Preliminary Jurisdictional Determination Report

for the

East County Substation Project

Prepared for:

Prepared by:

October 2010

EXECUTIVE SUMMARY

Insignia Environmental (Insignia) performed field surveys on behalf of San Diego Gas & Electric Company (SDG&E) to map water resources under the jurisdiction of the United States (U.S.) Army Corps of Engineers (USACE) within the East County Substation Project (Proposed Project). Insignia developed field survey protocol and data collection methods based on USACE-published regulatory guidance and direct consultation with the USACE. Surveys were conducted in April and June of 2010, during which Insignia biologists mapped and collected data on a total of 574 drainage features. Due to the hydrologic conditions of the Proposed Project area, the drainages mapped were all non-wetland waters of the U.S. with the exception of one wetland, which is described in the paragraph that follows. Of the 574 drainage features, 555 were classified as ephemeral and 19 were classified as intermittent. The length of the drainages ranged from 1.7 feet to 3,327.8 feet. Ordinary high water mark widths ranged from 0.1 inch to 50 feet.

One USACE-jurisdictional inland seasonal saline emergent wetland was identified within the survey area along the 138 kV transmission line alignment, directly east of Steel Pole (SP)-83, adjacent to an agricultural field. This wetland feature was delineated on September 14, 2010, in accordance with the USACE Wetlands Delineation Manual and the Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. The feature is approximately 0.3 acre and is the only USACE-jurisdictional wetland within the survey area.

Once the inventory of drainages within the Proposed Project area was complete, Insignia determined impacts to the mapped water resources under the jurisdiction of USACE. Of the 574 drainage features mapped, 327 will be temporarily and/or permanently impacted by construction of the Proposed Project. Impacts to the USACE-jurisdictional wetland feature will be avoided entirely. Impacts to jurisdictional waters from the Proposed Project will be further detailed in SDG&E's Preconstruction Notification package for Nationwide Permit Number 12.

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1 – INTRODUCTION

This document describes the results of field surveys that Insignia Environmental (Insignia) conducted on behalf of San Diego Gas & Electric Company (SDG&E) to collect data on dry desert washes, swales, and other drainage features within the East County (ECO) Substation Project (Proposed Project) area. An overview map of the Proposed Project and maps of the survey area are provided as Figure 1: Project Overview Map and Attachment A: Drainage Survey Area Maps, respectively. This document also provides an overview of the Proposed Project, United States (U.S.) Army Corps of Engineers (USACE) regulatory background and published guidance, and the methods used to conduct field surveys.

2 – PROJECT DESCRIPTION OVERVIEW

SDG&E is proposing to construct the Proposed Project in the southeastern portion of San Diego County, California, near the Imperial County and Mexico borders. The Proposed Project involves the following components:

- Construction of a new 500/230/138 kilovolt (kV) electric substation (ECO Substation)
- Loop-in of the existing 500 kV Southwest Powerlink (SWPL) transmission line into the new substation
- Construction of a 138 kV transmission line from the ECO Substation to the rebuilt Boulevard Substation
- Rebuild of the Boulevard Substation on a new approximately 8.5-acre parcel

Construction of the Proposed Project will require a footprint of approximately 168.7 acres. The Proposed Project components are described in more detail in the following sections.

2.0 ECO SUBSTATION

The ECO Substation component will have a permanent footprint of approximately 81.1 acres, not including access roads. Including the access roads, the total impact will be approximately 88.5 acres. Of this total footprint, the substation pads will compose approximately 58 acres. In addition, a 20-foot area around the perimeter of the substation pads will be required for maintenance purposes. The substation pads will be enclosed by chain-link fencing. Construction will require permanent cut and fill slopes that will occupy up to an additional 25 acres in the area surrounding the substation. A temporary area of approximately 100 to 150 feet around the perimeter of the substation will also be required to maneuver construction equipment and supplies during construction.

2.1 SWPL LOOP-IN

The existing SWPL 500 kV transmission line will be looped in and out of the ECO Substation component. This installation will require the removal of one existing 125-foot-tall tower and the

installation of five three-pole dead-end structures and one H-frame tangent structure east of the ECO Substation component fence. New permanent dirt access roads (approximately 20 feet wide and totaling approximately 2,000 feet long) will be constructed from the SWPL right-of-way (ROW) to the six new SWPL loop-in structures. Seven temporary pull sites will be required to accommodate the installation of the SWPL loop-in, each measuring approximately 150 feet by 100 feet. A permanent maintenance pad measuring approximately 150 feet by 150 feet will be cleared around each of the six structure locations to accommodate installation and maintenance. The SWPL loop-in will have a permanent footprint of approximately 7.7 acres. Permanent maintenance pads at each structure will be kept clear of shrubs and other obstructions for inspection and maintenance purposes. All other areas that are temporarily disturbed will be restored to pre-construction conditions to the extent practical.

2.2 138 KV TRANSMISSION LINE

A new 138 kV transmission line will be constructed from the ECO Substation to the rebuilt Boulevard Substation. The new transmission line will be approximately 13.5 miles long and will be composed of approximately 99 steel poles (SPs). In addition, nine wooden distribution poles will be installed to replace the existing distribution Circuit 445 poles; this distribution line will be collocated on the new 138 kV transmission line structures near the intersection of Jewel Valley Road and Tule Jim Lane in Boulevard. Each SP will require a permanent maintenance pad, generally measuring 80 feet by 60 feet. In addition, four 100-foot by 150-foot pull sites, three approximately 500-foot by 500-foot fly yards, and two approximately 170-foot by 100-foot staging areas will be required. New, unpaved access roads to the new SP sites will be installed, graded level, and will generally be 15 feet wide for straight sections and up to 20 feet wide at curves. The proposed 138 kV transmission line will transition from an overhead to an underground configuration at SP-1. From this point, it will exit the Boulevard Substation via an underground duct package. An approximately 450-foot by 50-foot work area will be required to install the underground duct package. A total of 39.7 acres of impacts are associated with the 138 kV transmission line.

2.3 BOULEVARD SUBSTATION REBUILD

Currently, the fenced area of the existing Boulevard Substation measures approximately 70 feet by 100 feet. The Boulevard Substation will be rebuilt directly east of the existing substation on an approximately 8.5-acre parcel. The Boulevard Substation rebuild will include a 138/69/12 kV fenced yard measuring approximately 277 feet by 319 feet, and a 10-foot area around the perimeter of the fenced area will be used for maintenance purposes. The fenced area of the new substation will require approximately two acres. Additionally, an approximately 636-foot-long swale along the west side of the rebuilt Boulevard Substation will be improved to prevent flooding of the Boulevard Substation site. The existing Boulevard Substation will be removed from service and demolished once the new substation is energized. One approximately 250-foot-long by 175-foot-wide temporary staging area will be required to stage substation materials and construction equipment. The Boulevard Substation rebuild will have a footprint of approximately 3.5 acres.

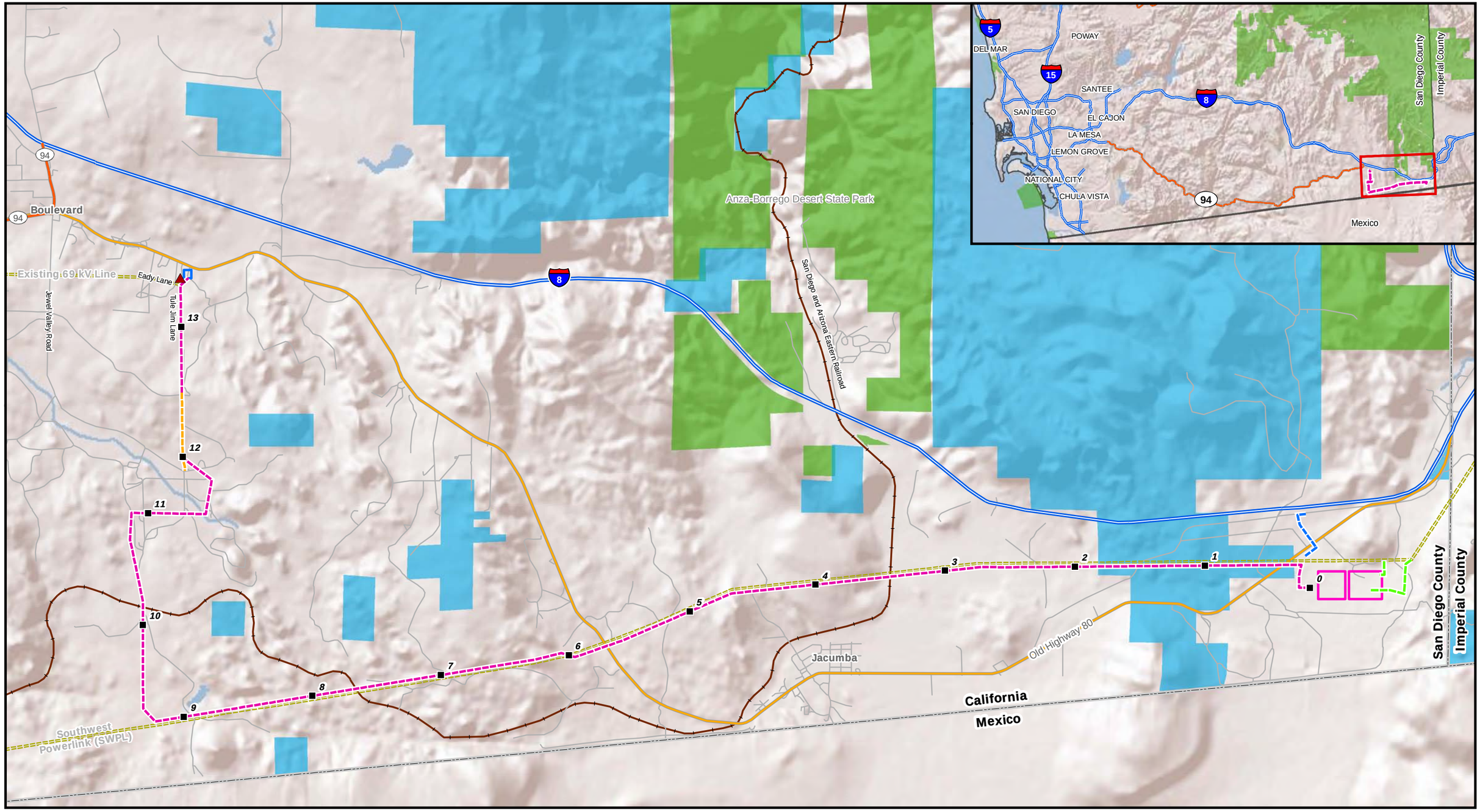

Figure 1: Project Location Map

East County Substation Project

- Proposed SWPL Loop-In
- Proposed 138 kV Line
- Proposed 12 kV Temporary Distribution Tap
- 445 Circuit Collocated with 138 kV Line
- Existing Transmission Line
- ECO Substation
- Boulevard Substation Rebuild
- Existing Boulevard Substation
- Proposed 138 kV Line Milepost
- Bureau of Land Management
- California State Park
- Interstate
- Highway
- Major Road
- Railroad

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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Z:\GIS\Projects and Data\California\Projects\SDGE E. County Sub\Mxds\Permitting\BA\Figure 1 Project Location.mxd

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3 – REGULATORY BACKGROUND

The Clean Water Act (CWA) (33 U.S.C. § 1251 *et seq*.), formerly known as the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the U.S. (WOUS). The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water.

Section 404 of the CWA gives the USACE and U.S. Environmental Protection Agency (EPA) regulatory and permitting authority regarding the discharge of dredged or fill material into "navigable waters of the United States." The USACE issues individual site-specific or general (Nationwide) permits for such discharges. Section 328 of Title 33 in the Code of Federal Regulations (CFR) defines the term WOUS as it applies to the jurisdictional limits of the authority of the USACE under the CWA. Wetlands are defined in the CWA as "those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions." A summary of the definition of WOUS in 33 CFR § 328.3 includes:

- All waters that are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide
- All interstate waters, including interstate wetlands
- All other waters, such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which could affect interstate or foreign commerce, including any such waters:
    - Which are or could be used by interstate or foreign travelers for recreational or other purposes, or
    - From which fish or shellfish are or could be taken and sold in interstate or foreign commerce, or
    - Which are used or could be used for industrial purposes by industries in interstate commerce
- All impoundments of waters otherwise defined as WOUS as described previously
- Tributaries of waters identified previously
- A territorial sea

- Wetlands adjacent to waters (other than waters that are themselves wetlands) identified previously[1]

Therefore, for purposes of determining USACE jurisdiction under the CWA, "navigable waters" as defined in the CWA are the same as WOUS as defined in 33 CFR § 323.3, as described previously.

In 2006, the Supreme Court addressed the jurisdictional scope of Section 404 of the CWA in *Rapanos v. United States* and *Carabell v. United States* Supreme Court decisions. These decisions provide two analytical standards for determining whether waterbodies that are not traditional navigable waters (TNW), including wetlands adjacent to those non-TNWs, are subject to CWA jurisdiction: (1) if the waterbody is relatively permanent, or if the waterbody is a wetland that directly abuts (e.g., the wetland is not separated from the tributary by uplands, a berm, dike or similar feature) a relatively permanent water (RPW), or (2) if the waterbody, in combination with all wetlands adjacent to that waterbody, has a significant nexus with TNWs.

When determining whether a waterbody qualifies as TNW, relevant considerations include:

- whether a USACE district has determined that the waterbody is navigable WOUS pursuant to 33 CFR § 329.14; or

- the waterbody qualifies as a navigable WOUS under any of the tests set forth in 33 CFR § 329; or

- a federal court has determined that the waterbody is navigable-in-fact under federal law for any purpose; or

- the waterbody is navigable-in-fact under the standards that have been used by the federal courts.

On December 2, 2008, the USACE and the EPA issued a memorandum providing guidance regarding the agencies' jurisdiction over WOUS under the CWA, in light of the *Rapanos v. United States* and *Carabell v. United States* Supreme Court decisions. The memorandum states that the USACE and the EPA will assert jurisdiction over the following waters:

- TNWs
- Wetlands adjacent to TNWs
- Non-navigable tributaries of TNWs that are relatively permanent, where the tributaries typically flow year-round or have continuous flow at least seasonally
- Wetlands that directly abut such tributaries

The memorandum also states that the USACE and EPA will generally not assert jurisdiction over swales or erosional features (*e.g.*, gullies and small washes characterized by low volume,

[1] Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than cooling ponds as defined in 40 Code of Federal Regulations 423.11(m) which also meet the criteria of this definition) are not WOUS.

infrequent, or short duration of flow) and ditches (including roadside ditches) that are excavated wholly in and draining only uplands and that do not carry a relatively permanent flow of water.

In addition, the memorandum states that the agencies will decide whether they have jurisdiction over non-navigable tributaries that are not relatively permanent based on a fact-specific analysis to determine whether the tributaries have a significant nexus with a TNW. The memorandum states that "a significant nexus exists if the tributary, together with its adjacent wetlands, has more than an insubstantial or speculative effect on the chemical, physical, and/or biological integrity of a downstream TNW." The classes of waterbodies that are subject to EPA and USACE jurisdiction only if such a significant nexus is demonstrated are:

- Non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally;
- Wetlands adjacent to such tributaries; and
- Wetlands adjacent to, but that do not directly abut a relatively permanent, non-navigable tributary

The limits of USACE jurisdiction under Section 404 as given in 33 CFR Section 328.4 are as follows:

- Territorial seas: three nautical miles in a seaward direction from the baseline
- Tidal waters of the U.S.: high tide line or to the limit of adjacent non-tidal waters
- Non-tidal waters of the U.S.: ordinary high water mark (OHWM) or to the limit of adjacent wetlands
- Wetlands: to the limit of the wetland

Published Guidance

Wetland Delineation Manuals

In 1987, the USACE published the Wetland Delineation Manual describing the technical guidelines and methods using a multi-parameter approach to identify and delineate wetlands for purposes of implementing Section 404 of the CWA. The Wetland Delineation Manual states that wetlands have three general diagnostic environmental characteristics including:

- The prevalent vegetation consists of macrophytes that are typically adapted to areas with soils that are typically saturated or inundated with water.
- The soils present have been classified as hydric, or they possess characteristics that are associated with reducing soil conditions.
- The area is inundated either permanently or periodically at mean water depths of less than 6.6 feet, or the soil is saturated to the surface at some time during the growing season of the prevalent vegetation.

In September 2008, the USACE published the Regional Supplement to the Wetland Delineation Manual: Arid West Region (Version 2.0). This manual was developed as part of a nationwide Regional Supplement Program to address regional wetland characteristics and improve the accuracy and efficiency of wetland delineation procedures.

Waters of the U.S. Delineation Guidance

In June 2001, the USACE published the Final Summary Report: Guidelines for Jurisdictional Determinations for WOUS in the Arid Southwest, which provides a specific methodology, including a detailed checklist, for delineators in the western U.S. to follow when conducting jurisdictional determinations for WOUS in arid and semi-arid regions.

On May 30, 2007, after the *Rapanos* v. *United States* and *Carabell* v. *United States* Supreme Court decisions, the USACE published the Jurisdictional Determination Form Instructional Guidebook. This document was intended to be used as the USACE Regulatory Standard Operating Procedures for conducting an approved jurisdictional determination. The guidebook details the definition and characteristics of a TNW and hydrological and ecological factors that help assist in determining if a certain drainage feature has a significant nexus, as defined by the *Rapanos v. United States* and *Carabell v. United States* Supreme Court decisions.

On June 5, 2007, the USACE issued Regulatory Guidance Letter Number 07-01, detailing the practices the agency utilizes for documenting jurisdiction under Section 9 and 10 of the River and Harbors Act of 1899 and Section 404 of the CWA. This guidance letter was developed to provide clarification for processing and documenting jurisdictional determinations.

On June 26, 2008, the USACE issued Regulatory Guidance Letter Number 08-02, explaining the difference between preliminary jurisdictional determinations and approved jurisdictional determinations, and providing guidance on when an approved jurisdictional determination is required and when an applicant may elect to use a preliminary jurisdictional determination. This guidance took effect immediately and superseded any inconsistent guidance provided in Regulatory Guidance Letter Number 07-01. However, this guidance does not address which waterbodies or drainage features are subject to the CWA.

In August 2008, the USACE published A Field Guide to the Identification of the OHWM in the Arid West Region of the Western U.S. This field guide presented a method for delineating the lateral extent of non-wetland waters in the arid portion of the western U.S., using stream geomorphology and vegetation response to the dominate stream discharge. The methodology presented in this field guide is limited to one element of the delineation procedure for non-wetland WOUS in the Arid West Region. Determining USACE jurisdiction of non-wetland WOUS is based on the Jurisdictional Determination Form Instructional Guidebook and the December 2, 2008 USACE and EPA memorandum that is described previously.

4 – METHODS

4.0 RESEARCH

Work to analyze potential impacts to water features from construction and operation of the Proposed Project initially began with review of aerial photographs, U.S. Geological Survey (USGS) topographic maps, and National Wetland Inventory (NWI) maps. All planning documents that were relevant to the Proposed Project area, including two San Diego County plans, the Mountain Empire Subregional Plan, and the San Diego County General Plan, were also reviewed.

4.1 INITIAL SURVEYS

Insignia biologists Jeffry Coward, Larry Butcher, Kevin Kilpatrick, and Nick Fisher conducted biological surveys of the entire Proposed Project area on February 21 through 22, March 19 through 20, April 2 through 4, April 10, July 15 through 18, July 28 through 31, August 27 through 29, and October 28 through 30 of 2008. Their surveys included the six land parcels (totaling approximately 498 acres) on which the approximately 58-acre ECO Substation component and SWPL loop-in structures will be constructed, as well as the entire SDG&E property surrounding the existing Boulevard Substation and the 8.5-acre parcel east of the Boulevard Substation where the substation will be rebuilt. All unpaved access roads and locations of proposed new access roads to the substation sites were surveyed. In addition, a 400-foot-wide corridor for the proposed 138 kV transmission line was surveyed, including pole locations, work areas, existing and proposed access roads, pull and tension sites, staging areas, fly yards, and laydown yards.

The surveyors documented the dominant plant communities and potential habitat for wildlife species focusing on burrows, nests, rocky outcrops, swales, and cavities. They also documented plant and animal species observed, including any signs of wildlife species, such as scat, tracks, and remains. The potential for sensitive plant and animal species, determined by the presence of diagnostic habitat elements, was documented.

During the biological field surveys, biologists assessed the entire Proposed Project area for potentially jurisdictional wetlands or WOUS based on the presence of hydrophytic vegetation, OHWM, connectivity to blue-line drainages, and hydrology.

4.2 DETAILED DRAINAGE SURVEYS

4.2.0 Survey Area

The survey area for the drainage survey included the following:

- the three parcels on which the ECO Substation component and SWPL loop-in will be located, which total 377 acres;
- a 200-foot by 200-foot area around each SP location along the 138 kV transmission line;
- the 8.5-acre parcel on which the Boulevard Substation will be rebuilt;

- all fly yards, pull sites, and staging areas, including any associated areas to be graded;
- a 35-foot-wide corridor centered on all access roads, except the southern access road to the ECO Substation site, that are planned for use or to be constructed; and
- a 100-foot-wide corridor centered on the southern access road to the ECO Substation site.

Maps of the survey area are provided in Attachment A: Drainage Survey Area Maps. Maps of the survey area were provided to each field team, and the survey area was uploaded to each global positioning system (GPS) device.

4.2.1 Data Collection

Biologists Jeffry Coward and Danielle Muir conducted surveys on April 26 through April 29, 2010, to collect data on the larger drainage features (generally 3 feet wide or greater from top of bank [TOB] to TOB) within the approximately 377-acre ECO Substation component site. Following these initial surveys, Jeffry Coward, Danielle Muir, Bill Fischer, Larry Butcher, Lauren Brudney, Derek Siver, and Peter Boice formed three teams of two biologists each to conduct surveys of the entire ECO Substation component site and associated access roads; the Boulevard Substation rebuild site and associated access roads; and the fly yards, pull sites, temporary work areas, access roads, maintenance pads, and SP locations associated with the 138 kV transmission line. Surveys were conducted over 13 days between June 1 and June 15, 2010.

In July and August 2010, SDG&E consulted with the USACE regarding impacts to USACE-jurisdictional waters that will result from construction of the Proposed Project as well as the associated permitting options. In consultation with the USACE, SDG&E revised the footprint of the ECO Substation component and main access road in order to reduce the permanent impacts to USACE-jurisdictional waters. Following these revisions, the new southern access road was surveyed by biologists Peter Boice and Lauren Brudney on August 26, 2010. This survey included a 35-foot-wide corridor centered on the access road. An additional survey of the southern access road was conducted by biologists Jeffry Coward and Lauren Brudney on September 20, 2010. This survey included a 100-foot-wide corridor centered on the access road.

All intermittent and ephemeral desert washes within the survey area that exhibited bed and bank (a concave depression that appears to carry water at some point), connected to a TNW, and exhibited OHWM, were documented and mapped, including tributaries to the drainages collected in the initial field effort. Data collected for each drainage feature was based on the 2007 Jurisdictional Determination Form Instructional Guidebook; the December 2, 2008 USACE and EPA memorandum; and the 2008 Field Guide to the Identification of the OHWM in the Arid West Region of the Western U.S.

Insignia biologists recorded the information required to determine potential USACE jurisdiction on a drainage field survey form. Information recorded for each drainage feature includes, but is not limited to:

- its relationship with a TNW (flows directly or indirectly into the TNW, distance from the TNW)
- presence of bed and bank

- presence of OHWM
- width (measured from OHWM to OHWM and from TOB to TOB with a yard stick and/or 12-inch ruler)
- depth (measured from OHWM to bed and TOB to bed with a yard stick and/or 12-inch ruler)
- general tributary characteristics (natural, artificial, or manipulated)
- flow characteristics (intermittent or ephemeral)
- presence of surface flow
- vegetation within bed
- percent of vegetation cover within bed
- surrounding vegetation type
- water quality
- presence of pollutants
- presence of run/riffle/pool complexes
- primary substrate composition
- geometry
- gradient (measured with a clinometer)
- presence of riparian corridor
- identification as a tributary to an adjacent wetland
- presence of habitat for federally listed species
- presence of habitat for fish
- presence of other environmentally sensitive areas

The following guidelines were used to help determine whether or not a drainage was intermittent or ephemeral during the dry season:

- There will be stronger OHWM indicators for the intermittent drainage than for the ephemeral drainage.

- The intermittent drainage will have more facultative[2] and facultative wetland[3] plants, whereas the ephemeral drainage may even have some upland plants.

- The intermittent stream will have numerous hydrology indicators whereas the ephemeral drainage will have few.

Identification of the OHWM was conducted in accordance with the USACE Regulatory Guidance Letter Number 05-05, Ordinary High Water Mark Identification (USACE 2005) and the USACE 2008 Field Guide to the Identification of the OHWM in the Arid West Region of the Western U.S., which describes physical evidence used to ascertain the lateral limits of jurisdiction. The USACE generally uses more than one physical indicator or other means for determining the OHWM. Physical indicators of OHWM include: natural line impressed on the bank; shelving; destruction of terrestrial vegetation; presence of litter and debris; wracking;

[2] Plants that are equally likely to occur in wetlands or non-wetland areas.
[3] Plants that usually occur in wetlands, but are occasionally found in non-wetland areas.

vegetation matted down, bent, or absent; sediment sorting; leaf litter disturbed or washed away; scour; deposition; bed and banks; water staining; and change in plant community.

The biologists mapped all of the drainage features with a sub-meter Geo-XT Trimble GPS unit. The biologists walked both lateral limits of the drainages, as determined by the OHWM (for WOUS), taking GPS points along the centerline of the drainage in order to digitally map the area of jurisdiction. For drainages with varying widths, the surveyor took at least three measurements of width and calculated an average width for the entire drainage. When it was not possible for biologists to walk the entire centerline of the drainage due to rock features or dense vegetation, biologists accessed the areas possible, and then put the GPS unit on pause until they could find another location to access the drainage's bed.

To assist the team's orientation in the field, the mapped stream layers; layers for survey areas; layers for ROWs; all areas proposed to be disturbed, including but not limited to access roads, proposed structure maintenance pad sites, pull sites, lay down areas; and any other areas where construction-related facilities may be located or activities may occur, were uploaded to the GPS units before mobilizing to the field.

Representative photographs—including views of the drainage facing upstream and downstream, the OHWM, substrate within the drainage, vegetation within the drainage, drainage bed and bank, and other important features—were taken of each drainage feature. Photographs taken during the day were documented, downloaded, and labeled each evening.

Once the fieldwork was completed, the GPS data was processed and maps of the survey area were created, displaying all drainage features identified in the field. Maps and photographs depicting drainage locations and features are discussed in the results section that follows.

4.3 WETLAND DELINEATION

Insignia contracted with WRA Environmental Consultants (WRA) to conduct a formal wetland delineation of one wetland feature that was identified during the drainage field survey along the 138 kV transmission line alignment near SP-83. Prior to conducting the field delineation, WRA reviewed reference materials, including the San Diego County Area Soil Survey, the Jacumba USGS 7.5-minute quadrangle map, and aerial photographs of the Proposed Project site.

A focused evaluation of indicators of wetland and non-wetland waters was performed within a 200-foot by 200-foot area (study area) near SP-83 on September 14, 2010. The methods used to delineate jurisdictional wetland and non-wetland waters were based on the USACE Wetlands Delineation Manual and the Regional Supplement to the USACE Wetland Delineation Manual: Arid West Region. A general description of the study area, including plant communities present, topography, and land use, was also generated during the delineation. All wetland features observed within the study area were mapped.

5 – RESULTS

5.0 STUDY AREA DESCRIPTION

5.0.0 Hydrology

The Proposed Project is located within the Colorado River Hydrologic Region. Average annual rainfall in the area, as measured in Boulevard, is approximately 12 inches per year, with the majority of all precipitation falling between November and May (Western Regional Climate Center, 2010). Rainfall between June and October averages approximately 0.4 inch per month. Precipitation decreases to the east, with average annual rainfall measuring approximately 2.4 inches per year in Coyote Wells, which is located approximately 16 miles northeast of the Proposed Project area.

The hydrologic conditions are representative of high-elevation, semi-arid, and desert regions, with undulating terrain dominated by dry washes, ephemeral drainages, and erosion features. Located distantly to the east, the Colorado River remains the most important waterway in the region. The river supplies water for use within the region and elsewhere, and plays an important role in water supply, agriculture, and recreation.

The Proposed Project is within the Salton Sea Watershed, Anza Borrego hydrologic unit, and the Jacumba hydrologic area of the Colorado River Basin, as shown in Figure 2: Watershed Map. Within the ECO Substation component and SWPL loop-in limits, numerous erosion gullies, swales, and dry washes transect the site from east to west. These features originate approximately 2,200 feet east of the ECO Substation component site.

During heavy rain events, runoff starts east of the ECO Substation component and concentrates along several paths as it flows to the west. Boulder Creek, which appears as a blue-line drainage on USGS topographic maps, is located further east of the ECO Substation component, but has no surface water connectivity to the site. However, all of the drainage features eventually drain into Carrizo Creek, which drains into an agricultural field and then into Carrizo Wash. Additionally, numerous drainages along the 138 kV transmission line alignment and within the Boulevard Substation rebuild site also have the potential to drain to Carrizo Wash. Carrizo Wash flows north and east before intersecting San Felipe Creek, approximately 13 miles southwest of the Salton Sea. San Felipe Creek then flows into the Salton Sea. Carrizo Creek, Carrizo Wash, and San Felipe Creek are USGS blue-line drainages.

Insignia biologists mapped and collected data on a total of 574 drainage features. Maps of the results of the drainage surveys are provided in Attachment B: Drainage Survey Results Maps. A table of all drainage features mapped is provided in Table 1: Mapped Drainage Features. In consultation with Shanti Santulli of the USACE, it was determined that only drainage features with a distinct OHWM were considered jurisdictional; therefore, only these drainages were mapped. In addition, erosion features within the prism of any existing road were not considered jurisdictional and were not mapped. Photographs of each drainage are included in Attachment C: Drainage Photographs. Drainage survey data forms for each of the mapped drainages are included in Attachment D: Completed Drainage Survey Data Forms.

No potential wetlands were identified within the ECO Substation component site. The ECO Substation component site lacks all three diagnostic environmental elements of wetlands—hydrophytic vegetation, hydric soils, or the required hydrology—as described in the USACE Wetland Delineation Manual. Therefore, the only potentially USACE-jurisdictional areas within the ECO Substation component site are non-wetland WOUS. One inland seasonal saline emergent wetland was located within the survey area near the proposed work pad for SP-83. A wetland delineation was conducted for this wetland, the results of which are provided in Attachment E: Site SP-83 Wetland Delineation. This wetland feature was determined to be approximately 0.3 acre in size.

5.0.1 Vegetation

Seven natural plant communities occur within the Proposed Project area, including chamise-redshank chaparral, coastal oak woodland, juniper woodland, mixed desert scrub, riparian scrub, shadscale scrub, and fresh emergent wetland. Mixed desert scrub and juniper woodland encompass the ECO Substation component site and surrounding areas. Mixed desert scrub within the survey area is dominated by Mormon tea (*Ephedra californica*), cholla cactus (*Opuntia* spp.), jojoba (*Simmondsia chinensis*), California juniper (*Juniperus californica*), desert agave (*Agave deserti*), water jacket (*Lycium andersonii*), lotebush (*Ziziphus parryi* var. *parryi*), and boundary goldenbush (*Ericameria brachylepis*). Mojave yucca (*Yucca schidigera*), desert apricot (*Prunus fremontii*), and creosote bush (*Larrea tridentata*) also occur within the survey area. Juniper woodland that occurs within the survey area is dominated by California juniper with associated shrubs of desert agave, water jacket, Mormon tea, and cholla cactus.

A variety of habitat types occur within the 138 kV transmission line alignment, including chamise-redshank chaparral, coastal oak woodland, juniper woodland, mixed desert scrub, riparian scrub, shadscale scrub, and fresh emergent wetland. In addition, the 138 kV transmission line alignment crosses an active agricultural field, residential areas, and equestrian facilities. Carrizo Creek and one wetland feature were identified within the survey area; these features will be avoided. Many other smaller riverine features were identified in the survey area and will be impacted by the Proposed Project.

Chamise-redshank chaparral occupies an area southwest of the existing Boulevard Substation. The principal dominant shrubs are chamise and redshank with associated shrubs, including Muller's oak (*Quercus cornelius-mulleri*), Mexican manzanita (*Arctostaphylos pungens*), cholla cactus, sugar bush, cupleaf ceanothus (*Ceanothus greggii* var. *perplexans*), and, in open areas, interior goldenbush (*Ericameria linearifolia*). The small, annual herb California goldfields is locally very abundant in openings. Common phacelia (*Phacelia distans*), western tansy-mustard (*Descurainia pinnata*), and non-native annual grasses, including foxtail chess (*Bromus madritensis* ssp. *rubens*) and cheat grass (*Bromus tectorum*), are locally moderately abundant under shrubs.

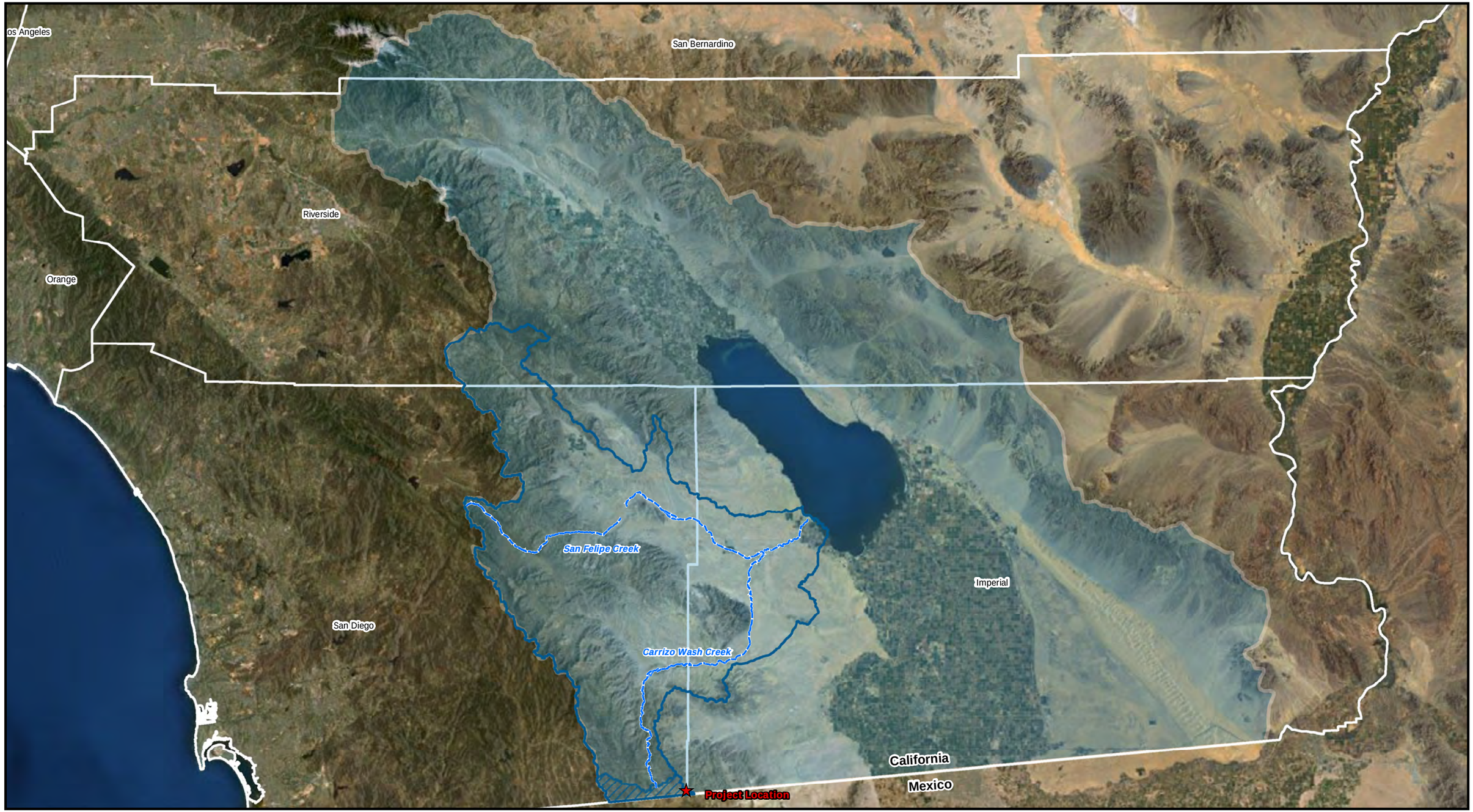

Figure 2: Watershed Map

East County Substation Project

Salton Sea Watershed
Anza Borrego Hydrological Unit
Jacumba Valley Hydrological Area
Creek

SDGE A Sempra Energy utility

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10/04/2010

5.1 DRAINAGE FEATURES AND IMPACTS

A total of 574 drainage features were mapped. Of the 574 mapped drainage features, 555 were classified as ephemeral, and 19 were classified as intermittent. The average length of the drainages was 124.7 feet and ranged from 1.7 feet to 3,327.8 feet. Widths of the OHWM varied from 0.1 inch and 50 feet. One USACE-jurisdictional inland seasonal saline emergent wetland was identified within the survey area along the 138 kV transmission line alignment, directly east of SP-83, adjacent to an agricultural field. This wetland feature was determined to be approximately 0.3 acre in size.

Of the 574 drainage features mapped, 327 will be temporarily and/or permanently impacted by the construction of the Proposed Project. Permanent impacts will include the filling or grading of drainage features that will not be restored to their previous contours. Temporary impacts will include the removal of vegetation at ground level, driving, and parking of vehicles and equipment within drainage features to establish pull sites, staging areas, temporary access, and fly yards. Impacts to jurisdictional waters from the Proposed Project will be further detailed in SDG&E's Preconstruction Notification package for Nationwide Permit Number 12.

Table 1: Mapped Drainage Features

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1001	R/E	2 feet	6 feet	2881.10 feet	3,631,217.394	1,146,294.628
1002	R/E	1 foot	3 feet	356.20 feet	3,631,257.022	1,146,620.725
1003	R/E	2 feet	3 feet	1557.32 feet	3,630,793.424	1,146,869.313
1004	R/E	3 feet	6 feet	2668.60 feet	3,631,032.541	1,145,503.749
1005	R/E	5 feet	6 feet	2922.96 feet	3,631,002.245	1,145,671.365
1006	R/E	1 foot	3 feet	706.86 feet	3,630,890.578	1,145,501.717
1007	R/E	2 feet	4 feet	495.45 feet	3,631,046.953	1,146,125.549
1008	R/E	1 foot	2 feet	193.04 feet	3,631,069.882	1,146,099.227
1009	R/E	3 feet	8 feet	2831.55 feet	3,630,912.178	1,145,762.303
1010	R/E	2 feet	5 feet	579.79 feet	3,630,977.410	1,146,077.941
1011	R/E	1 foot	1 foot	868.73 feet	3,631,224.127	1,145,509.254
1012	R/E	1 foot	2 feet	639.66 feet	3,631,152.665	1,145,470.309
1013	R/E	1 foot	3 feet	904.30 feet	3,631,029.258	1,145,560.662
1014	R/E	2 feet	4 feet	148.85 feet	3,630,825.273	1,145,524.932
1015	R/E	1 foot	3 feet	330.16 feet	3,630,814.094	1,145,568.646
1016	R/E	2 feet	3 feet	974.91 feet	3,630,753.453	1,145,536.023

[4] The Cowardin Class has been defined as follows:
R/E = Riverine-Ephemeral
R/I = Riverine-Intermittent
[5] Coordinates provided in the NAD 83 Zone 11 projection

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1017	R/E	4 feet	6 feet	744.21 feet	3,630,718.704	1,145,556.066
1018	R/E	2 feet	6 feet	1072.16 feet	3,630,672.371	1,145,721.392
1019	R/E	3 feet	6 feet	2164.09 feet	3,631,337.681	1,145,825.002
1020	R/E	2 feet	4 feet	1296.84 feet	3,631,285.532	1,145,838.562
1021	R/E	2 feet	3 feet	413.54 feet	3,631,450.941	1,145,699.585
1022	R/E	1 foot	3 feet	882.69 feet	3,631,428.780	1,145,812.012
1023	R/E	1 foot	5 feet	437.89 feet	3,631,179.658	1,146,485.064
1025	R/E	1 foot	4 feet	795.44 feet	3,631,121.011	1,146,158.598
1026	R/E	1 foot	2 feet	378.16 feet	3,631,211.172	1,146,789.629
1027	R/E	1 foot	30 inches	52.68 feet	3,631,438.240	1,145,890.598
1028	R/E	2 inches	6 inches	54.59 feet	3,631,443.377	1,145,864.228
1029	R/E	12 inches	3 feet	163.87 feet	3,631,418.609	1,145,865.873
1030	R/E	10 inches	4 feet	299.57 feet	3,631,460.201	1,145,847.753
1031	R/E	3 inches	3 inches	42.97 feet	3,631,450.279	1,145,821.787
1032	R/E	3 inches	10 inches	104.93 feet	3,631,422.436	1,145,827.693
1035	R/E	4 inches	12 inches	29.29 feet	3,631,430.058	1,145,691.976
1036	R/E	5 inches	3 feet	243.67 feet	3,631,470.359	1,145,692.100
1037	R/E	10 inches	4 feet	72.47 feet	3,631,458.638	1,145,667.085
1038	R/E	5 inches	16 inches	84.10 feet	3,631,437.795	1,145,663.162
1039	R/E	4 inches	15 inches	54.05 feet	3,631,433.030	1,145,668.658
1040	R/E	3 inches	3 feet	146.61 feet	3,631,344.272	1,145,569.598

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1041	R/E	8 inches	9 feet	448.98 feet	3,631,309.359	1,145,626.836
1042	R/E	5 inches	4 feet	54.77 feet	3,631,292.380	1,145,622.145
1043	R/E	4 inches	16 inches	19.25 feet	3,631,269.787	1,145,670.404
1044	R/E	6 inches	6 feet	1088.44 feet	3,631,241.193	1,145,784.281
1045	R/E	3 inches	30 inches	28.33 feet	3,631,195.755	1,145,910.958
1050	R/E	4 inches	20 inches	2.23 feet	3,631,271.277	1,145,727.096
1051	R/E	3 inches	15 inches	8.05 feet	3,631,276.811	1,145,717.032
1054	R/E	3 inches	3 feet	120.75 feet	3,631,387.446	1,145,621.157
1056	R/E	5 inches	20 inches	69.87 feet	3,631,380.597	1,145,634.065
1057	R/E	4 inches	21 inches	69.33 feet	3,631,373.735	1,145,643.468
1058	R/E	3 inches	20 inches	118.04 feet	3,631,370.251	1,145,663.367
1060	R/E	4 inches	16 inches	107.17 feet	3,631,306.927	1,145,733.968
1065	R/E	3 inches	15 inches	114.04 feet	3,631,291.370	1,145,777.148
1066	R/E	6 inches	6 feet	14.71 feet	3,631,240.164	1,145,969.435
1067	R/E	3 inches	26 inches	51.15 feet	3,631,244.310	1,145,938.686
1068	R/E	3 inches	19 inches	98.06 feet	3,631,263.852	1,145,921.992
1070	R/E	5 inches	22 inches	131.67 feet	3,631,276.949	1,145,899.500
1071	R/E	2 inches	9 inches	190.79 feet	3,631,276.538	1,145,930.155
1072	R/E	2 inches	18 inches	145.40 feet	3,631,248.657	1,145,874.298
1074	R/E	2 inches	14 inches	24.64 feet	3,631,282.122	1,145,849.055
1076	R/E	4 inches	27 inches	66.85 feet	3,631,278.590	1,145,815.974

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1079	R/E	4 inches	26 inches	97.38 feet	3,631,293.237	1,145,793.271
1080	R/E	3 inches	20 inches	31.28 feet	3,631,284.750	1,145,790.278
1081	R/E	3 inches	17 inches	75.28 feet	3,631,364.089	1,145,713.245
1082	R/E	6 inches	26 inches	8.01 feet	3,631,366.415	1,145,734.460
1083	R/E	3 inches	26 inches	20.79 feet	3,631,368.502	1,145,739.974
1084	R/E	4 inches	23 inches	142.36 feet	3,631,377.874	1,145,774.179
1085	R/E	2 inches	19 inches	45.31 feet	3,631,347.818	1,145,788.137
1087	R/E	6 inches	5 feet	66.86 feet	3,631,366.545	1,145,813.195
1089	R/E	5 inches	4 feet	20.06 feet	3,631,340.524	1,145,880.114
1090	R/E	3 inches	30 inches	42.39 feet	3,631,329.713	1,145,910.904
1091	R/E	3 inches	30 inches	175.47 feet	3,631,318.565	1,145,931.862
1093	R/E	4 inches	20 inches	181.94 feet	3,631,331.177	1,145,988.564
1096	R/E	0.1 inch	5 feet	64.37 feet	3,631,218.219	1,145,519.770
1098	R/E	4 inches	19 inches	65.00 feet	3,631,219.899	1,145,612.768
1099	R/E	4 inches	12 inches	11.21 feet	3,631,237.280	1,145,626.527
1100	R/E	3 inches	11 inches	2.30 feet	3,631,237.584	1,145,626.933
1102	R/E	8 inches	28 inches	18.83 feet	3,631,160.650	1,145,425.575
1103	R/E	3 inches	25 inches	71.83 feet	3,631,147.442	1,145,438.529
1106	R/E	7 inches	30 inches	64.48 feet	3,631,141.980	1,145,465.502
1107	R/E	5 inches	32 inches	13.48 feet	3,631,147.915	1,145,482.199
1108	R/E	4 inches	30 inches	13.88 feet	3,631,136.355	1,145,483.677

