Funds Law

Arizona Revised Statutes Section 6-843 regulates the disbursement of escrow funds by an escrow agent. The law requires that funds be deposited in the escrow agent's escrow account and available for withdrawal prior to disbursement. Funds deposited with the Company by wire transfer may be disbursed upon receipt. Funds deposited with the Company in the form of cashier's checks, certified checks or teller's checks, or checks which are made by an affiliate of a state or federally regulated depository institution when the check is drawn on that institution, may be disbursed the same day as deposited. If funds are deposited with the Company by other methods, recording and/or disbursement may be delayed.

Privacy Notice (15 U.S.C. 6801 and 16 CFR Part 313):

We collect nonpublic personal information about you from information you provide on forms and documents and from other people such as your lender, real estate agent, attorney, escrow, etc. We do not disclose any nonpublic personal information about our customers or former customers to anyone, except as permitted by law. We restrict access to nonpublic personal information about you to those employees who need to know that information in order to provide products or services to you. We maintain physical, electronic and procedural safeguards that comply with federal regulations to guard your nonpublic personal information.

PURCHASER DWELLING ACTIONS NOTICE

Pursuant to Arizona Revised Statutes Section 12-1363.N, notice is hereby provided to the purchaser of a dwelling of the provisions of Arizona Revised Statutes Sections 12-1361, 1362 and 1363. These statutory sections set forth the requirements to be met by a purchaser prior to bringing an action against the seller of a dwelling arising out of or related to the design, construction, condition or sale of the dwelling. "Dwelling" means a single or multifamily unit designed for residential use and common areas and improvements owned or maintained by an association or its members. "Seller" means any person, firm, partnership, corporation, association or other organization engaged in the business of designing, constructing or selling dwellings. The complete statutory sections can be viewed on the Arizona State Legislature's web site: www.azleg.state.az.us/ars/ars.htm.

NOTICE:

Pursuant to Arizona Revised Statutes 11-480, effective January 1, 1991, the County Recorder may not accept documents for recording that do not comply with the following:

- a Print must be ten-point type (pica) or larger.
- b Margins of at least one-half inch along the left and right sides one-half inch across the bottom and at least two inches on top for recording and return address information.
- c Each instrument shall be no larger than 8 ½ inches in width and 14 inches in length.

Escrow Officer: **Alexa Ramirez**
Lawyers Title of Arizona
1780 N. Mastick Way
Suite F
Nogales, Az 85621

COMMITMENT FOR TITLE INSURANCE

Issued by

Lawyers Title Insurance Corporation

SCHEDULE A

1. Effective Date: **February 2, 2004** at 7:30 a.m. File No.: 01320924
2. Policy or Policies to be issued: **ALTA Std. Owners Policy 10-17-92**

Proposed Insured: **Swift Current Land & Cattle LLC, an Arizona limited liability company**

Liability: **\$3,400,000.00**

Policy or Policies to be issued: **None**

Proposed Insured:

Liability: **\$**

Policy or Policies to be issued: **None**

Proposed Insured:

Liability: **\$**
3. The estate or interest in the land described or referred to in the Commitment and covered herein is **A FEE**.
4. Title to the said estate or interest in said land is at the effective date hereof vested in:
See Exhibit B attached hereto and made a part hereof.
5. The land referred to in this Commitment is situated in the County of Santa Cruz, State of ARIZONA, and is described as follows:
As fully set forth on "Exhibit A" attached hereto and by this reference incorporated herein

Title Officer: **/P17**

Typist: **c18**

Amended: February 20, 2004 **No.**

Page 3 of 27

EXHIBIT "A"

Parcel 1:

The Northwest quarter of the Southeast quarter and the East half of the Northeast quarter of the Southwest quarter of Section 14, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona.

APN 108-18-012A

Parcel 2:

Lot 2;

The Southwest quarter of the Northeast quarter and the East half of the Southeast quarter of the Northwest quarter of Section 14, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona;

EXCEPT the Northeast quarter of said Lot 2 conveyed by Deed recorded in Docket 416 at page 491.

APN 108-18-012B

Parcel 3:

Lot 3;

The Southwest quarter of the Northwest quarter and the West half of the Southeast quarter of the Northwest quarter of Section 14, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona;

EXCEPT that portion of said Lot 3 conveyed by Deeds recorded in Docket 633 at page 134 and Docket 633 at page 135.

APN 108-18-012H

Parcel 4:

Lot 4;

The Northwest quarter of the Southwest quarter and the West half of the Northeast quarter of the Southwest quarter all in Section 14, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona

EXCEPT that portion of said Lot 4 conveyed by Deed recorded in Docket 545 at page 610;

EXCEPT all coal and other minerals as reserved in the Patent from the United States of America.

APN 108-18-019 and 108-18-020

EXHIBIT "A"
(Continued)

Parcel 5:

The south half of Lot 4, the south half of the North half and the Northwest quarter of the Southeast quarter of Section 15, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona.

Portion of APN 108-18-017C

Parcel 6:

The Northeast quarter of the Southeast quarter of Section 15, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona;

EXCEPT all coal and other minerals as reserved in the Patent from the United States of America.