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1109	R/E	5 inches	28 inches	71.26 feet	3,631,141.469	1,145,498.490
1117	R/E	8 inches	7 feet	333.05 feet	3,631,118.081	1,145,735.912
1120	R/E	2 inches	34 inches	29.19 feet	3,631,128.085	1,145,717.575
1121	R/E	1 inch	22 inches	8.65 feet	3,631,131.156	1,145,768.335
1122	R/E	1 inch	18 inches	8.04 feet	3,631,131.764	1,145,767.607
1123	R/E	2 inches	20 inches	33.61 feet	3,631,112.881	1,145,663.811
1124	R/E	4 inches	3 feet	219.03 feet	3,631,128.901	1,145,673.504
1125	R/E	6 inches	3 feet	424.62 feet	3,631,152.356	1,145,681.634
1141	R/E	4 inches	18 inches	28.04 feet	3,631,097.464	1,145,580.786
1142	R/E	4 inches	14 inches	34.95 feet	3,631,105.180	1,145,571.031
1143	R/E	6 inches	28 inches	23.93 feet	3,631,094.347	1,145,561.416
1145	R/E	10 inches	3 feet	158.25 feet	3,631,106.830	1,145,535.129
1146	R/E	4 inches	21 inches	74.64 feet	3,631,104.738	1,145,542.279
1147	R/E	3 inches	27 inches	69.65 feet	3,631,077.429	1,145,504.644
1148	R/E	7 inches	3 feet	273.05 feet	3,631,071.339	1,145,543.919
1149	R/E	4 inches	27 inches	38.42 feet	3,631,071.322	1,145,566.811
1150	R/E	6 inches	3 feet	51.06 feet	3,631,066.938	1,145,557.921
1154	R/E	9 inches	4 feet	535.94 feet	3,631,054.100	1,145,458.578
1159	R/E	3 inches	22 inches	47.73 feet	3,631,073.414	1,145,458.309
1162	R/E	3 inches	34 inches	35.83 feet	3,631,055.317	1,145,448.514
1171	R/E	3 inches	25 inches	38.00 feet	3,631,077.353	1,146,062.910

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1175	R/E	5 inches	30 inches	379.19 feet	3,631,061.510	1,146,134.261
1177	R/E	5 inches	34 inches	71.74 feet	3,631,082.195	1,146,123.420
1178	R/E	4 inches	3 feet	48.20 feet	3,631,044.043	1,146,098.751
1181	R/E	1 inch	20 inches	45.50 feet	3,631,015.234	1,145,493.139
1183	R/E	4 inches	3 feet	8.00 feet	3,631,007.315	1,145,502.067
1184	R/E	3 inches	22 inches	7.92 feet	3,631,002.519	1,145,505.187
1185	R/E	3 inches	19 inches	14.18 feet	3,630,999.658	1,145,510.421
1186	R/E	3 inches	26 inches	80.08 feet	3,630,998.063	1,145,524.515
1188	R/E	2 inches	30 inches	13.82 feet	3,631,003.854	1,145,521.602
1191	R/E	4 inches	3 feet	62.86 feet	3,631,032.736	1,145,543.958
1192	R/E	3 inches	28 inches	12.67 feet	3,631,032.652	1,145,551.016
1198	R/E	1 inch	14 inches	55.05 feet	3,631,052.192	1,145,584.143
1201	R/E	4 inches	20 inches	23.92 feet	3,631,061.539	1,145,582.626
1202	R/E	5 inches	3 feet	60.59 feet	3,631,044.538	1,145,594.313
1205	R/E	4 inches	32 inches	75.59 feet	3,631,064.378	1,145,601.981
1217	R/E	5 inches	5 feet	130.23 feet	3,631,062.273	1,145,417.642
1218	R/E	4 inches	26 inches	151.30 feet	3,631,071.735	1,145,411.508
1219	R/E	5 inches	3 feet	270.61 feet	3,631,128.336	1,145,427.212
1226	R/E	8 inches	20 inches	39.16 feet	3,631,290.311	1,145,448.011
1230	R/E	4 inches	30 inches	40.06 feet	3,631,271.738	1,145,480.078
1231	R/E	6 inches	3 feet	298.13 feet	3,630,907.143	1,145,436.750

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1232	R/E	3 inches	25 inches	38.08 feet	3,630,898.516	1,145,414.661
1234	R/E	3 inches	22 inches	20.17 feet	3,630,895.465	1,145,416.334
1237	R/E	4 inches	26 inches	57.75 feet	3,630,896.420	1,145,423.920
1244	R/E	6 inches	3 feet	79.21 feet	3,630,908.347	1,145,473.416
1245	R/E	3 inches	18 inches	10.72 feet	3,630,911.439	1,145,472.843
1246	R/E	6 inches	4 feet	201.14 feet	3,630,919.261	1,145,467.489
1251	R/E	4 inches	4 feet	13.22 feet	3,630,930.074	1,145,420.706
1252	R/E	2 inches	20 inches	6.74 feet	3,630,929.667	1,145,421.342
1255	R/E	4 inches	23 inches	24.68 feet	3,630,955.652	1,145,514.019
1256	R/E	7 inches	4 feet	70.73 feet	3,630,981.063	1,145,552.434
1260	R/E	4 inches	22 inches	22.56 feet	3,630,975.445	1,145,573.399
1264	R/E	7 inches	4 feet	75.36 feet	3,630,983.651	1,145,627.401
1267	R/E	8 inches	6 feet	281.80 feet	3,631,020.724	1,145,687.368
1276	R/E	4 inches	13 inches	10.48 feet	3,630,988.332	1,145,688.022
1277	R/E	4 inches	27 inches	32.29 feet	3,630,996.784	1,145,687.811
1283	R/E	7 inches	6 feet	949.66 feet	3,631,024.964	1,145,864.750
1284	R/E	3 inches	30 inches	43.69 feet	3,631,011.608	1,145,763.960
1286	R/E	2 inches	18 inches	10.56 feet	3,631,009.201	1,145,781.721
1288	R/E	4 inches	27 inches	51.60 feet	3,631,008.719	1,145,791.780
1289	R/E	3 inches	25 inches	22.61 feet	3,631,010.716	1,145,793.584
1290	R/E	4 inches	6 feet	43.93 feet	3,631,016.137	1,145,799.154

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1292	R/E	4 inches	24 inches	31.54 feet	3,631,032.203	1,145,851.186
1293	R/E	3 inches	26 inches	47.72 feet	3,631,039.421	1,145,865.719
1299	R/E	4 inches	25 inches	10.80 feet	3,631,015.777	1,145,897.450
1300	R/E	3 inches	3 feet	11.36 feet	3,631,023.829	1,145,904.599
1306	R/E	9 inches	6 feet	448.47 feet	3,630,987.749	1,145,816.469
1307	R/E	3 inches	32 inches	72.18 feet	3,630,979.118	1,145,871.832
1308	R/E	3 inches	30 inches	24.18 feet	3,630,982.019	1,145,858.852
1310	R/E	2 inches	21 inches	25.55 feet	3,630,981.669	1,145,845.899
1313	R/E	2 inches	24 inches	22.85 feet	3,630,990.034	1,145,839.206
1318	R/E	5 inches	22 inches	239.30 feet	3,630,970.278	1,145,826.160
1322	R/E	4 inches	27 inches	12.75 feet	3,631,025.499	1,145,755.933
1324	R/E	3 inches	30 inches	16.99 feet	3,631,041.180	1,145,778.847
1325	R/E	2 inches	23 inches	32.26 feet	3,631,045.813	1,145,787.082
1326	R/E	6 inches	28 inches	77.08 feet	3,631,051.671	1,145,796.207
1327	R/E	3 inches	27 inches	7.44 feet	3,631,046.133	1,145,792.515
1330	R/E	5 inches	32 inches	78.17 feet	3,631,053.039	1,145,818.257
1331	R/E	3 inches	31 inches	23.20 feet	3,631,059.794	1,145,818.585
1332	R/E	6 inches	3 feet	189.40 feet	3,631,069.265	1,145,849.842
1335	R/E	3 inches	26 inches	90.31 feet	3,631,083.124	1,145,851.513
1336	R/E	5 inches	3 feet	313.74 feet	3,631,054.273	1,145,894.484
1342	R/E	3 inches	20 inches	25.93 feet	3,631,063.431	1,145,928.384

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1345	R/E	3 inches	27 inches	115.12 feet	3,631,104.585	1,145,910.103
1348	R/E	2 inches	21 inches	10.71 feet	3,631,093.102	1,145,929.521
1349	R/E	3 inches	18 inches	95.58 feet	3,631,096.498	1,145,943.788
1351	R/E	2 inches	17 inches	93.63 feet	3,631,097.989	1,145,980.922
1352	R/E	4 inches	32 inches	85.58 feet	3,631,093.955	1,145,994.108
1355	R/E	3 inches	29 inches	73.55 feet	3,631,085.208	1,146,023.096
1357	R/E	3 inches	31 inches	62.23 feet	3,631,066.823	1,146,053.581
1359	R/E	3 inches	26 inches	81.32 feet	3,631,149.099	1,146,080.406
1360	R/E	36 inches	8 feet	196.40 feet	3,631,143.092	1,146,162.899
1362	R/E	3 inches	32 inches	39.35 feet	3,631,125.760	1,146,158.564
1363	R/E	4 inches	29 inches	121.21 feet	3,631,123.151	1,146,183.653
1365	R/E	3 inches	20 inches	24.55 feet	3,631,088.422	1,146,208.651
1366	R/E	3 inches	30 inches	31.16 feet	3,631,090.421	1,146,223.135
1370	R/E	7 inches	30 inches	192.21 feet	3,631,076.431	1,146,296.300
1372	R/E	3 inches	26 inches	20.69 feet	3,631,183.310	1,145,964.668
1373	R/E	4 inches	24 inches	29.88 feet	3,631,199.261	1,146,006.691
1375	R/E	4 inches	22 inches	59.60 feet	3,631,201.984	1,146,019.791
1376	R/E	5 inches	27 inches	45.52 feet	3,631,197.389	1,146,034.783
1377	R/E	6 inches	3 feet	228.47 feet	3,631,206.082	1,146,064.098
1381	R/E	2 inches	20 inches	40.36 feet	3,631,177.771	1,146,068.920
1382	R/E	4 inches	19 inches	51.11 feet	3,631,185.282	1,146,088.965

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1383	R/E	3 inches	15 inches	16.44 feet	3,631,193.834	1,146,085.127
1384	R/E	6 inches	33 inches	79.20 feet	3,631,185.848	1,146,102.726
1385	R/E	4 inches	25 inches	19.09 feet	3,631,182.624	1,146,099.413
1386	R/E	4 inches	18 inches	51.37 feet	3,631,207.315	1,146,123.074
1387	R/E	2 inches	16 inches	31.94 feet	3,631,208.580	1,146,120.671
1388	R/E	5 inches	23 inches	37.76 feet	3,630,997.336	1,146,001.608
1392	R/E	5 inches	23 inches	23.35 feet	3,630,988.499	1,146,077.651
1398	R/E	3 inches	24 inches	18.65 feet	3,630,976.807	1,146,024.672
1399	R/E	3 inches	26 inches	18.45 feet	3,630,982.413	1,146,030.799
1401	R/E	4 inches	35 inches	15.42 feet	3,630,970.291	1,146,061.594
1402	R/E	4 inches	19 inches	15.35 feet	3,630,974.356	1,146,081.253
1403	R/E	4 inches	30 inches	11.72 feet	3,630,974.439	1,146,093.998
1405	R/E	7 inches	4 feet	242.35 feet	3,630,953.749	1,146,153.029
1406	R/E	3 inches	30 inches	22.21 feet	3,630,939.966	1,146,168.100
1407	R/E	4 inches	3 feet	31.25 feet	3,630,960.216	1,146,130.456
1408	R/E	2 inches	18 inches	22.44 feet	3,630,988.035	1,145,995.846
1409	R/E	4 inches	28 inches	122.10 feet	3,630,977.121	1,145,998.456
1410	R/E	6 inches	32 inches	70.78 feet	3,630,974.610	1,145,980.309
1412	R/E	5 inches	28 inches	22.49 feet	3,630,958.419	1,145,930.801
1413	R/E	6 inches	33 inches	85.19 feet	3,630,960.493	1,145,909.596
1414	R/E	4 inches	29 inches	24.20 feet	3,630,953.530	1,145,899.801

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1415	R/E	6 inches	35 inches	77.52 feet	3,630,947.310	1,145,910.024
1416	R/E	4 inches	29 inches	70.96 feet	3,630,937.610	1,145,920.093
1417	R/E	4 inches	29 inches	26.67 feet	3,630,945.020	1,145,877.451
1419	R/E	6 inches	4 feet	57.80 feet	3,630,953.954	1,145,873.843
1421	R/E	2 inches	20 inches	14.08 feet	3,630,953.099	1,145,870.066
1423	R/E	5 inches	25 inches	5.19 feet	3,630,937.423	1,145,853.224
1427	R/E	4 inches	22 inches	24.66 feet	3,630,912.657	1,145,800.764
1430	R/E	9 inches	5 feet	111.86 feet	3,630,916.040	1,145,735.693
1431	R/E	7 inches	34 feet	111.47 feet	3,630,936.786	1,145,751.530
1432	R/E	5 inches	23 inches	14.32 feet	3,630,947.593	1,145,760.988
1433	R/E	5 inches	3 feet	55.78 feet	3,630,931.671	1,145,755.504
1434	R/E	6 inches	3 feet	40.13 feet	3,630,926.168	1,145,747.547
1436	R/E	5 inches	24 inches	42.44 feet	3,630,916.299	1,145,721.514
1437	R/E	4 inches	27 inches	55.09 feet	3,630,927.624	1,145,714.971
1439	R/E	6 inches	25 inches	44.24 feet	3,630,928.983	1,145,693.538
1441	R/E	5 inches	27 inches	62.00 feet	3,630,906.427	1,145,680.413
1442	R/E	9 inches	7 feet	136.20 feet	3,631,275.877	1,146,527.267
1443	R/E	7 inches	9 feet	119.72 feet	3,631,298.642	1,146,573.713
1444	R/E	4 inches	3 feet	26.02 feet	3,631,298.155	1,146,569.088
1446	R/E	4 inches	23 inches	112.73 feet	3,631,232.262	1,146,658.772
1448	R/E	7 inches	4 feet	308.69 feet	3,631,371.533	1,146,712.295

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
1449	R/E	5 inches	16 inches	67.94 feet	3,631,437.397	1,146,694.513
1451	R/E	9 feet	18 feet	231.85 feet	3,630,938.534	1,145,030.991
1452	R/E	3.5 feet	10.5 feet	72.08 feet	3,630,955.611	1,145,055.642
1453	R/E	1.5 feet	6 feet	291.28 feet	3,630,832.712	1,145,168.060
1454	R/E	2 feet	3.5 feet	183.37 feet	3,630,752.987	1,145,268.004
1455	R/E	2.5 feet	3 feet	159.84 feet	3,630,741.092	1,145,287.026
1456	R/E	2.5 feet	3.5 feet	172.49 feet	3,630,709.582	1,145,309.546
1457	R/E	1.5 feet	3 feet	61.70 feet	3,630,653.939	1,145,372.627
1458	R/E	22 inches	3 feet	99.83 feet	3,630,670.490	1,145,357.379
1459	R/E	20 inches	6 feet	23.28 feet	3,630,921.735	1,145,015.575
2001	R/E	15 inches	6 feet	71.23 feet	3,631,031.359	1,145,073.175
2002	R/E	48 inches	7 feet	119.19 feet	3,631,057.346	1,145,042.137
2003	R/E	15 inches	2 feet	104.23 feet	3,631,055.201	1,145,033.416
2005	R/E	24 inches	2 feet	70.48 feet	3,631,127.384	1,145,082.318
2006	R/E	17 inches	4 feet	265.02 feet	3,631,170.646	1,145,082.165
2007	R/I	20 feet	26 feet	256.35 feet	3,631,144.135	1,144,834.747
2008	R/E	40 inches	40 inches	130.42 feet	3,631,142.770	1,144,872.068
2009	R/E	4 inches	6 feet	84.45 feet	3,631,130.631	1,144,833.779
2010	R/E	26 inches	9 feet	110.75 feet	3,631,141.630	1,144,604.957
2011	R/E	16 inches	6 feet	159.72 feet	3,631,133.284	1,144,601.326
2012	R/E	16 inches	4.5 feet	112.75 feet	3,631,085.583	1,144,599.442

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2013	R/I	168 inches	25 feet	200.97 feet	3,631,096.470	1,144,618.916
2014	R/I	36 inches	12 feet	157.22 feet	3,631,129.441	1,144,478.032
2015	R/E	16 inches	3 feet	122.62 feet	3,631,121.525	1,144,401.622
2016	R/E	48 inches	7 feet	235.67 feet	3,631,119.937	1,144,361.988
2017	R/E	12 inches	14 inches	124.08 feet	3,631,148.527	1,144,297.471
2018	R/E	16 inches	60 inches	87.83 feet	3,631,189.208	1,143,958.116
2019	R/E	6 inches	72 inches	111.68 feet	3,631,171.327	1,143,959.421
2021	R/E	16 inches	54 inches	72.21 feet	3,631,221.337	1,143,896.229
2022	R/E	12 inches	84 inches	76.15 feet	3,631,285.062	1,143,958.676
2023	R/E	20 inches	24 inches	59.90 feet	3,631,234.554	1,143,865.350
2026	R/E	25 inches	10 feet	70.54 feet	3,631,192.656	1,143,698.811
2027	R/E	12 inches	2 feet	85.68 feet	3,631,187.118	1,143,671.953
2028	R/E	60 inches	8 feet	85.01 feet	3,631,132.085	1,143,546.797
2029	R/E	16 inches	3 feet	45.28 feet	3,631,051.363	1,143,502.102
2030	R/E	10 inches	2 feet	130.30 feet	3,631,011.194	1,143,490.322
2031	R/E	6 inches	6 feet	60.49 feet	3,630,858.469	1,143,355.126
2032	R/E	20 inches	6 feet	147.57 feet	3,630,860.402	1,143,332.113
2034	R/E	48 inches	4 feet	158.80 feet	3,631,001.027	1,143,226.863
2035	R/E	14 inches	2 feet	73.15 feet	3,630,809.203	1,143,241.261
2039	R/E	4 inches	1 foot	110.77 feet	3,630,965.547	1,142,979.766
2041	R/E	2 inches	4 feet	49.13 feet	3,631,118.377	1,142,771.448

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2042	R/E	2 inches	2 feet	30.98 feet	3,631,113.820	1,142,731.245
2044	R/E	1 inch	3 feet	11.43 feet	3,631,083.105	1,142,673.146
2045	R/E	133 inches	15 feet	36.47 feet	3,630,881.177	1,142,446.371
2046	R/E	138 inches	12 feet	51.62 feet	3,630,876.737	1,142,419.054
2048	R/E	12 inches	4 feet	71.99 feet	3,630,892.985	1,142,333.778
2050	R/E	8 inches	4 feet	96.33 feet	3,631,064.140	1,142,120.145
2051	R/E	18 inches	4 feet	76.03 feet	3,631,131.697	1,142,014.028
2052	R/I	50 feet	50 feet	209.25 feet	3,630,906.655	1,142,069.030
2053	R/E	5 inches	16 feet	102.28 feet	3,630,892.424	1,141,802.279
2054	R/E	3 inches	6 feet	21.29 feet	3,630,899.534	1,141,805.995
2056	R/I	50 feet	50 feet	164.08 feet	3,630,832.292	1,141,320.002
2057	R/I	50 feet	50 feet	175.94 feet	3,630,892.424	1,141,802.279
2058	R/E	80 inches	9 feet	77.25 feet	3,630,605.533	1,139,804.351
2059	R/E	80 inches	9 feet	139.37 feet	3,630,620.655	1,139,803.342
2060	R/E	40 inches	97 feet	321.86 feet	3,630,604.374	1,139,850.576
2061	R/E	10 inches	3 feet	304.80 feet	3,630,618.608	1,139,893.930
2062	R/E	29 inches	6 feet	265.11 feet	3,630,631.499	1,139,978.206
2064	R/E	8 inches	8 feet	69.14 feet	3,630,630.095	1,140,056.895
2067	R/E	10 inches	3 feet	348.63 feet	3,630,691.347	1,138,866.794
2068	R/E	3 inches	2 feet	58.08 feet	3,630,799.574	1,138,771.929
2069	R/E	6 inches	2 feet	72.49 feet	3,631,001.183	1,138,644.982

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2070	R/E	6 inches	1 foot	135.93 feet	3,631,006.217	1,138,606.705
2071	R/E	12 inches	3 feet	186.72 feet	3,630,701.337	1,138,374.347
2072	R/E	105 inches	18 feet	73.50 feet	3,630,688.171	1,138,355.414
2073	R/E	30 inches	20 feet	68.65 feet	3,630,409.918	1,138,355.655
2074	R/E	12 inches	6 feet	74.69 feet	3,630,431.337	1,138,412.561
2075	R/E	5 inches	1 foot	48.86 feet	3,630,472.214	1,138,468.365
2076	R/E	4 inches	2 feet	48.90 feet	3,630,542.492	1,138,431.718
2077	R/E	12 inches	28 feet	430.06 feet	3,630,601.303	1,138,368.072
2078	R/E	4 inches	20 inches	48.66 feet	3,630,637.586	1,138,354.999
2079	R/E	16 inches	6 feet	227.64 feet	3,630,656.330	1,138,323.978
2080	R/E	6 inches	2 feet	63.45 feet	3,630,644.418	1,138,170.954
2081	R/E	12 inches	2 feet	110.25 feet	3,630,600.554	1,138,044.614
2082	R/E	5 inches	1 foot	39.02 feet	3,630,594.607	1,137,964.905
2083	R/E	9 inches	5 feet	309.92 feet	3,630,587.539	1,137,860.162
2085	R/E	12 inches	3 feet	75.51 feet	3,630,033.015	1,137,744.212
2086	R/E	30 inches	3 feet	126.59 feet	3,630,188.313	1,137,837.120
2088	R/E	29 inches	8 feet	133.01 feet	3,629,941.864	1,137,701.708
2089	R/E	10 inches	2 feet	550.07 feet	3,630,177.746	1,137,461.080
2091	R/E	45 inches	5 feet	100.03 feet	3,630,166.269	1,136,971.085
2092	R/E	16 inches	4 feet	53.64 feet	3,630,152.597	1,136,999.993
2093	R/E	6 inches	1 foot	56.77 feet	3,630,160.317	1,137,220.149

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2094	R/E	45 inches	8 feet	356.60 feet	3,629,814.876	1,137,713.352
2095	R/E	10 inches	22 inches	11.71 feet	3,629,810.174	1,137,711.020
2096	R/E	8 inches	1 foot	36.93 feet	3,629,732.495	1,137,714.050
2097	R/E	14 inches	2 feet	44.20 feet	3,629,626.475	1,137,674.342
2098	R/E	4 inches	5 feet	120.90 feet	3,629,584.120	1,137,691.808
2099	R/E	3 inches	8 inches	11.19 feet	3,629,530.431	1,137,705.727
2100	R/E	7 inches	1 foot	17.12 feet	3,629,529.435	1,137,707.659
2101	R/E	7 inches	1 foot	74.13 feet	3,629,520.821	1,137,703.037
2102	R/E	7 inches	2 feet	63.18 feet	3,629,498.317	1,137,716.398
2103	R/E	10 inches	2 feet	37.35 feet	3,629,445.792	1,137,730.683
2104	R/E	72 inches	10 feet	94.42 feet	3,629,235.900	1,137,740.514
2106	R/E	6 inches	1 foot	54.76 feet	3,629,175.025	1,137,756.309
2107	R/E	8 inches	1 foot	71.08 feet	3,629,102.070	1,137,727.189
2109	R/E	4 inches	1 foot	94.96 feet	3,629,755.590	1,137,076.441
2112	R/E	4 inches	18 inches	74.91 feet	3,629,541.580	1,136,610.316
2114	R/E	5 inches	12 inches	97.82 feet	3,629,496.506	1,136,689.254
2115	R/E	5 inches	8 inches	246.90 feet	3,629,555.357	1,136,782.894
2116	R/E	12 inches	37 inches	38.06 feet	3,629,549.106	1,136,771.937
2117	R/E	16 feet	16 feet	186.75 feet	3,629,585.918	1,136,820.610
2118	R/E	6 feet	7 feet	128.74 feet	3,629,594.148	1,136,898.310
2120	R/E	10 inches	13 inches	209.87 feet	3,629,618.406	1,136,912.405

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2121	R/E	6 feet	7 feet	56.20 feet	3,629,814.915	1,136,587.239
2122	R/E	20 inches	2 feet	127.65 feet	3,629,121.057	1,135,299.657
2123	R/E	5 inches	5 inches	59.28 feet	3,629,055.407	1,135,278.001
2124	R/E	5 inches	5 inches	38.34 feet	3,629,042.309	1,135,208.429
2125	R/E	28 inches	59 inches	290.87 feet	3,629,163.650	1,135,066.203
2128	R/E	27 inches	38 inches	109.79 feet	3,629,203.532	1,134,964.474
2129	R/E	6 inches	6 inches	24.08 feet	3,629,214.111	1,134,905.492
2130	R/E	15 inches	15 inches	58.48 feet	3,629,194.081	1,134,872.671
2131	R/E	3 inches	5 inches	88.19 feet	3,629,064.853	1,134,706.051
2132	R/E	3 inches	5 inches	96.17 feet	3,629,063.927	1,134,707.371
2133	R/E	3 inches	15 inches	150.62 feet	3,629,110.968	1,134,685.195
2134	R/E	7 inches	14 inches	221.35 feet	3,629,088.694	1,134,574.934
2135	R/E	10 inches	20 inches	240.73 feet	3,628,958.010	1,134,535.669
2137	R/I	28 inches	137 inches	115.54 feet	3,629,022.421	1,134,404.103
2138	R/E	69 inches	70 inches	145.17 feet	3,629,026.944	1,134,339.572
2140	R/E	3 inches	13 inches	34.92 feet	3,629,033.515	1,134,295.722
2141	R/E	1 inch	49 inches	97.67 feet	3,628,991.713	1,134,121.467
2142	R/E	2 inches	5 inches	69.93 feet	3,628,989.163	1,134,134.162
2143	R/E	2 inches	5 inches	54.95 feet	3,628,992.592	1,134,142.020
2144	R/E	4 inches	7 inches	166.12 feet	3,628,893.422	1,133,923.047
2146	R/I	43 inches	72 inches	261.93 feet	3,628,880.620	1,133,715.735

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2147	R/I	1 inch	2 feet	99.95 feet	3,628,872.462	1,133,681.687
2148	R/E	20 inches	28 inches	73.68 feet	3,628,825.226	1,133,819.015
2149	R/I	67 inches	120 inches	102.55 feet	3,628,337.486	1,133,784.663
2150	R/I	50 feet	50 feet	240.38 feet	3,630,883.523	1,141,554.118
2151	R/E	113 inches	113 inches	87.08 feet	3,629,326.766	1,136,943.734
2152	R/E	7 inches	10 inches	16.41 feet	3,628,941.086	1,136,946.676
2153	R/E	10 inches	10 inches	167.53 feet	3,628,963.304	1,136,946.249
2154	R/E	10 inches	10 inches	261.80 feet	3,628,920.615	1,136,926.271
2155	R/E	7 inches	115 inches	128.30 feet	3,628,893.636	1,136,638.012
2156	R/E	9 inches	15 inches	112.58 feet	3,629,126.248	1,136,407.807
2157	R/E	36 inches	10 feet	101.07 feet	3,629,239.504	1,136,230.308
2163	R/E	5 inches	1 foot	56.67 feet	3,628,495.613	1,133,838.332
2164	R/E	7 inches	14 inches	164.04 feet	3,628,541.989	1,133,911.220
2165	R/E	5 inches	5 inches	81.59 feet	3,628,636.784	1,133,967.236
2166	R/E	5 inches	5 inches	46.76 feet	3,628,653.655	1,133,979.032
2170	R/E	20 inches	20 inches	58.66 feet	3,628,253.190	1,133,433.991
2171	R/E	240 inches	240 inches	100.24 feet	3,628,358.945	1,133,380.383
2172	R/E	72 inches	120 inches	1527.97 feet	3,631,027.671	1,147,161.679
2175	R/E	3 inches	36 inches	353.42 feet	3,631,062.579	1,147,177.704
2176	R/E	3 inches	36 inches	334.26 feet	3,631,070.307	1,147,236.016
2177	R/E	10 inches	65 inches	455.22 feet	3,630,912.828	1,147,170.672

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2179	R/E	15 inches	15 inches	57.91 feet	3,630,926.338	1,147,183.111
2185	R/E	36 inches	36 inches	98.96 feet	3,631,229.291	1,146,786.635
2186	R/E	3 inches	10 inches	19.94 feet	3,631,199.528	1,146,810.729
2187	R/E	30 inches	37 inches	381.47 feet	3,631,178.647	1,145,339.962
2188	R/E	30 inches	37 inches	179.83 feet	3,631,162.160	1,145,354.513
2189	R/E	7 inches	10 inches	227.03 feet	3,631,145.420	1,145,343.670
2190	R/E	7 inches	10 inches	27.22 feet	3,631,136.572	1,145,353.487
2191	R/E	7 inches	10 inches	29.77 feet	3,630,938.904	1,145,574.354
2192	R/E	4 inches	15 inches	11.90 feet	3,630,924.453	1,145,542.948
2193	R/E	4 inches	15 inches	10.36 feet	3,630,921.128	1,145,546.689
2194	R/E	4 inches	15 inches	9.21 feet	3,630,919.907	1,145,546.211
2195	R/E	4 inches	15 inches	8.13 feet	3,630,916.856	1,145,543.466
2196	R/E	4 inches	15 inches	5.68 feet	3,630,913.142	1,145,538.518
2198	R/E	6 inches	15 inches	24.39 feet	3,630,900.787	1,145,515.100
2199	R/E	4 inches	10 inches	9.71 feet	3,630,894.071	1,145,519.353
2200	R/E	6 inches	20 inches	98.70 feet	3,630,871.625	1,145,515.882
2201	R/E	5 inches	15 inches	22.26 feet	3,630,863.822	1,145,526.668
2202	R/E	8 inches	15 inches	23.84 feet	3,630,865.924	1,145,519.807
2203	R/E	8 inches	15 inches	14.80 feet	3,630,864.340	1,145,494.098
2204	R/E	5 inches	15 inches	15.89 feet	3,630,884.811	1,145,465.725
2208	R/E	4 inches	10 inches	28.59 feet	3,630,864.313	1,145,426.411

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
2209	R/E	15 inches	80 inches	39.50 feet	3,630,775.620	1,147,044.799
2211	R/E	17 inches	72 inches	206.06 feet	3,630,794.651	1,147,021.072
2212	R/E	4 inches	20 inches	17.74 feet	3,630,747.327	1,147,002.302
2213	R/E	10 inches	20 inches	93.59 feet	3,630,737.218	1,146,968.048
2216	R/E	2 inches	8 inches	7.68 feet	3,630,779.751	1,146,831.492
2218	R/E	10 inches	36 inches	167.20 feet	3,630,839.743	1,146,703.992
2219	R/E	5 inches	5 inches	98.32 feet	3,630,844.456	1,146,708.048
2220	R/E	10 inches	40 inches	55.07 feet	3,630,803.460	1,146,403.651
2221	R/E	10 inches	240 inches	668.69 feet	3,631,296.663	1,146,258.489
2222	R/E	15 inches	36 inches	304.63 feet	3,631,218.257	1,146,291.888
2223	R/E	20 inches	44 inches	118.29 feet	3,631,193.666	1,146,357.007
2225	R/E	12 inches	46 inches	320.28 feet	3,631,248.077	1,146,402.369
2226	R/E	12 inches	46 inches	104.55 feet	3,631,215.640	1,146,399.205
2229	R/E	10 inches	28 inches	81.28 feet	3,631,196.005	1,146,444.721
2230	R/E	10 inches	20 inches	15.30 feet	3,631,189.954	1,146,455.579
2231	R/E	10 inches	20 inches	22.65 feet	3,631,176.134	1,146,466.066
2232	R/E	5 inches	20 inches	12.01 feet	3,631,218.018	1,146,485.412
2233	R/E	10 inches	36 inches	13.12 feet	3,631,233.653	1,146,501.030
2234	R/E	10 inches	36 inches	24.92 feet	3,631,238.660	1,146,506.538
2235	R/E	4 inches	24 inches	55.13 feet	3,631,235.595	1,146,523.794
3001	R/E	44 inches	92 inches	43.11 feet	3,634,028.245	1,131,387.836

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3002	R/E	35 inches	90 inches	1560.00 feet	3,633,800.085	1,131,399.249
3003	R/E	20 inches	75 inches	170.58 feet	3,633,576.232	1,131,392.688
3004	R/E	4.5 inches	12 inches	51.01 feet	3,633,874.312	1,131,400.473
3005	R/E	2 inches	4 inches	18.14 feet	3,633,874.997	1,131,397.548
3006	R/E	5 inches	25 inches	40.87 feet	3,633,860.878	1,131,400.616
3007	R/E	7 inches	36 inches	58.00 feet	3,633,856.278	1,131,400.071
3008	R/E	7.5 inches	21 inches	20.38 feet	3,633,853.421	1,131,395.511
3009	R/E	5 inches	29 inches	13.95 feet	3,633,849.168	1,131,396.087
3011	R/E	24 inches	42 inches	147.54 feet	3,633,751.519	1,131,377.068
3012	R/E	15 inches	37 inches	142.58 feet	3,633,685.648	1,131,402.639
3015	R/E	6 inches	19 inches	64.82 feet	3,633,657.210	1,131,399.440
3016	R/E	2 inches	9 inches	65.45 feet	3,633,641.931	1,131,400.085
3017	R/E	2 inches	4 inches	19.95 feet	3,633,628.898	1,131,396.022
3018	R/E	4 inches	8 inches	26.90 feet	3,633,624.814	1,131,396.836
3019	R/E	6 inches	29 inches	183.47 feet	3,633,602.732	1,131,405.616
3020	R/E	4 inches	9 inches	18.80 feet	3,633,610.400	1,131,401.796
3024	R/E	36 inches	38 inches	11.84 feet	3,633,400.297	1,131,419.111
3025	R/E	2 inches	8 inches	38.58 feet	3,633,341.929	1,131,384.643
3026	R/E	5 inches	13 inches	38.82 feet	3,633,318.093	1,131,392.291
3027	R/E	42 inches	81 inches	274.52 feet	3,633,138.120	1,131,432.971
3028	R/E	10 inches	26 inches	40.07 feet	3,633,126.486	1,131,439.498

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3031	R/E	5 inches	26 inches	76.72 feet	3,633,133.774	1,131,404.321
3032	R/E	6 inches	28 inches	18.65 feet	3,633,069.557	1,131,444.950
3033	R/E	4.5 inches	16 inches	16.15 feet	3,633,071.615	1,131,445.198
3034	R/E	4.5 inches	11 inches	6.80 feet	3,633,070.898	1,131,443.585
3035	R/E	12 inches	16 inches	38.57 feet	3,633,024.905	1,131,439.865
3037	R/E	50 inches	72 inches	52.25 feet	3,632,997.456	1,131,444.734
3038	R/E	4 inches	12 inches	16.23 feet	3,633,003.645	1,131,447.304
3039	R/E	6 inches	10 inches	13.96 feet	3,633,002.381	1,131,447.189
3040	R/E	12 inches	33 inches	103.92 feet	3,632,986.370	1,131,452.420
3045	R/E	12 inches	27 inches	50.83 feet	3,632,656.824	1,131,496.102
3046	R/E	16 inches	72 inches	510.13 feet	3,632,478.068	1,131,495.693
3047	R/E	29 inches	61 inches	19.31 feet	3,631,838.233	1,131,556.167
3048	R/E	12 inches	26 inches	20.26 feet	3,631,818.194	1,131,557.191
3049	R/E	31.2 inches	40 inches	227.97 feet	3,631,366.820	1,131,941.897
3050	R/E	7 inches	19 inches	57.35 feet	3,631,348.992	1,131,936.951
3051	R/E	19 inches	24 inches	77.75 feet	3,631,356.383	1,131,921.091
3052	R/E	15 inches	53 inches	182.66 feet	3,631,299.142	1,131,911.566
3053	R/E	9 inches	36 inches	253.08 feet	3,631,171.516	1,131,880.275
3054	R/E	22 inches	42 inches	158.73 feet	3,631,157.787	1,131,937.142
3055	R/E	36 inches	128 inches	229.04 feet	3,630,929.254	1,131,866.493
3056	R/E	39 inches	132 inches	930.28 feet	3,630,840.821	1,131,737.433

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3057	R/E	16.2 inches	50 inches	436.94 feet	3,630,939.953	1,130,979.336
3058	R/E	11 inches	27 inches	28.48 feet	3,630,904.643	1,130,977.222
3059	R/E	17 inches	43 inches	90.55 feet	3,630,943.908	1,130,966.678
3060	R/E	21 inches	36 inches	150.85 feet	3,630,883.735	1,130,934.632
3061	R/E	4 inches	7 inches	69.28 feet	3,630,893.510	1,130,941.973
3062	R/E	33 inches	108 inches	7.49 feet	3,631,035.048	1,130,960.415
3063	R/E	6 inches	13 inches	23.20 feet	3,631,022.891	1,130,960.657
3064	R/E	41 inches	72 inches	14.68 feet	3,631,174.118	1,130,963.662
3065	R/E	22 inches	72 inches	35.27 feet	3,631,139.162	1,131,607.087
3066	R/E	14 inches	46 inches	15.99 feet	3,631,147.722	1,131,602.019
3067	R/E	10 inches	181 inches	141.71 feet	3,631,251.848	1,131,590.123
3068	R/E	14 inches	42 inches	51.74 feet	3,630,855.159	1,130,970.272
3069	R/E	6 inches	13 inches	12.34 feet	3,630,840.612	1,130,969.554
3071	R/E	76 inches	101 inches	57.61 feet	3,630,787.964	1,131,007.391
3072	R/E	14 inches	49 inches	41.95 feet	3,630,793.701	1,131,010.853
3073	R/E	19 inches	36 inches	6.63 feet	3,630,779.213	1,131,013.438
3074	R/E	152 inches	191 inches	53.17 feet	3,630,395.214	1,131,005.947
3075	R/E	19 inches	37 inches	112.93 feet	3,630,419.357	1,131,132.824
3076	R/E	5 inches	17 inches	15.85 feet	3,630,415.795	1,131,132.287
3077	R/E	5.5 inches	20 inches	16.50 feet	3,630,419.491	1,131,131.137
3078	R/E	16 inches	31.5 inches	43.09 feet	3,630,426.919	1,131,127.809

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3079	R/E	11 inches	27 inches	56.03 feet	3,630,422.711	1,131,141.130
3080	R/E	9 inches	28 inches	54.40 feet	3,630,394.571	1,131,137.867
3081	R/E	7 inches	15 inches	12.99 feet	3,630,377.406	1,131,128.825
3082	R/E	4 inches	27 inches	7.62 feet	3,630,367.670	1,131,125.908
3083	R/E	13 inches	27 inches	7.07 feet	3,630,348.690	1,131,124.171
3084	R/E	7 inches	26 inches	5.32 feet	3,630,342.461	1,131,120.969
3085	R/E	6 inches	24 inches	13.69 feet	3,630,341.622	1,131,111.095
3088	R/E	39 inches	75 inches	113.49 feet	3,630,239.998	1,131,079.264
3089	R/E	3 inches	15 inches	43.16 feet	3,630,238.753	1,131,064.065
3090	R/E	5 inches	54 inches	72.19 feet	3,630,230.376	1,131,070.132
3091	R/E	7 inches	46 inches	30.12 feet	3,630,223.090	1,131,072.503
3092	R/E	9 inches	36 inches	11.63 feet	3,630,235.089	1,131,082.065
3093	R/E	11 inches	36 inches	44.14 feet	3,630,230.914	1,131,087.862
3094	R/E	10 inches	25 inches	14.20 feet	3,630,157.302	1,131,093.520
3095	R/E	16 inches	62 inches	19.07 feet	3,630,128.546	1,131,101.822
3097	R/I	48 inches	94 inches	110.28 feet	3,628,879.496	1,131,275.676
3098	R/I	40 inches	298 inches	207.04 feet	3,628,940.683	1,131,196.287
3099	R/E	24 inches	244 inches	319.96 feet	3,628,746.505	1,131,243.295
3100	R/I	35 inches	444 inches	421.56 feet	3,628,670.956	1,131,529.96
3101	R/I	20 inches	100 inches	962.97 feet	3,628,330.111	1,131,522.388
3102	R/E	3 inches	10 inches	8.65 feet	3,628,286.775	1,131,486.304

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3103	R/E	36 inches	61 inches	53.02 feet	3,628,251.970	1,131,736.898
3104	R/E	14 inches	216 inches	55.65 feet	3,628,229.202	1,131,819.113
3105	R/E	3 inches	17 inches	26.30 feet	3,628,231.199	1,131,807.849
3106	R/E	38 inches	70 inches	440.73 feet	3,628,446.300	1,131,832.115
3107	R/E	6 inches	18 inches	50.97 feet	3,628,456.822	1,132,114.235
3108	R/E	11 inches	23 inches	93.39 feet	3,628,458.195	1,132,103.861
3109	R/E	9 inches	72 inches	35.28 feet	3,628,424.391	1,132,131.410
3110	R/E	4 inches	10 inches	15.81 feet	3,628,422.695	1,132,138.461
3111	R/E	19 inches	44 inches	67.14 feet	3,628,434.225	1,132,168.074
3112	R/E	28 inches	71 inches	24.75 feet	3,628,435.481	1,132,348.043
3113	R/E	14 inches	34 inches	62.89 feet	3,628,442.767	1,132,379.168
3114	R/E	12 inches	27 inches	10.14 feet	3,628,438.314	1,132,395.407
3115	R/E	19 inches	72 inches	10.65 feet	3,628,441.268	1,132,470.365
3116	R/E	3 inches	22 inches	13.02 feet	3,628,435.105	1,132,516.687
3117	R/E	3 inches	13 inches	13.95 feet	3,628,435.329	1,132,511.803
3118	R/E	72 inches	131 inches	12.68 feet	3,628,427.229	1,132,545.630
3119	R/E	6 inches	16 inches	11.41 feet	3,628,510.777	1,132,610.750
3121	R/E	6 inches	10 inches	23.57 feet	3,628,572.610	1,132,620.746
3122	R/E	4 inches	18 inches	41.08 feet	3,628,577.512	1,132,622.150
3123	R/E	9 inches	48 inches	65.40 feet	3,628,640.910	1,132,631.817
3124	R/E	2.5 inches	11 inches	15.46 feet	3,628,640.652	1,132,628.271

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3125	R/E	14 inches	50 inches	298.64 feet	3,628,609.816	1,132,681.841
3126	R/E	15 inches	72 inches	34.21 feet	3,628,629.485	1,132,689.775
3127	R/E	6 inches	29 inches	14.82 feet	3,628,599.823	1,132,679.135
3128	R/E	2 inches	15 inches	10.26 feet	3,628,401.602	1,132,608.524
3129	R/E	8 inches	36 inches	19.71 feet	3,628,367.429	1,132,646.293
3130	R/E	4 inches	36 inches	10.20 feet	3,628,363.023	1,132,660.888
3131	R/E	10 inches	36 inches	8.60 feet	3,628,363.395	1,132,660.083
3132	R/E	12 inches	76 inches	45.32 feet	3,628,327.950	1,132,749.735
3133	R/E	15 inches	59 inches	90.94 feet	3,628,282.463	1,132,837.306
3134	R/E	58 inches	82 inches	34.56 feet	3,628,288.682	1,132,825.858
3135	R/I	17 inches	108 inches	50.99 feet	3,628,267.072	1,132,873.149
3136	R/E	11.5 inches	48 inches	237.64 feet	3,628,272.080	1,132,923.485
3137	R/I	13 inches	49 inches	199.85 feet	3,628,254.429	1,133,136.317
3138	R/I	9 inches	41 inches	213.44 feet	3,628,261.077	1,133,088.896
3139	R/E	8 inches	25 inches	121.09 feet	3,628,265.978	1,133,089.819
3140	R/E	13 inches	50 inches	29.63 feet	3,628,256.360	1,133,429.841
3141	R/E	45 inches	65 inches	58.43 feet	3,628,409.295	1,133,349.476
3143	R/E	8 inches	48 inches	43.71 feet	3,628,630.946	1,132,920.196
3144	R/I	80 inches	256 inches	213.21 feet	3,628,691.244	1,133,090.073
3145	R/E	12 inches	42 inches	42.26 feet	3,628,687.299	1,133,122.021
3146	R/E	10 inches	36 inches	841.98 feet	3,628,784.051	1,133,417.918

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3147	R/E	20 inches	31 inches	395.33 feet	3,630,671.276	1,145,494.558
3152	R/E	11 inches	61 inches	328.57 feet	3,630,644.882	1,145,466.102
3153	R/E	9 inches	28 inches	194.37 feet	3,630,670.870	1,145,462.659
3154	R/E	3 inches	25 inches	37.70 feet	3,630,667.808	1,145,457.387
3159	R/E	33 inches	56 inches	54.27 feet	3,630,637.747	1,145,458.666
3161	R/E	10 inches	27 inches	17.02 feet	3,630,644.955	1,145,474.975
3162	R/E	4 inches	26 inches	83.32 feet	3,630,699.919	1,145,480.541
3167	R/E	7 inches	35 inches	175.11 feet	3,630,725.374	1,145,531.176
3175	R/E	5 inches	36 inches	22.26 feet	3,630,739.713	1,145,630.697
3181	R/E	13 inches	37 inches	78.64 feet	3,630,684.163	1,145,685.543
3184	R/E	10 inches	25 inches	18.06 feet	3,630,755.935	1,145,511.398
3190	R/E	6 inches	26 inches	48.66 feet	3,630,777.098	1,145,603.147
3195	R/E	19 inches	47 inches	235.59 feet	3,630,771.865	1,145,464.688
3196	R/E	6 inches	26 inches	14.69 feet	3,630,763.080	1,145,454.896
3199	R/E	7 inches	27 inches	55.55 feet	3,630,823.008	1,145,545.904
3202	R/E	3 inches	17 inches	23.97 feet	3,630,845.780	1,145,537.063
3203	R/E	15 inches	45 inches	506.68 feet	3,630,852.162	1,145,613.296
3205	R/E	15 inches	40 inches	143.58 feet	3,630,849.011	1,145,587.288
3206	R/E	5 inches	20 inches	10.93 feet	3,630,859.868	1,145,588.142
3207	R/E	20 inches	70 inches	49.30 feet	3,630,869.841	1,145,592.372
3209	R/E	6 inches	22 inches	31.27 feet	3,630,856.840	1,145,634.284

Drainage Number	Cowardin Class[4]	Approximate OHWM Width	Approximate Top of Bank Width	Approximate Drainage Length	Universal Transverse Mercator Coordinates[5]	
					X	Y
3211	R/E	10 inches	40 inches	44.88 feet	3,630,847.317	1,145,675.171
3212	R/E	4 inches	50 inches	107.17 feet	3,630,912.535	1,145,615.349
3213	R/E	10 inches	44 inches	448.67 feet	3,630,939.710	1,145,663.751
3214	R/E	5 inches	44 inches	22.79 feet	3,630,905.820	1,145,634.208
3216	R/E	5 inches	40 inches	33.55 feet	3,630,961.713	1,145,673.429
3217	R/E	4 inches	6 inches	12.02 feet	3,630,965.688	1,145,686.235
3218	R/E	3 inches	5 inches	13.10 feet	3,630,971.135	1,145,691.190
3219	R/E	20 inches	132 inches	198.59 feet	3,630,598.219	1,145,483.374
3220	R/E	10 inches	40 inches	23.54 feet	3,630,601.113	1,145,496.553
3221	R/E	8 inches	71 inches	412.98 feet	3,631,426.881	1,146,685.659
3222	R/E	25 inches	25 inches	77.68 feet	3,631,373.462	1,146,674.040
3223	R/E	3 inches	15 inches	22.92 feet	3,631,451.675	1,146,698.887

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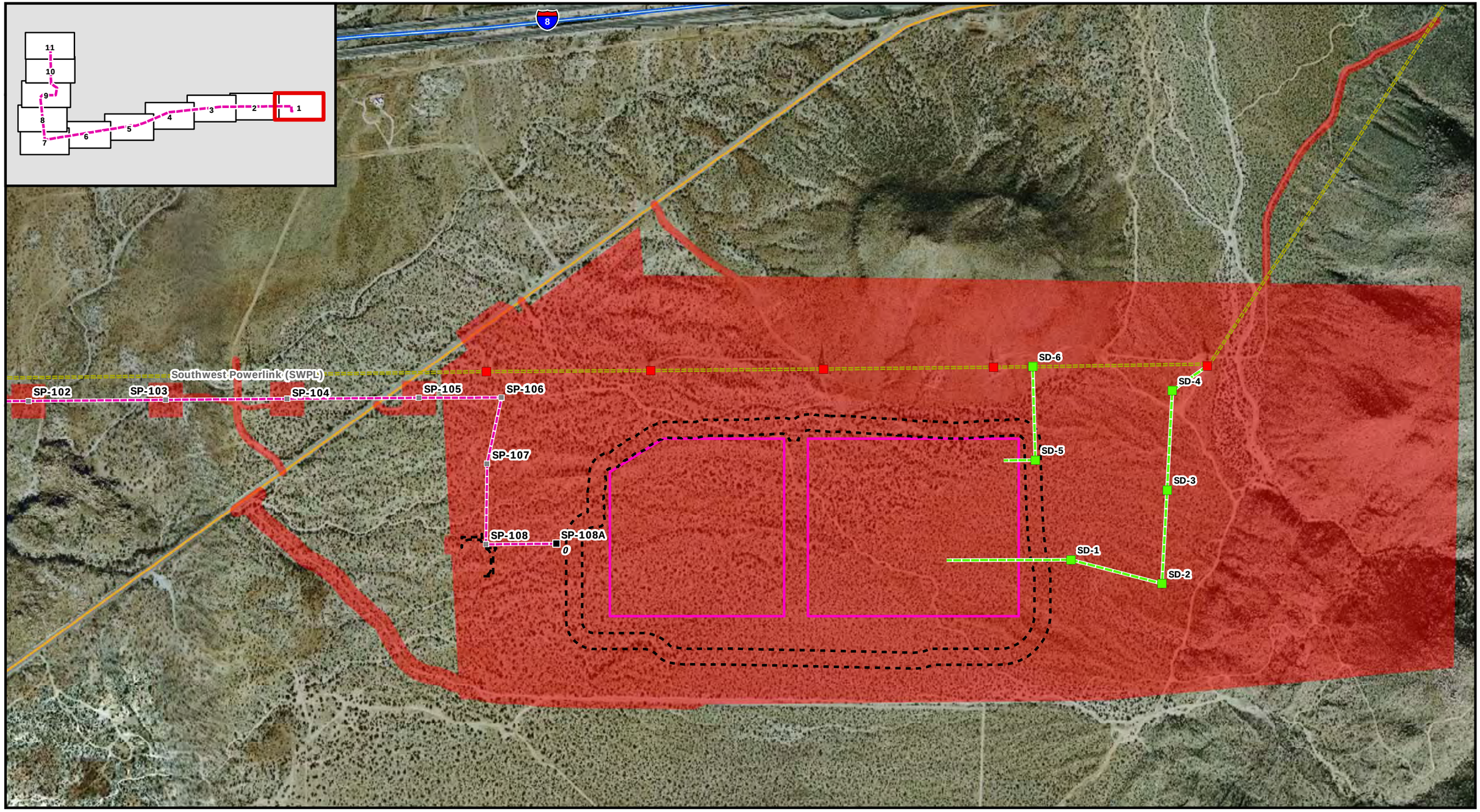
ATTACHMENT A: DRAINAGE SURVEY AREA MAPS



Attachment A: Drainage Survey Area Map 1 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Proposed 138 kV Tower
- Wood Distribution Pole
- Existing SWPL Structure
- Proposed SWPL Loop-In Structure
- TL 6931 Getaway Structure
- Drainage Survey Area
- ECO Substation
- Boulevard Substation Rebuild
- Temporary Construction Buffer
- Interstate
- Highway
- Major Road
- Railroad

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:7,000

0 250 500 1,000 1,500 2,000 2,500 Feet

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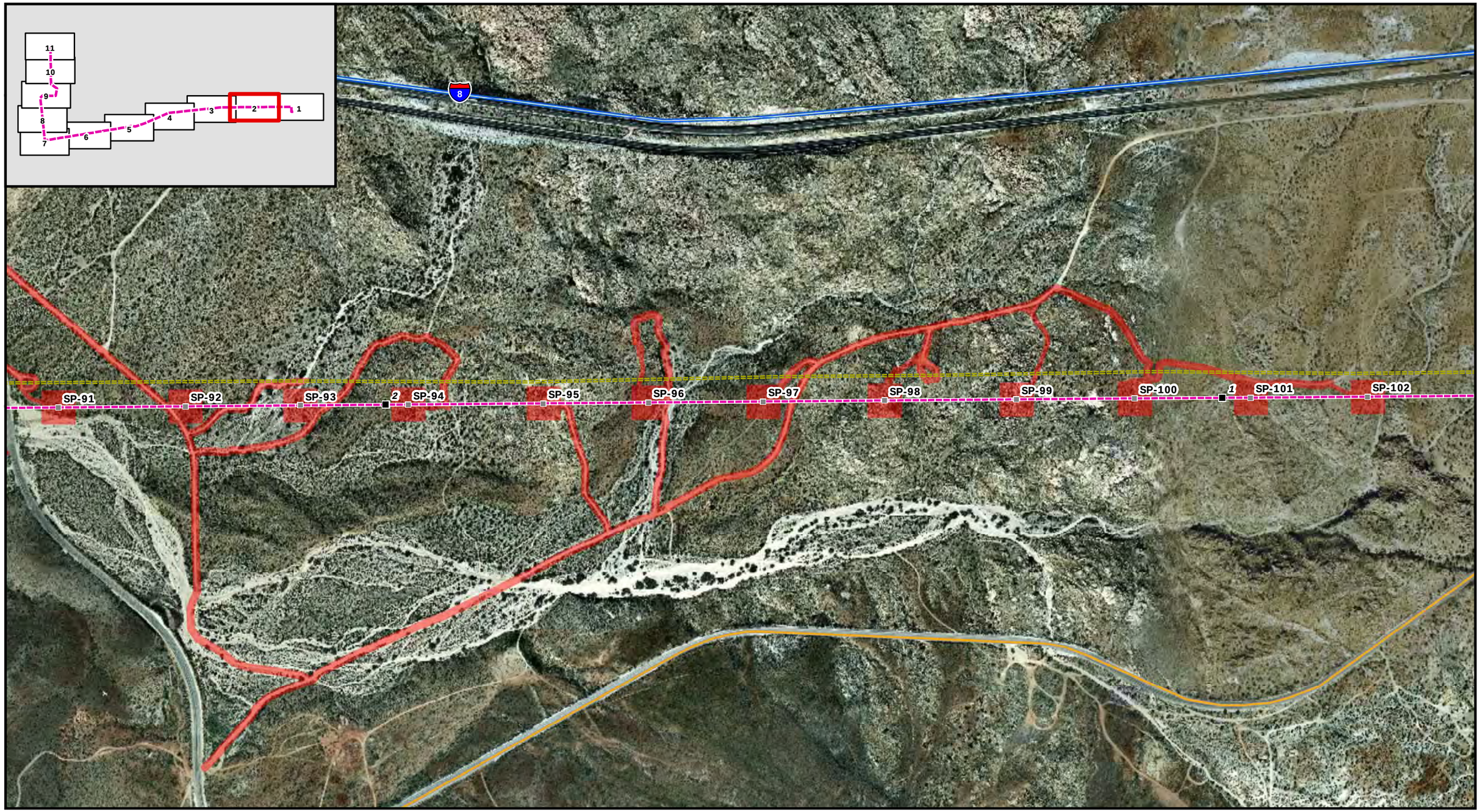

Attachment A: Drainage Survey Area Map 2 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Proposed 138 kV Tower
- Wood Distribution Pole
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- Proposed SWPL Loop-In Structure
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SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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Attachment A: Drainage Survey Area Map 3 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
- Existing Transmission Line
- Proposed 138 kV Line Milepost
- Proposed 138 kV Tower
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SDGE A Sempra Energy utility™

INSIGNIA ENVIRONMENTAL

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Attachment A: Drainage Survey Area Map 4 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
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- Proposed 138 kV Tower
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SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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Attachment A: Drainage Survey Area Map 5 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
- Existing Transmission Line
- Proposed 138 kV Line Milepost
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Attachment A: Drainage Survey Area Map 6 of 11

East County Substation Project

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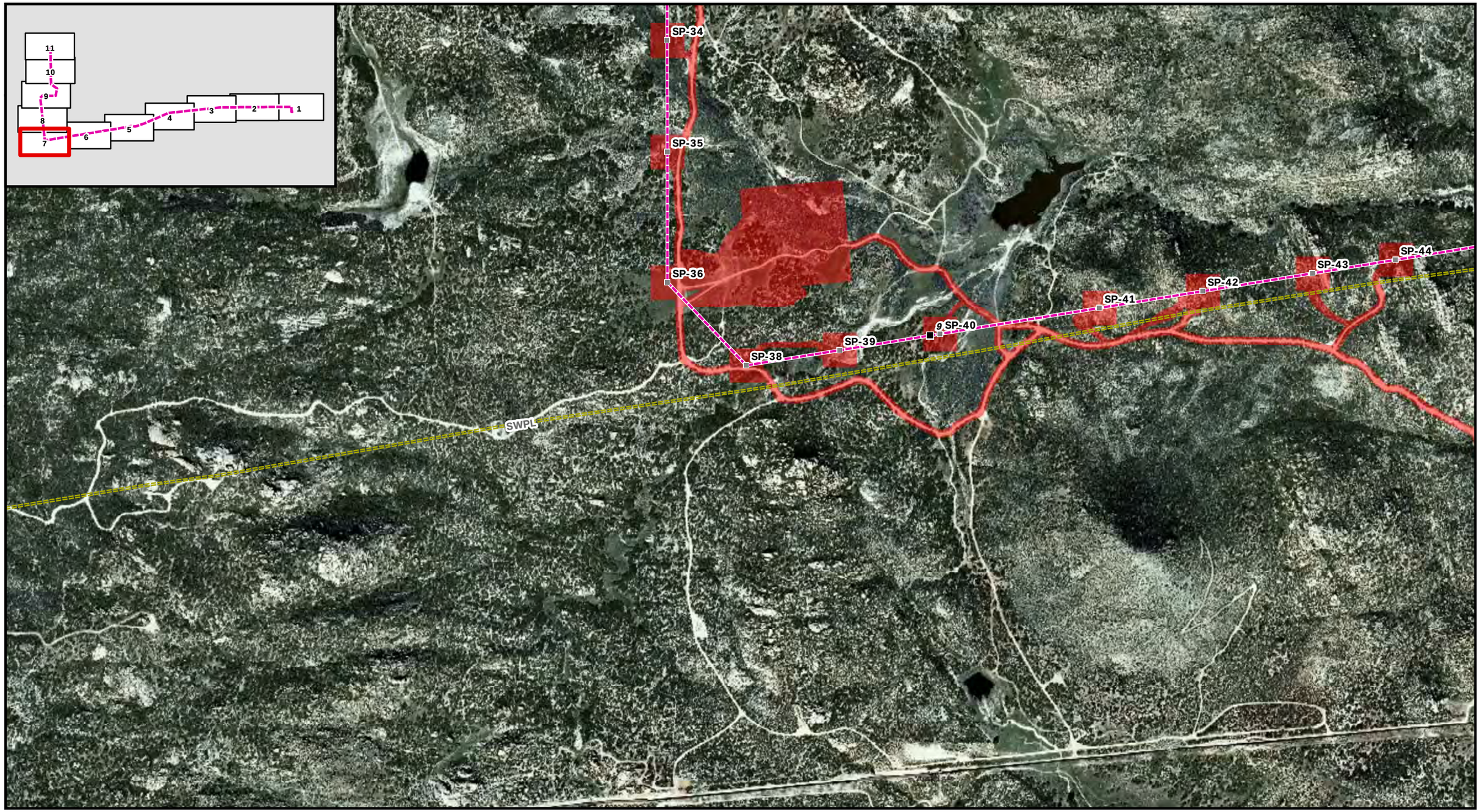

Attachment A: Drainage Survey Area Map 7 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
- Existing Transmission Line
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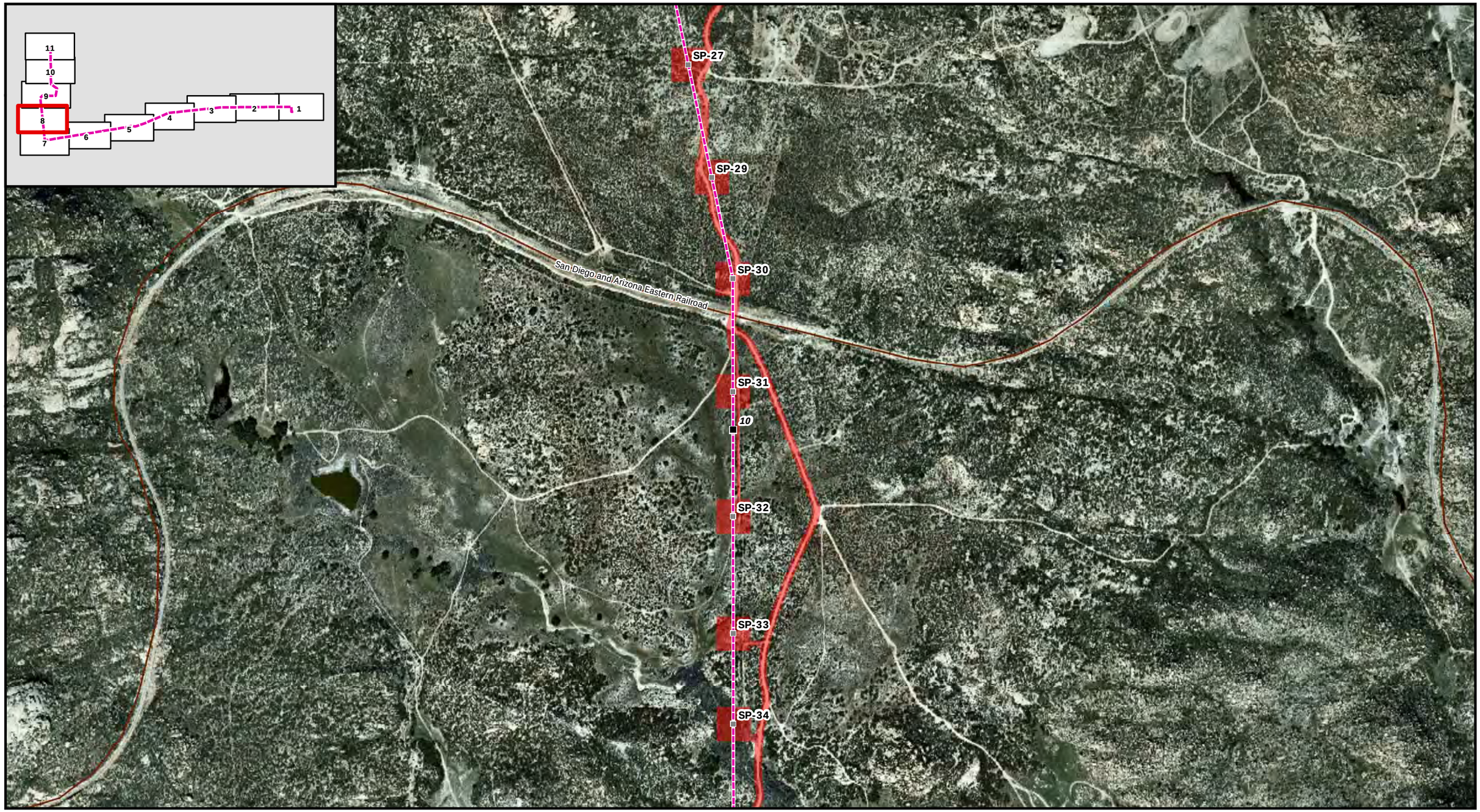

Attachment A: Drainage Survey Area Map 8 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
- Existing Transmission Line
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Attachment A: Drainage Survey Area Map 9 of 11

East County Substation Project

- Proposed 138 kV Line
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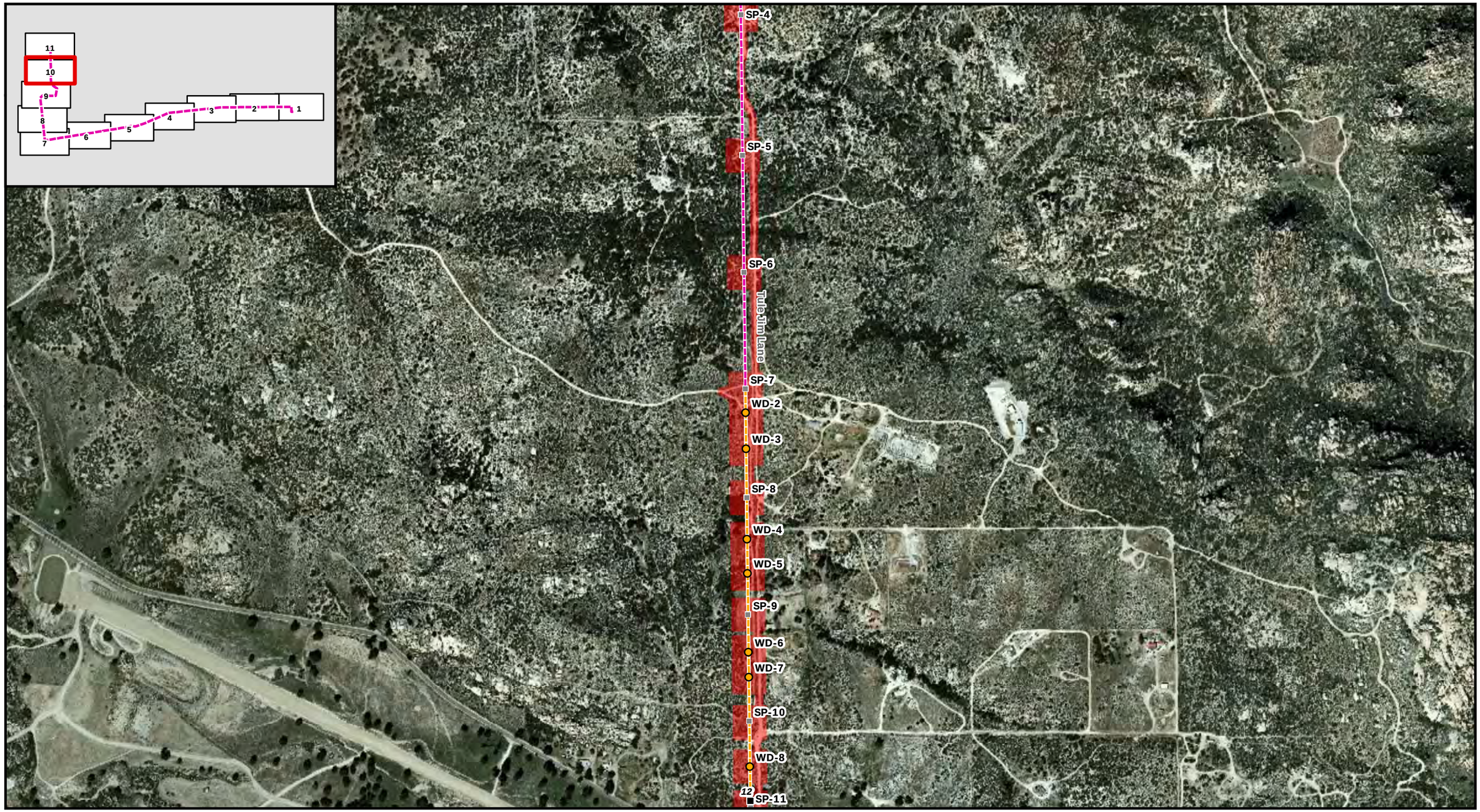

Attachment A: Drainage Survey Area Map 10 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
- Existing Transmission Line
- Proposed 138 kV Line Milepost
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- Wood Distribution Pole
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SDGE A Sempra Energy utility™

INSIGNIA ENVIRONMENTAL

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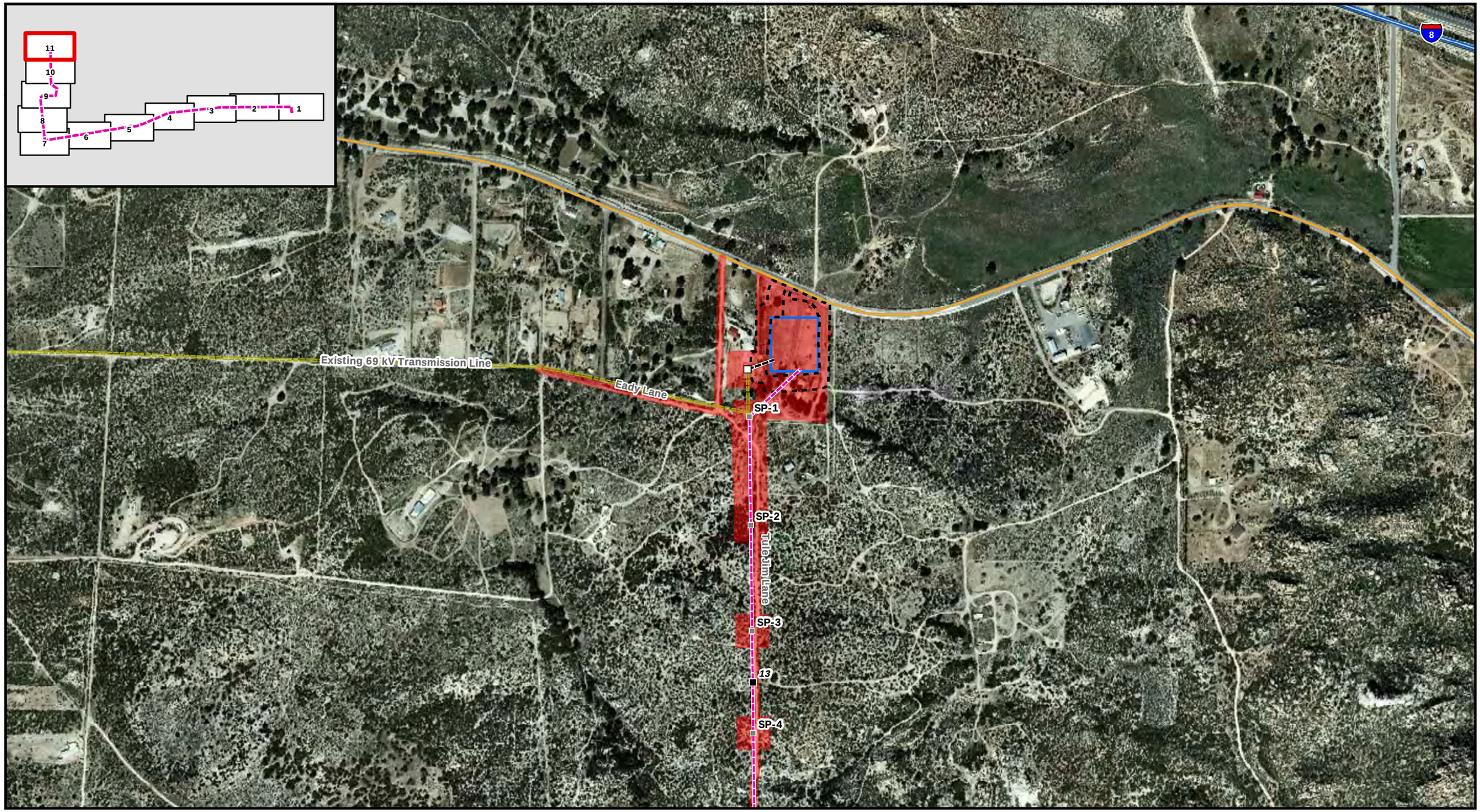

Attachment A: Drainage Survey Area Map 11 of 11

East County Substation Project

- Proposed 138 kV Line
- Proposed SWPL Loop-In
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Getaway
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SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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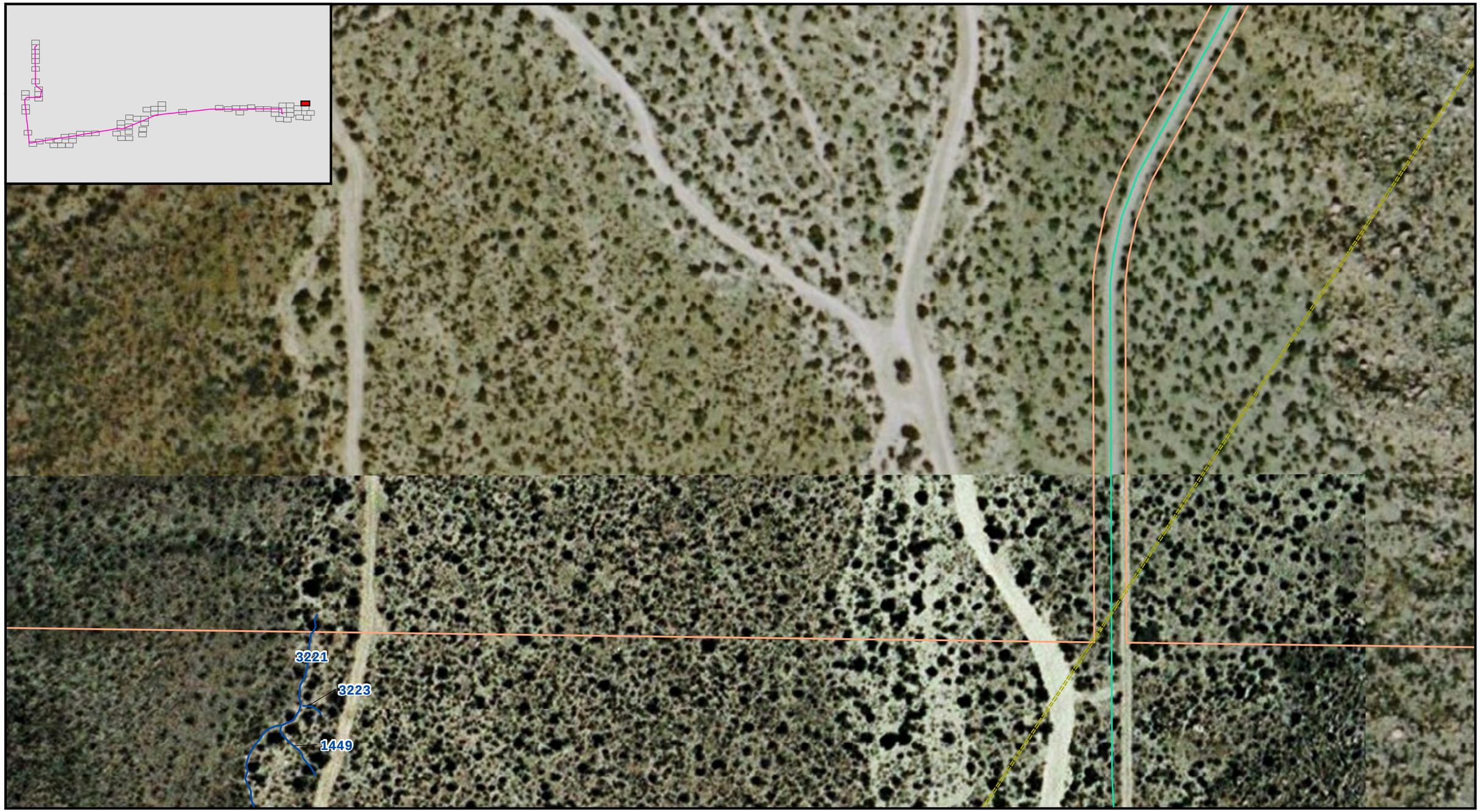
ATTACHMENT B: DRAINAGE SURVEY RESULTS MAPS



Attachment B: Drainage Survey Results Map 1 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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Attachment B: Drainage Survey Results Map 2 of 72

East County Substation Project

- Drainage - Impacted
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- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 3 of 72

East County Substation Project

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- Existing SWPL Structure
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- Highway
- Major Road
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SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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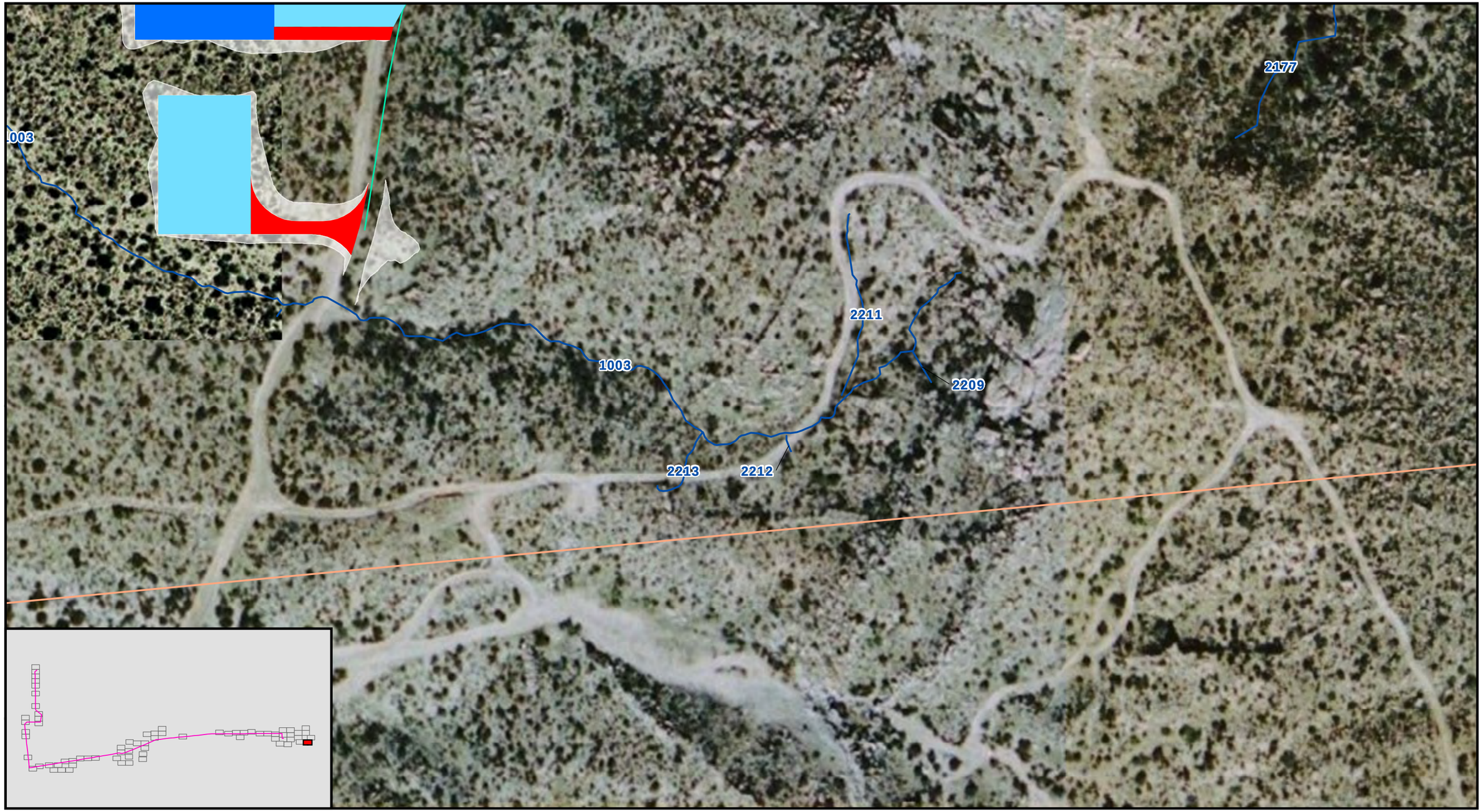

Attachment B: Drainage Survey Results Map 4 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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SDGE A Sempra Energy utility

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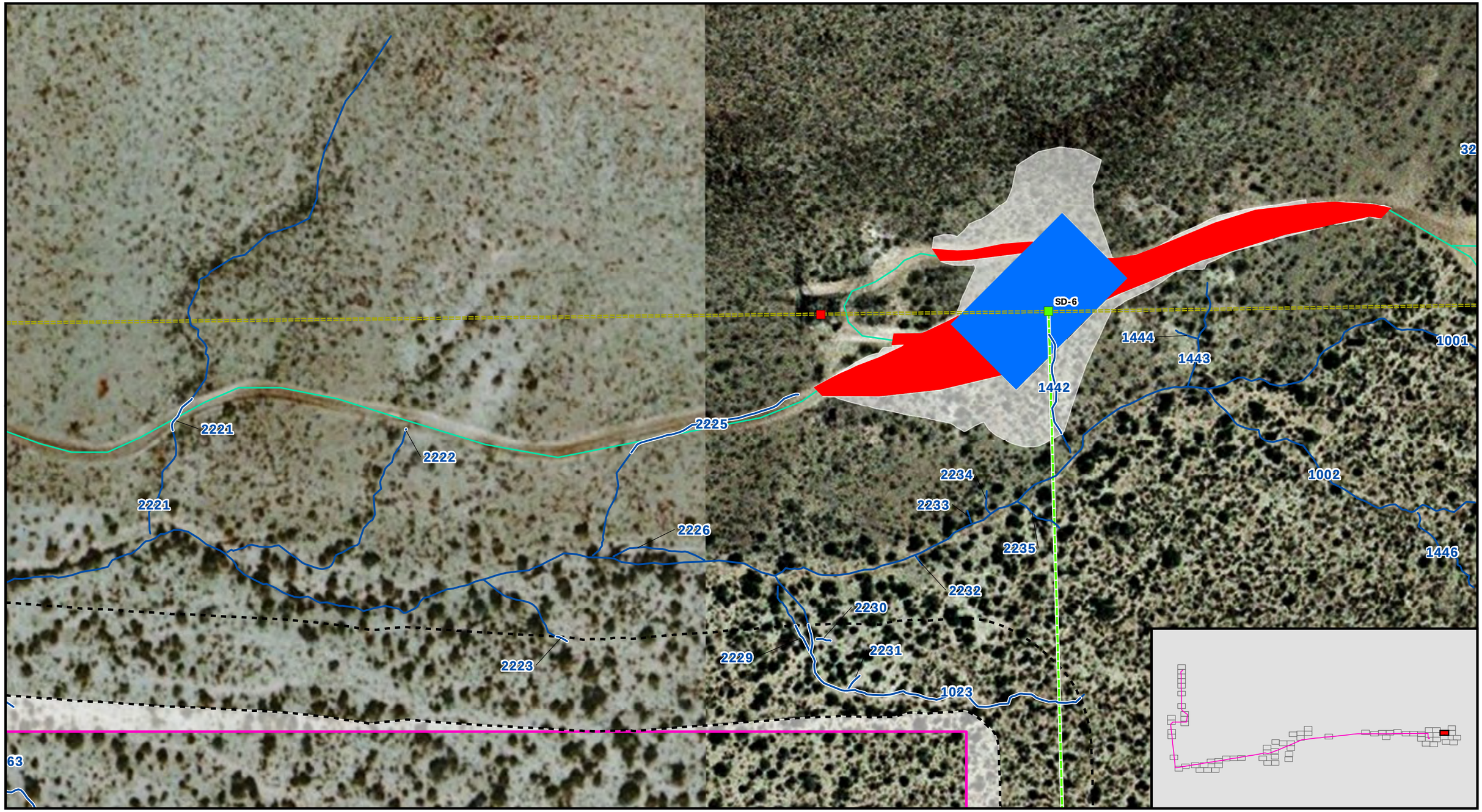

Attachment B: Drainage Survey Results Map 5 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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1 inch equals 100 feet

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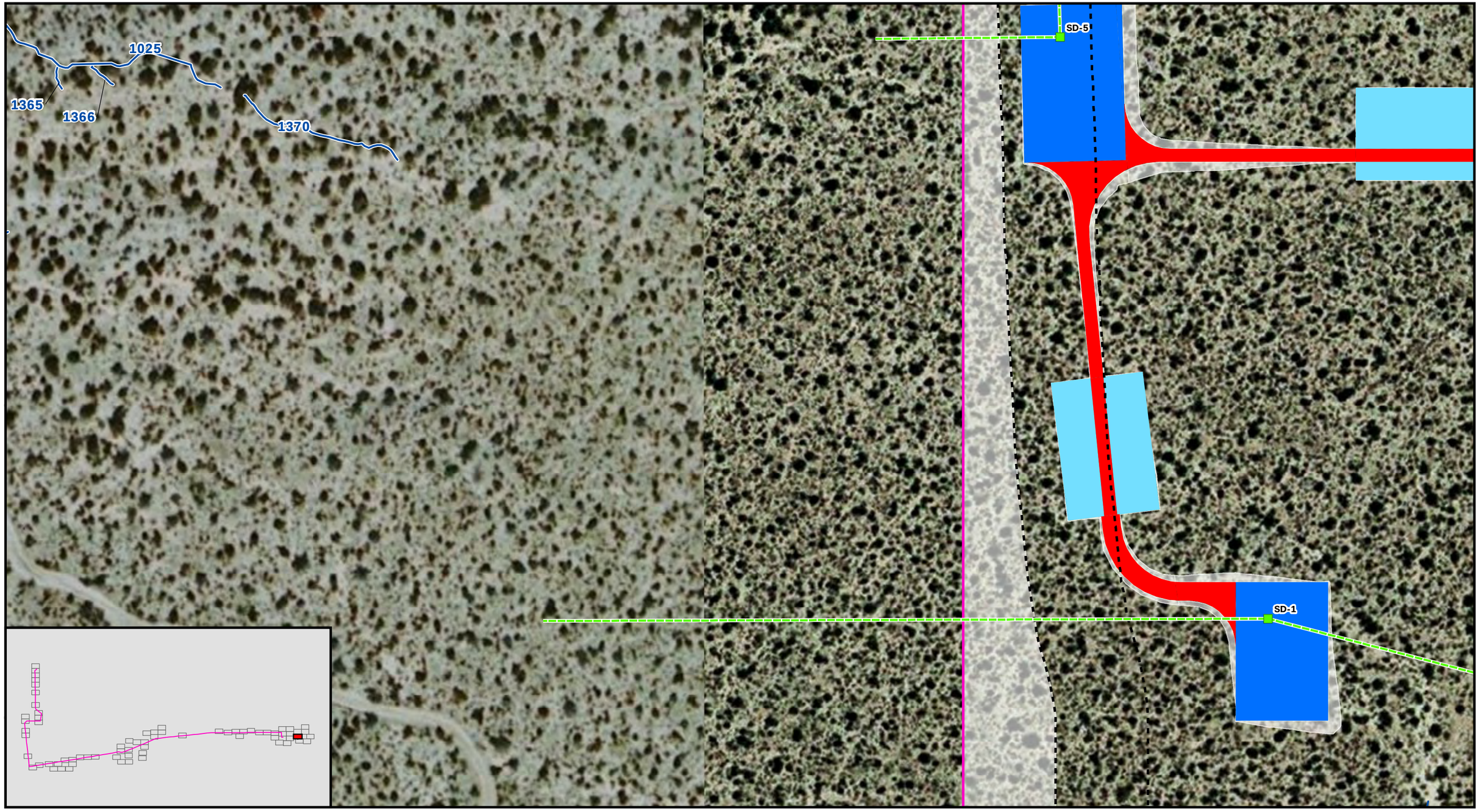

Attachment B: Drainage Survey Results Map 6 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
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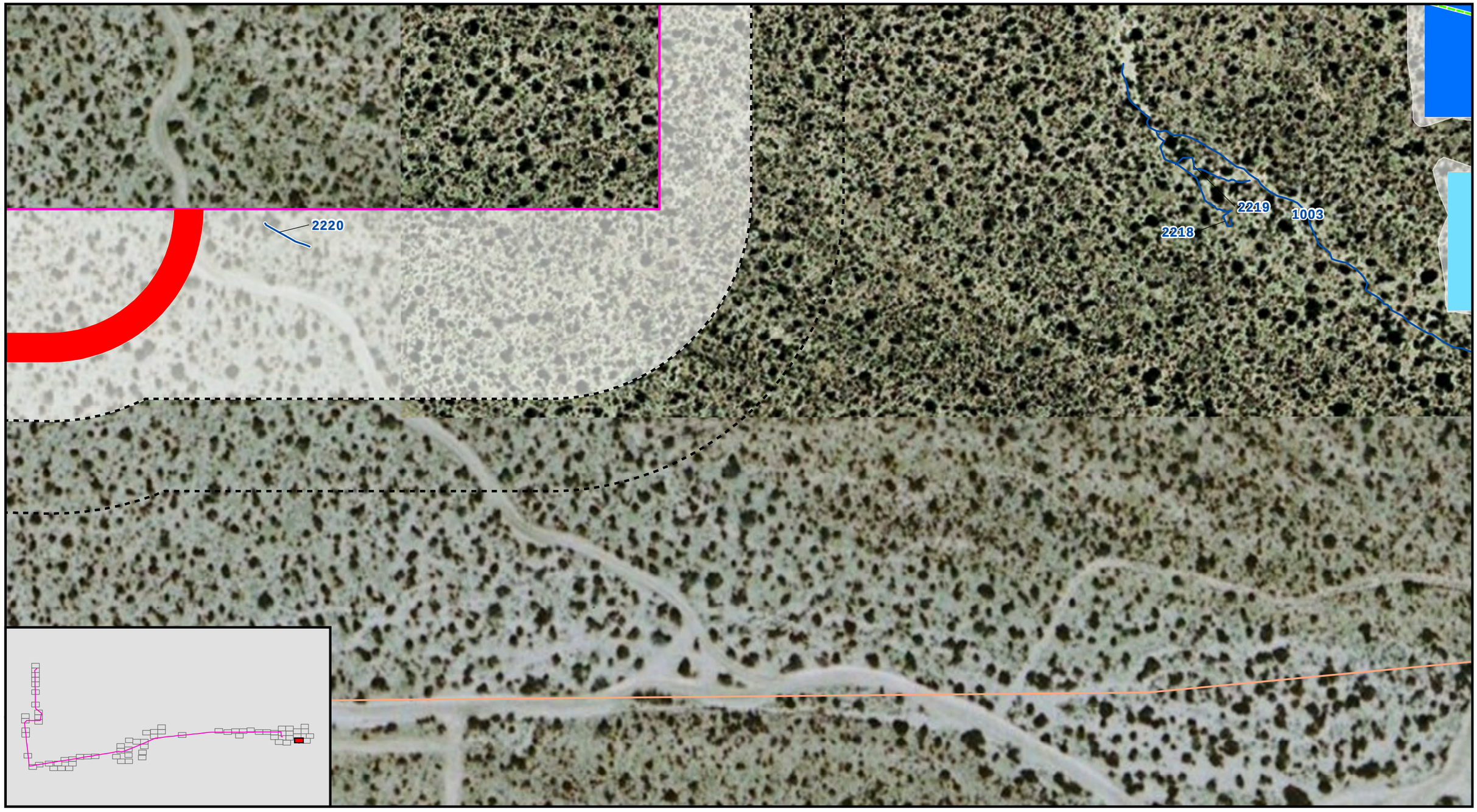