Portion of APN 108-18-017C

Parcel 7:

The East half of Section 17, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona.

Parcel 8:

A tract or parcel of land being a portion of Sections 27 and 28, Township 21 South, Range 18 East, Gila and Salt River Base and Meridian, Santa Cruz County, Arizona, more particularly described as follows:

BEGINNING at the corner common to Sections 21, 22, 27 and 28 of said Township and Range, a G.L.O. brass cap firmly set and properly marked;

THENCE North 89 degrees 58 minutes East, 2022.24 feet along and upon the North line of said Section 27 to a point thereon, being also corner No. 4 of H.E.S. No. 285;

THENCE South 39 degrees 40 minutes 30 seconds West, 1541.38 feet to an angle point;

THENCE North 72 degrees 44 minutes 30 seconds West, 549.08 feet to an angle point;

THENCE South 48 degrees 83 minutes West, 883.86 feet to an angle point;

THENCE South 82 degrees 36 minutes West, 828.70 feet to an angle point;

THENCE North 89 degrees 58 minutes 15 seconds West, 1043.82 feet to an angle point;

THENCE South 68 degrees 16 minutes 45 seconds West, 1020.90 feet to an angle point;

THENCE North 8 degrees 32 minutes 15 seconds East, 2119.11 feet to the quarter corner common to said Sections 21 and 28;

EXHIBIT "A"
(Continued)

THENCE North 89 degrees 58 minutes East, 2642.95 feet to the place of beginning, all according to a transit survey made in June, 1974, by Robert Lenon, P.E. of Patagonia, Arizona, from the results of which this description was prepared by him at that time, with bearings referred to the meridian as determined from the average of 4 direct solar observations made at said Section corner;

EXCEPT any portion lying within the property conveyed by Deed recorded in Docket 468 at page 642 described as follows:

BEGINNING at the corner common to Sections 21, 22, 27 and 28 of said Township and Range, being a G.L.O. brass cap pipe firmly set and properly marked;

THENCE North 89 degrees 58 minutes 00 seconds East, 2020.03 feet along and upon the North line of said Section 27, to a point thereof, also being corner No. 4 of H.E.S. No. 285;

THENCE South 39 degrees 37 minutes 20 seconds West, 1539.65 feet;

THENCE North 72 degrees 45 minutes 04 seconds West, 549.09 feet;

THENCE South 48 degrees 01 minutes 54 seconds West, 883.94 feet;

THENCE South 82 degrees 34 minutes 49 seconds West, 186.35 feet;

THENCE North 26 degrees 42 minutes 49 seconds West, 643.82 feet;

THENCE South 85 degrees 45 minutes 02 seconds West, 549.80 feet;

THENCE North 01 degrees 29 minutes 22 seconds West, 1102.46 feet to a point on the North line of said Section 28;

THENCE North 89 degrees 58 minutes 00 seconds East along said North section line 1194.62 feet to the point of beginning.

SCHEDULE B – SECTION I REQUIREMENTS

The following are the requirements to be complied with prior to the issuance of said policy or policies. Any other instrument recorded subsequent to the date hereof may appear as an exception under Schedule B of the policy to be issued. Unless otherwise noted, all documents must be recorded in the office of the Recorder of the County in which said property is located.

1. TAXES for the year 2003 are shown paid in the amount of \$28.44.
(State Tax Parcel No. 108-18-012A) (Parcel 1)
2. TAXES for the year 2003 are shown paid in the amount of \$27.58.
(State Tax Parcel No. 108-18-012B) (Parcel 2)
3. TAXES for the year 2003 are shown paid in the amount of \$24.84.
(State Tax Parcel No. 108-18-012H) (Parcel 3)
4. TAXES for the year 2003 are shown paid in the amount of \$5.52.
(State Tax Parcel No. 108-18-019) (portion of Parcel 4)
5. TAXES for the year 2003 are shown paid in the amount of \$19.46.
(State Tax Parcel No. 108-18-020) (portion of Parcel 4)
6. TAXES for the year 2003 are shown paid in the amount of \$120.72.
(State Tax Parcel No. 108-18-017C) (Parcels 5 and 6)
7. TAXES for the year 2003 are shown paid in the amount of \$104.04.
(State Tax Parcel No. 108-25-001) (Parcel 7)
8. TAXES for the year 2003 are shown paid in the amount of \$847.02.
(State Tax Parcel No. 108-36-003A) (Parcel 8)
9. RECORD Deed from Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969 to Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969.

This Deed necessary to correct the Grantor in the Deed dated December 23, 1985, recorded January 09, 1986 in Docket 416 at page 478. On this date Lynne Appleton held title as Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969 by Deed dated January 27, 1970, recorded February 09, 1970 in Docket 110 at page 391. If it is the intent of Marc Francis Appleton to hold title as Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969, the name of the Grantee must also be corrected. The legal description for this Deed should be only for Parcel 1 of paragraph 5 of Schedule A, tax parcel No. 108-18-012A.

NOTE:

Disclosure of beneficiaries for Lynne Appleton Trust under Agreement dated June 16, 1969 in compliance with A.R.S. 33-404 is recorded in:

Docket	213
Page	359

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

NOTE:

Disclosure of beneficiaries for Marc Francis Appleton Trust under Agreement dated April 15, 1966 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	273

10. RECORD Deed from Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 to Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969.

This Deed necessary to correct the Grantor in the Deed dated December 24, 1985, recorded January 09, 1986 in Docket 416 at page 482. On this date Lee Appleton held title as Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 by Deed dated February 19, 1976, recorded March 01, 1976 in Docket 203 at page 51. If it is the intent of Marc Francis Appleton to hold title as Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969, the name of the Grantee must also be corrected. The legal description for this Deed should be only for Parcel 1 of paragraph 5 of Schedule A, tax parcel No. 108-18-012A.

NOTE:

Disclosure of beneficiaries for Lee Appleton Trust under Agreement dated January 14, 1972 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	145

NOTE:

Disclosure of beneficiaries for Marc Francis Appleton Trust under Agreement dated April 15, 1966 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	273

11. RECORD Quit Claim Deed from Marc Francis Appleton, a married man as his sole and separate property to Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969.

This Deed necessary to convey the interest he may have acquired individually by Deed dated December 26, 1985, recorded January 09, 1986 in Docket 416 at page 474. The legal description for this Deed should be only for Parcel 1 of paragraph 5 of Schedule A, tax parcel No. 108-18-012A.

NOTE:

Disclosure of beneficiaries for Marc Francis Appleton Trust under Agreement dated April 15, 1966 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	273

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

12. RECORD Deed from Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969 to Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972

This Deed necessary to correct the Grantor in the Deed dated December 26, 1985, recorded January 09, 1986 in Docket 416 at page 479. On this date, Mark Francis Appleton held title as Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969 in Docket 110 at page 393. If it is the intent of Lee Appleton to hold title as Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 the name of the Grantee must also be corrected. The legal description for this Deed should be only for Parcel 2 of paragraph 5 of Schedule A, tax parcel No. 108-18-012B.

NOTE:

Disclosure of beneficiaries for Marc Francis Appleton Trust under Agreement dated April 15, 1966 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	273

NOTE:

Disclosure of beneficiaries for Lee Appleton Trust under Agreement dated January 14, 1972 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	145

13. RECORD Deed from Lynne Appleton, Trustee of the Lynne Appleton Trust under agreement dated June 16, 1969 to Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972.

This Deed necessary to correct the Grantor in the Deed dated December 23, 1985, recorded January 09, 1986 in Docket 416 at page 483. On this date Lynne Appleton held title as Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969 by Deed dated January 27, 1970, recorded February 09, 1970 in Docket 110 at page 391. If it is the intent of Lee Appleton to hold title as Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972, the name of the Grantee must also be corrected. The legal description for this Deed should be only for Parcel 2 of paragraph 5 of Schedule A, tax parcel No. 108-18-012B.

NOTE:

Disclosure of beneficiaries for Lynne Appleton Trust under Agreement dated June 16, 1969 in compliance with A.R.S. 33-404 is recorded in:

Docket	213
Page	359

NOTE:

Disclosure of beneficiaries for Lee Appleton Trust under Agreement dated January 14, 1972 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	145

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

14. RECORD Deed from Lee Appleton, a single woman to Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972.

This Deed necessary to convey any interest she may have acquired individually by Deed dated December 26, 1985, recorded January 09, 1986 in Docket 416 at page 475. The legal description for this Deed should be only for Parcel 2 of paragraph 5 of Schedule A, tax parcel No. 108-18-012B.

NOTE:

Disclosure of beneficiaries for Lee Appleton Trust under Agreement dated January 14, 1972 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	145

15. RECORD Deed from Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969 to Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969.

This Deed necessary to correct the Grantor in the Deed dated December 26, 1985 recorded January 09, 1986 in Docket 416 at page 480. On this dated Marc Francis Appleton held title as Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969 in Docket 110 at page 393. If it is the intent of Lynne Appleton to hold title as Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969, the name of the Grantee must also be corrected. The legal description for this Deed should be only for Parcel 3 of paragraph 5 of Schedule A, tax parcel No. 108-18-012H.

NOTE:

Disclosure of beneficiaries for Marc Francis Appleton Trust under Agreement dated April 15, 1966 in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	273

NOTE:

Disclosure of beneficiaries for Lynne Appleton Trust under Agreement dated June 16, 1969 in compliance with A.R.S. 33-404 is recorded in:

Docket	213
Page	359

16. RECORD Deed from Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 to Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969.

This Deed necessary to correct the Grantor in the Deed dated December 24, 1985 recorded January 09, 1986 in Docket 416 at page 484. On this date Lee Appleton held title as Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 by Deed dated 021976 recorded March 01, 1976 in Docket 203 at page 51. If it is the intent of Lynne Appleton to hold title as Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969, the name of the Grantee must also be corrected. The legal description for this Deed should be only for Parcel 3 of paragraph 5 of Schedule A, tax parcel No. 108-18-012H.