Attachment B: Drainage Survey Results Map 7 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
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Attachment B: Drainage Survey Results Map 8 of 72

East County Substation Project

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Attachment B: Drainage Survey Results Map 9 of 72

East County Substation Project

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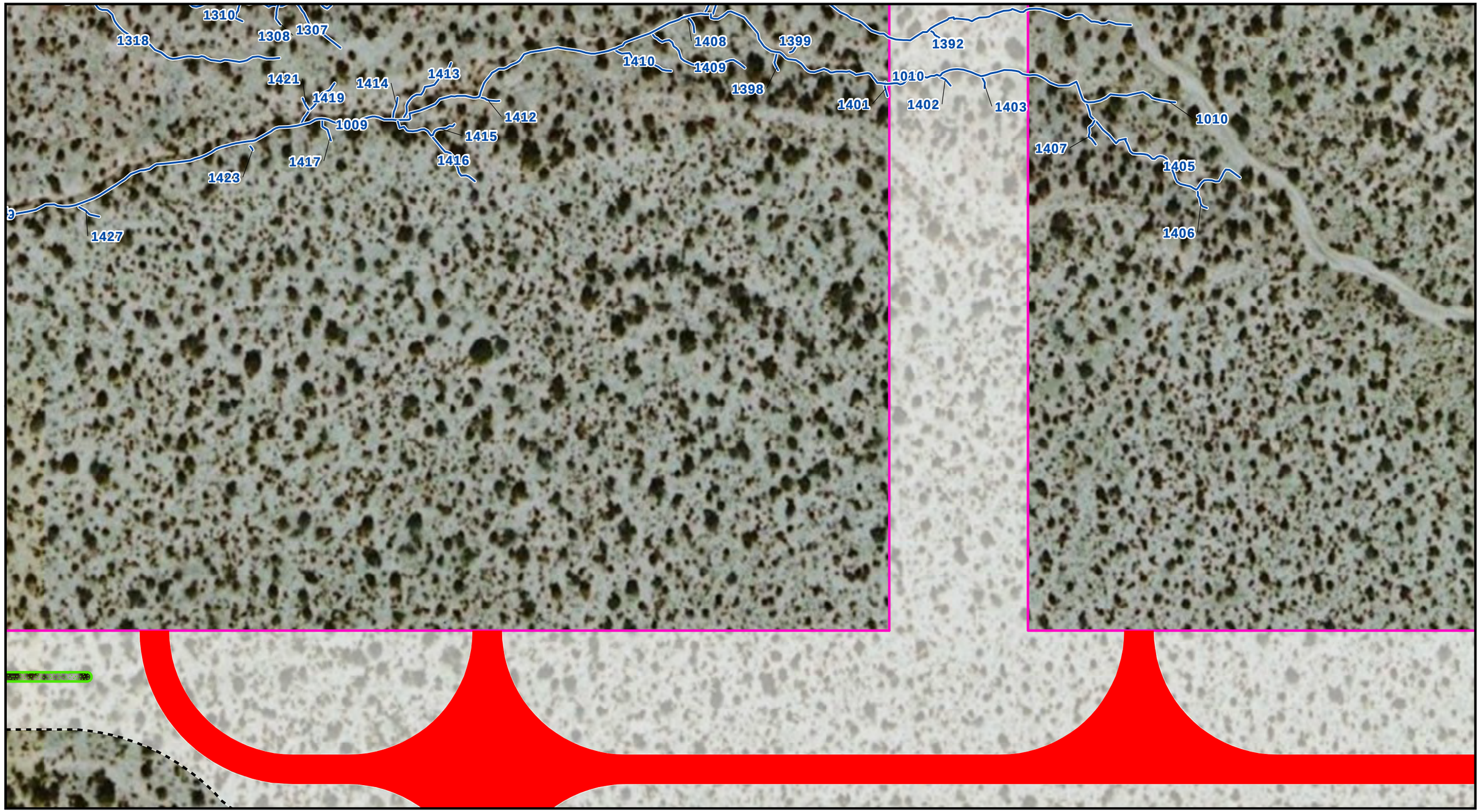

Attachment B: Drainage Survey Results Map 10 of 72

East County Substation Project

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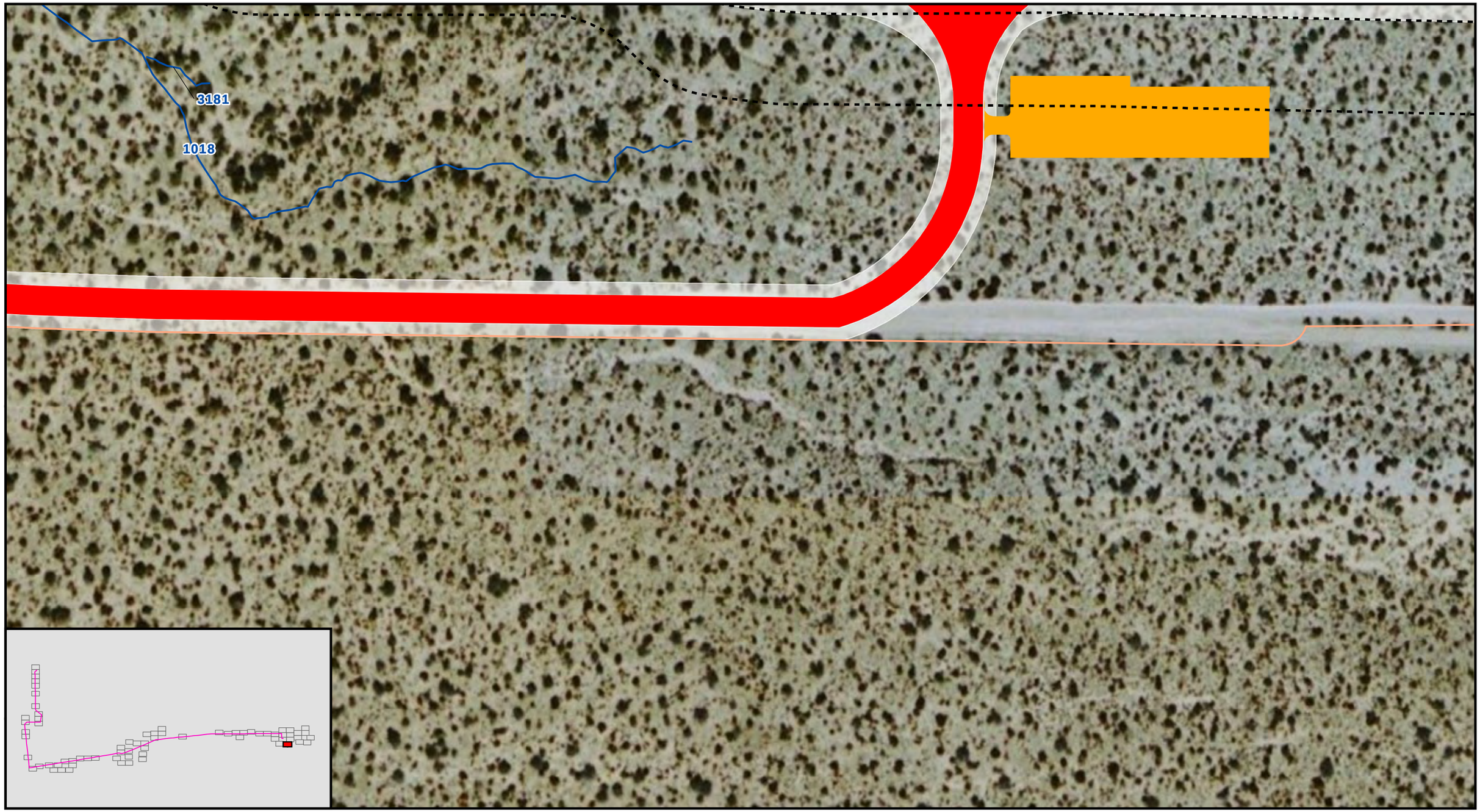

Attachment B: Drainage Survey Results Map 11 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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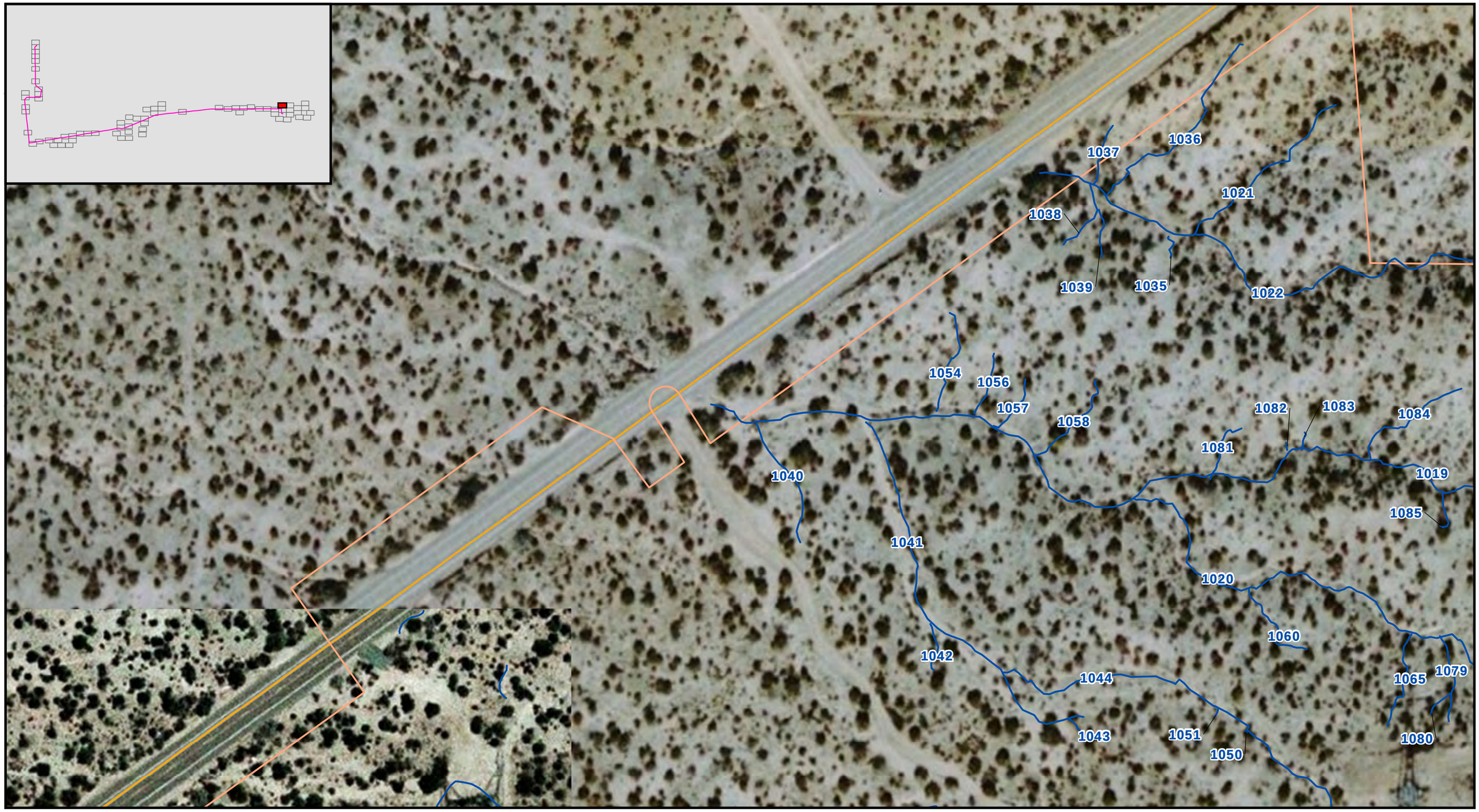

Attachment B: Drainage Survey Results Map 12 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

N W E S

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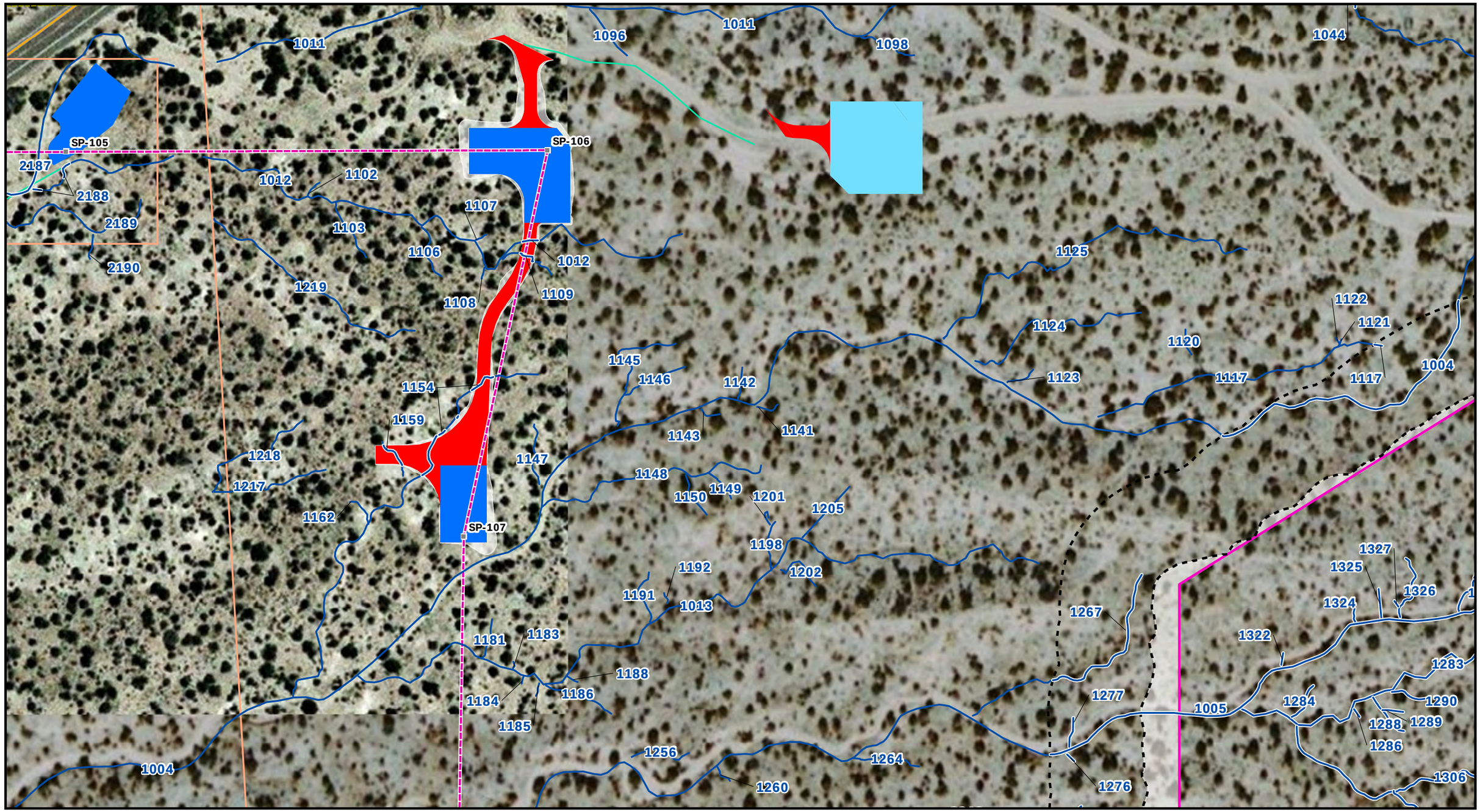

Attachment B: Drainage Survey Results Map 13 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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N W E S

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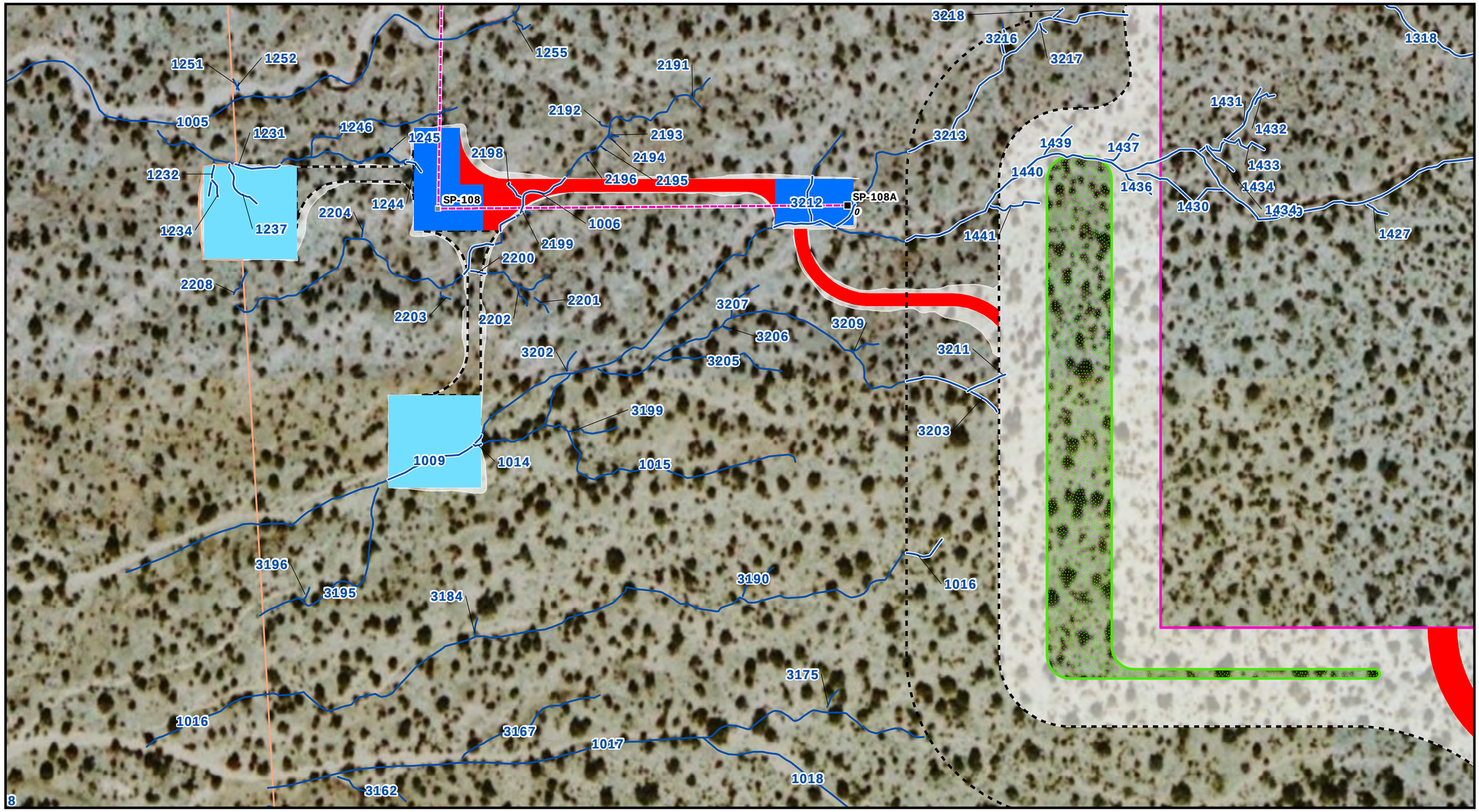

Attachment B: Drainage Survey Results Map 14 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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Attachment B: Drainage Survey Results Map 15 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

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N W E S

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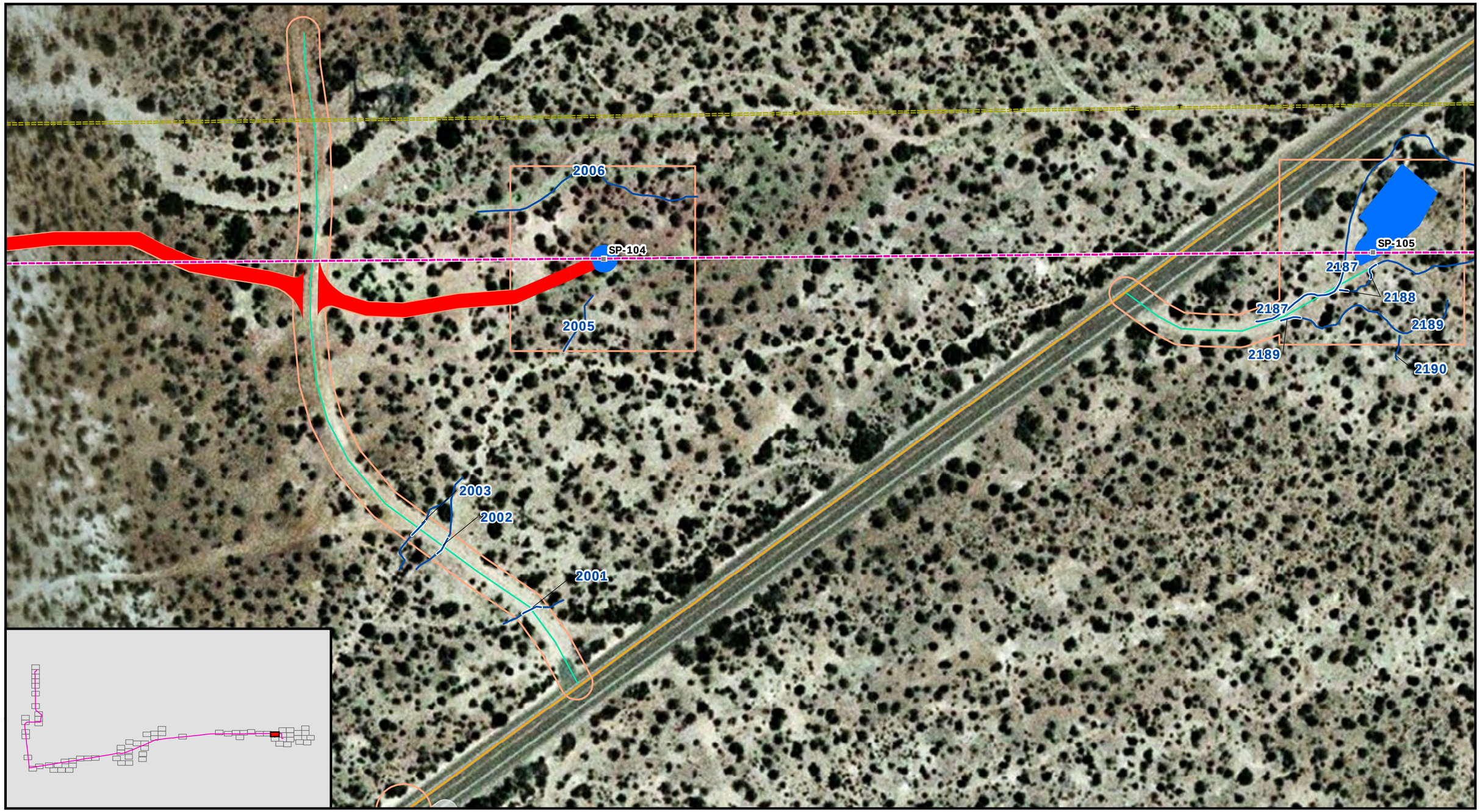

Attachment B: Drainage Survey Results Map 16 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 17 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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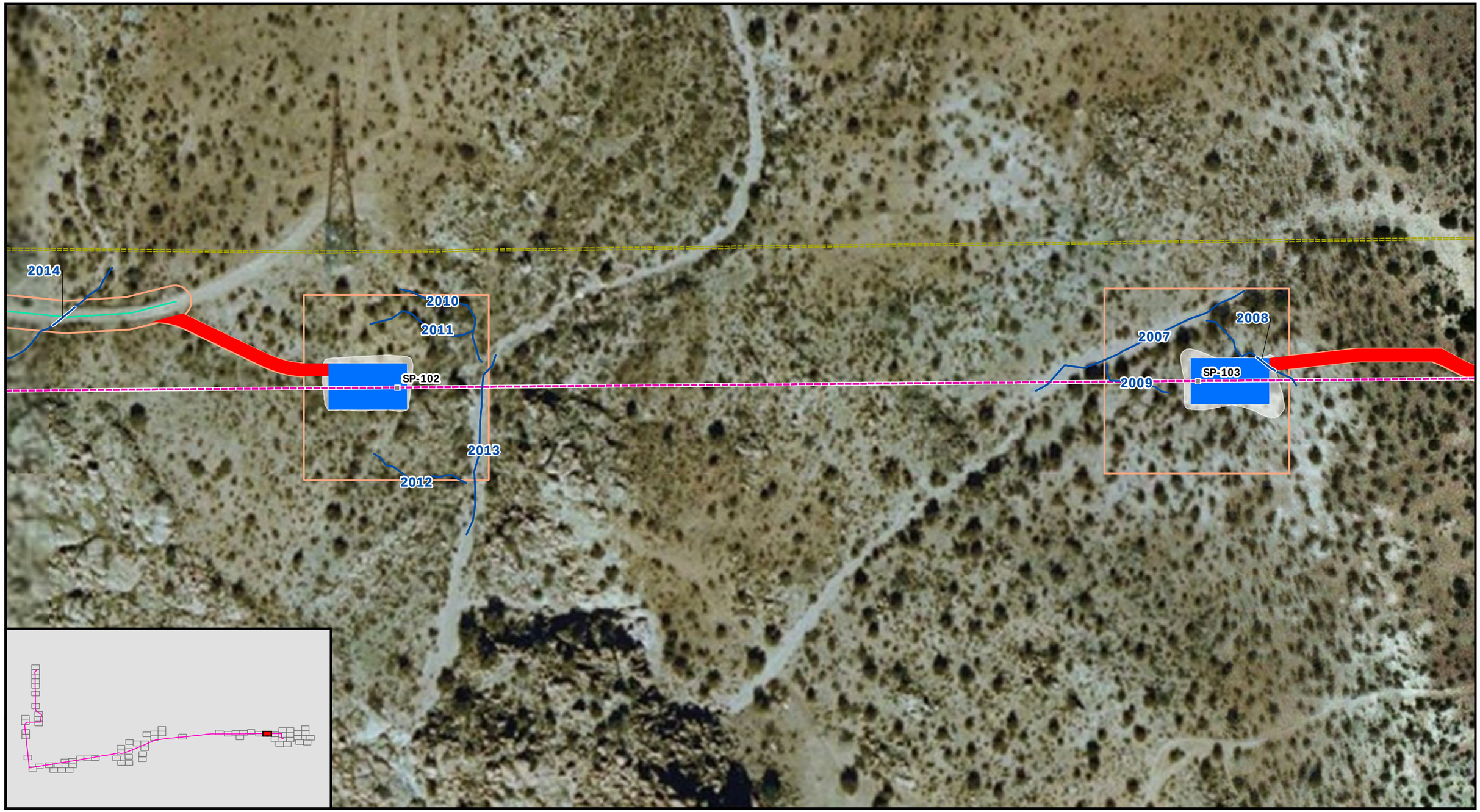

Attachment B: Drainage Survey Results Map 18 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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1 inch equals 100 feet

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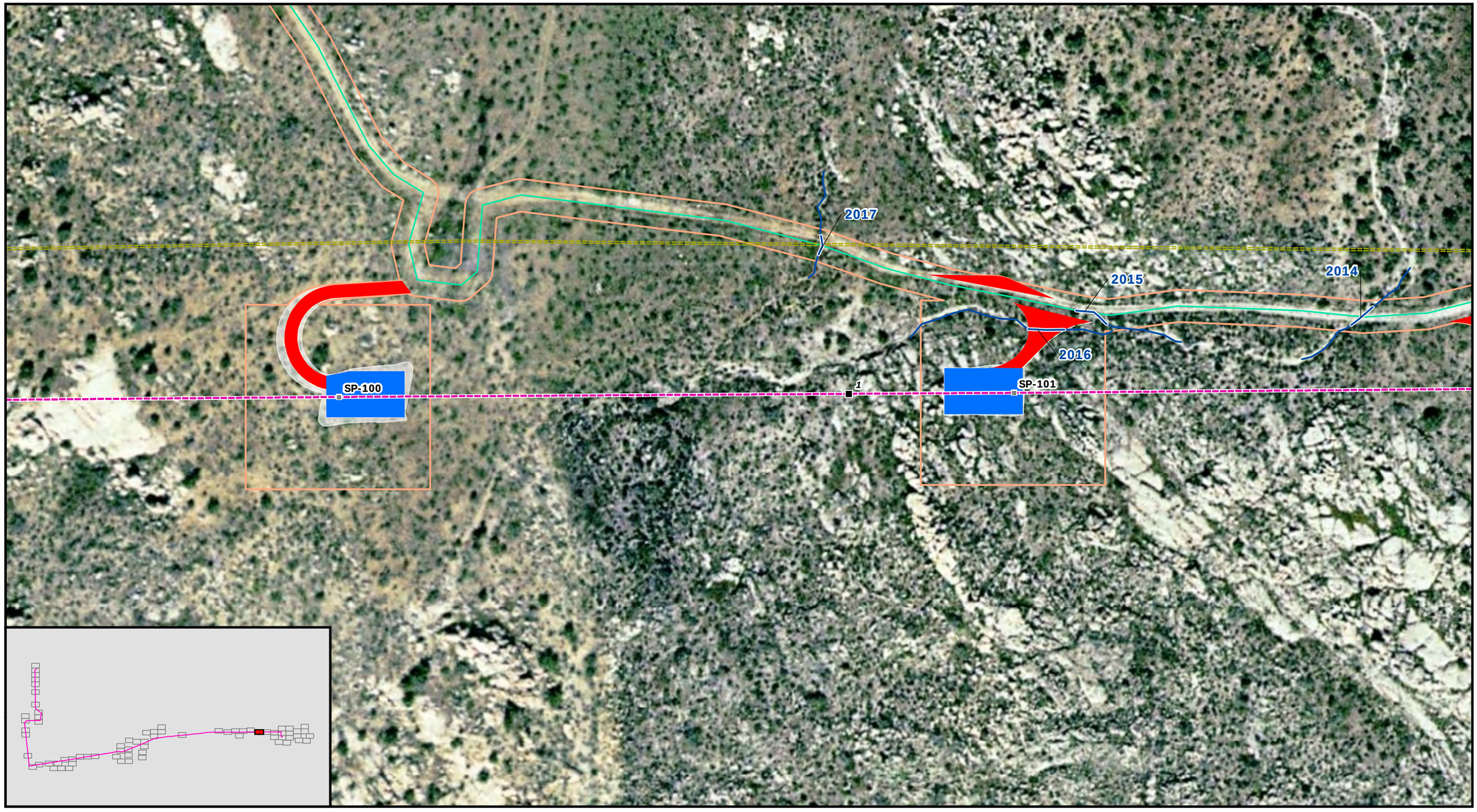

Attachment B: Drainage Survey Results Map 19 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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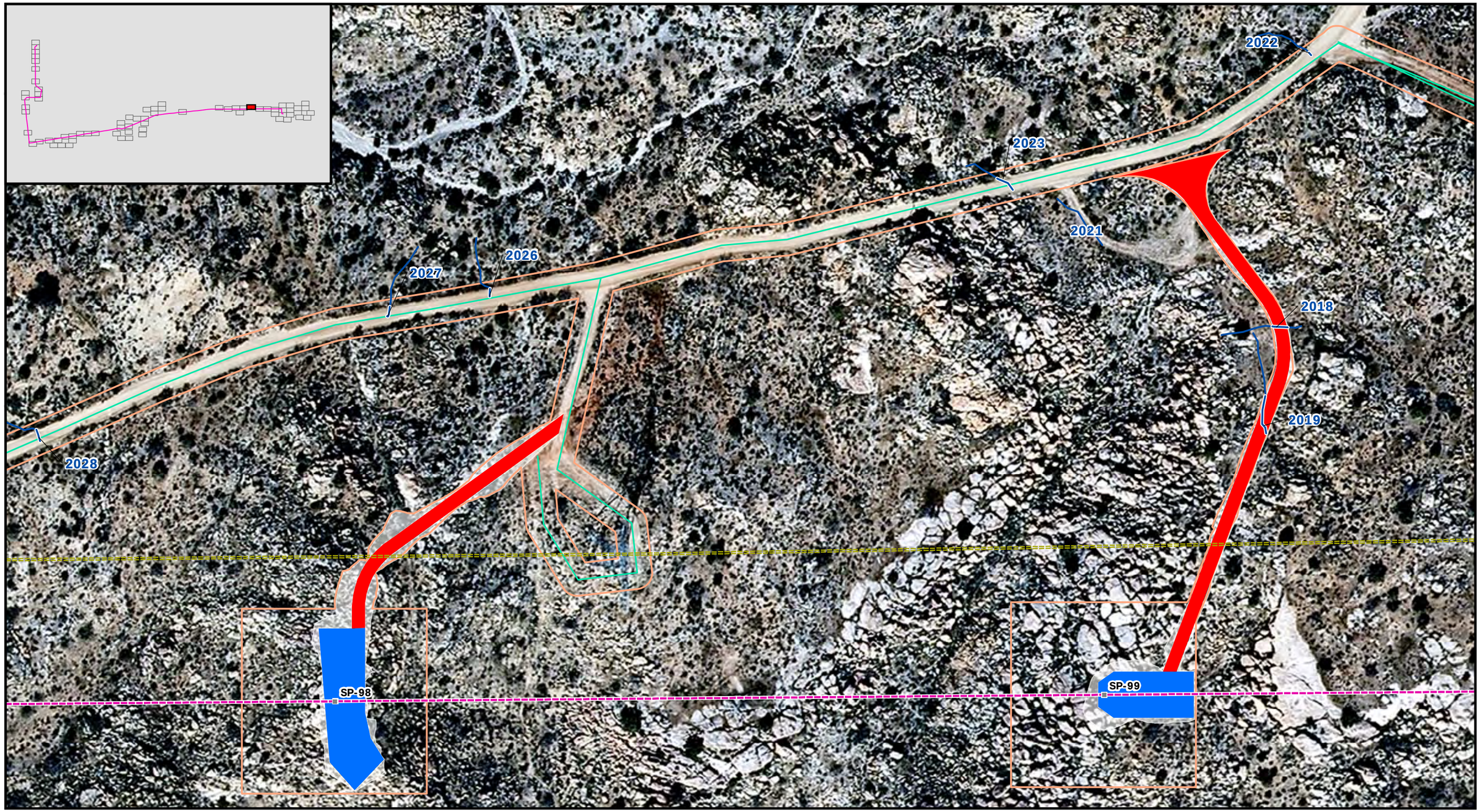

Attachment B: Drainage Survey Results Map 20 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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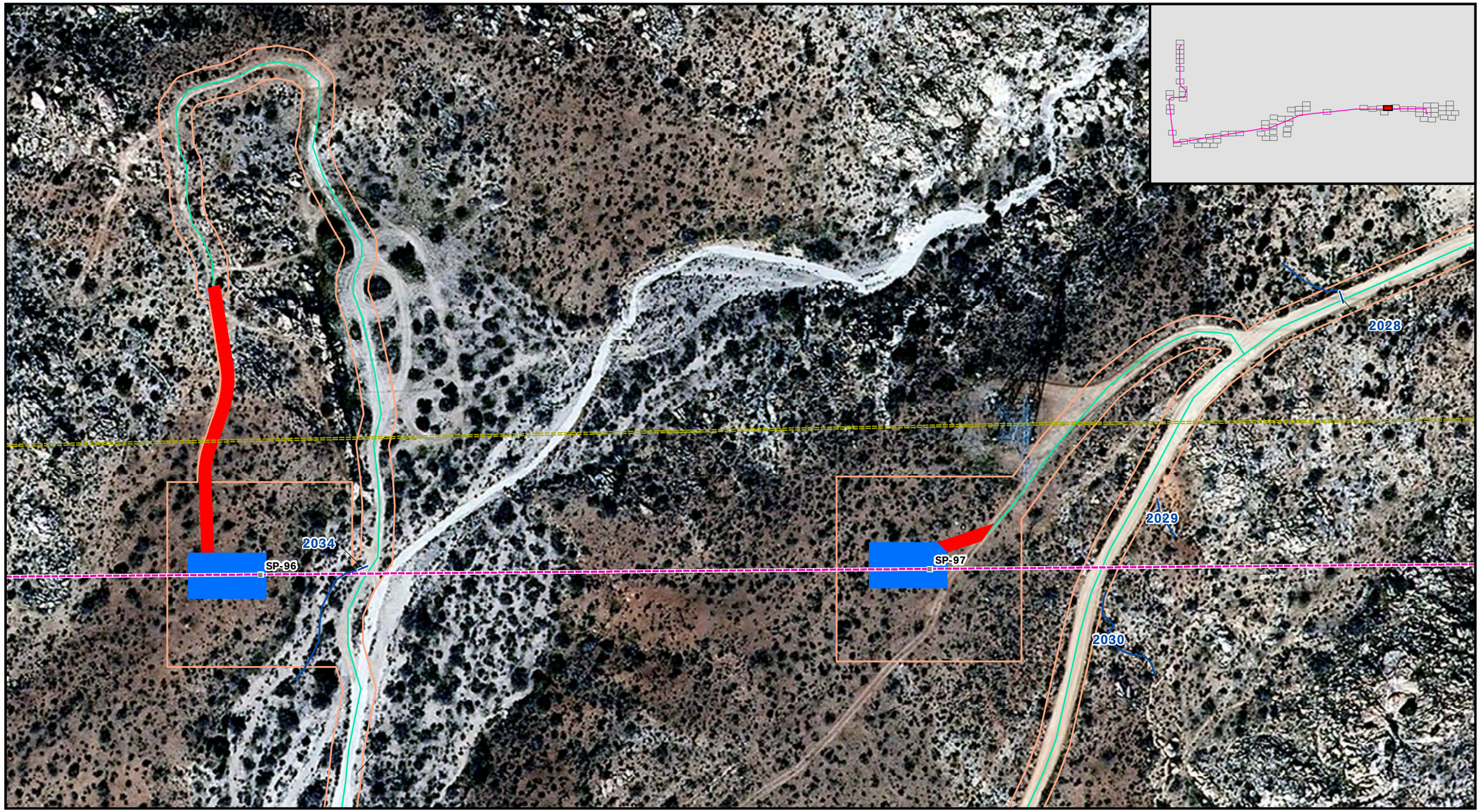

Attachment B: Drainage Survey Results Map 21 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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Attachment B: Drainage Survey Results Map 22 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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Attachment B: Drainage Survey Results Map 23 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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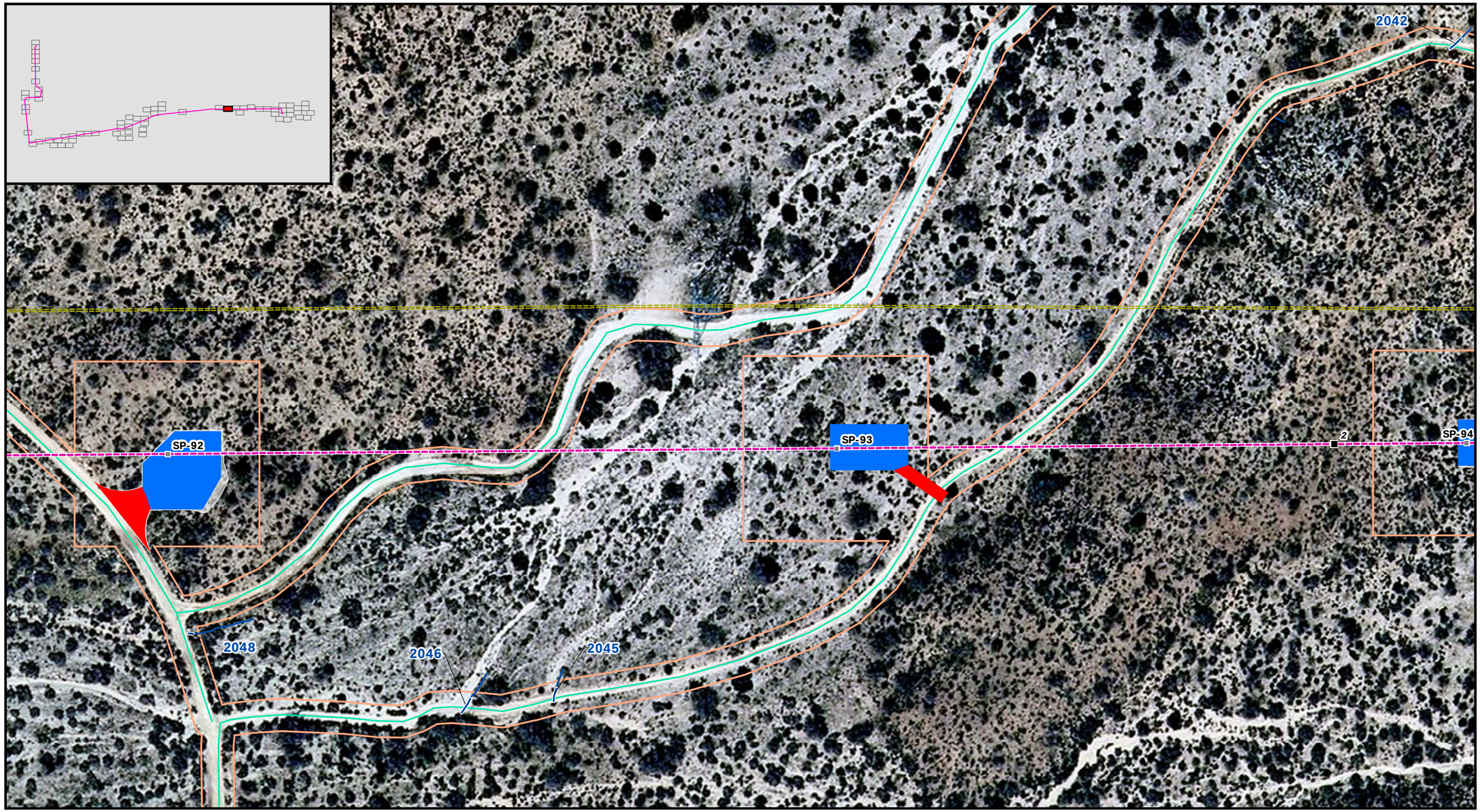

Attachment B: Drainage Survey Results Map 24 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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N W E S

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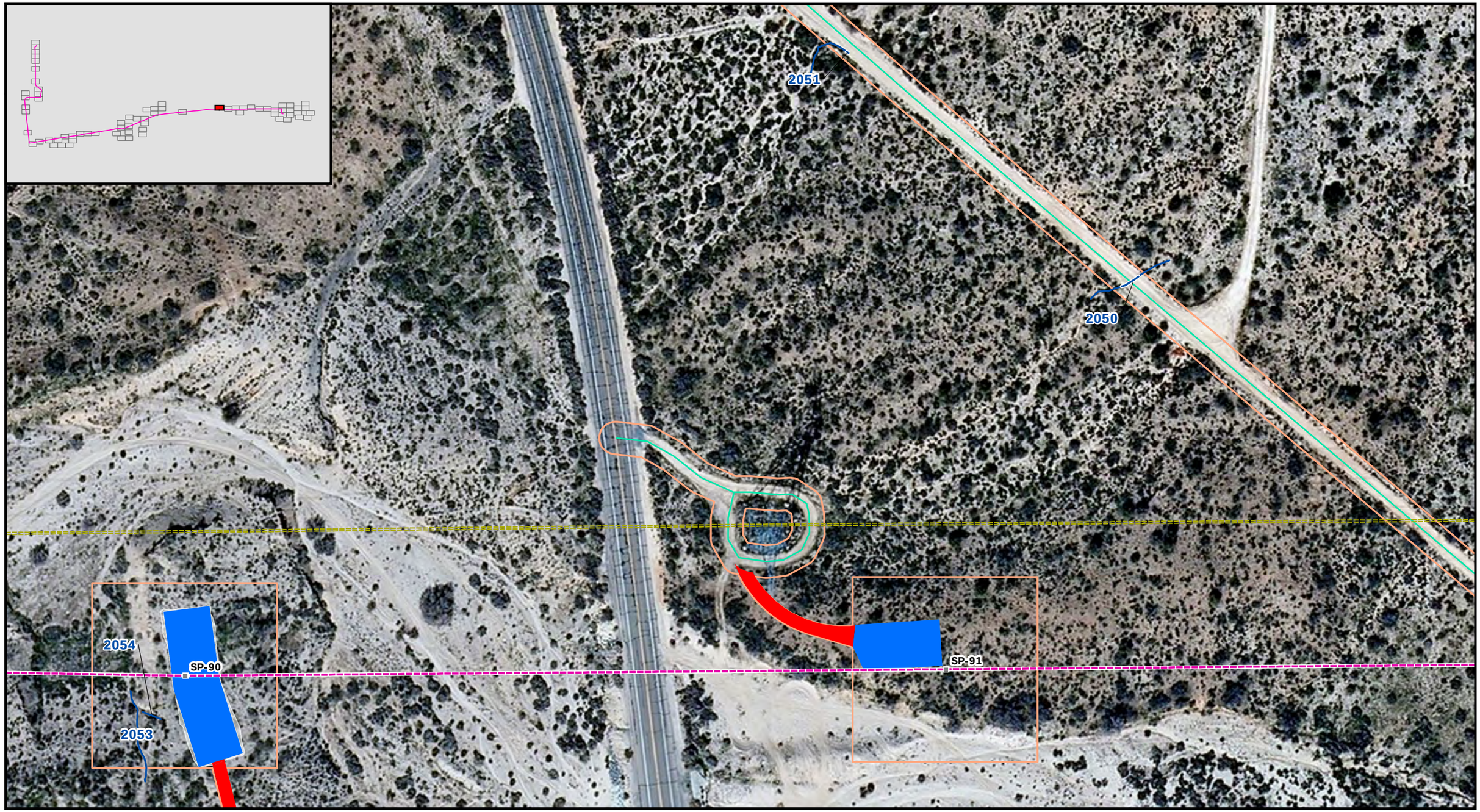