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

NOTE:

Disclosure of beneficiaries for Lee Appleton Trust under Agreement dated January 14, 1972 in compliance with A.R.S. 33-404 is recorded in:

Docket 212

Page 145

NOTE:

Disclosure of beneficiaries for Lynne Appleton Trust under Agreement dated June 16, 1969 in compliance with A.R.S. 33-404 is recorded in:

Docket 213

Page 359

17. RECORD Deed from Lynne Appleton, a married woman as her sole and separate property to Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969.

This Deed necessary to convey any interest she may have acquired individually by Deed dated December 26, 1985 recorded January 09, 1986 in Docket 416 at page 476. The legal description for this Deed should be only for Parcel 3 of paragraph 5 of Schedule A, tax parcel No. 108-18-012H.

NOTE:

Disclosure of beneficiaries for Lynne Appleton Trust under Agreement dated June 16, 1969 in compliance with A.R.S. 33-404 is recorded in:

Docket 213

Page 359

18. RECORD Deed from Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969 to Peter Bryce Appleton, as Trustee under Agreement dated September 18, 1964.

This Deed necessary to correct the Grantor in the Deed dated December 26, 1985 recorded January 09, 1986 in Docket 416 at page 477. On this date title was held by Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969 by Deed dated January 24, 1970 recorded February 09, 1970 in Docket 110 at page 393.

As of September 01, 1989 Peter Bryce Appleton holds title as Peter Bryce Appleton, as Trustee under Agreement dated September 18, 1964 by Deed dated September 01, 1989 recorded September 11, 1989 in Docket 508 at page 804. The legal description for this Deed should be only for Parcel 4 of paragraph 5 of Schedule A, tax parcel No. 108-18-019 and 108-18-020.

19. RECORD Deed from Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969 to Peter Bryce Appleton, Trustee of Peter Bryce Appleton, Trust under Agreement dated September 18, 1964.

This Deed necessary to correct the Grantor in the Deed dated December 23, 1985 recorded January 09, 1986 in Docket 416 at page 481. On this date title was held by Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969 by Deed dated January 27, 1970 recorded February 09, 1970 in Docket 110 at page 391.

As of September 01, 1989 Peter Bryce Appleton holds title as Peter Bryce Appleton, as Trustee under Agreement dated September 18, 1964 by Deed dated September 01, 1989 recorded September 11, 1989 in Docket 508 at page 804. The legal description for this Deed should be only for Parcel 4 of paragraph 5 of Schedule A, tax parcel No. 108-18-019 and 108-18-020.

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

20. RECORD Deed from Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 to Peter Bryce Appleton, as Trustee under Agreement dated September 18, 1964. ✓

This Deed necessary to correct the Grantor in the Deed dated December 24, 1985 recorded January 09, 1986 recorded in Docket 416 at page 485. On this date title was held by Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 by Deed dated February 19, 1976 recorded March 01, 1976 in Docket 203 at page 51.

As of September 01, 1989 Peter Bryce Appleton holds title as Peter Bryce Appleton, as Trustee under Agreement dated September 18, 1964 by Deed dated September 01, 1989 recorded September 11, 1989 in Docket 508 at page 804. The legal description for this Deed should be only for Parcel 4 of paragraph 5 of Schedule A, tax parcel No. 108-18-019 and 108-18-020.

21. RECORD Mutual Cancellation of Lease:

Lessor	Francis Henry Appleton III, Ariel Bryce Appleton, Peter Bryce Appleton, Marc Francis Appleton, Lynne Appleton and Lee Appleton
Lessee	The Research Ranch Foundation, an Arizona non-profit corporation, formerly The Research Ranch, an Arizona non-profit corporation
Dated	September 01, 1972
Recorded	December 11, 1972
Docket	151
Page	491

22. RECORD Quit Claim Deed from National Audubon Society, Inc., a New York non-profit corporation to Swift Current Land & Cattle LLC, an Arizona limited liability company . This Deed necessary to assign any interest they may have by reason of the Agreement shown in Exhibit A attached to the Deed recorded in Docket 374 at page 46..

23. RECORD corrective instrument correcting the instrument referred to below for the reason stated:

Docket	753
Page	236 and Docket 899 at page 703
Reason for correction	to correct the legal description of said Deeds to read as described in Parcel 8 shown in paragraph 4 of Schedule A.

24. FURNISH copy of filed Articles of organization of the limited liability company named below which states whether said limited liability company is member managed or manager managed:

Bolson Holdings, LLC, a Delaware limited liability company

25. SUBMIT fully executed copy of the Operating Agreement (and all amendments) of the limited liability company named below for examination. The right is reserved to make additional requirements upon said examination.

Bolson Holdings, LLC, a Delaware limited liability company

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

26. FURNISH copy of Certificate of Registration of the foreign limited liability company named below filed with the Arizona Corporation Commission.

Bolson Holdings, LLC, a Delaware limited liability company

-or-

Proper showing that said limited liability company is in good standing in its domiciliary jurisdiction.

The right is reserved to make additional requirements upon examination of said certificate.