Attachment B: Drainage Survey Results Map 25 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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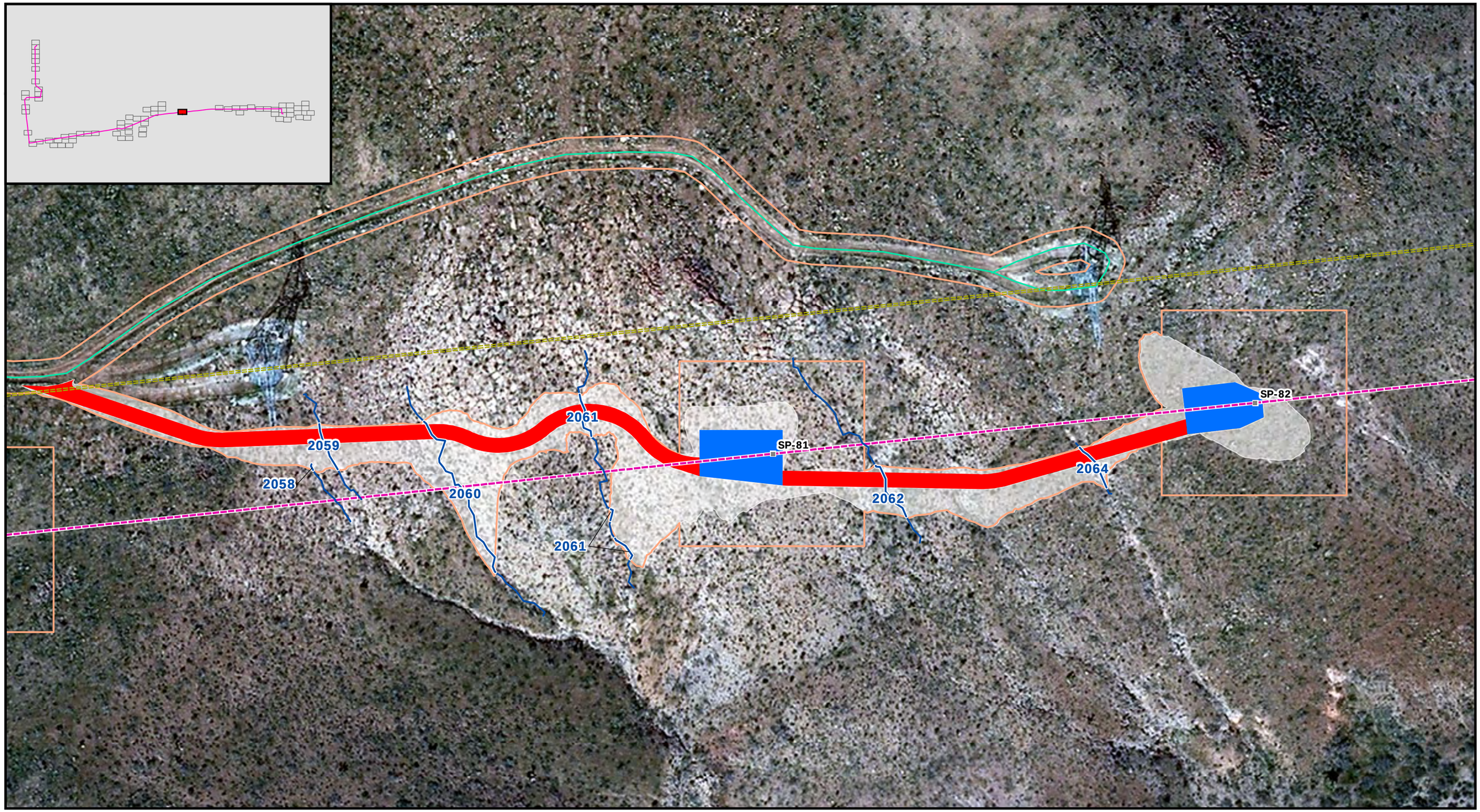

Attachment B: Drainage Survey Results Map 26 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

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N W E S

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Attachment B: Drainage Survey Results Map 27 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 28 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
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- Fly Yard
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- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

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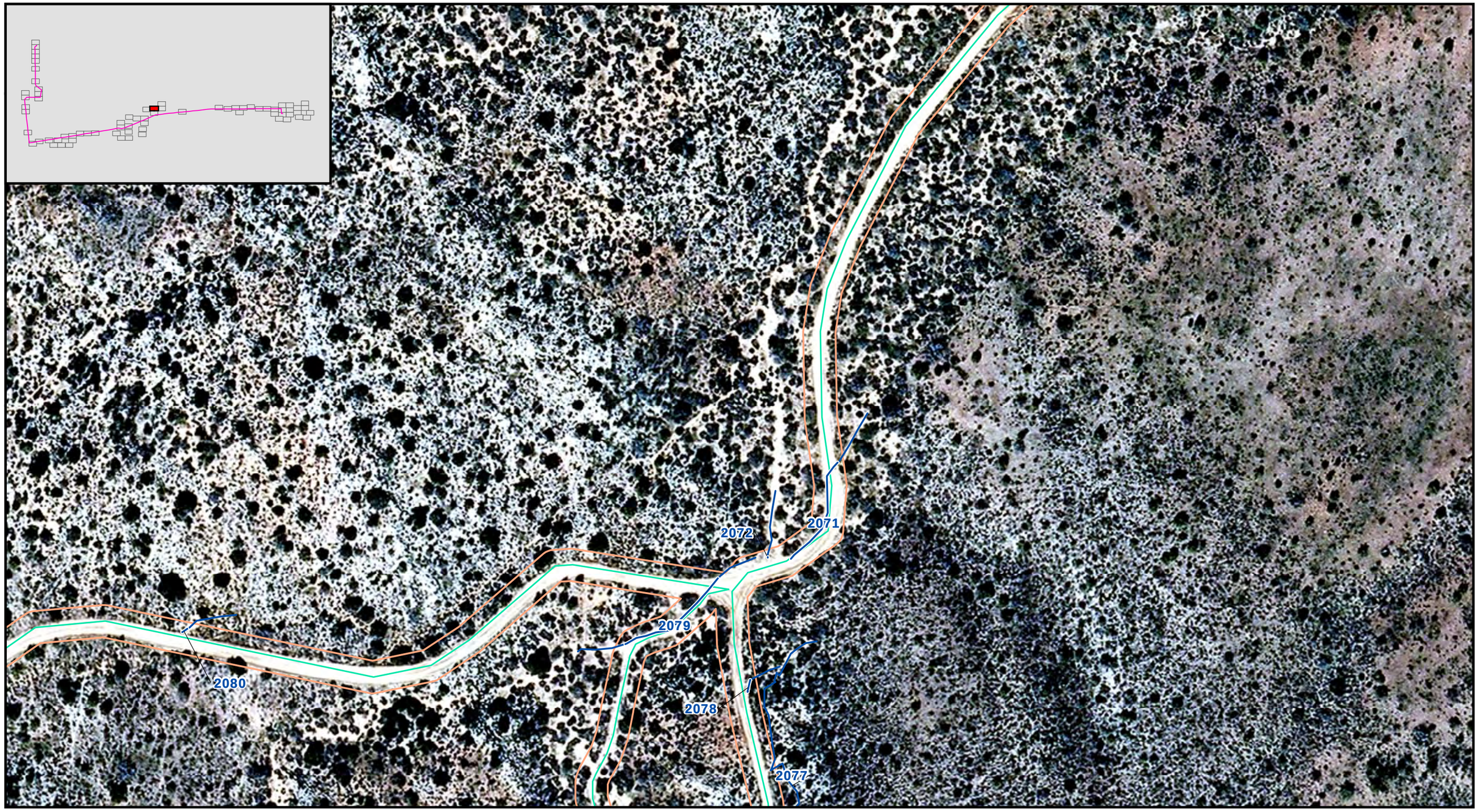

Attachment B: Drainage Survey Results Map 29 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

N W E S

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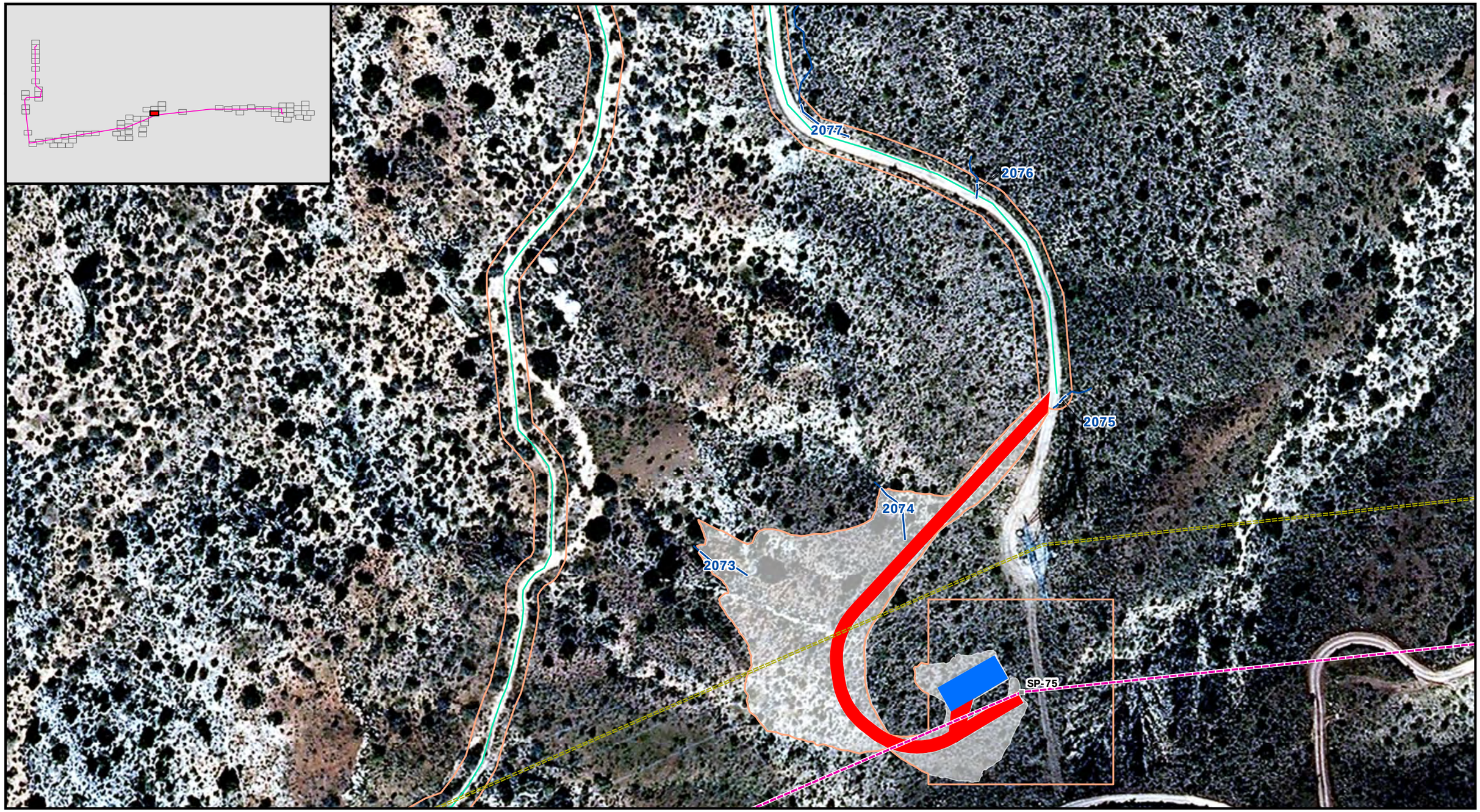

Attachment B: Drainage Survey Results Map 30 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 31 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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- Existing SWPL Structure
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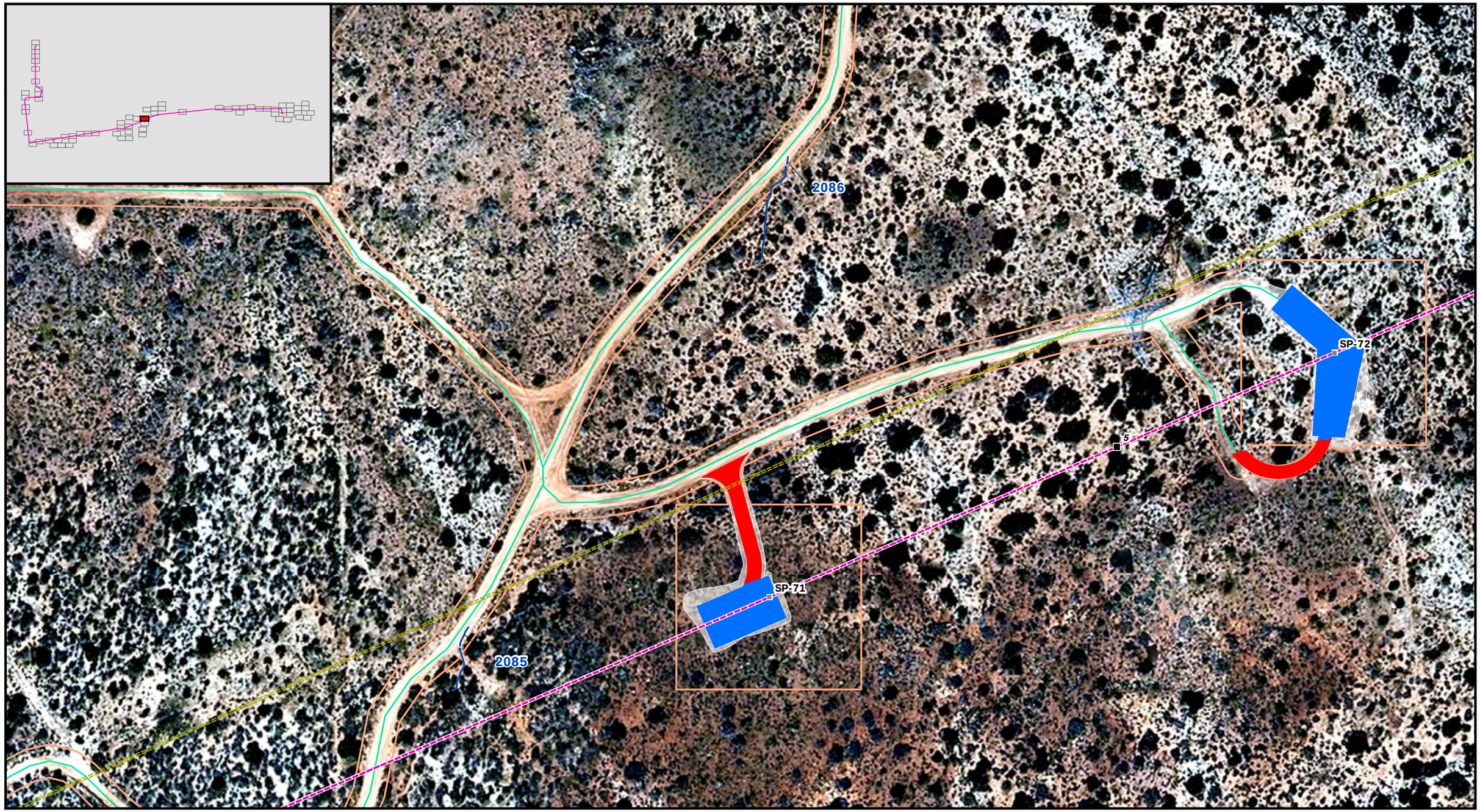

Attachment B: Drainage Survey Results Map 32 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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- Retention Pond
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- New Access Road
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- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
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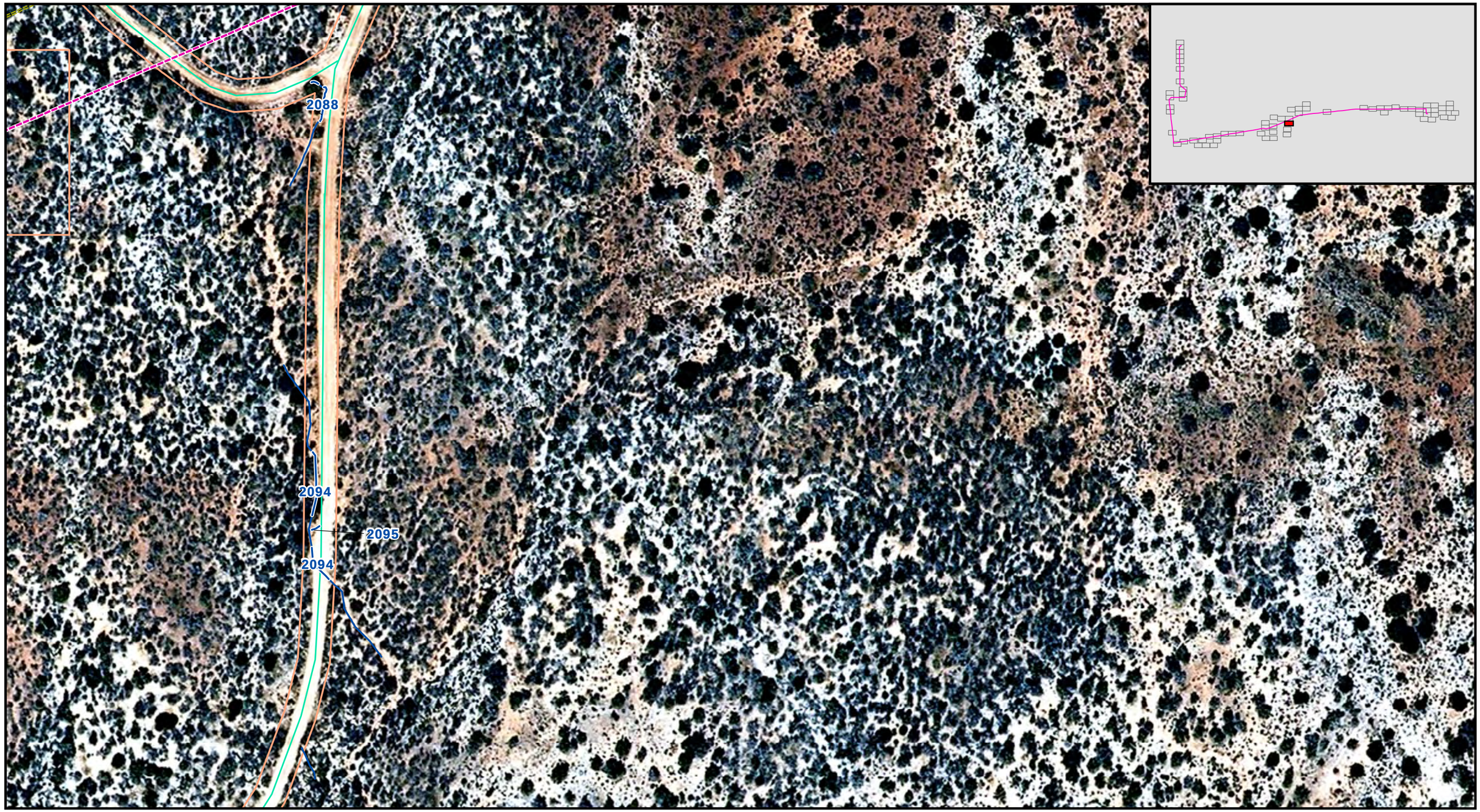

Attachment B: Drainage Survey Results Map 33 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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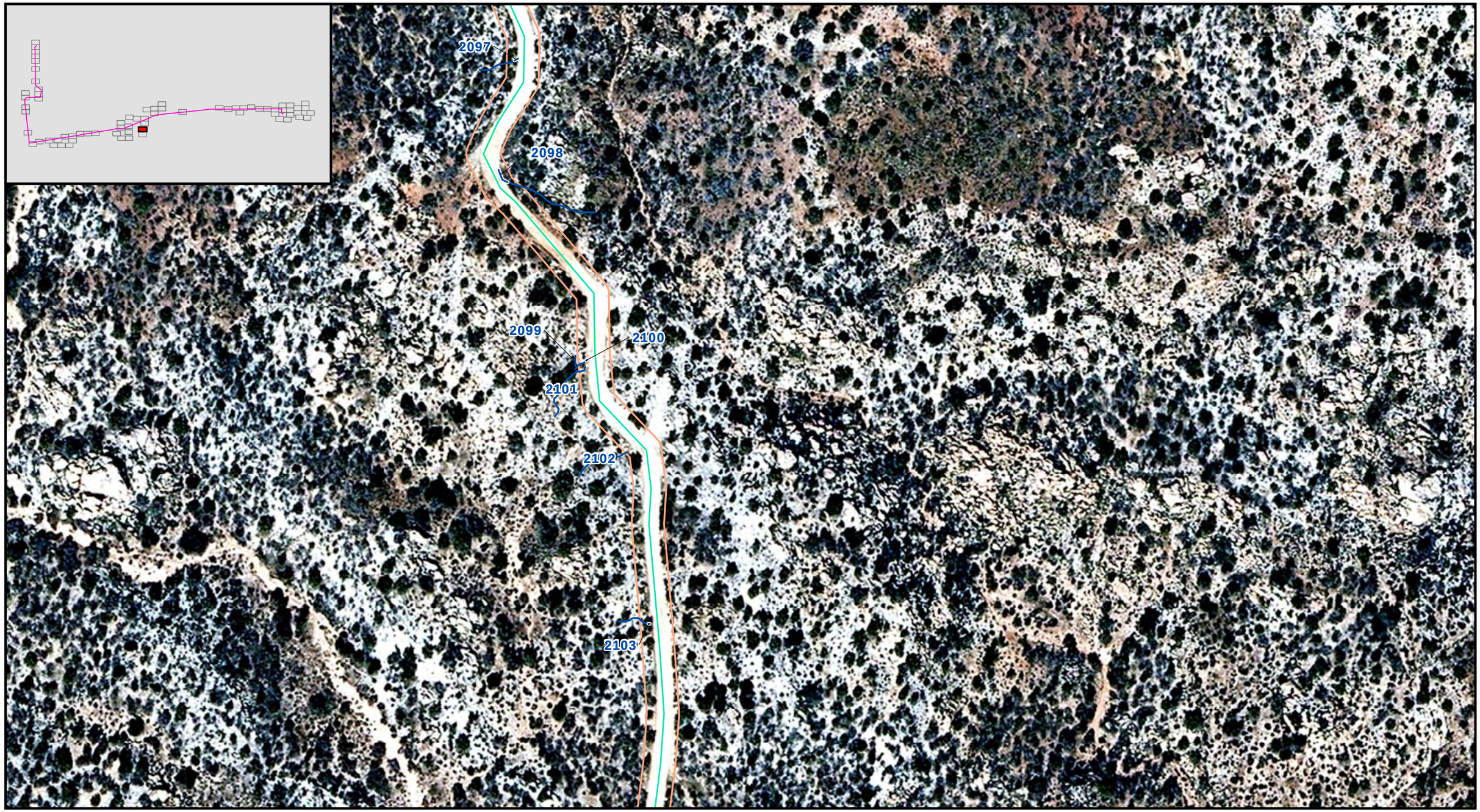

Attachment B: Drainage Survey Results Map 34 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
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- Existing SWPL Structure
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 35 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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- ECO Substation
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- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 36 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
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- TL 6931 Getaway Structure
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- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 37 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 39 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 38 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 40 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
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- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
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SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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1 inch equals 100 feet

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Attachment B: Drainage Survey Results Map 41 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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- ECO Substation
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- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
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- Highway
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SDGE A Sempra Energy utility

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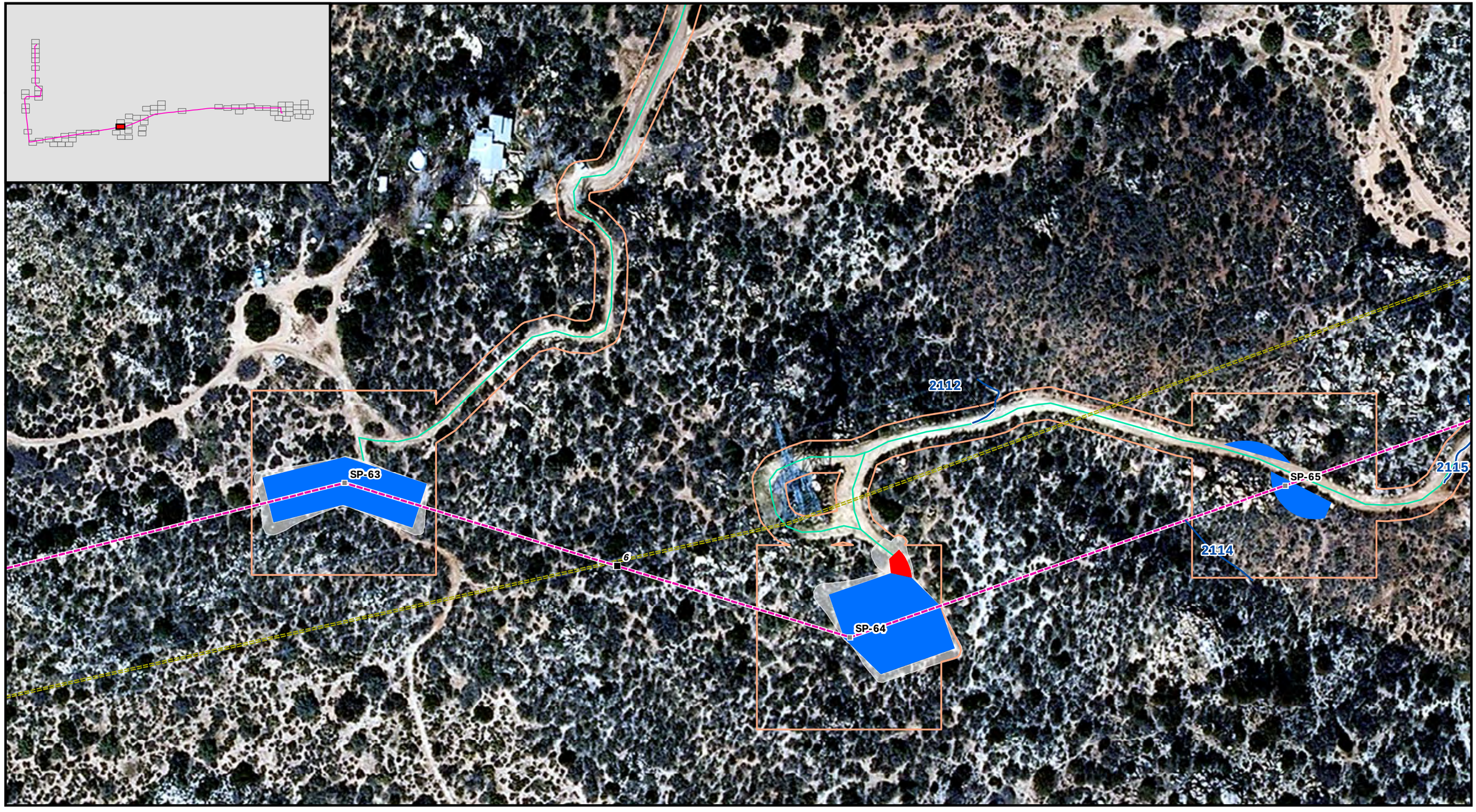

Attachment B: Drainage Survey Results Map 42 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
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SDGE A Sempra Energy utility

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Attachment B: Drainage Survey Results Map 43 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
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- Interstate
- Highway
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SDGE A Sempra Energy utility

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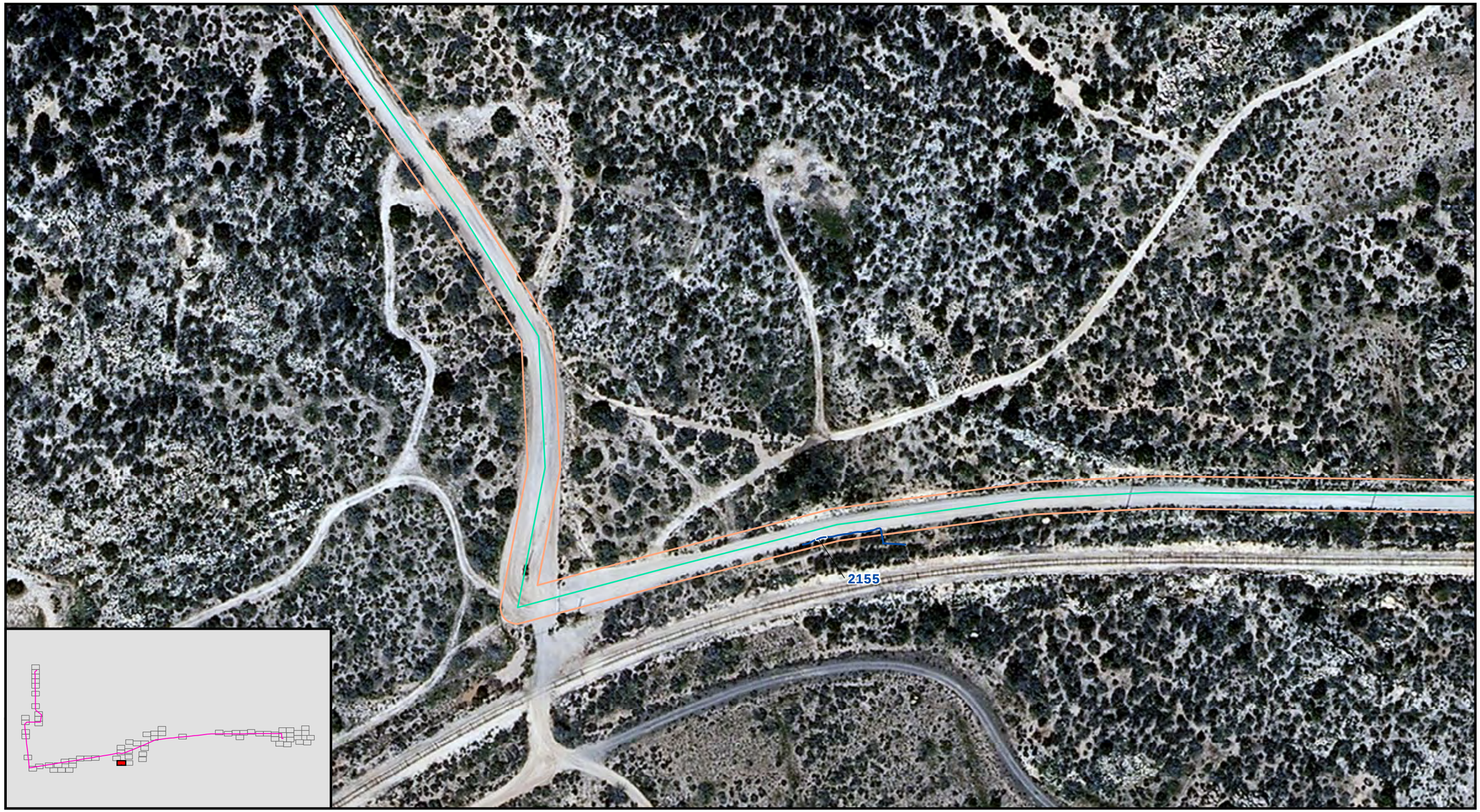

Attachment B: Drainage Survey Results Map 44 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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SDGE A Sempra Energy utility

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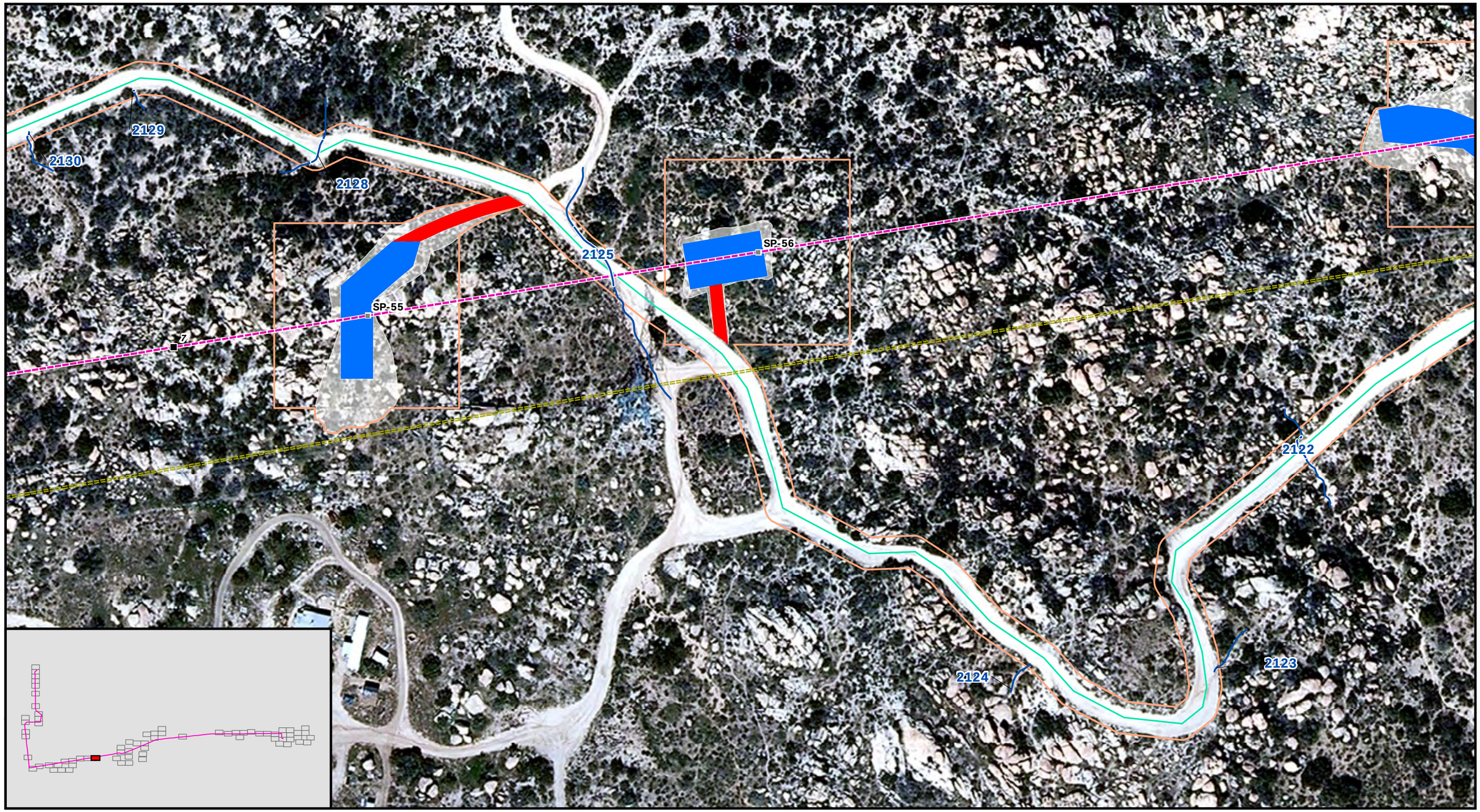

Attachment B: Drainage Survey Results Map 45 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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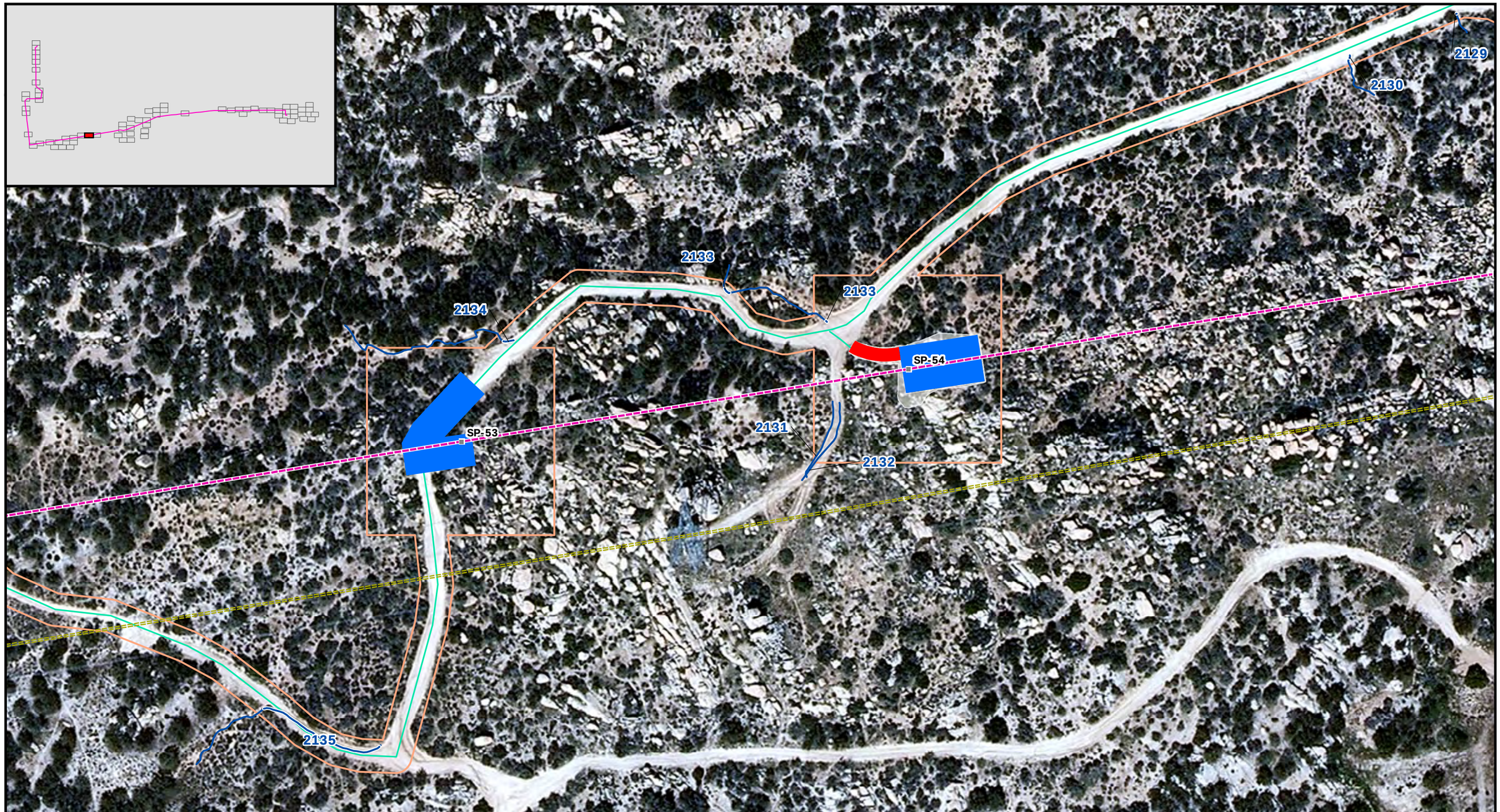

Attachment B: Drainage Survey Results Map 46 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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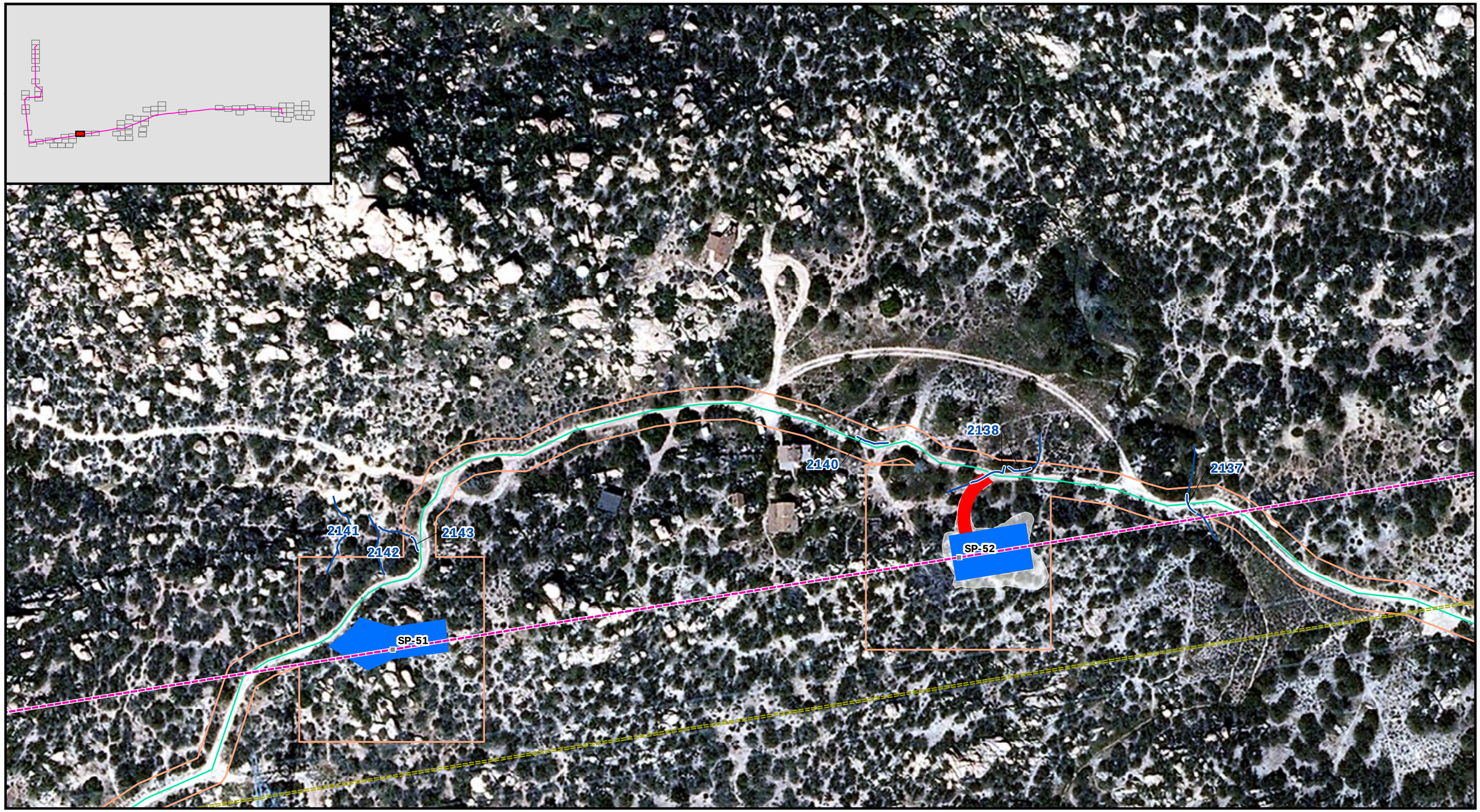

Attachment B: Drainage Survey Results Map 47 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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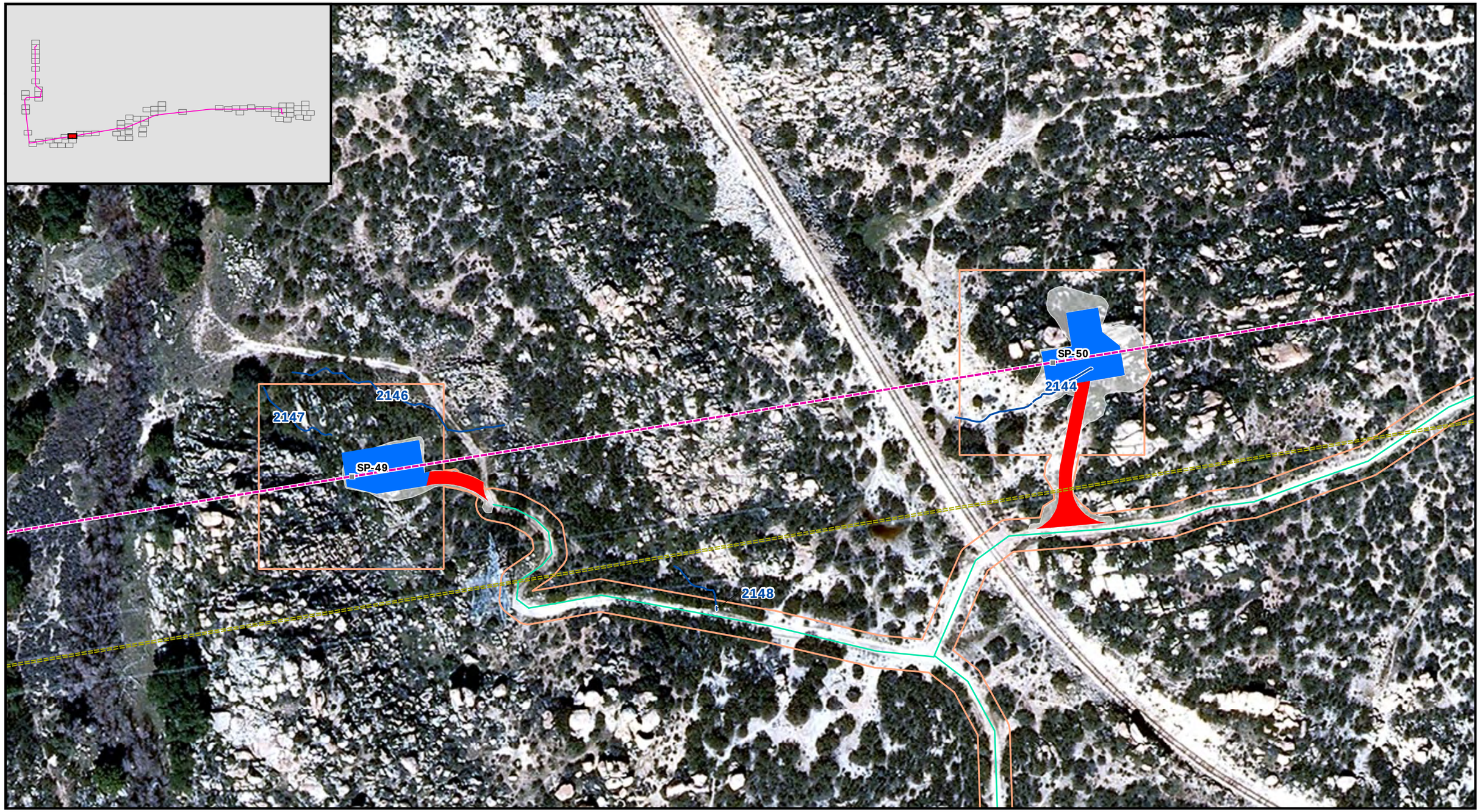

Attachment B: Drainage Survey Results Map 48 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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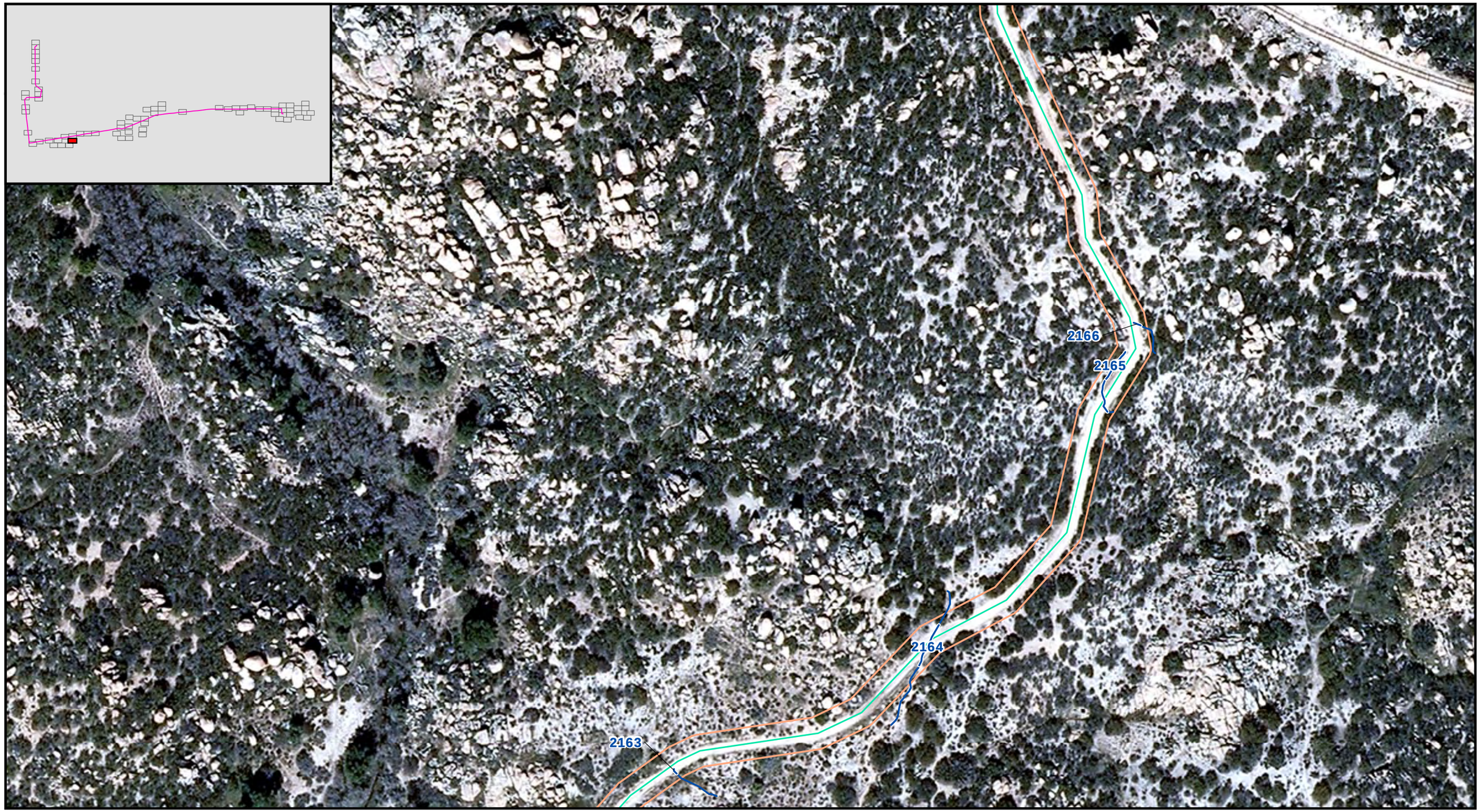

Attachment B: Drainage Survey Results Map 49 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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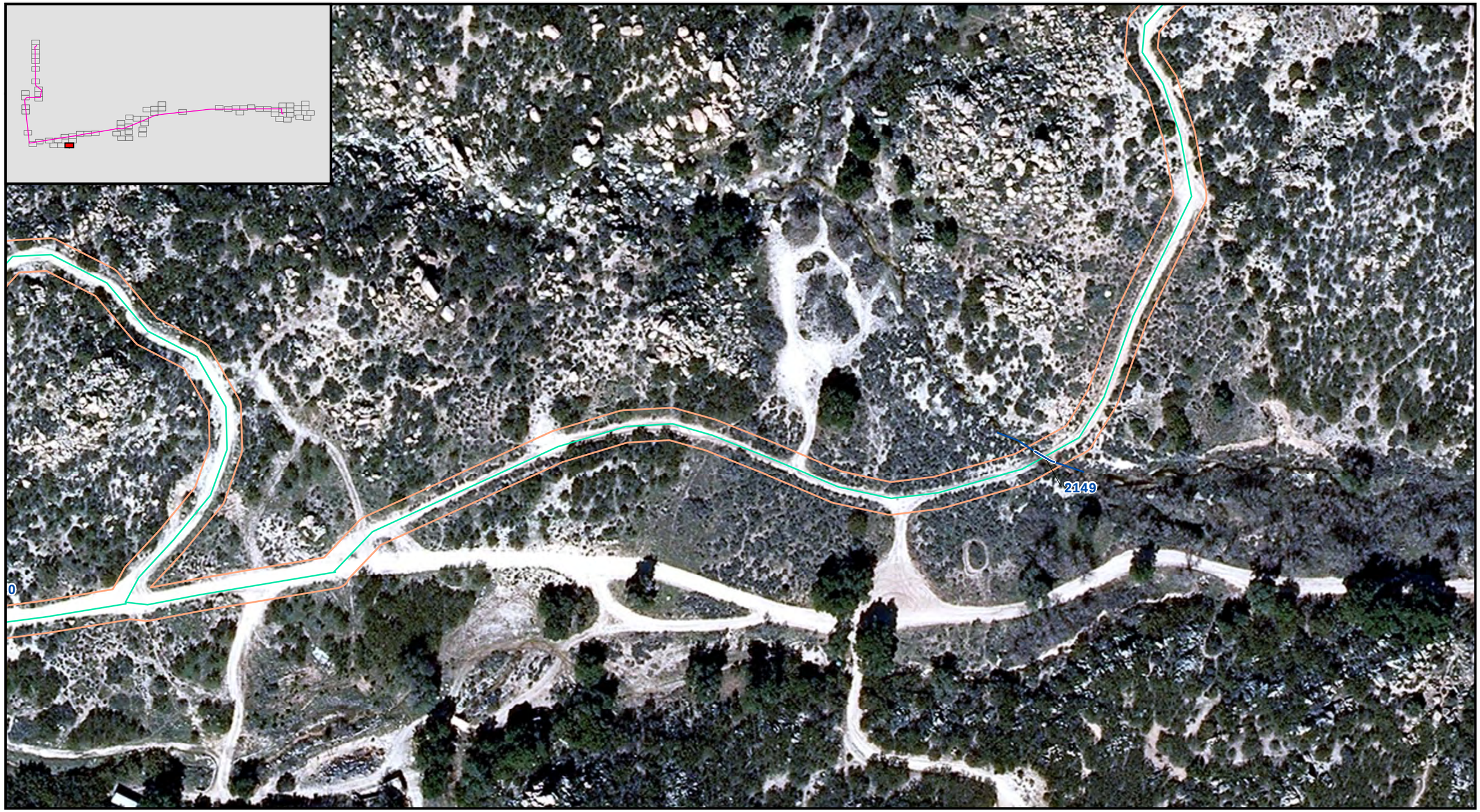

Attachment B: Drainage Survey Results Map 50 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
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- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
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- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility™

INSIGNIA ENVIRONMENTAL

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1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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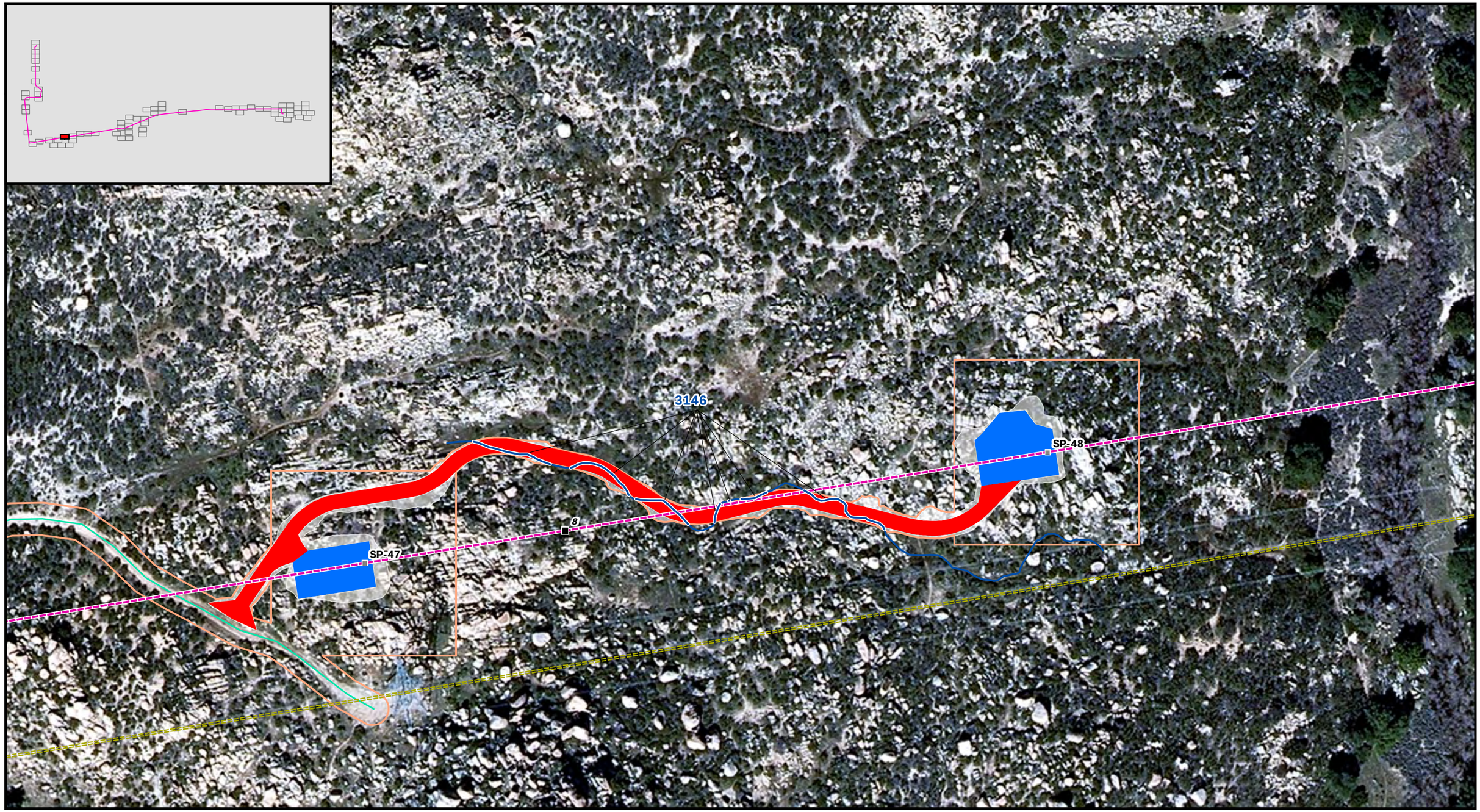

Attachment B: Drainage Survey Results Map 51 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility™

INSIGNIA ENVIRONMENTAL

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N W E S

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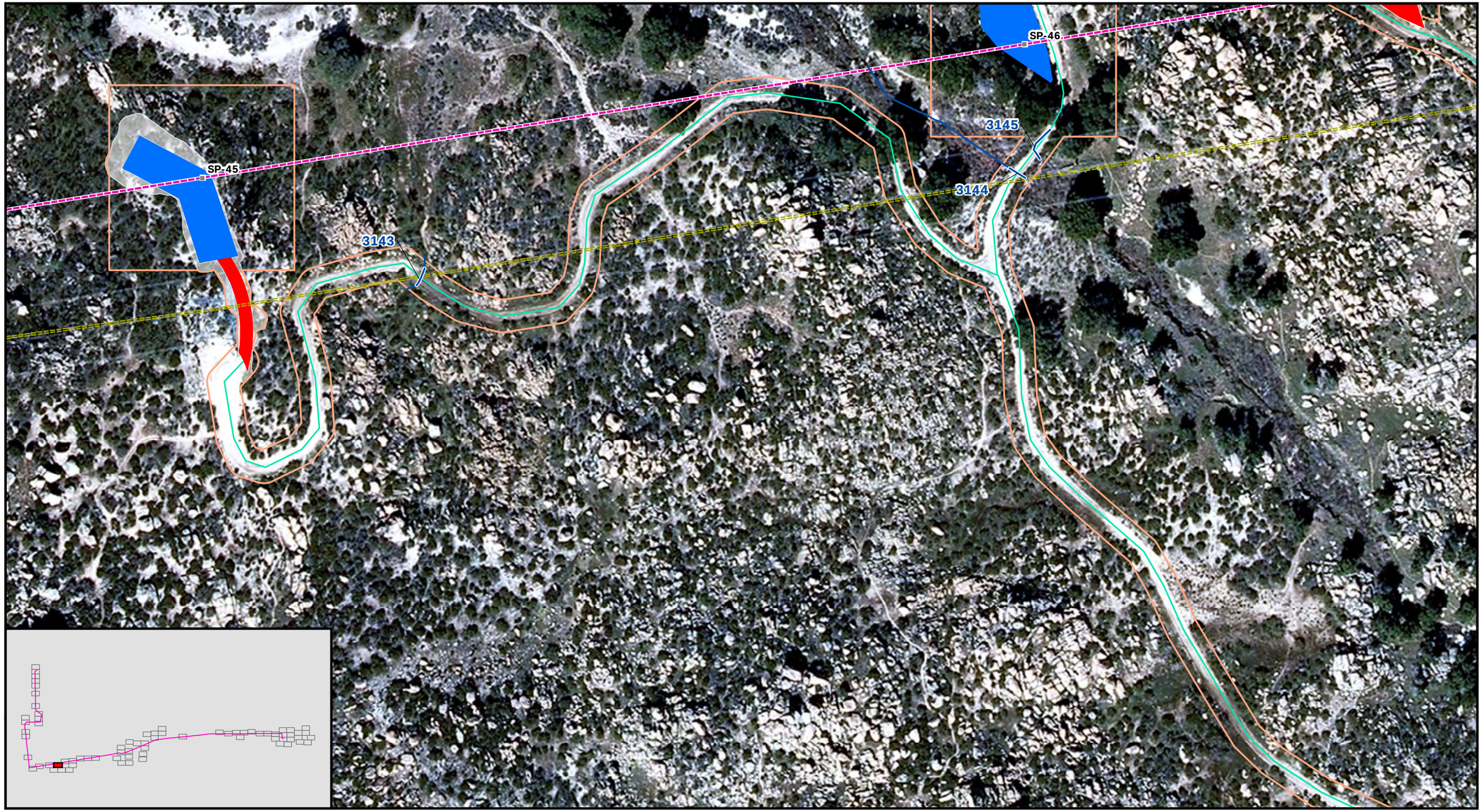

Attachment B: Drainage Survey Results Map 52 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

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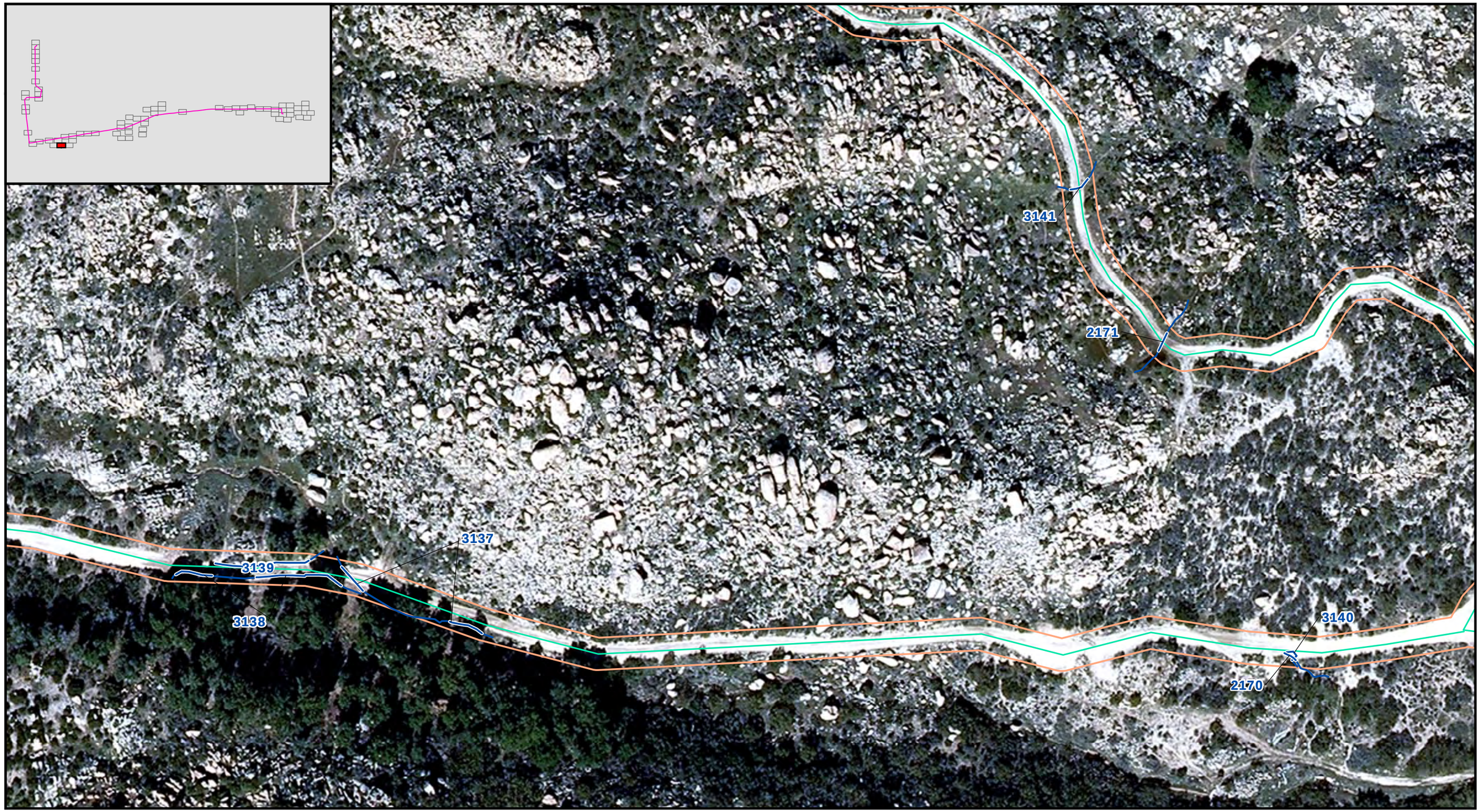

Attachment B: Drainage Survey Results Map 53 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
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- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

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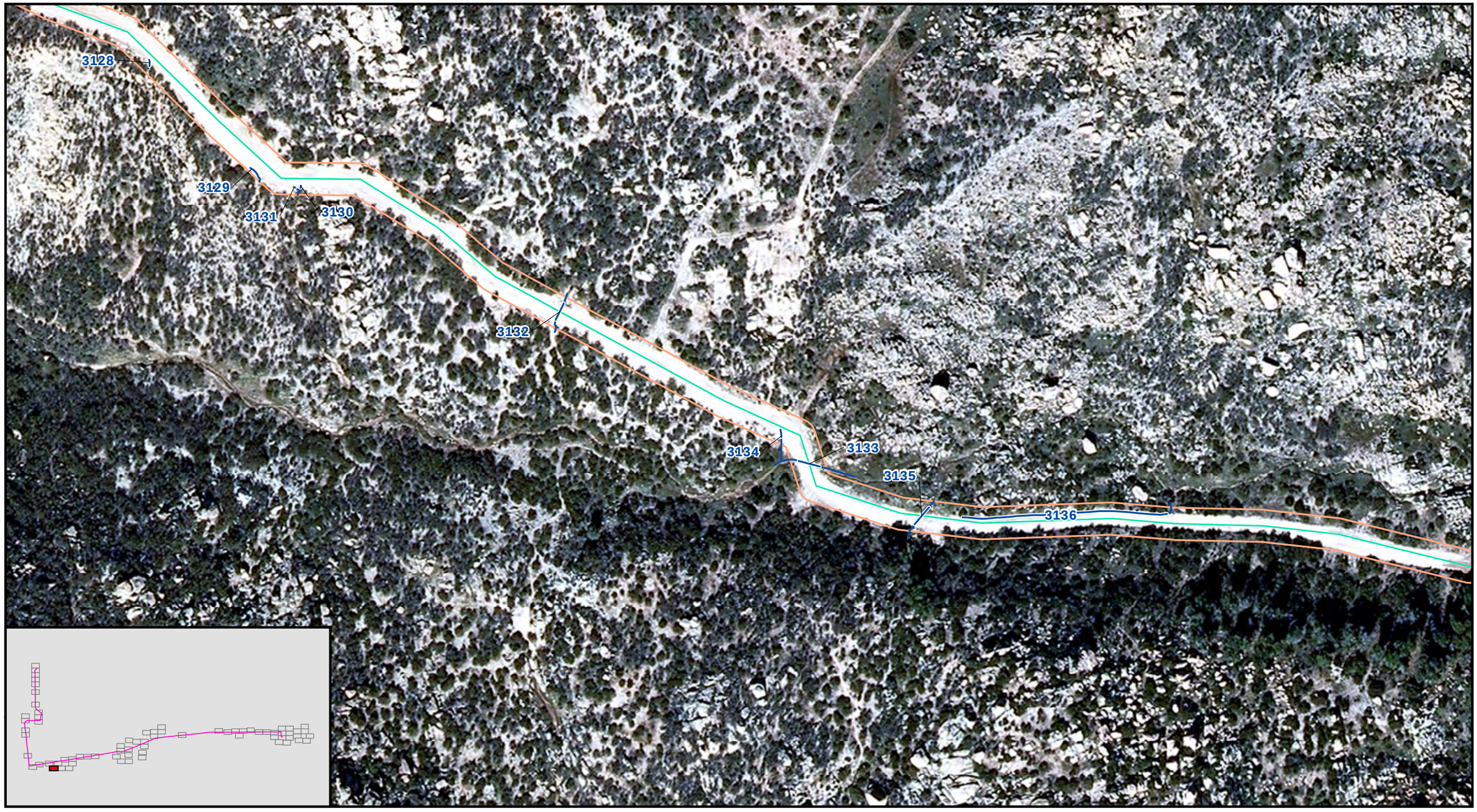

Attachment B: Drainage Survey Results Map 54 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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1 inch equals 100 feet

0 50 100 200 300 400 Feet

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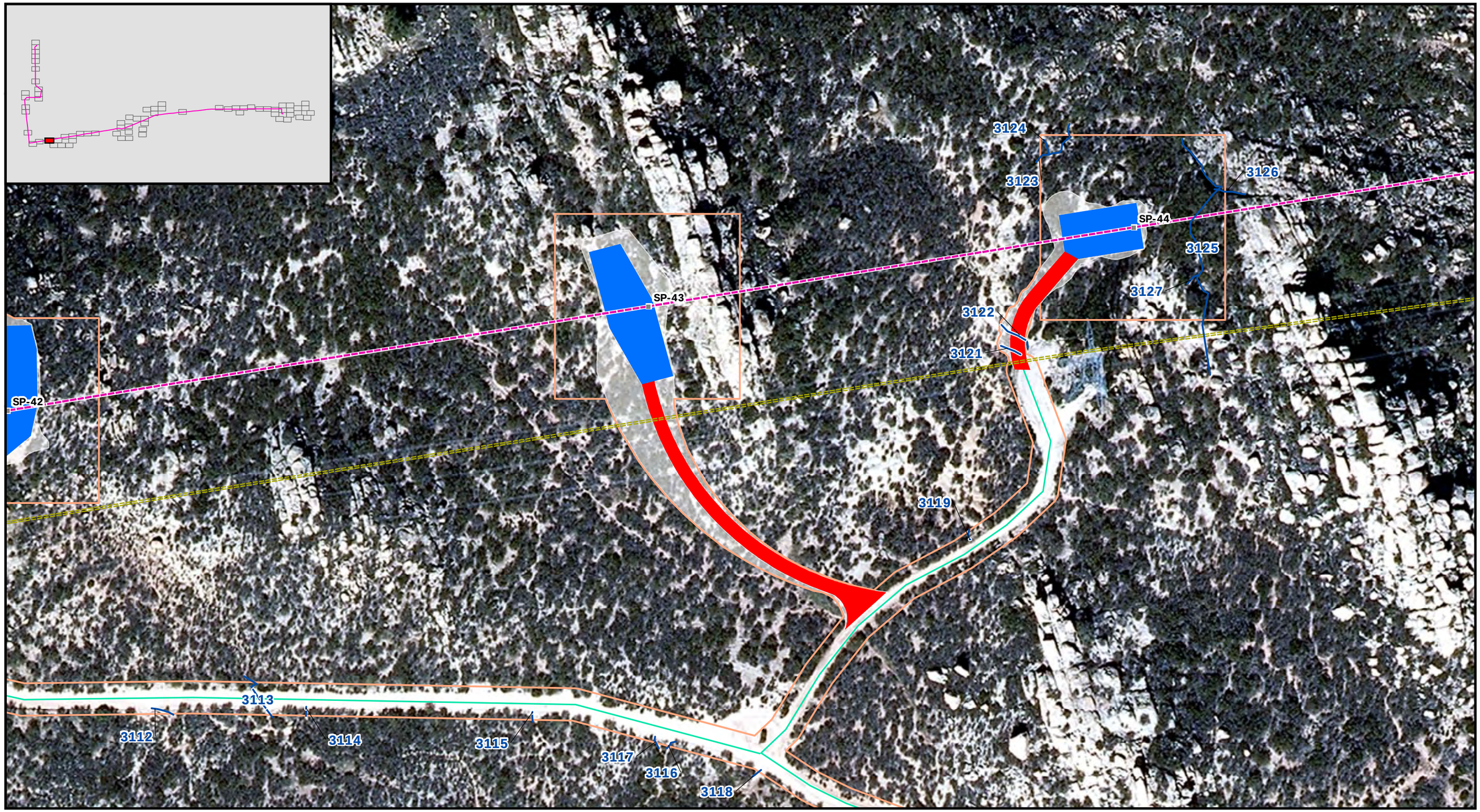

Attachment B: Drainage Survey Results Map 55 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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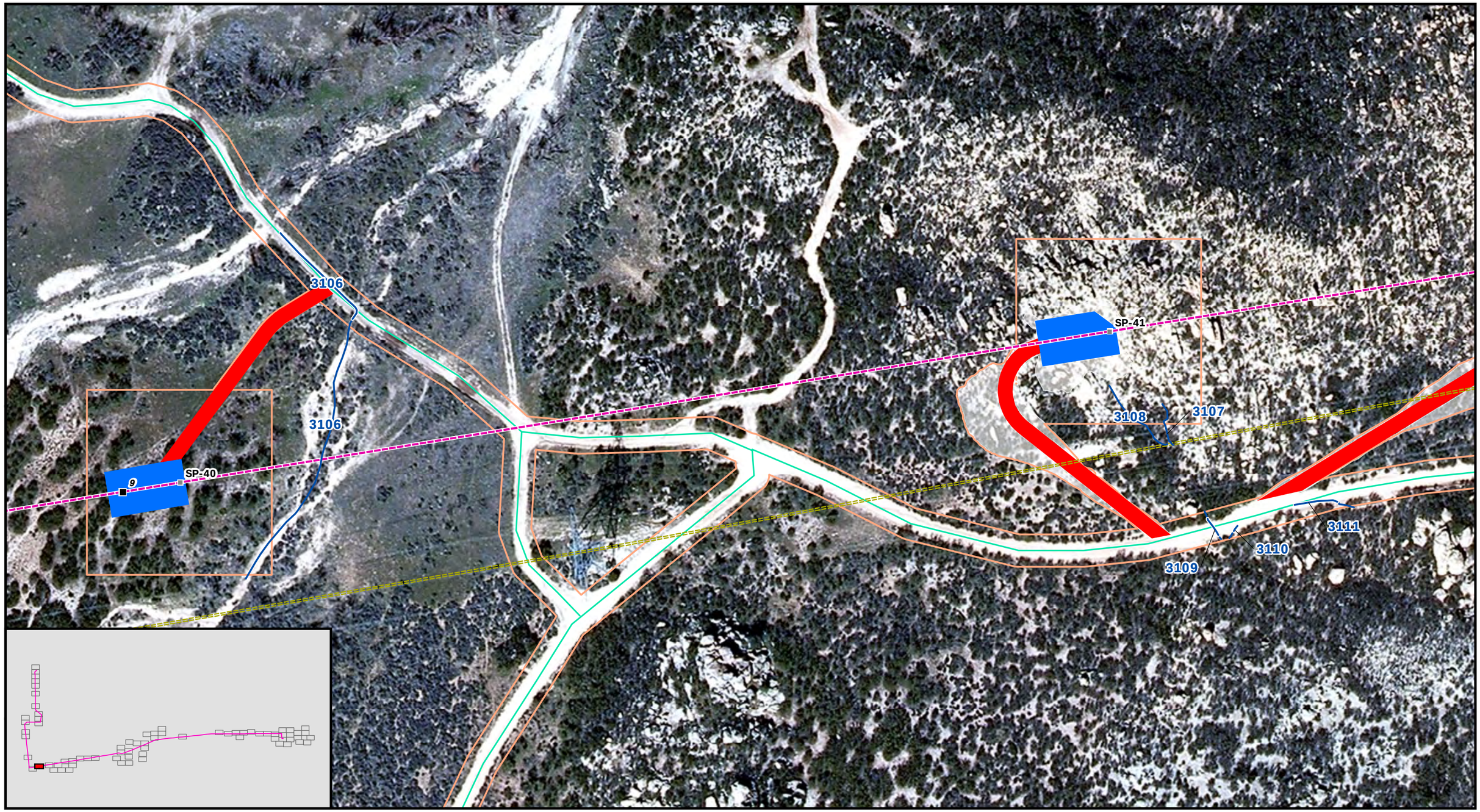

Attachment B: Drainage Survey Results Map 56 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
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- Permanent Work Area
- New Access Road
- Concrete Channel
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- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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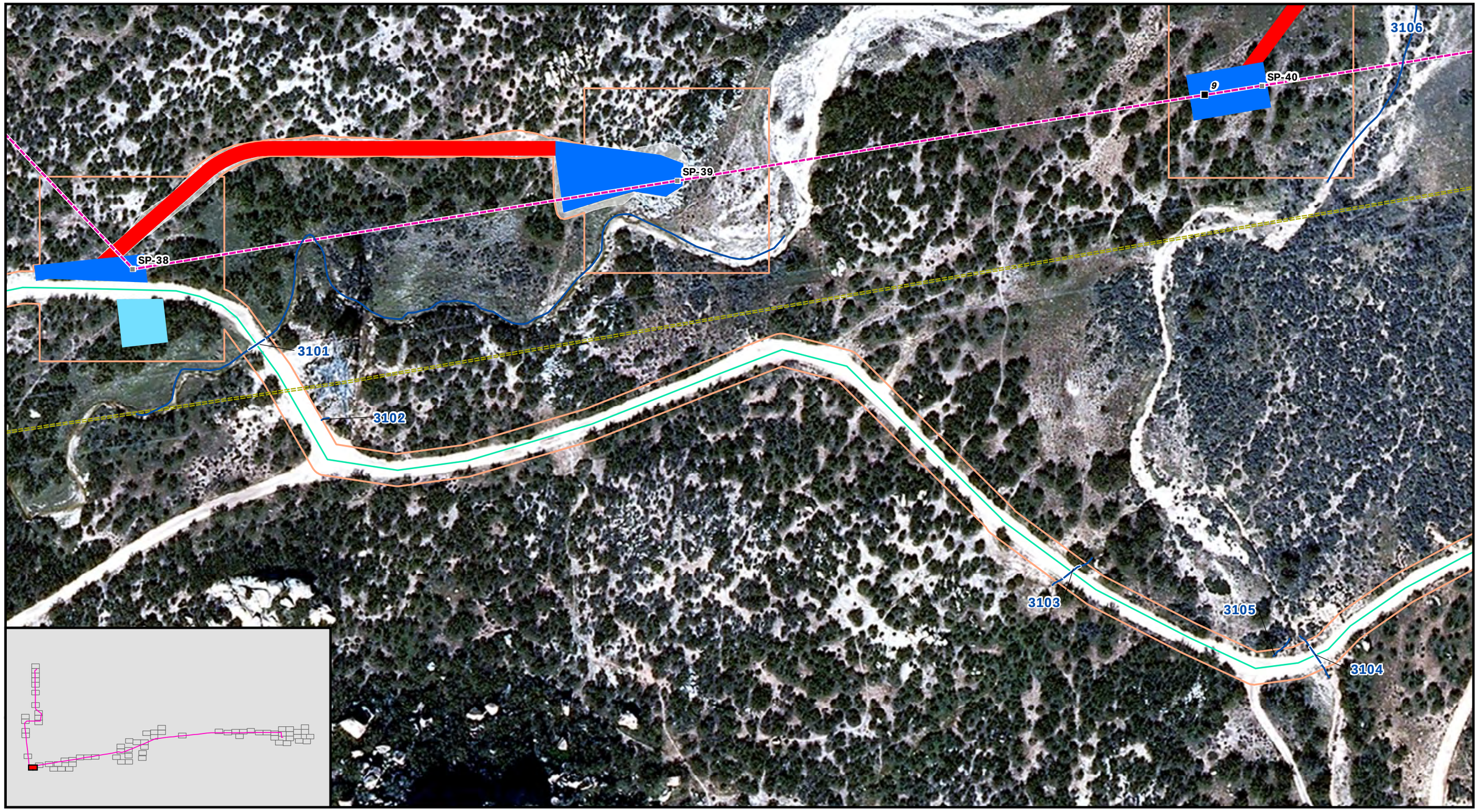

Attachment B: Drainage Survey Results Map 57 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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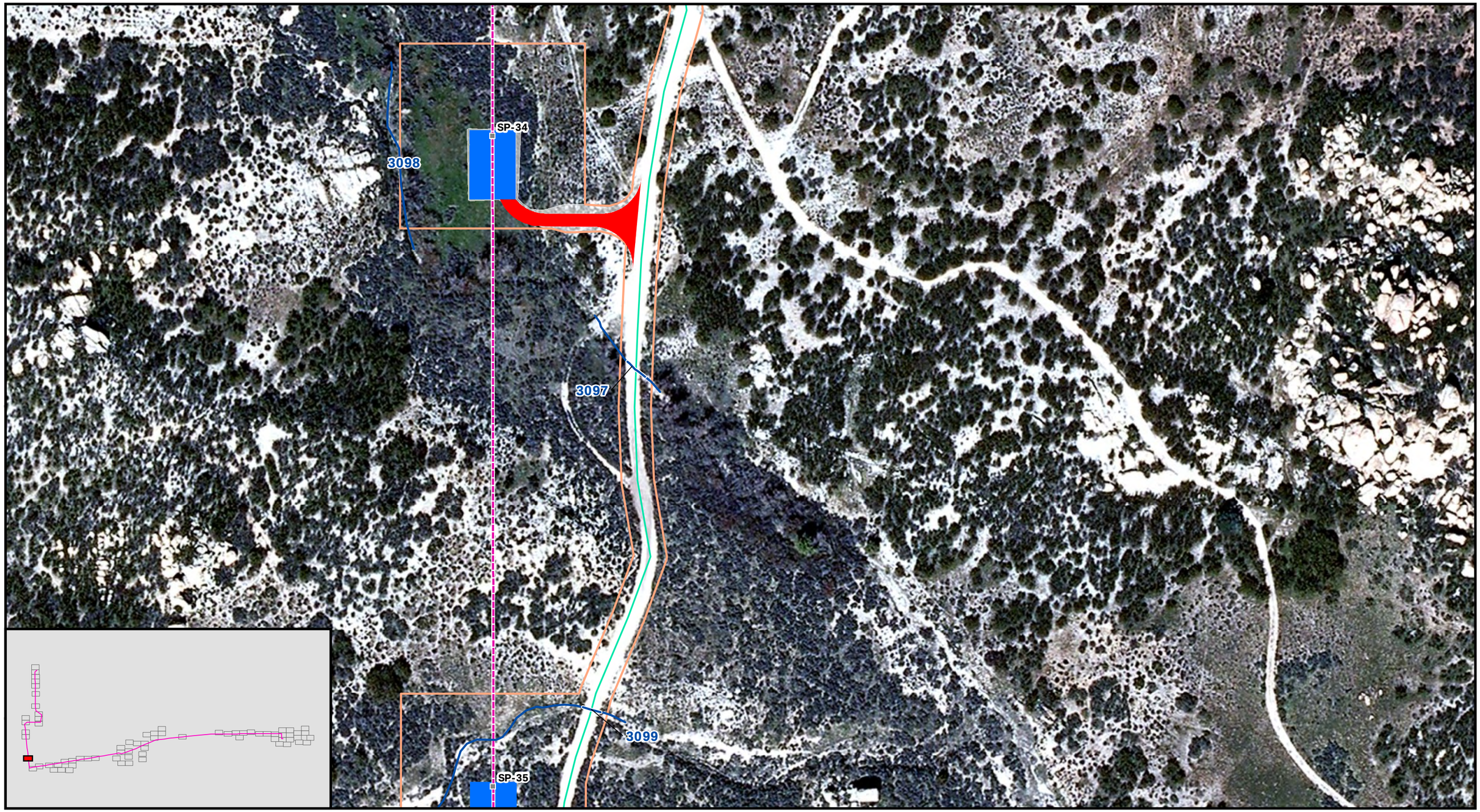

Attachment B: Drainage Survey Results Map 58 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
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- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
- Existing Access Road

SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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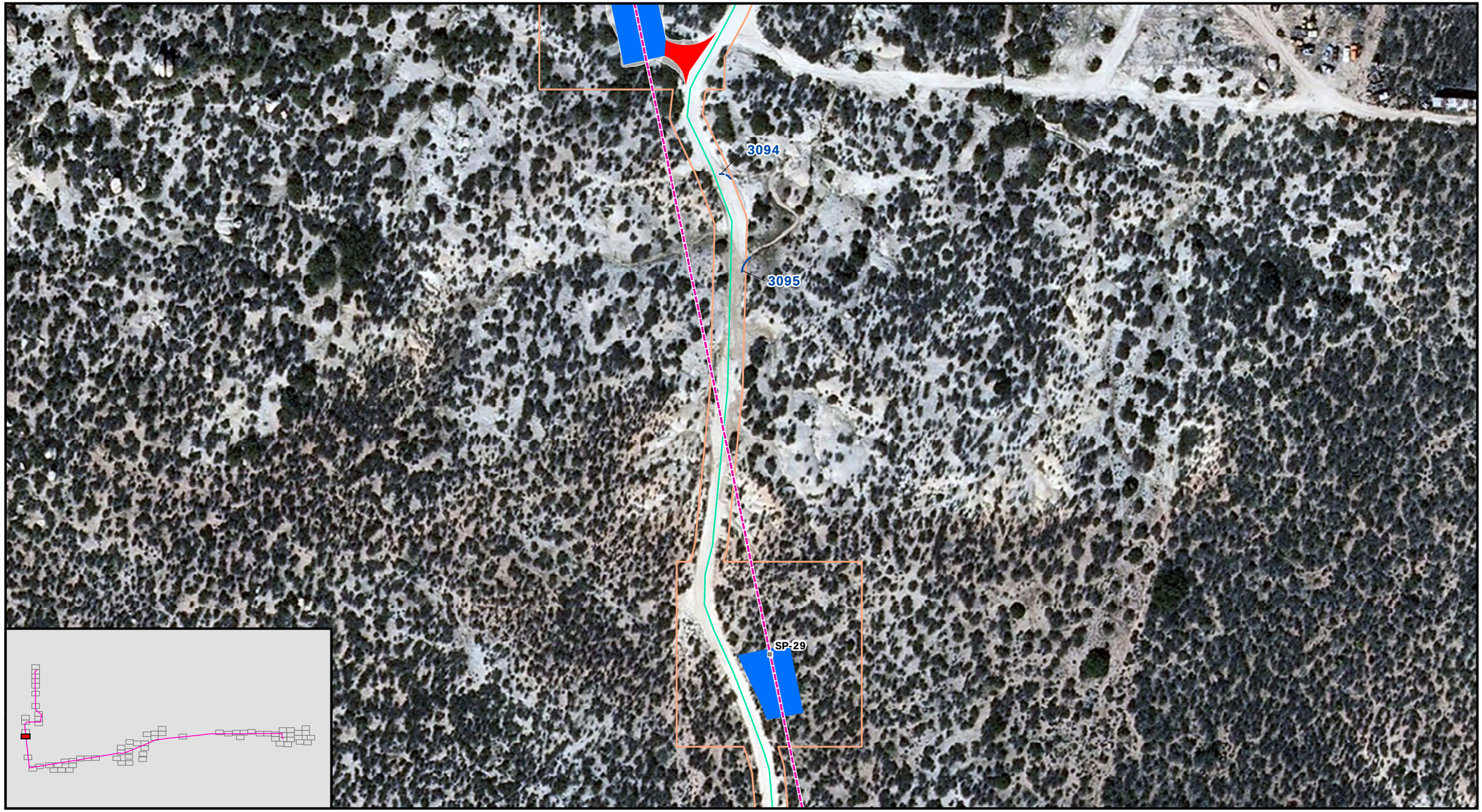

Attachment B: Drainage Survey Results Map 59 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
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SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

0 50 100 200 300 400 Feet

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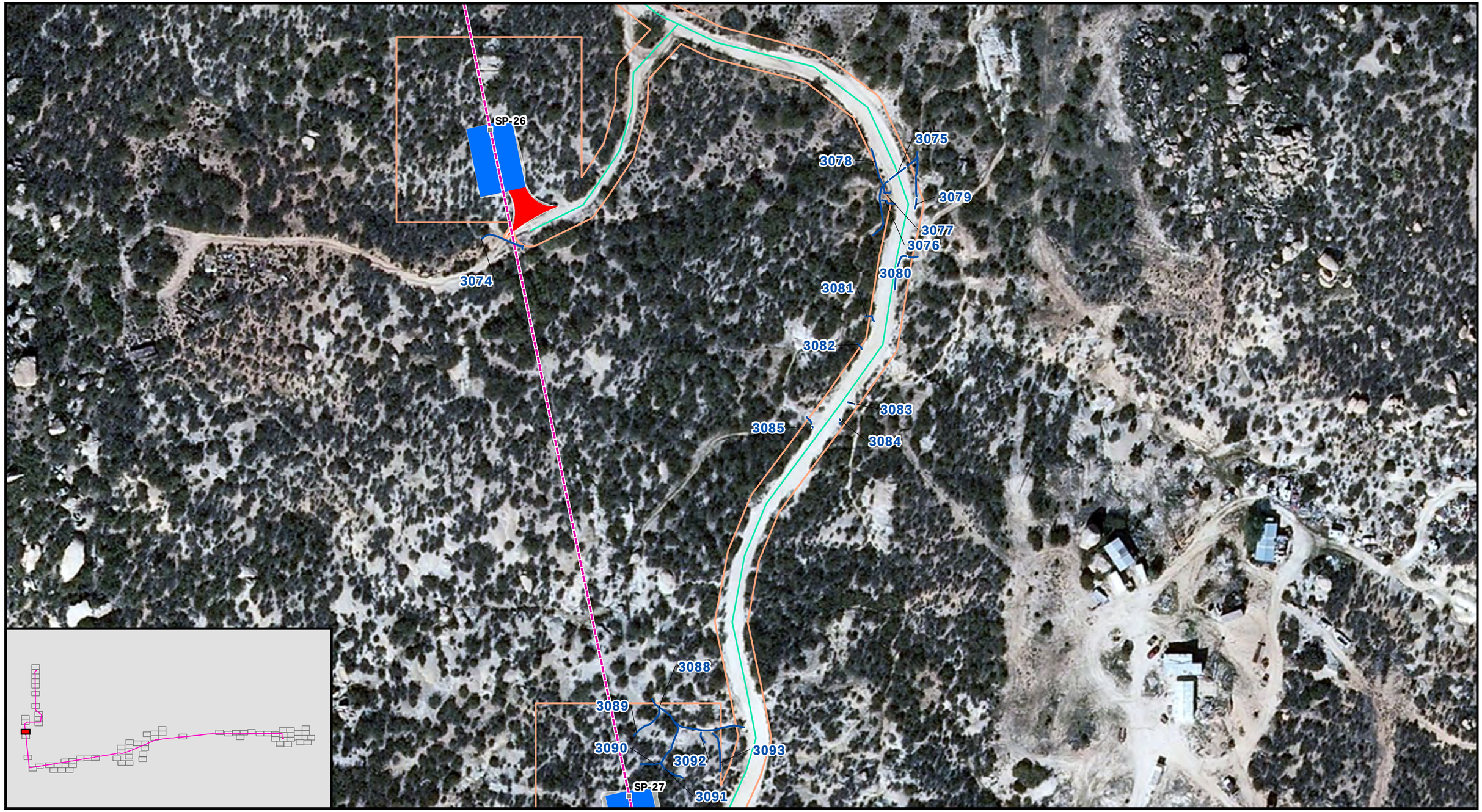