27. FURNISH the Company a copy of the Articles of Organization, stamped "filed" by the Arizona Corporation Commission and a fully executed copy of the Operating Agreement and all amendments thereto for the following named Limited Liability Company:

Swift Current Land & Cattle, LLC, an Arizona limited liability company

28. SUBMIT fully executed copy of the Trust Agreement and all amendments showing that the Trustee has the authority to consummate this transaction.

Name of Trust: Peter Bryce Appleton Irrevocable Trust dated December 12, 1983 f/b/o Amy Appleton

29. SUBMIT fully executed copy of the Trust Agreement and all amendments showing that the Trustee has the authority to consummate this transaction.

Name of Trust: Peter Bryce Appleton Irrevocable Trust dated December 12, 1983 f/b/o Sarah Appleton

30. SUBMIT fully executed copy of the Trust Agreement and all amendments showing that the Trustee has the authority to consummate this transaction.

Name of Trust: Peter Bryce Appleton Irrevocable Trust dated December 12, 1983 f/b/o Nathan Cooper Appleton

31. RECORD Deed from Peter Bryce Appleton, Trustee of the Peter Bryce Appleton Trust under Agreement dated September 18, 1964 to Swift Current Land & Cattle LLC, an Arizona limited liability company.

NOTE:

Disclosure of beneficiaries in compliance with A.R.S. 33-404 is recorded in:

Docket	211
Page	441

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

32. RECORD Deed from Marc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 to Swift Current Land & Cattle LLC, an Arizona limited liability company.

NOTE:

Disclosure of beneficiaries in compliance with A.R.S. 33-404 is recorded in:

Docket	212
Page	274

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

33. RECORD Deed from Lee Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 to Swift Current Land & Cattle LLC, an Arizona limited liability company.

NOTE:

Disclosure of beneficiaries in compliance with A.R.S. 33-404 is recorded in:

Docket 212

Page 145

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

34. RECORD Deed from Lynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969 to Swift Current Land & Cattle LLC, an Arizona limited liability company.

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

NOTE:

Disclosure of beneficiaries in compliance with A.R.S. 33-404 is recorded in:

Docket 213

Page 360

35. PROPER showing as to the marital status of Amy Appleton on August 31, 1992 by reason of instrument recorded in Docket 594 at page 432 and the proper divesting of the interest of the spouse, if married.

The right is reserved to make additional exceptions or requirements based upon information furnished.

36. PROPER showing as to the marital status of Nathan Cooper Appleton on July 16, 1997 by reason of instrument recorded in Docket 729 at page 656 and the proper divesting of the interest of the spouse, if married.

The right is reserved to make additional exceptions or requirements based upon information furnished.

37. RECORD corrective instrument correcting the instrument referred to below for the reason stated:

Recorded July 23, 2003

Docket 990

Page 271

Reason for correction to show marital status of Grantee and to comply with ARS 33-404 disclosing beneficiary of Trust

38. RECORD Deed from Amy Appleton, a _____ woman, Nathan Cooper Appleton, a _____ man, and Sarah Appleton, a _____ woman to Swift Current Land & Cattle LLC, an Arizona limited liability company.

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

**SCHEDULE B – SECTION I
REQUIREMENTS
(Continued)**

39. RECORD Deed from Bolson Holdings, LLC, a Delaware limited liability company to Swift Current Land & Cattle LLC, an Arizona limited liability company.

NOTE: ARS 11:1133 may require the completion and filing of an Affidavit of Value.

40. Approval by the parties to this transaction of the description used in this report.

END OF SCHEDULE B – SECTION I

SCHEDULE B – SECTION II EXCEPTIONS

Schedule B of policy or policies to be issued will contain exceptions to the following matters unless the same are disposed of to the satisfaction of the Company:

Defects, liens, encumbrances, adverse claims or other matters, if any, created, first appearing in the public records or attaching subsequent to the effective date hereof but prior to the date the proposed Insured acquires for value of record the estate or interest or mortgage thereon covered by this commitment.

RESERVATIONS contained in the Patent from the United States of America, reading as follows:

SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America recorded in Book 12 of Deeds at page 22.

Affects the south half of Lot 4 and the south half of the North half of Section 15.

RESERVATIONS contained in the Patent from the United States of America, reading as follows:

SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 13 of Miscellaneous Records at page 606.

Affects Lots 2 and 3, Southwest quarter of Northeast quarter; south half of Northwest quarter; North half of Southwest quarter and Northwest quarter of Southeast quarter of Section 14.

RESERVATIONS contained in the Patent from the United States of America, reading as follows:

SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 13 of Miscellaneous Records at page 607.

Affects Northeast quarter of the Southeast quarter of Section 15 and Lot 4 of Section 14.

RESERVATIONS contained in the Patent from the United States of America, reading as follows:

SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 15 of Deeds at page 124.

Affects Northwest quarter of Southeast quarter of Section 15.

RESERVATIONS contained in the Patent from the United States of America, reading as follows:

SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Book 15 of Deeds at page 196.

Affects North half of Northeast quarter of Section 28.