Attachment B: Drainage Survey Results Map 60 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
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- Highway
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SDGE A Sempra Energy utility

INSIGNIA ENVIRONMENTAL

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0 50 100 200 300 400 Feet

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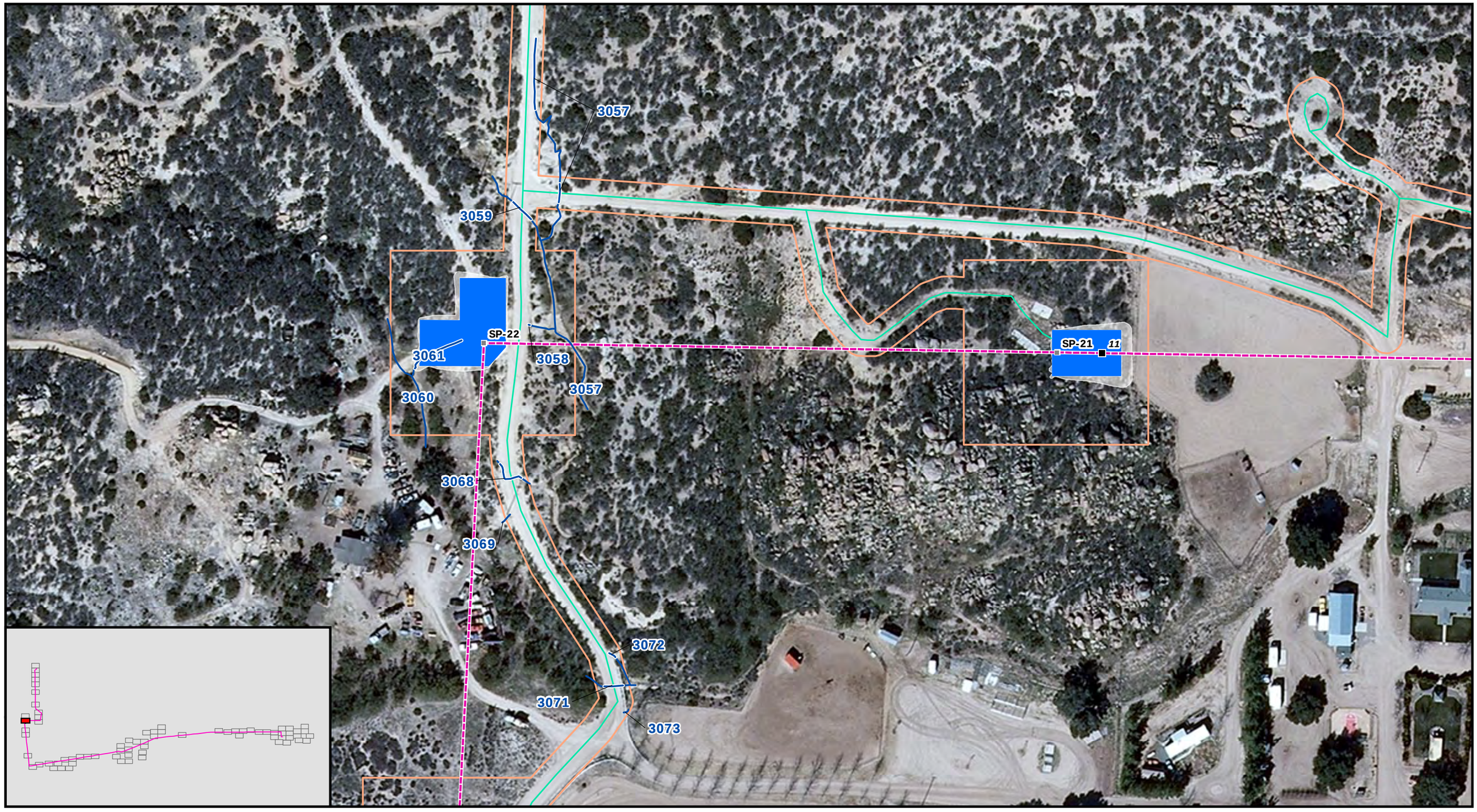

Attachment B: Drainage Survey Results Map 61 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
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- Temporary Construction Buffer
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- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
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- Highway
- Major Road
- Existing Access Road

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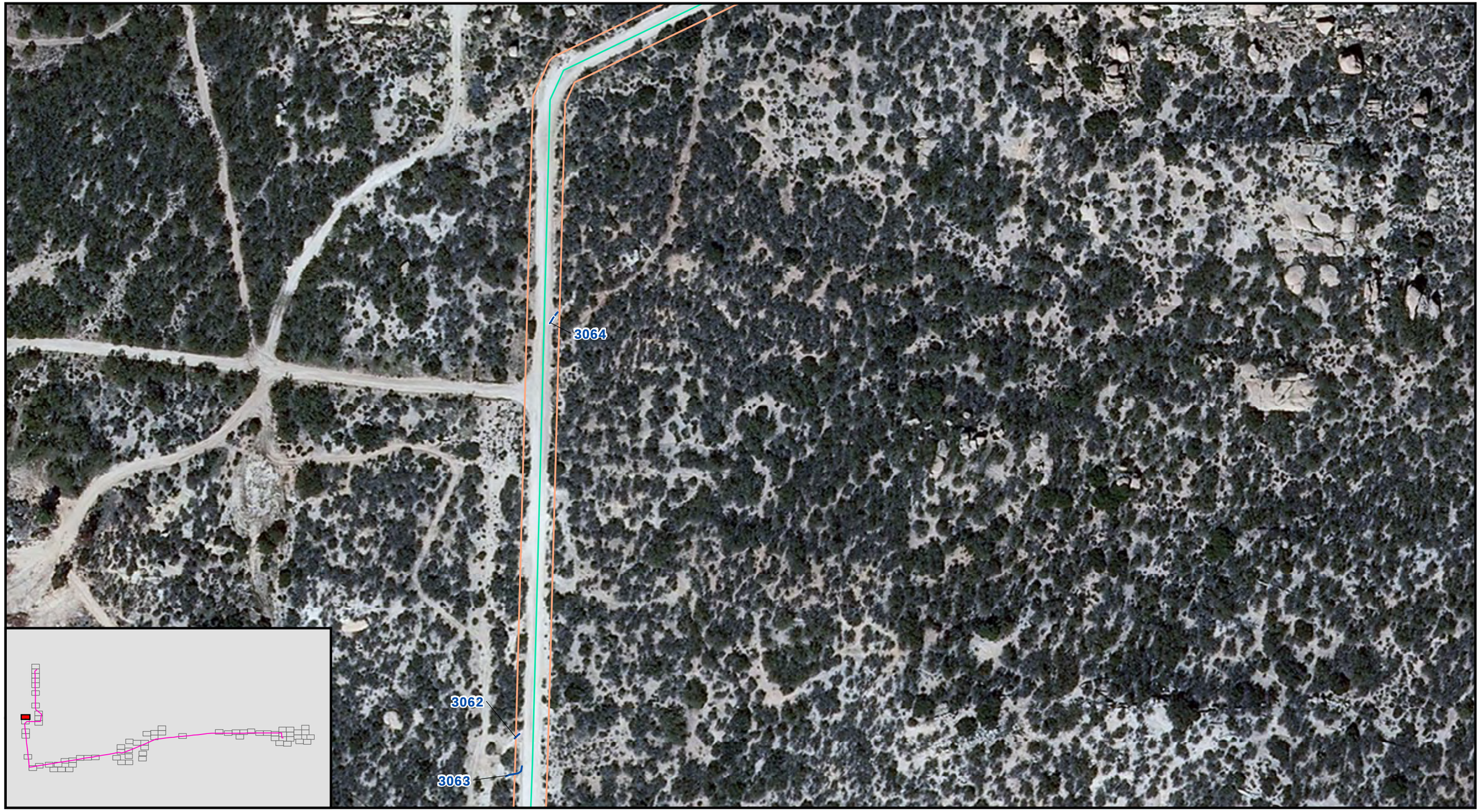

Attachment B: Drainage Survey Results Map 62 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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- ECO Substation
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- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
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N W E S

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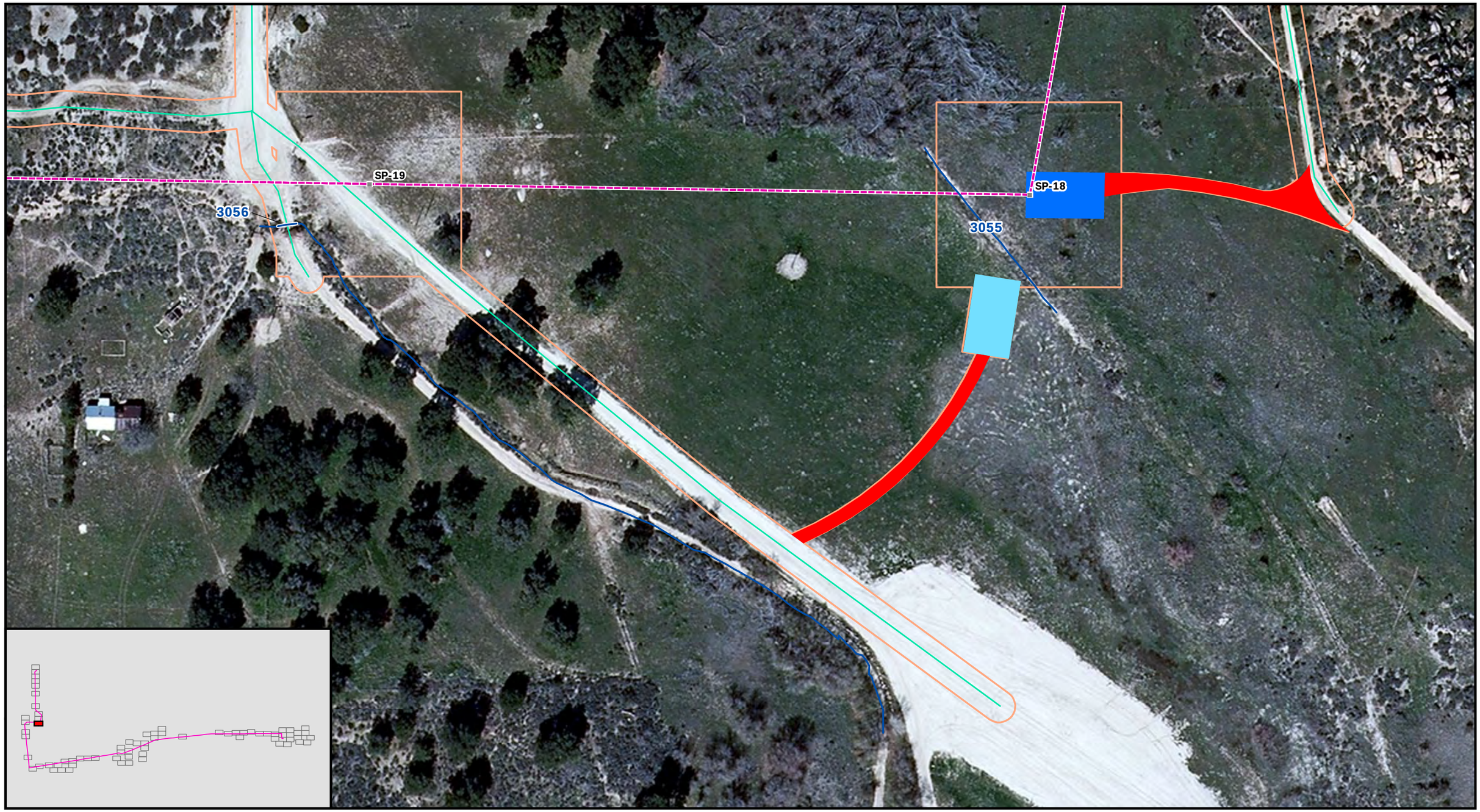

Attachment B: Drainage Survey Results Map 63 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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- ECO Substation
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- Proposed 138 kV Line Milepost
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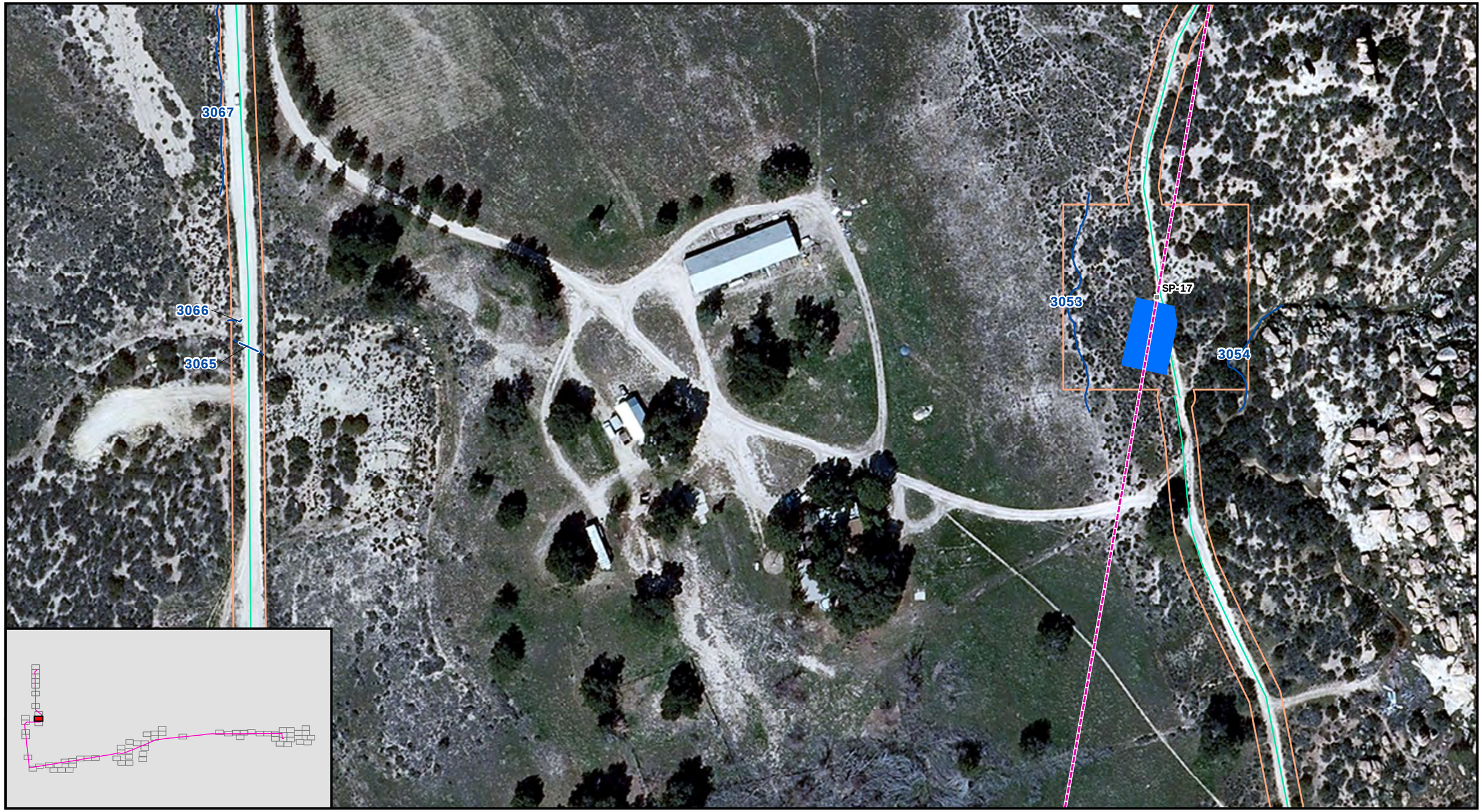

Attachment B: Drainage Survey Results Map 64 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
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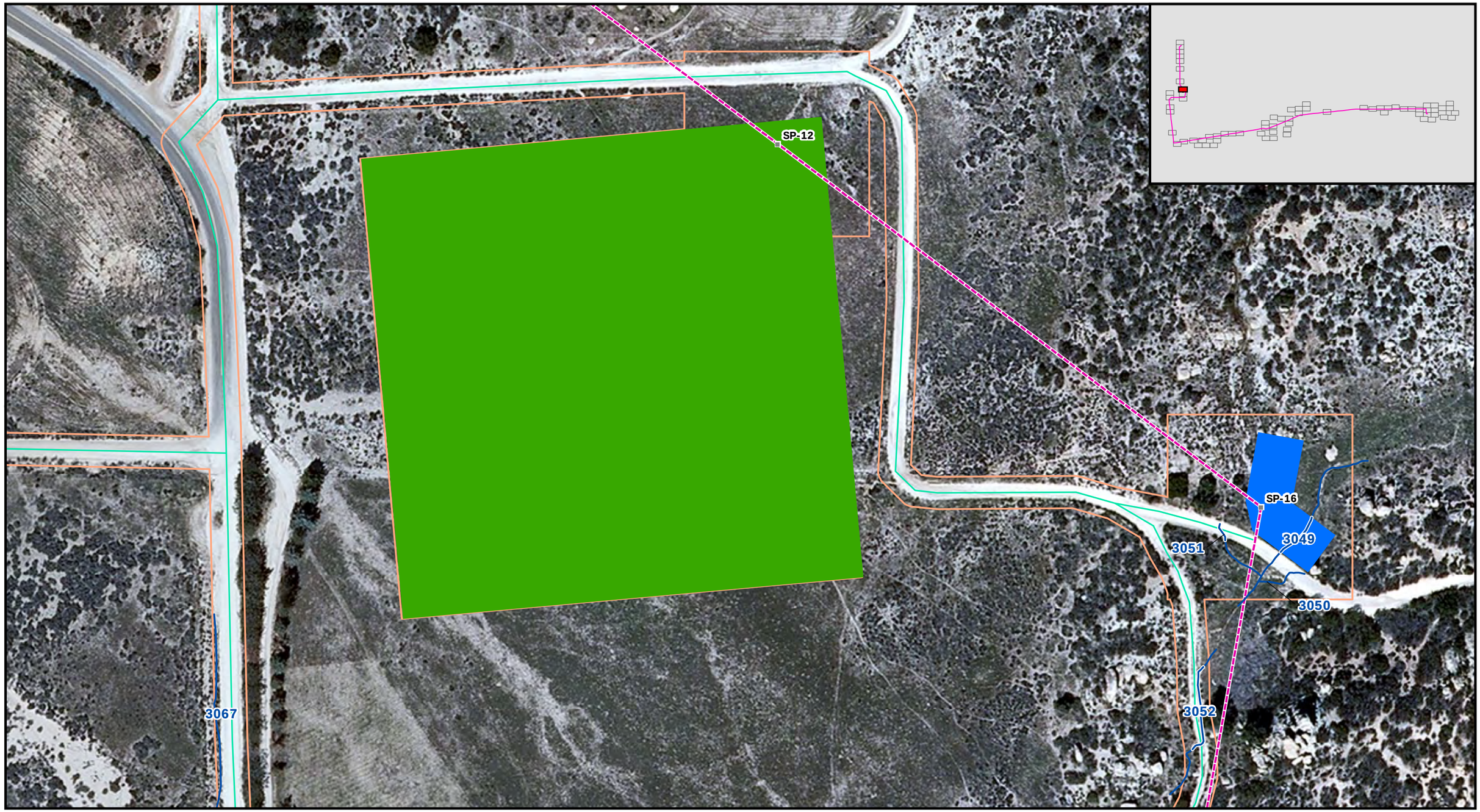

Attachment B: Drainage Survey Results Map 65 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
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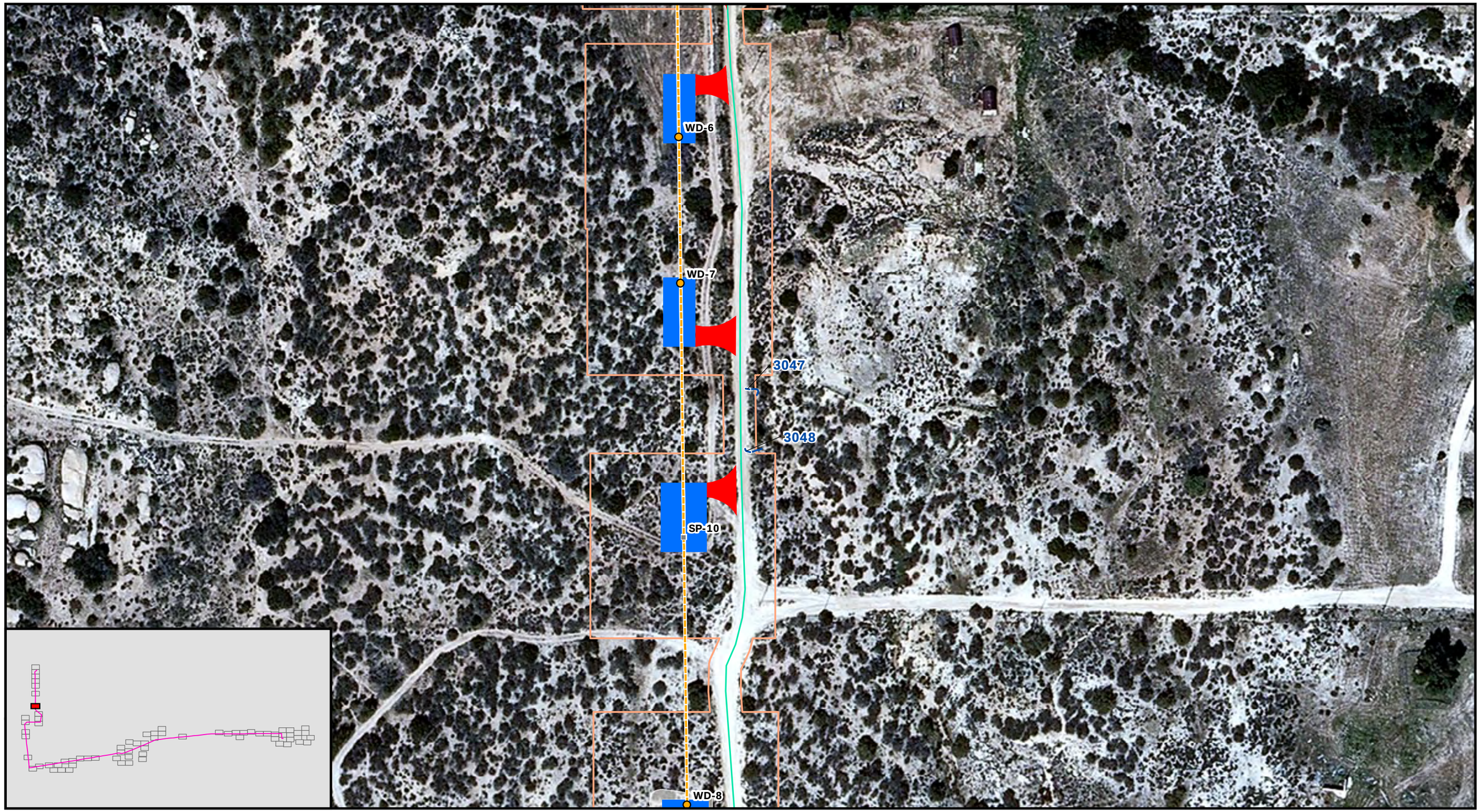

Attachment B: Drainage Survey Results Map 66 of 72

East County Substation Project

- Drainage - Impacted
- Drainage - Not Impacted
- Drainage Survey Area
- Proposed SWPL Loop-In
- Proposed 138 kV Line
- 445 Circuit Collocated with 138 kV Line
- TL 6931 Get Away
- Existing Transmission Line
- ECO Substation
- BLVD Substation Rebuild
- Retention Pond
- Temporary Construction Buffer
- Grading
- Permanent Work Area
- New Access Road
- Concrete Channel
- Fly Yard
- Pull Site
- Staging Yard
- Trench Work Area
- TL 6931 Getaway Structure
- Proposed 138 kV Tower
- Proposed 138 kV Line Milepost
- Proposed SWPL Loop-In Structure
- Existing SWPL Structure
- Wood Distribution Pole
- Interstate
- Highway
- Major Road
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SDGE A Sempra Energy utility™

INSIGNIA ENVIRONMENTAL

1:1,200

1 inch equals 100 feet

N W E S

0 50 100 200 300 400 Feet

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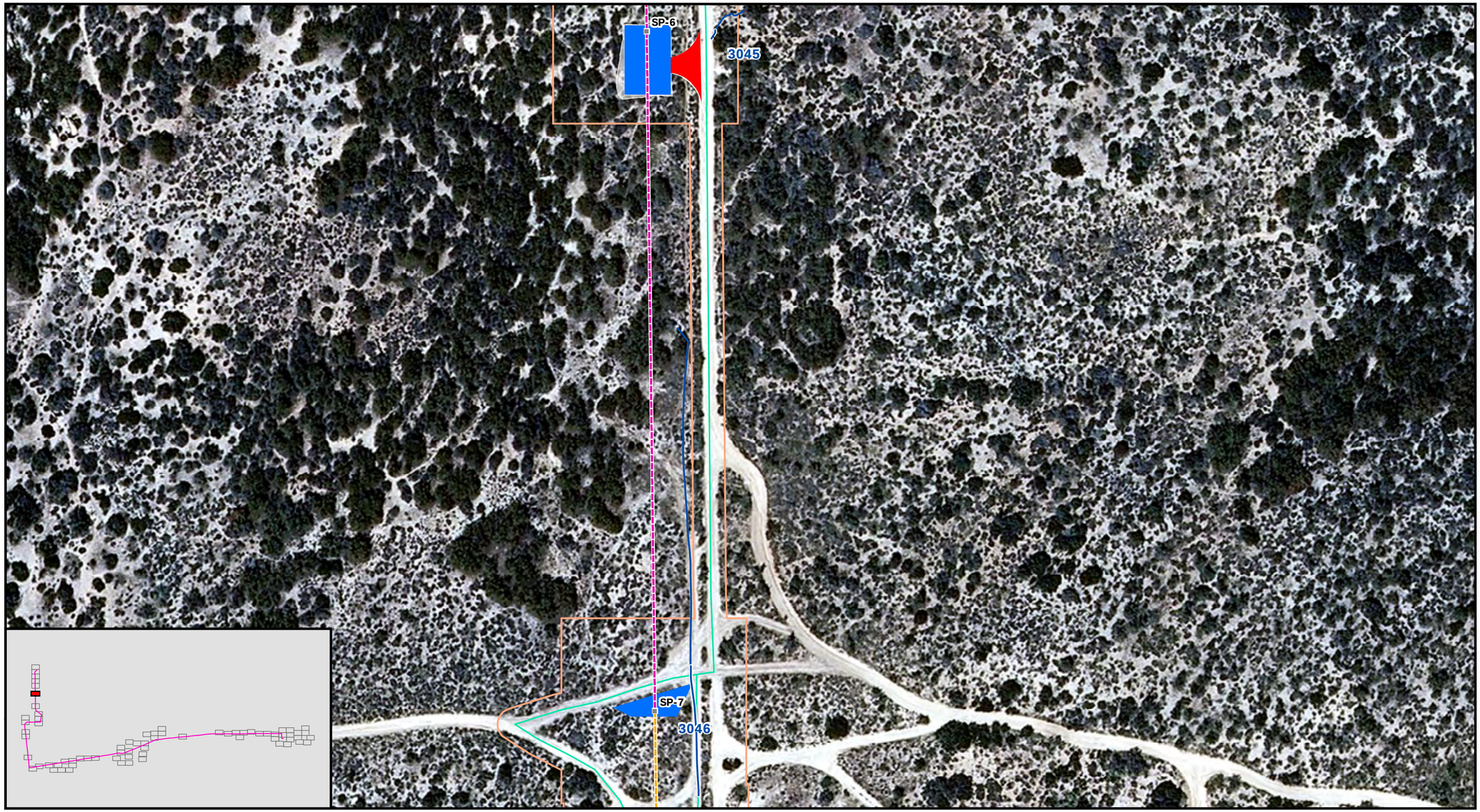

Attachment B: Drainage Survey Results Map 67 of 72

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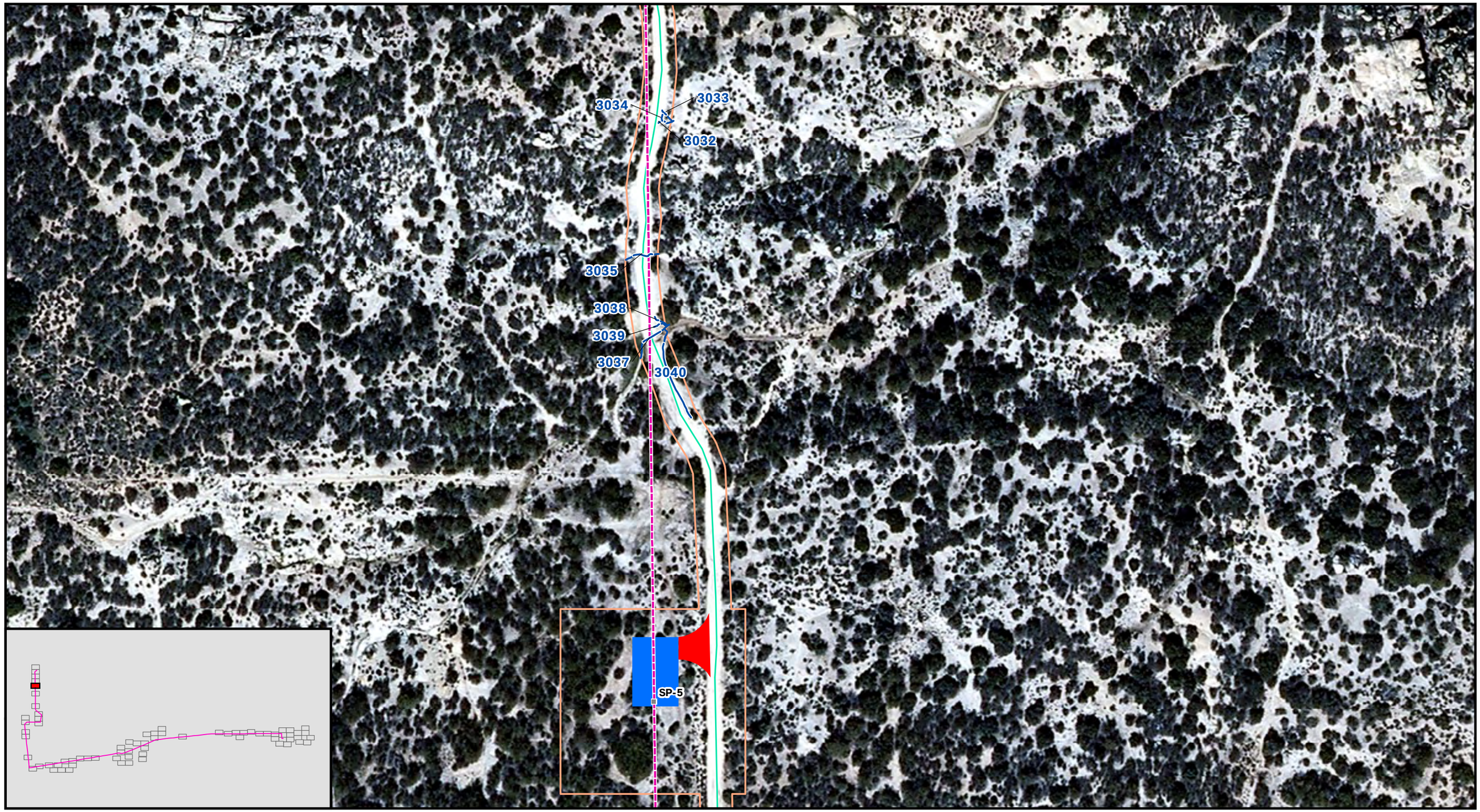

Attachment B: Drainage Survey Results Map 68 of 72

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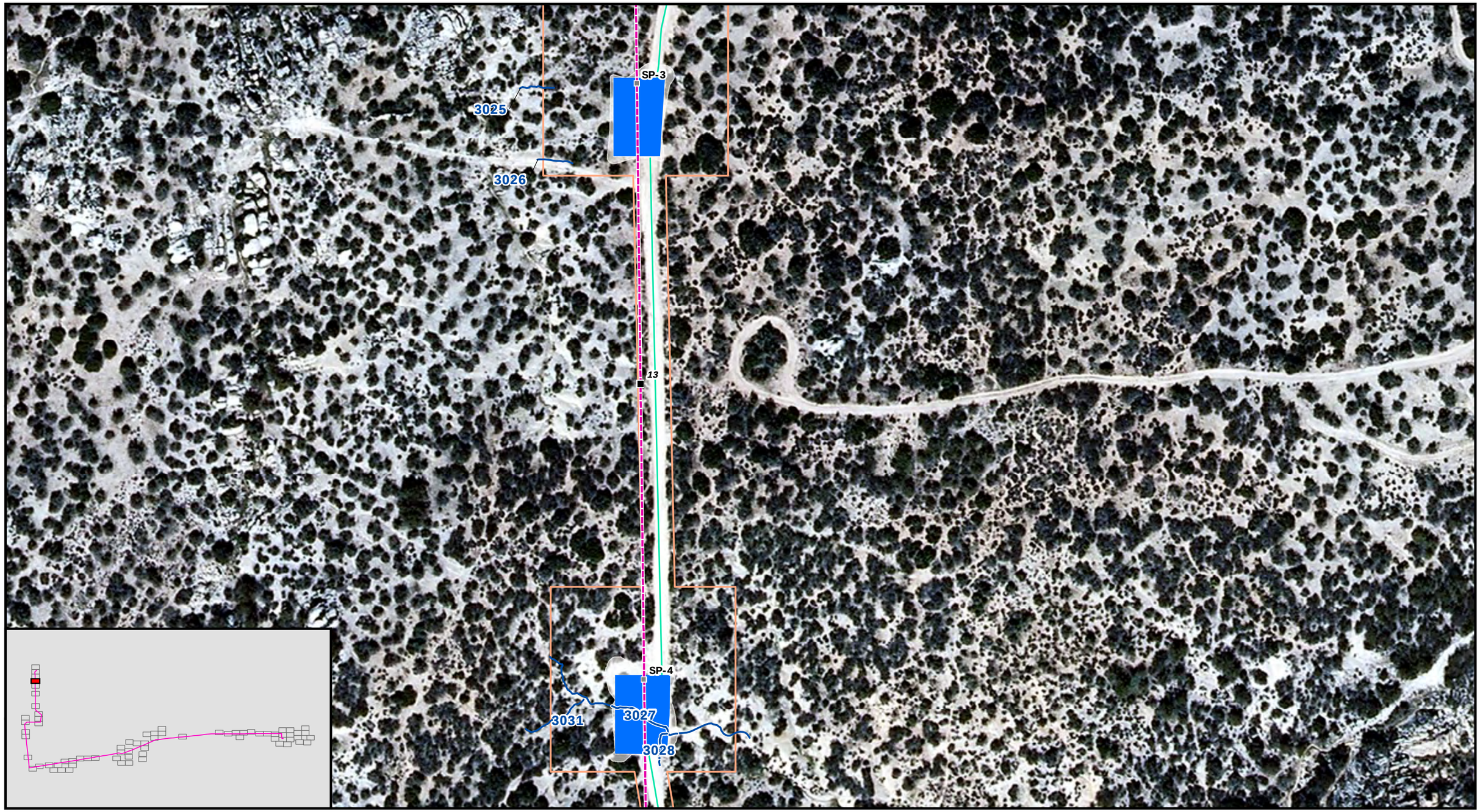

Attachment B: Drainage Survey Results Map 69 of 72

East County Substation Project

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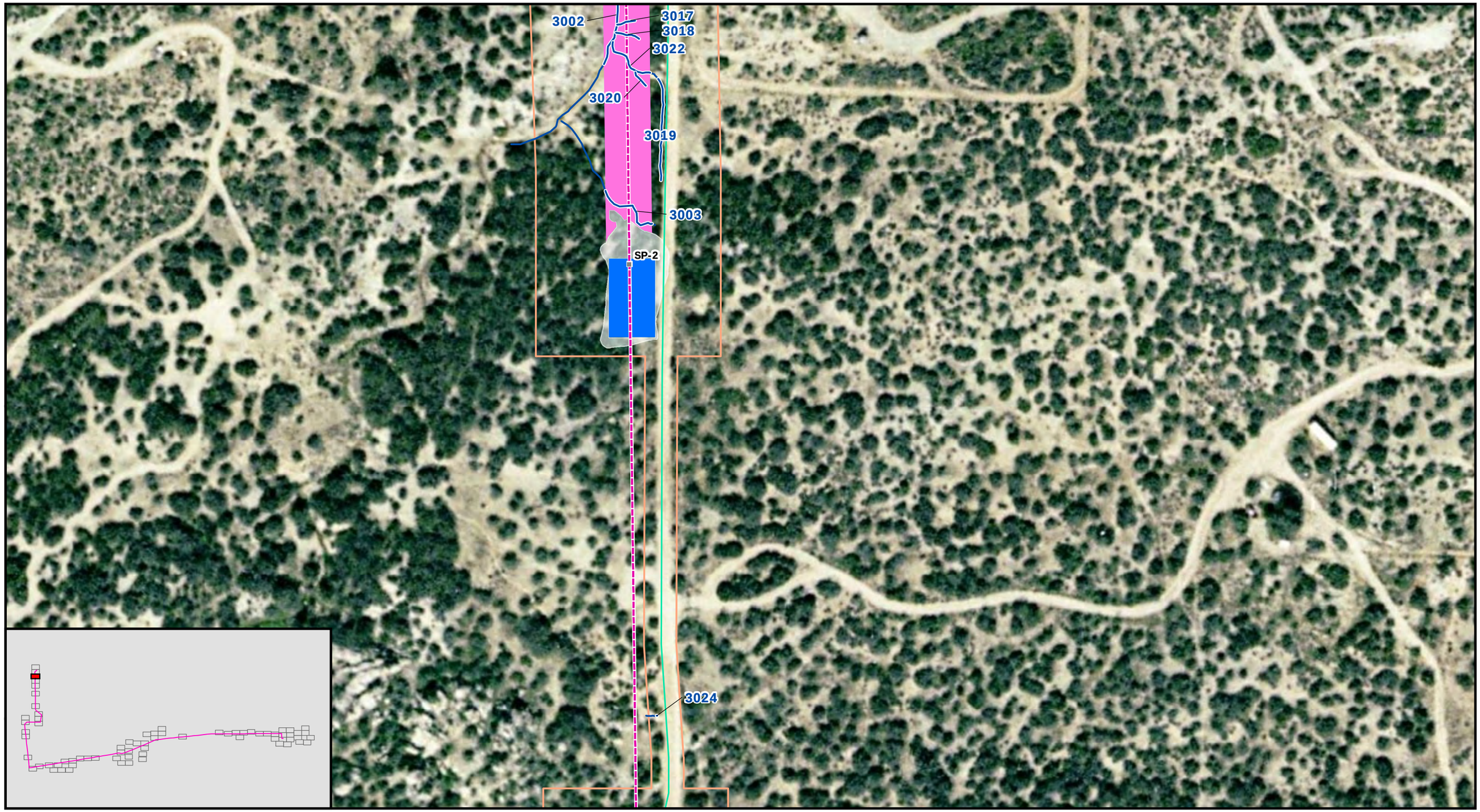

Attachment B: Drainage Survey Results Map 70 of 72

East County Substation Project

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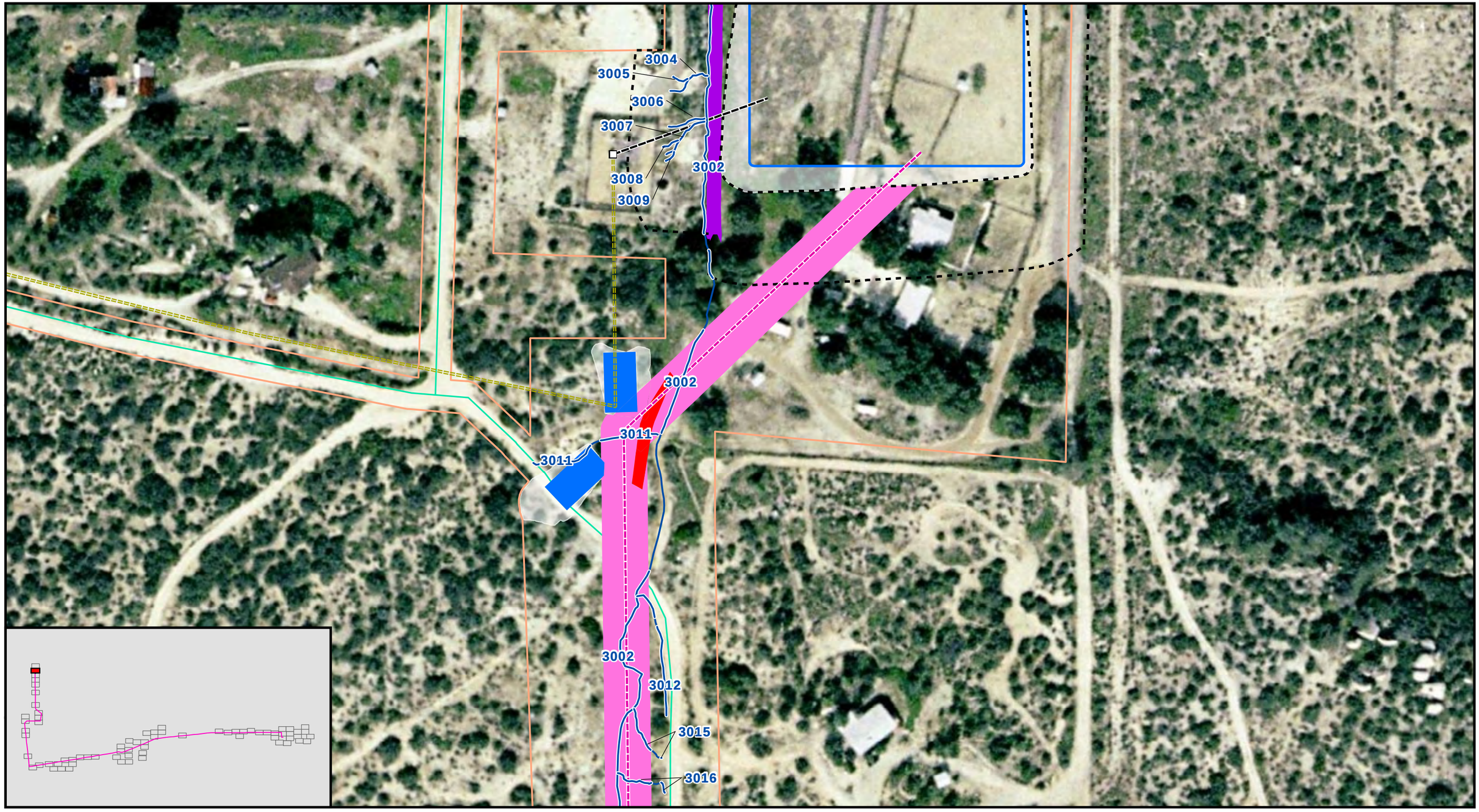