RESERVATIONS contained in the Patent from the State of Arizona, reading as follows:

- a) Excepting and reserving unto the United States rights of way for ditches and canals constructed by their authority.
- b) This Patent is issued subject to any and all easements or rights of way heretofore legally obtained and now in full force and effect in Book 26 of Deeds at page 208.

Affects East half of Section 17.

RESERVATIONS contained in the Patent from the United States of America, reading as follows:

SUBJECT to any vested and accrued water rights for mining, agricultural, manufacturing or other purposes, and rights to ditches and reservoirs used in connection with such water rights as may be recognized and acknowledged by the local customs, laws and decisions of courts; and there is reserved from the lands hereby granted, a right of way thereon for ditches or canals constructed by the authority of the United States of America in Docket 37 at page 501.

Affects south half of Northeast quarter and the Northwest quarter of Section 28.

TAXES for the year 2004, a lien not yet due and payable.

RIGHT OF ENTRY to prospect for, mine and remove the minerals in said land as reserved in Patent to said land.

Affects Parcels 4 and 6

1. Reservation of all oil, coal and other minerals as set forth in Deed recorded in Book 16 of Deeds at page 372.
2. Reservation of one half of all mineral rights as set forth in Deed recorded in Docket 16 at page 383.
3. Reservation of a 55% interest in all oil, gas, coal and other minerals as set forth in Deed recorded in Book 33 of Deeds at page 178.
4. Reservation of oil, gas, mineral, water and other subsurface rights as set forth in the following Deeds recorded in Docket 416 at page 474, Docket 416 at page 475, Docket 416 at page 476, Docket 416 at page 477, Docket 416 at page 478, Docket 416 at page 479, Docket 416 at page 480, Docket 416 at page 481, Docket 416 at page 482, Docket 416 at page 483, Docket 416 at page 484, Docket 416 at page 485, Docket 416 at page 486, Docket 416 at page 488.
5. All oil, gas, mineral, water and other subsurface rights conveyed by Deed recorded in Docket 508 at page 804.
6. EASEMENT and rights incident thereto, as set forth in instrument:
Recorded in Book 22 of Miscellaneous Records
Page 157
Purpose electric transmission lines and related facilities
(affects the Northeast quarter of the Northwest quarter and the West half of the Northeast quarter of Section 14)
7. EASEMENT and rights incident thereto, as set forth in instrument:
Recorded in Docket 27
Page 281
Purpose telephone and telegraph lines
(affects the East 10 feet of Section 15)
8. Terms and conditions as set forth in that certain Agreement attached to the deed recorded in docket 374 at page 46.
9. EASEMENT and rights incident thereto, as set forth in instrument:
Recorded in Docket 427
Page 338
Purpose ingress and egress
(affects an undefined portion of Section 14)
10. EASEMENT and rights incident thereto, as set forth in instrument:
Recorded in Docket 468
Page 651
Purpose ingress and egress
(affects Section 15)
11. EASEMENT and rights incident thereto, as set forth in instrument:
Recorded in Docket 517
Page 155
Purpose electric transmission or distribution line
(affects Section 28)

e No.: 01320924

EASEMENT and rights incident thereto, as set forth in instrument:
Recorded in Docket 559
Page 680
Purpose telecommunication facilities
(affects Section 15)

END OF SCHEDULE B – SECTION II

EXHIBIT "B"

arc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 and as amended and restated by First Amendment dated January 25, 1969, as to Parcel 1;

ie Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972, as to Parcel 2;

ynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969, as to Parcel 3;

ster Bryce Appleton, Trustee of the Peter Bryce Appleton Trust under Agreement dated September 18, 1964, as to Parcel 4;

Olson Holdings, L.L.C., a Delaware limited liability company, as to Parcels 5, 6 and 8;

arc Francis Appleton, Trustee of the Marc Francis Appleton Trust under Agreement dated April 15, 1966 as to an undivided 1/4 interest;

ynne Appleton, Trustee of the Lynne Appleton Trust under Agreement dated June 16, 1969 as to an undivided 1/4 interest;

ie Appleton, Trustee of the Lee Appleton Trust under Agreement dated January 14, 1972 as to an undivided 1/4 interest;

ster Bryce Appleton, Trustee of the Peter Bryce Appleton Trust under Agreement dated September 18, 1964 as to an undivided 1/16 interest;

ny Appleton, a _____ woman, as to an undivided 1/16 interest;

athan Cooper Appleton, a _____ man, as to an undivided 1/16 interest;

**arah Appleton, a _____ woman, as to an undivided 1/16 interest.
s to Parcel 7**

COMMITMENT CONDITIONS AND STIPULATIONS

The term mortgage, when used herein, shall include deed of trust, trust deed, or other security instrument.

If the proposed insured has or acquires actual knowledge of any defect, lien, encumbrance, adverse claim or other matter affecting the estate or interest or mortgage thereon covered by this Commitment other than those shown in Schedule B hereof, and shall fail to disclose such knowledge to the Company in writing, the Company shall be relieved from liability for any loss or damage resulting from any act or reliance hereon to the extent the Company is prejudiced by failure to so disclose such knowledge. If the proposed insured shall disclose such knowledge to the Company, or if the Company otherwise acquires actual knowledge of any such defect, lien, encumbrance, adverse claim or other matter, the Company at its option may amend Schedule B of this Commitment accordingly, but such amendment shall not relieve the Company from liability previously incurred pursuant to paragraph 3 of these Conditions and Stipulations.

Liability of the Company under this Commitment shall be only to the named proposed insured and such parties included under the definition of insured in the form of policy or policies committed for and only for actual loss incurred in reliance hereon in undertaking in good faith, (a) to comply with the requirements hereof, or (b) to eliminate exceptions shown in Schedule B, or (c) to acquire or create the estate or interest or mortgage thereon covered by this Commitment. In no event shall such liability exceed the amount stated in Schedule A for the policy or policies committed for and such liability is subject to the insuring provisions, the Conditions and Stipulations, and the Exclusions from Coverage of the form of policy or policies committed for in favor of the proposed insured which are hereby incorporated by reference and are made a part of this Commitment except as expressly modified herein.

Any action or actions or rights of action that the proposed insured may have or may bring against the Company arising out of the status of the title to the estate or interest or the status of the mortgage thereon covered by this Commitment must be based on and are subject to the provisions of this Commitment.

AMERICAN LAND TITLE ASSOCIATION LOAN POLICY (10-17-92)**WITH ALTA ENDORSEMENT-FORM 1 COVERAGE**

and

AMERICAN LAND TITLE ASSOCIATION LEASEHOLD LOAN POLICY (10-17-92)**WITH ALTA ENDORSEMENT-FORM 1 COVERAGE****EXCLUSIONS FROM COVERAGE**

Following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

- (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land, (ii) the character, dimensions or location of any improvement now or hereafter erected on the land, (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part, or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental policy power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

Defects, liens, encumbrances, adverse claims or other matters:

- (a) created, suffered, assumed or agreed to by the insured claimant;
- (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
- (c) resulting in no loss or damage to the insured claimant;
- (d) attaching or created subsequent to Date of Policy; (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
- (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.

Unenforceability of the lien of the insured mortgage because of the inability or failure of the insured at Date of Policy, or the inability or failure of any subsequent owner of the indebtedness, to comply with applicable doing business laws of the state in which the land is situated.

Invalidity or unenforceability of the lien of the insured mortgage, or claim thereof, which arises out of the transaction evidenced by the insured mortgage and is based upon usury or any consumer credit protection or truth in lending law. Any statutory lien for services, labor or materials (or the claim of priority of any statutory lien for services, labor or materials over the lien of the insured mortgage) arising from an improvement or work related to the land which is contracted for and commenced subsequent to Date of Policy and is not financed in whole or in part by proceeds of the indebtedness secured by the insured mortgage which at Date of Policy the insured has advanced or is obligated to advance.

Any claim which arises out of the transaction creating the interest of the mortgagee insured by this Policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:

- (a) the transaction creating the interest of the insured mortgagee being deemed a fraudulent conveyance or fraudulent transfer, or
- (b) the subordination of the interest of the insured mortgagee as a result of the application of the doctrine of equitable subordination; or
- (c) the transaction creating the interest of the insured mortgagee being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

Above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

- Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
- Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
- Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
- Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
- Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
- (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

AMERICAN LAND TITLE ASSOCIATION OWNER'S POLICY (10-17-92)

And

AMERICAN LAND TITLE ASSOCIATION LEASEHOLD OWNER'S POLICY (10-17-92)**EXCLUSIONS FROM COVERAGE**

Following matters are expressly excluded from the coverage of this policy and the Company will not pay loss or damage, costs, attorneys' fees or expenses which arise by reason of:

- (a) Any law, ordinance or governmental regulation (including but not limited to building and zoning laws, ordinances, or regulations) restricting, regulating, prohibiting or relating to (i) the occupancy, use, or enjoyment of the land, (ii) the character, dimensions or location of any improvement now or hereafter erected on the land, (iii) a separation in ownership or a change in the dimensions or area of the land or any parcel of which the land is or was a part; or (iv) environmental protection, or the effect of any violation of these laws, ordinances or governmental regulations, except to the extent that a notice of the enforcement thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.
- (b) Any governmental policy power not excluded by (a) above, except to the extent that a notice of the exercise thereof or a notice of a defect, lien or encumbrance resulting from a violation or alleged violation affecting the land has been recorded in the public records at Date of Policy.

Rights of eminent domain unless notice of the exercise thereof has been recorded in the public records at Date of Policy, but not excluding from coverage any taking which has occurred prior to Date of Policy which would be binding on the rights of a purchaser for value without knowledge.

Defects, liens, encumbrances, adverse claims or other matters:

- (a) created, suffered, assumed or agreed to by the insured claimant;
- (b) not known to the Company, not recorded in the public records at Date of Policy, but known to the insured claimant and not disclosed in writing to the Company by the insured claimant prior to the date the insured claimant became an insured under this policy;
- (c) resulting in no loss or damage to the insured claimant;
- (d) attaching or created subsequent to Date of Policy; (except to the extent that this policy insures the priority of the lien of the insured mortgage over any statutory lien for services, labor or material) or
- (e) resulting in loss or damage which would not have been sustained if the insured claimant had paid value for the estate or interest insured by this policy.

Any claim, which arises out of the transaction vesting in the insured the estate or interest insured by the policy, by reason of the operation of federal bankruptcy, state insolvency, or similar creditors' rights laws, that is based on:

- (a) the transaction creating the estate or interest insured by this policy being deemed a fraudulent conveyance or fraudulent transfer; or
- (b) the transaction creating the estate or interest insured by the policy being deemed a preferential transfer except where the preferential transfer results from the failure:
 - (i) to timely record the instrument of transfer; or
 - (ii) of such recordation to impart notice to a purchaser for value or a judgment or lien creditor.

Above policy forms may be issued to afford either Standard Coverage or Extended Coverage. In addition to the above Exclusions from Coverage, the Exceptions from Coverage in a Standard Coverage Policy will also include the following General Exceptions:

EXCEPTIONS FROM COVERAGE

This policy does not insure against loss or damage (and the Company will not pay costs, attorneys' fees or expenses) which arise by reason of:

- Taxes or assessments which are not shown as existing liens by the records of any taxing authority that levies taxes or assessments on real property or by the public records.
- Proceedings by a public agency which may result in taxes or assessments, or notices of such proceedings, whether or not shown by the records of such agency or by the public records.
- Any facts, rights, interests or claim which are not shown by the public records but which could be ascertained by an inspection of the land or by making inquiry of persons in possession thereof.
- Easements, liens or encumbrances, or claims thereof, which are not shown by the public records.
- Discrepancies, conflicts in boundary lines, shortage in area, encroachments, or any other facts which a correct survey would disclose, and which are not shown by the public records.
- (a) Unpatented mining claims; (b) reservations or exceptions in patents or in Acts authorizing the issuance thereof; (c) water rights, claims or title to water, whether or not the matters excepted under (a), (b) or (c) are shown by the public records.

**AMERICAN LAND TITLE ASSOCIATION
HOMEOWNER'S POLICY OF TITLE INSURANCE (10/17/98)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, You are not insured against loss, costs, attorneys' fees, and expenses resulting from Governmental police power, and the existence or violation of any law or government regulation. This includes ordinances, laws and regulations concerning:

- a. building
- b. zoning
- c. land use
- d. improvements on the Land
- e. land division
- f. environmental protection

This Exclusion does not apply to violations or the enforcement of these matters if notice of the violation or enforcement appears in the Public Records at the Policy Date.

This Exclusion does not limit the coverage described in Covered Risk 14, 15, 16, 17 or 24.

The failure of Your existing structures, or any part of them, to be constructed in accordance with applicable building codes. This Exclusion does not apply to violations of building codes if notice of the violation appears in the Public Records at the Policy Date.

The right to take the Land by condemning it, unless:

- a. a notice of exercising the right appears in the Public Records at the Policy Date, or
- b. the taking happened before the Policy date and is binding on You if You bought the Land without knowing of the taking.

Risks:

- a. that are created, allowed, or agreed to by You, whether or not they appear in the Public Records;
- b. that are known to You at the Policy Date, but not to Us, unless they appear in the Public Records at the Policy Date;
- c. that result in no loss to You, or
- d. that first occur after the Policy Date – this does not limit the coverage described in Covered Risk 7, 8d, 22, 23, 24 or 25.

Failure to pay value for Your Title.

Lack of a right:

- a. to any land outside the area specifically described and referred to in paragraph 3 of Schedule A; and
- b. in streets, alleys, or waterways that touch the land.

This Exclusion does not limit the coverage described in Covered Risk 11 or 18.

**AMERICAN LAND TITLE ASSOCIATION
RESIDENTIAL TITLE INSURANCE POLICY (6-2-87)
EXCLUSIONS**

In addition to the Exceptions in Schedule B, you are not insured against loss, costs, attorneys' fees, and expenses resulting from Governmental police power, and the existence or violation of any law or government regulation. This includes building and zoning ordinances and also laws and regulations concerning:

- Land use
- Improvements on the land
- Land division
- Environmental protection

This exclusion does not apply to violations or the enforcement of these matters which appear in the public records at Policy Date.

This exclusion does not limit the zoning coverage described in items 12 and 13 of Covered Title Risks.

The right to take the Land by condemning it, unless:

- A notice of exercising the right appears in the public records on the Policy Date
- The taking happened prior to the Policy Date and is binding on you if you bought the land without knowing of the taking

Title Risks:

- That are created, allowed, or agreed to by you
- That are known to you, but not to us, on the Policy Date – unless they appeared in the Public Records
- That result in no loss to you
- That first affect your title after the Policy Date – this does not limit the labor and material lien coverage in Item B of Covered Title Risks

Failure to pay value for your title.

Lack of a right:

- To any land outside the area specifically described and referred to in Item 3 of Schedule A
OR
- In streets, alleys, or waterways that touch your land

This exclusion does not limit the access coverage in Item 5 of Covered Title Risks.