Attachment B: Drainage Survey Results Map 71 of 72

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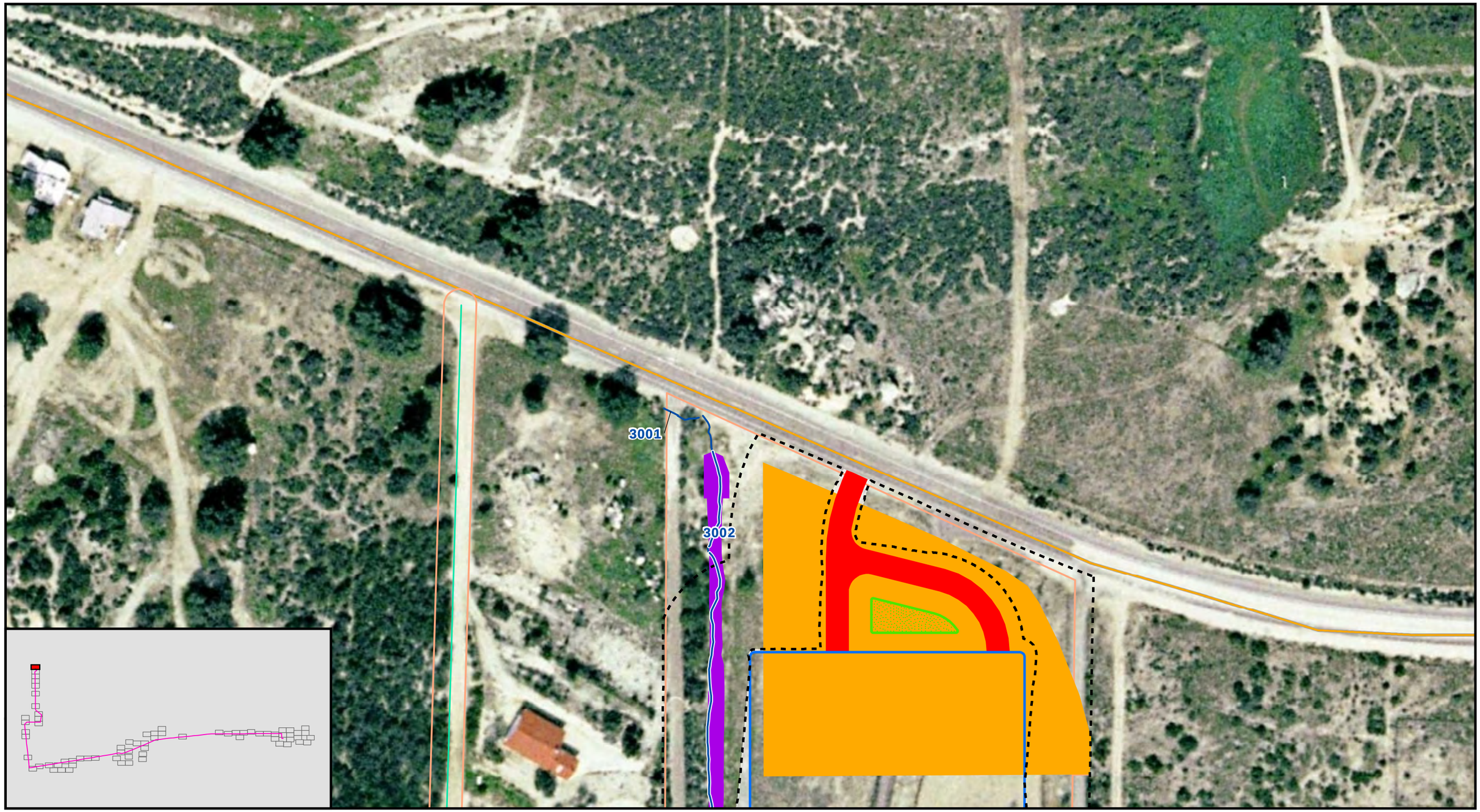

Attachment B: Drainage Survey Results Map 72 of 72

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ATTACHMENT C: DRAINAGE PHOTOGRAPHS

Photograph 1: View of Drainage 1001, facing east, upstream showing OHWM

Photograph 2: View of Drainage 1001, facing west, downstream

Photograph 1: View of Drainage 1002, facing northwest, downstream showing OHWM

Photograph 2: View of Drainage 1002, facing southeast, upstream

Photograph 1: View of Drainage 1003, facing north, downstream showing OHWM

Photograph 2: View of Drainage 1003, facing southeast, upstream

Photograph 1: View of Drainage 1004, facing east, upstream

Photograph 2: View of Drainage 1004, facing west, downstream

Photograph 1: View of Drainage 1005, facing southeast, upstream

Photograph 2: View of Drainage 1005, facing west, downstream

Photograph 1: View of Drainage 1006, facing east, upstream

Photograph 2: View of Drainage 1006, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1007, facing east, upstream

Photograph 2: View of Drainage 1007, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1008, facing east, upstream

Photograph 2: View of Drainage 1008, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1009, facing east, upstream showing OHWM

Photograph 2: View of Drainage 1009, facing west, downstream

Photograph 1: View of Drainage 1010, facing east, upstream

Photograph 2: View of Drainage 1010, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1011, facing east, upstream

Photograph 2: View of Drainage 1011, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1012, facing southeast, upstream

Photograph 2: View of Drainage 1012, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1013, facing east, upstream

Photograph 2: View of Drainage 1013, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1014, facing east, upstream showing OHWM

Photograph 2: View of Drainage 1014, facing west, downstream

Photograph 1: View of Drainage 1015, facing east, upstream

Photograph 2: Drainage 1015, view of OHWM

Photograph 1: View of Drainage 1016, facing east, upstream showing OHWM

Photograph 2: View of Drainage 1016, facing west, downstream

Photograph 1: View of Drainage 1017, facing east, upstream

Photograph 2: View of Drainage 1017, facing west, downstream

Photograph 1: View of Drainage 1018, facing west, downstream

Photograph 2: Drainage 1018, view of OHWM

Photograph 1: View of Drainage 1019, facing southeast, upstream showing OHWM

Photograph 2: View of Drainage 1019, facing west, downstream

Photograph 1: View of Drainage 1020, facing east, upstream

Photograph 2: View of Drainage 1020, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1021, facing east, upstream

Photograph 2: Drainage 1021, view of OHWM

Photograph 1: View of Drainage 1022, facing east, upstream

Photograph 2: Drainage 1022, view of OHWM

Photograph 1: View of Drainage 1023, facing northwest, downstream

Photograph 2: View of Drainage 1023, facing southeast, upstream showing OHWM

Photograph 1: View of Drainage 1025, facing east, upstream

Photograph 2: View of Drainage 1025, facing west, downstream

Photograph 1: View of Drainage 1026, facing east, upstream

Photograph 2: Drainage 1026, view of OHWM

Photograph 1: View of Drainage 1027, facing northwest, upstream

Photograph 2: View of Drainage 1027, facing southwest, downstream

Photograph 1: View of Drainage 1028, facing northeast, upstream

Photograph 2: Drainage 1028, view of OHWM

Photograph 1: View of Drainage 1029, facing northwest, downstream

Photograph 2: View of Drainage 1029, facing southeast, upstream

Photograph 1: View of Drainage 1030, facing northeast, upstream

Photograph 2: View of Drainage 1030, facing southwest, downstream

Photograph 1: View of Drainage 1031, facing northeast, upstream

Photograph 2: View of Drainage 1031, facing southwest, downstream

Photograph 1: Drainage 1032, view of OHWM

Photograph 2: View of Drainage 1032, view of vegetation

Photograph 1: View of Drainage 1035, facing southeast, upstream

Photograph 2: Drainage 1035, view of OHWM

Photograph 1: View of Drainage 1036, facing north, upstream

Photograph 2: View of Drainage 1036, facing south, downstream

Photograph 1: View of Drainage 1037, facing northwest, upstream

Photograph 2: View of Drainage 1037, facing southeast, downstream

Photograph 1: View of Drainage 1038, facing north, downstream

Photograph 2: View of Drainage 1038, facing south, upstream

Photograph 1: View of Drainage 1039, facing north, downstream

Photograph 2: View of Drainage 1039, facing south, upstream

Photograph 1: View of Drainage 1040, facing northwest, downstream

Photograph 2: View of Drainage 1040, facing southeast, upstream

Photograph 1: View of Drainage 1041, facing south, upstream

Photograph 2: Drainage 1041, view of OHWM

Photograph 1: View of Drainage 1042, facing north, downstream

Photograph 2: View of Drainage 1042, facing south, upstream

Photograph 1: View of Drainage 1043, facing northwest, downstream

Photograph 2: Drainage 1043, view of OHWM

Photograph 1: View of Drainage 1044, facing east, upstream showing OHWM

Photograph 2: View of Drainage 1044, facing west, downstream

Photograph 1: View of Drainage 1045, view facing west, downstream

Photograph 2: Drainage 1045, view of OHWM

Photograph 1: View of Drainage 1050, facing north, downstream

Photograph 2: Drainage 1050, view of OHWM

Photograph 1: View of Drainage 1051, facing south, upstream

Photograph 2: Drainage 1051, view of OHWM

Photograph 1: View of Drainage 1054, facing north, upstream

Photograph 2: Drainage 1054, view of OHWM

Photograph 1: View of Drainage 1056, facing north, upstream

Photograph 2: View of Drainage 1056, facing south, downstream

Photograph 1: View of Drainage 1057, facing south, donwstream

Photograph 2: Drainage 1057, view of OHWM

Photograph 1: View of Drainage 1058, facing north, upstream

Photograph 2: Drainage 1058, view of OHWM

Photograph 1: View of Drainage 1060, facing south, upstream

Photograph 2: Drainage 1060, view of OHWM

Photograph 1: View of Drainage 1065, facing south, upstream

Photograph 2: Drainage 1065, view of OHWM

Photograph 1: View of Drainage 1066, facing north, downstream

Photograph 2: View of Drainage 1066, facing south, upstream

Photograph 1: View of Drainage 1067, facing north, downstream

Photograph 2: View of Drainage 1067, facing south, upstream

Photograph 1: View of Drainage 1068, facing northeast, upstream

Photograph 2: View of Drainage 1068, facing southwest, downstream

Photograph 1: View of Drainage 1070, facing northeast, upstream

Photograph 2: Drainage 1070, view of OHWM

Photograph 1: View of Drainage 1071, facing east, upstream

Photograph 2: Drainage 1071, view of OHWM

Photograph 1: View of Drainage 1072, facing north, downstream

Photograph 2: View of Drainage 1072, facing south, upstream

Photograph 1: View of Drainage 1074, facing east, upstream

Photograph 2: Drainage 1074, view of OHWM

Photograph 1: View of Drainage 1076, facing north, downstream

Photograph 2: Drainage 1076, view of OHWM

Photograph 1: View of Drainage 1079, facing north, downstream

Photograph 2: Drainage 1079, view of OHWM

Photograph 1: View of Drainage 1080, facing southwest, upstream

Photograph 2: Drainage 1080, view of OHWM

Photograph 1: View of Drainage 1081, facing north, upstream

Photograph 2: Drainage 1081, view of OHWM

Photograph 1: View of Drainage 1082, facing south, downstream

Photograph 2: Drainage 1082, view of OHWM

Photograph 1: View of Drainage 1083, facing north, upstream

Photograph 2: View of Drainage 1083, facing south, downstream

Photograph 1: View of Drainage 1084, facing southwest, downstream

Photograph 2: Drainage 1084, view of OHWM

Photograph 1: View of Drainage 1085, facing south, upstream

Photograph 2: Drainage 1085, view of OHWM

Photograph 1: View of Drainage 1087, facing northeast, upstream

Photograph 2: View of Drainage 1087, facing southwest, downstream

Photograph 1: View of Drainage 1089, facing north, downstream

Photograph 2: View of Drainage 1089, facing south, upstream

Photograph 1: View of Drainage 1090, facing north, downstream

Photograph 2: Drainage 1090, view of OHWM

Photograph 1: View of Drainage 1091, facing northwest, downstream

Photograph 2: View of Drainage 1091, facing southeast, upstream

Photograph 1: View of Drainage 1093, facing east, upstream

Photograph 2: View of Drainage 1093, facing west, downstream showing OHWM

Photograph 1: View of Drainage 1096, facing northwest, upstream

Photograph 2: View of Drainage 1096, facing southeast, downstream

Photograph 1: View of Drainage 1098, facing northwest, upstream

Photograph 2: View of Drainage 1098, facing southeast, downstream

Photograph 1: View of Drainage 1099, facing northwest, upstream

Photograph 2: Drainage 1099, view of OHWM

Photograph 1: View of Drainage 1100, facing southeast, downstream

Photograph 2: Drainage 1100, view of OHWM

Photograph 1: View of Drainage 1102, facing northeast, downstream

Photograph 2: Drainage 1102, view of OHWM

Photograph 1: View of Drainage 1103, facing northwest, upstream

Photograph 2: View of Drainage 1103, view of vegetation

Photograph 1: View of Drainage 1106, facing north, upstream

Photograph 2: View of Drainage 1106, facing south, downstream

Photograph 1: View of Drainage 1107, facing southwest, upstream

Photograph 2: Drainage 1107, view of OHWM

Photograph 1: View of Drainage 1108, facing south, downstream

Photograph 2: Drainage 1108, view of OHWM

Photograph 1: View of Drainage 1109, facing northwest, upstream showing OHWM

Photograph 2: View of Drainage 1109, facing southeast, downstream

Photograph 1: Drainage 1117, view of OHWM

Photograph 2: View of Drainage 1117, facing east, downstream

Photograph 1: View of Drainage 1120, facing north, downstream

Photograph 2: View of Drainage 1120, facing south, upstream showing OHWM

Photograph 1: View of Drainage 1121, facing north, downstream

Photograph 2: View of Drainage 1121, facing south, upstream. Drainage is shown on the left side of the photograph.

Photograph 1: View of Drainage 1122, facing south, upstream. Drainage is shown on the right side of the photograph.

Photograph 2: Drainage 1122, view of OHWM

Photograph 1: View of Drainage 1123, facing southwest, upstream

Photograph 2: Drainage 1123, view of OHWM

Photograph 1: Drainage 1124, view of OHWM

Photograph 2: View of Drainage 1124, facing northeast, downstream

Photograph 1: View of Drainage 1125, facing northeast, downstream showing OHWM

Photograph 2: View of Drainage 1125, facing southwest, upstream

Photograph 1: View of Drainage 1141, facing east, upstream

Photograph 2: Drainage 1141, view of OHWM

Photograph 1: View of Drainage 1142, facing north, upstream

Photograph 2: Drainage 1142, view of OHWM

Photograph 1: View of Drainage 1143, facing east, upstream

Photograph 2: View of Drainage 1143, facing west, downstream

Photograph 1: View of Drainage 1145, facing northeast, upstream

Photograph 2: Drainage 1145, view of OHWM

Photograph 1: View of Drainage 1146, facing northeast, upstream

Photograph 2: Drainage 1146, view of OHWM

Photograph 1: View of Drainage 1147, facing south, downstream

Photograph 2: Drainage 1147, view of OHWM

Photograph 1: View of Drainage 1148, facing east, upstream

Photograph 2: View of Drainage 1148, facing west, downstream

Photograph 1: View of Drainage 1149, facing northwest, downstream

Photograph 2: View of Drainage 1149, facing southeast, upstream

Photograph 1: View of Drainage 1150, facing northwest, downstream

Photograph 2: View of Drainage 1150, facing southeast, upstream

Photograph 1: View of Drainage 1154, facing northeast, upstream

Photograph 2: Drainage 1154, view of OHWM

Photograph 1: View of Drainage 1159, facing northwest, upstream

Photograph 2: View of Drainage 1159, facing southeast, downstream

Photograph 1: View of Drainage 1162, facing northwest, upstream

Photograph 2: View of Drainage 1162, facing southeast, downstream

Photograph 1: View of Drainage 1171, facing northeast, upstream

Photograph 2: View of Drainage 1171, facing southwest, downstream

Photograph 1: View of Drainage 1175, facing east, upstream

Photograph 2: Drainage 1175, view of OHWM

Photograph 1: View of Drainage 1177, facing northeast, upstream

Photograph 2: View of Drainage 1177, facing southwest, downstream

Photograph 1: View of Drainage 1178, facing northwest, downstream showing OHWM

Photograph 2: View of Drainage 1178, facing southeast, upstream

Photograph 1: View of Drainage 1181, facing north, upstream

Photograph 2: Drainage 1181, view of OHWM

Photograph 1: View of Drainage 1183, facing north, upstream

Photograph 2: Drainage 1183, view of OHWM

Photograph 1: View of Drainage 1184, facing south, upstream

Photograph 2: Drainage 1184, view of OHWM

Photograph 1: View of Drainage 1185, facing north, downstream

Photograph 2: View of Drainage 1185, facing south, upstream

Photograph 1: View of Drainage 1186, facing west, downstream

Photograph 2: Drainage 1186, view of OHWM

Photograph 1: View of Drainage 1188, facing northwest, downstream

Photograph 2: View of Drainage 1188, facing southeast, upstream

Photograph 1: View of Drainage 1191, facing north, upstream

Photograph 2: Drainage 1191, view of OHWM

Photograph 1: View of Drainage 1192, facing southeast, downstream

Photograph 2: Drainage 1192, view of OHWM

Photograph 1: View of Drainage 1198, facing north, upstream

Photograph 2: View of Drainage 1198, facing south, downstream

Photograph 1: View of Drainage 1201, facing north, usptream

Photograph 2: Drainage 1201, view of OHWM

Photograph 1: View of Drainage 1202, facing east, upstream

Photograph 2: View of Drainage 1202, facing west, downstream

Photograph 1: View of Drainage 1205, facing northeast, upstream

Photograph 2: Drainage 1205, view of OHWM

Photograph 1: View of Drainage 1217, facing east, upstream

Photograph 2: View of Drainage 1217, facing west, downstream

Photograph 1: View of Drainage 1218, facing northeast, upstream

Photograph 2: View of Drainage 1218, facing southwest, downstream

Photograph 1: View of Drainage 1219, facing northwest, downstream

Photograph 2: View of Drainage 1219, facing southeast, upstream

Photograph 1: View of Drainage 1226, facing northeast, upstream

Photograph 2: Drainage 1226, view of OHWM

Photograph 1: View of Drainage 1230, facing south, upstream

Photograph 2: Drainage 1230, view of OHWM

Photograph 1: View of Drainage 1231, facing east, upstream

Photograph 2: View of Drainage 1231, facing west, downstream

Photograph 1: View of Drainage 1232, facing south, upstream

Photograph 2: Drainage 1232, view of OHWM

Photograph 1: View of Drainage 1234, facing north, downstream

Photograph 2: View of Drainage 1234, facing south, upstream

Photograph 1: View of Drainage 1237, facing southeast, upstream

Photograph 2: Drainage 1237, view of OHWM

Photograph 1: View of Drainage 1244, facing east, upstream

Photograph 2: Drainage 1244, view of OHWM

Photograph 1: View of Drainage 1245, facing northeast, upstream

Photograph 2: Drainage 1245, view of OHWM

Photograph 1: View of Drainage 1246, facing east, upstream

Photograph 2: Drainage 1246, view of OHWM

Photograph 1: View of Drainage 1251, facing south, downstream

Photograph 2: Drainage 1251, view of OHWM

Photograph 1: View of Drainage 1252, facing northeast, upstream

Photograph 2: Drainage 1252, view of OHWM

Photograph 1: View of Drainage 1255, facing west, downstream

Photograph 2: Drainage 1255, view of OHWM

Photograph 1: View of Drainage 1256, facing east, upstream

Photograph 2: Drainage 1256, view of OHWM

Photograph 1: View of Drainage 1260, facing northwest, downstream

Photograph 2: Drainage 1260, view of OHWM

Photograph 1: View of Drainage 1264, facing east, upstream

Photograph 2: Drainage 1264, view of OHWM

Photograph 1: View of Drainage 1267, facing northeast, upstream

Photograph 2: Drainage 1267, view of OHWM

Photograph 1: View of Drainage 1276, facing northwest, downstream

Photograph 2: Drainage 1276, view of OHWM

Photograph 1: View of Drainage 1277, facing east, upstream

Photograph 2: View of Drainage 1277, facing west, downstream

Photograph 1: View of Drainage 1283, facing west, downstream

Photograph 2: Drainage 1283, view of OHWM

Photograph 1: View of Drainage 1284, facing northeast, upstream

Photograph 2: View of Drainage 1284, facing southwest, downstream

Photograph 1: View of Drainage 1286, facing northwest, downstream

Photograph 2: Drainage 1286, view of OHWM

Photograph 1: View of Drainage 1288, facing east, upstream

Photograph 2: Drainage 1288, view of OHWM

Photograph 1: View of Drainage 1289, facing east, upstream, view of OHWM

Photograph 2: View of Drainage 1289, view of vegetation

Photograph 1: View of Drainage 1290, facing east, upstream

Photograph 2: View of Drainage 1290 from above

Photograph 1: View of Drainage 1292, facing south, upstream

Photograph 2: View of Drainage 1292, view of substrate

Photograph 1: View of Drainage 1293, facing west, downstream

Photograph 2: Drainage 1293, view of OHWM

Photograph 1: View of Drainage 1299, facing southeast, upstream

Photograph 2: Drainage 1299, view of OHWM

Photograph 1: View of Drainage 1300, facing northeast, upstream

Photograph 2: View of Drainage 1300, view of substrate

Photograph 1: View of Drainage 1306, facing northwest, downstream

Photograph 2: View of Drainage 1306, facing southeast, upstream

Photograph 1: View of Drainage 1307, facing northwest, downstream

Photograph 2: View of Drainage 1307, facing southeast, upstream

Photograph 1: View of Drainage 1308, facing north, downstream

Photograph 2: View of Drainage 1308, facing south, upstream

Photograph 1: View of Drainage 1310, facing north, downstream

Photograph 2: View of Drainage 1310, facing south, upstream

Photograph 1: View of Drainage 1313, facing north, upstream

Photograph 2: View of Drainage 1313, facing south, downstream

Photograph 1: View of Drainage 1318, facing northwest, downstream

Photograph 2: View of Drainage 1318, facing southeast, upstream

Photograph 1: View of Drainage 1322, facing north, upstream

Photograph 2: View of Drainage 1322, facing south, downstream

Photograph 1: View of Drainage 1324, facing north, upstream

Photograph 2: View of Drainage 1324, facing south, downstream

Photograph 1: View of Drainage 1325, facing north, upstream

Photograph 2: View of Drainage 1325, facing south, downstream

Photograph 1: View of Drainage 1326, facing north, upstream showing OHWM

Photograph 2: View of Drainage 1326, facing south, downstream

Photograph 1: View of Drainage 1327, facing northwest, upstream

Photograph 2: View of Drainage 1327, facing southeast, downstream

Photograph 1: View of Drainage 1330, facing south, upstream

Photograph 2: Drainage 1330, view of OHWM

Photograph 1: View of Drainage 1331, facing north, upstream

Photograph 2: Drainage 1331, view of OHWM

Photograph 1: View of Drainage 1332, facing northeast, upstream

Photograph 2: View of Drainage 1332, view of substrate

Photograph 1: View of Drainage 1335, facing north, upstream

Photograph 2: View of Drainage 1335, facing south, downstream

Photograph 1: View of Drainage 1336, facing east, upstream

Photograph 2: View of Drainage 1336, facing west, downstream

Photograph 1: View of Drainage 1342, facing northwest, downstream

Photograph 2: View of Drainage 1342, facing southeast, upstream

Photograph 1: View of Drainage 1345, facing north, upstream

Photograph 2: View of Drainage 1345, facing south, downstream

Photograph 1: View of Drainage 1348, facing southwest, downstream

Photograph 2: Drainage 1348, view of OHWM

Photograph 1: View of Drainage 1349, facing northeast, upstream

Photograph 2: View of Drainage 1349, facing southwest, downstream

Photograph 1: View of Drainage 1351, facing southwest, downstream

Photograph 2: Drainage 1351, view of OHWM

Photograph 1: View of Drainage 1352, facing south, downstream

Photograph 2: Drainage 1352, view of OHWM

Photograph 1: View of Drainage 1355, facing west, downstream

Photograph 2: Drainage 1355, view of OHWM

Photograph 1: View of Drainage 1357, facing northwest, downstream

Photograph 2: View of Drainage 1357, facing southeast, upstream

Photograph 1: View of Drainage 1359, facing southwest, downstream

Photograph 2: Drainage 1359, view of OHWM

Photograph 1: View of Drainage 1360, facing northeast, upstream

Photograph 2: View of Drainage 1360, facing southwest, downstream

Photograph 1: View of Drainage 1362, facing northwest, downstream

Photograph 2: View of Drainage 1362, facing southeast, upstream

Photograph 1: View of Drainage 1363, facing west, downstream

Photograph 2: Drainage 1363, view of OHWM

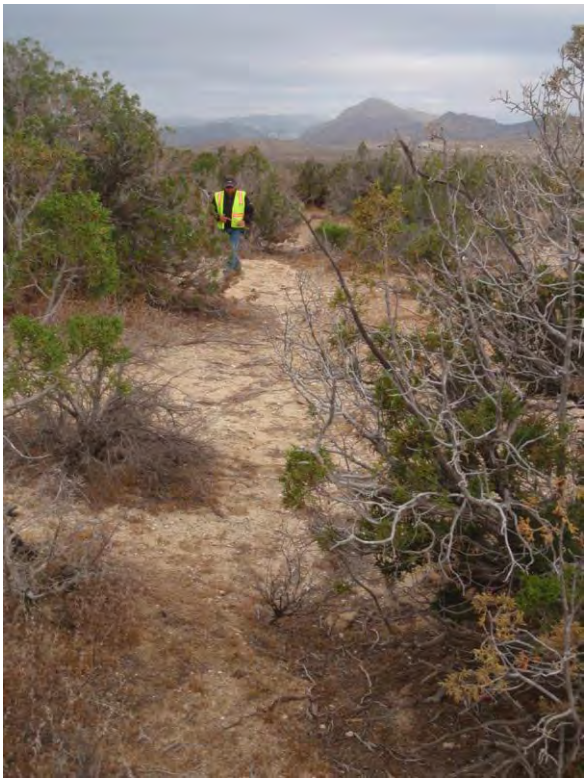
Photograph 1: View of Drainage 1365, facing north, downstream

Photograph 2: View of Drainage 1365, facing south, upstream

Photograph 1: View of Drainage 1366, facing northwest, downstream

Photograph 2: View of Drainage 1366, facing southeast, upstream

Photograph 1: View of Drainage 1370, facing east, upstream



Photograph 2: View of Drainage 1370, facing west, downstream

Photograph 1: View of Drainage 1372, facing southeast, upstream

Photograph 2: Drainage 1372, view of OHWM

Photograph 1: View of Drainage 1373, facing northeast, upstream

Photograph 2: View of Drainage 1373, facing southwest, downstream

Photograph 1: View of Drainage 1375, facing north, upstream

Photograph 2: Drainage 1375, view of OHWM

Photograph 1: View of Drainage 1376, facing north, upstream

Photograph 2: View of Drainage 1376, facing southwest, downstream

Photograph 1: View of Drainage 1377, facing northeast, upstream

Photograph 2: View of Drainage 1377, facing southwest, downstream

Photograph 1: View of Drainage 1381, facing south, upstream

Photograph 2: Drainage 1381, view of OHWM

Photograph 1: View of Drainage 1382, facing southeast, upstream

Photograph 2: Drainage 1382, view of OHWM

Photograph 1: View of Drainage 1383, facing north, upstream showing OHWM

Photograph 2: View of Drainage 1383, facing south, downstream

Photograph 1: View of Drainage 1384, facing northwest, downstream

Photograph 2: Drainage 1384, view of OHWM

Photograph 1: View of Drainage 1385, facing north, downstream

Photograph 2: View of Drainage 1385, facing south, upstream

Photograph 1: View of Drainage 1386, facing north, upstream

Photograph 2: Drainage 1386, view of OHWM

Photograph 1: View of Drainage 1387, facing north, upstream

Photograph 2: Drainage 1387, view of OHWM

Photograph 1: View of Drainage 1388, facing north, upstream

Photograph 2: View of Drainage 1388, facing south, downstream

Photograph 1: View of Drainage 1392, facing northwest, downstream

Photograph 2: View of Drainage 1392, facing southeast, upstream

Photograph 1: View of Drainage 1398, facing north, downstream

Photograph 2: View of Drainage 1398, facing south, upstream

Photograph 1: View of Drainage 1399, facing north, upstream

Photograph 2: View of Drainage 1399, facing south, downstream

Photograph 1: View of Drainage 1401, facing north, downstream

Photograph 2: View of Drainage 1401, facing south, upstream showing OHWM

Photograph 1: View of Drainage 1402, facing west, downstream

Photograph 2: Drainage 1402, view of OHWM

Photograph 1: View of Drainage 1403, facing northwest, downstream

Photograph 2: View of Drainage 1403, facing southeast, upstream

Photograph 1: View of Drainage 1405, facing southeast, upstream

Photograph 2: Drainage 1405, view of OHWM

Photograph 1: View of Drainage 1406, facing north, downstream

Photograph 2: View of Drainage 1406, facing south, upstream

Photograph 1: View of Drainage 1407, facing southeast, upstream

Photograph 2: Drainage 1407, view of OHWM

Photograph 1: View of Drainage 1408, facing south, upstream

Photograph 2: Drainage 1408, view of OHWM

Photograph 1: View of Drainage 1409, facing northwest, downstream

Photograph 2: Drainage 1409, view of OHWM

Photograph 1: View of Drainage 1410, facing northwest, downstream

Photograph 2: View of Drainage 1410, facing southeast, upstream

Photograph 1: View of Drainage 1412, facing east, upstream

Photograph 2: View of Drainage 1412, facing west, downstream

Photograph 1: View of Drainage 1413, facing northeast, upstream

Photograph 2: View of Drainage 1413, facing southwest, downstream

Photograph 1: View of Drainage 1414, facing north, upstream

Photograph 2: View of Drainage 1414, facing south, downstream

Photograph 1: View of Drainage 1415, facing west, downstream

Photograph 2: Drainage 1415, view of OHWM

Photograph 1: View of Drainage 1416, facing northwest, downstream

Photograph 2: View of Drainage 1416, facing southeast, upstream

Photograph 1: View of Drainage 1417, facing south, upstream

Photograph 2: Drainage 1417, view of OHWM

Photograph 1: View of Drainage 1419, facing northeast, upstream

Photograph 2: View of Drainage 1419, facing southwest, downstream

Photograph 1: View of Drainage 1421, facing north, upstream

Photograph 2: View of Drainage 1421, facing south, downstream

Photograph 1: View of Drainage 1423, facing north, downstream

Photograph 2: View of Drainage 1423, facing south, upstream

Photograph 1: View of Drainage 1427, facing northwest, downstream

Photograph 2: Drainage 1427, view of OHWM

Photograph 1: View of Drainage 1430, facing east, upstream

Photograph 2: View of Drainage 1430, facing west, downstream

Photograph 1: View of Drainage 1431, facing northeast, upstream

Photograph 2: View of Drainage 1431, facing southwest, downstream

Photograph 1: View of Drainage 1432, facing northeast, downstream

Photograph 2: Drainage 1432, view of OHWM

Photograph 1: View of Drainage 1433, facing east, upstream

Photograph 2: View of Drainage 1433, facing west, downstream

Photograph 1: View of Drainage 1434, facing northwest, downstream

Photograph 2: View of Drainage 1434, facing southeast, upstream

Photograph 1: View of Drainage 1436, facing southeast, upstream

Photograph 2: Drainage 1436, view of OHWM

Photograph 1: View of Drainage 1437, facing northeast, upstream

Photograph 2: View of Drainage 1437, facing southwest, downstream

Photograph 1: View of Drainage 1439, facing northeast, upstream

Photograph 2: Drainage 1439, view of OHWM

Photograph 1: View of Drainage 1441, facing east, upstream

Photograph 2: Drainage 1441, view of OHWM

Photograph 1: View of Drainage 1442, facing north, upstream

Photograph 2: Drainage 1442, view of OHWM

Photograph 1: View of Drainage 1443, facing north, upstream

Photograph 2: View of Drainage 1443, facing south, downstream

Photograph 1: View of Drainage 1444, facing east, downstream

Photograph 2: Drainage 1444, view of OHWM

Photograph 1: View of Drainage 1446, facing northwest, downstream

Photograph 2: View of Drainage 1446, facing southeast, upstream

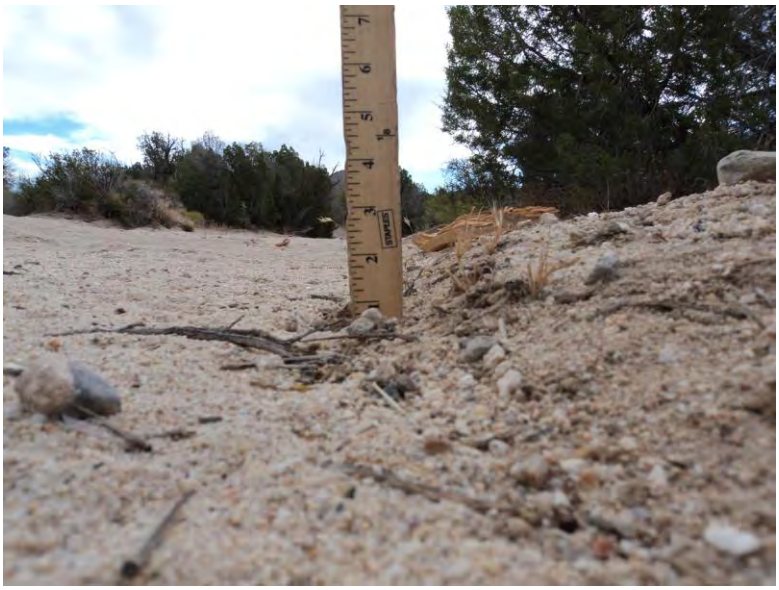
Photograph 1: View of Drainage 1448, facing northwest, downstream

Photograph 2: View of Drainage 1448, facing southeast, upstream

Photograph 1: View of Drainage 1449, facing northwest, downstream

Photograph 2: Drainage 1449, view of OHWM

Photograph 1: View of Drainage 1451, facing east, upstream



Photograph 2: Drainage 1451, view of OHWM

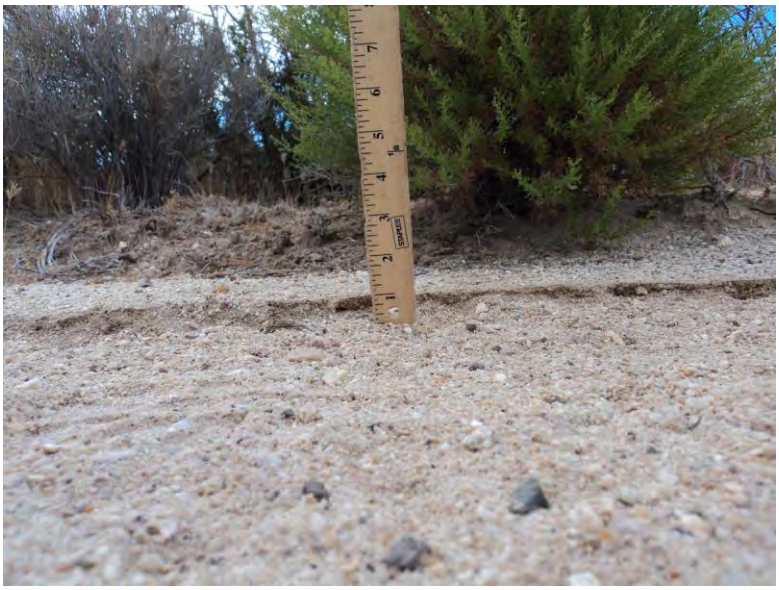
Photograph 1: View of Drainage 1452, facing east, upstream

Photograph 2: Drainage 1452, view of OHWM

Photograph 1: View of Drainage 1453, facing east, upstream

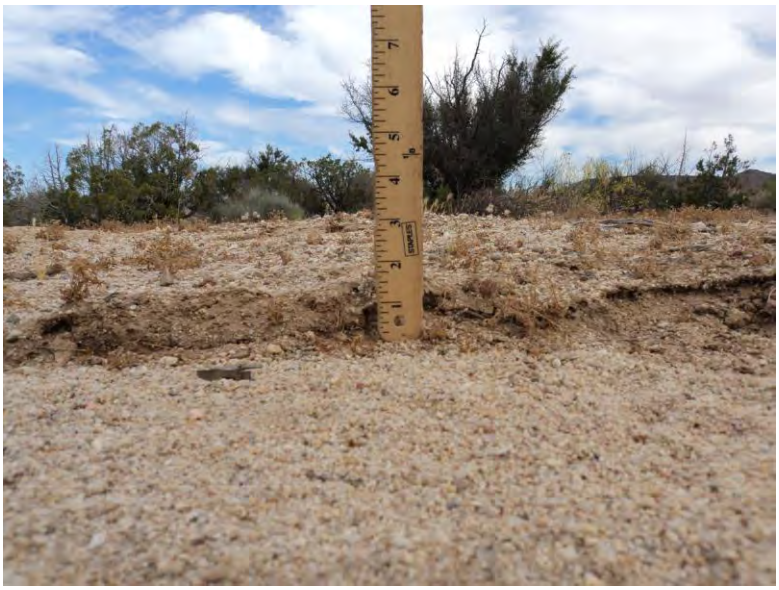
Photograph 2: View of Drainage 1453, facing southwest, downstream

Photograph 1: View of Drainage 1454, facing southwest, downstream



Photograph 2: Drainage 1454, view of OHWM

Photograph 1: View of Drainage 1455, facing west, downstream



Photograph 2: Drainage 1455, view of OHWM

Photograph 1: View of Drainage 1456, facing northeast, upstream

Photograph 2: View of Drainage 1456, facing southwest, downstream

Photograph 1: View of Drainage 1457, facing northeast, downstream

Photograph 2: Drainage 1457, view of OHWM

Photograph 1: View of Drainage 1458, facing east, upstream

Photograph 2: View of Drainage 1458, facing west, downstream

Photograph 1: View of Drainage 1459, facing north, upstream

Photograph 2: View of Drainage 1459, facing south, upstream

Photograph 1: View of Drainage 2001, facing southwest, downstream

Photograph 2: Drainage 2001, view of OHWM

Photograph 1: View of Drainage 2002, facing northeast, upstream

Photograph 2: Drainage 2002, view of OHWM

Photograph 1: View of Drainage 2003, facing west, downstream

Photograph 2: Drainage 2003, view of OHWM

Photograph 1: View of Drainage 2005, facing northeast, upstream

Photograph 2: Drainage 2005, view of OHWM

Photograph 1: View of Drainage 2006, facing east, upstream

Photograph 2: View of Drainage 2006, facing west, downstream

Photograph 1: View of Drainage 2007, facing northeast, upstream

Photograph 2: View of Drainage 2007, facing southwest, downstream

Photograph 1: View of Drainage 2008, facing north, downstream

Photograph 2: View of Drainage 2008, facing south, downstream

Photograph 1: View of Drainage 2009, facing north, downstream

Photograph 2: Drainage 2009, view of OHWM

Photograph 1: View of Drainage 2010, facing east, downstream

Photograph 2: View of Drainage 2010, facing west, upstream

Photograph 1: View of Drainage 2011, facing east, downstream

Photograph 2: View of Drainage 2011, facing west, upstream

Photograph 1: View of Drainage 2012, facing west, upstream

Photograph 2: Drainage 2012, view of OHWM

Photograph 1: View of Drainage 2013, facing south, downstream

Photograph 2: Drainage 2013, view of OHWM

Photograph 1: View of Drainage 2014, facing northeast, upstream

Photograph 2: Drainage 2014, view of OHWM

Photograph 1: View of Drainage 2015, facing east, upstream

Photograph 2: Drainage 2015, view of OHWM

Photograph 1: View of Drainage 2016, facing south, downstream

Photograph 2: Drainage 2016, view of OHWM

Photograph 1: View of Drainage 2017, facing south, downstream

Photograph 2: Drainage 2017, view of OHWM

Photograph 1: View of Drainage 2018, facing west, downstream

Photograph 2: Drainage 2018, view of OHWM

Photograph 1: View of Drainage 2019, facing east, upstream

Photograph 2: View of Drainage 2019, facing west, downstream

Photograph 1: View of Drainage 2021, facing southeast, downstream

Photograph 2: Drainage 2021, view of OHWM

Photograph 1: View of Drainage 2022, facing northwest, upstream

Photograph 2: View of Drainage 2022, view of OHWM

Photograph 1: View of Drainage 2023, facing northwest, upstream

Photograph 2: View of Drainage 2023, facing southeast, downstream showing OHWM

Photograph 1: View of Drainage 2026, facing south, upstream

Photograph 2: View of Drainage 2026, view of OHWM

Photograph 1: View of Drainage 2027, facing north, downstream

Photograph 2: View of Drainage 2027, facing south, upstream showing OHWM

Photograph 1: View of Drainage 2028, facing north, downstream

Photograph 2: View of Drainage 2028, view of OHWM

Photograph 1: View of Drainage 2029, facing north, upstream

Photograph 2: Drainage 2029, view of OHWM

Photograph 1: View of Drainage 2030, facing northwest, upstream

Photograph 2: View of Drainage 2030, facing south, downstream

Photograph 1: View of Drainage 2031, facing south, downstream

Photograph 2: Drainage 2031, view of OHWM

Photograph 1: View of Drainage 2032, facing north, upstream

Photograph 2: View of Drainage 2032, view of OHWM

Photograph 1: View of Drainage 2034, facing north, downstream showing OHWM

Photograph 2: View of Drainage 2034, facing south, upstream

Photograph 1: View of Drainage 2035, facing west, downstream

Photograph 2: Drainage 2035, view of OHWM

Photograph 1: View of Drainage 2039, facing east, upstream

Photograph 2: Drainage 2039, view of OHWM

Photograph 1: View of Drainage 2041, facing northeast, upstream

Photograph 2: View of Drainage 2041, facing southwest, downstream showing OHWM

Photograph 1: View of Drainage 2042, facing south, downstream

Photograph 2: Drainage 2042, view of OHWM

Photograph 1: View of Drainage 2044, facing south downstream

Photograph 2: Drainage 2044, view of OHWM

Photograph 1: View of Drainage 2045, facing northeast, upstream

Photograph 2: View of Drainage 2045, facing southwest, downstream

Photograph 1: View of Drainage 2046, facing northeast, upstream

Photograph 2: View of Drainage 2046, facing southwest, downstream

Photograph 1: View of Drainage 2048, facing east, upstream

Photograph 2: View of Drainage 2048, facing west, downstream

Photograph 1: View of Drainage 2050, facing southwest, downstream

Photograph 2: Drainage 2050, view of OHWM

Photograph 1: View of Drainage 2051, facing southwest, downstream

Photograph 2: Drainage 2051, view of OHWM

Photograph 1: View of Drainage 2052, facing east, upstream

Photograph 2: View of Drainage 2052, facing southwest, downstream

Photograph 1: View of Drainage 2053, facing north, downstream

Photograph 2: View of Drainage 2053, facing south, upstream

Photograph 1: View of Drainage 2054, facing east, upstream

Photograph 2: View of Drainage 2054, facing west, downstream

Photograph 1: View of Drainage 2056, facing east, upstream

Photograph 2: Drainage 2056, view of OHWM

Photograph 1: View of Drainage 2057, facing east, upstream

Photograph 2: View of Drainage 2057, facing west, downstream

Photograph 1: View of Drainage 2058, facing southeast, downstream showing OHWM

Photograph 2: View of Drainage 2058, facing northwest, upstream

Photograph 1: View of Drainage 2059, facing northwest, upstream

Photograph 2: View of Drainage 2059, facing southeast, downstream

Photograph 1: View of Drainage 2060, facing northwest, upstream

Photograph 2: View of Drainage 2060, facing southeast, downstream showing OHWM

Photograph 1: View of Drainage 2061, facing northwest, upstream

Photograph 2: View of Drainage 2061, facing southeast, downstream

Photograph 1: View of Drainage 2062, facing northwest, upstream

Photograph 2: Drainage 2062, view of OHWM

Photograph 1: View of Drainage 2064, facing northwest, upstream

Photograph 2: View of Drainage 2064, facing southeast, downstream

Photograph 1: View of Drainage 2067, facing northwest, downstream

Photograph 2: View of Drainage 2067, facing southeast, upstream showing OHWM

Photograph 1: View of Drainage 2068, facing south, upstream

Photograph 2: Drainage 2068, view of OHWM

Photograph 1: View of Drainage 2069, facing north, downstream

Photograph 2: View of Drainage 2069, facing south, upstream showing OHWM

Photograph 1: View of Drainage 2070, facing north, upstream

Photograph 2: View of Drainage 2070, facing south, upstream showing OHWM

Photograph 1: View of Drainage 2071, facing southwest, upstream

Photograph 2: Drainage 2071, view of OHWM

Photograph 1: View of Drainage 2072, facing north, downstream showing OHWM

Photograph 2: View of Drainage 2072, facing south, upstream

Photograph 1: View of Drainage 2073, facing northwest, downstream

Photograph 2: Drainage 2073, view of OHWM

Photograph 1: View of Drainage 2074, facing northwest, downstream

Photograph 2: View of Drainage 2074, facing southeast, upstream

Photograph 1: View of Drainage 2075, facing east, downstream

Photograph 2: View of Drainage 2075, facing west, upstream

Photograph 1: Drainage 2076, view of OHWM

Photograph 2: View of Drainage 2076, facing southwest, upstream

Photograph 1: View of Drainage 2077, facing north, downstream

Photograph 2: View of Drainage 2077, facing south, upstream

Photograph 1: View of Drainage 2078, facing northeast, downstream showing OHWM

Photograph 2: View of Drainage 2078, facing southwest, upstream

Photograph 1: View of Drainage 2079, facing northeast, downstream

Photograph 2: View of Drainage 2079, facing southwest, upstream

Photograph 1: View of Drainage 2080, facing northeast, downstream

Photograph 2: Drainage 2080, view of OHWM

Photograph 1: View of Drainage 2081, facing northeast, downstream

Photograph 2: View of Drainage 2081, facing southwest, upstream showing OHWM

Photograph 1: View of Drainage 2082, facing northeast, upstream

Photograph 2: View of Drainage 2082, facing southwest, upstream showing OHWM

Photograph 1: View of Drainage 2083, facing east, downstream

Photograph 2: View of Drainage 2083, facing west, upstream showing OHWM

Photograph 1: View of Drainage 2085, facing southwest, downstream

Photograph 2: Drainage 2085, view of OHWM

Photograph 1: View of Drainage 2086, facing southwest, downstream

Photograph 2: Drainage 2086, view of OHWM

Photograph 1: View of Drainage 2088, facing northeast, upstream showing OHWM

Photograph 2: View of Drainage 2088, facing southwest, downstream

Photograph 1: View of Drainage 2089, facing northwest, downstream

Photograph 2: View of Drainage 2089, facing southeast, upstream

Photograph 1: View of Drainage 2091, facing north, upstream

Photograph 2: View of Drainage 2091, facing south, downstream showing OHWM

Photograph 1: View of Drainage 2092, facing north, upstream

Photograph 2: View of Drainage 2092, facing south, downstream showing OHWM

Photograph 1: View of Drainage 2093, facing northeast, upstream

Photograph 2: View of Drainage 2093, facing southwest, downstream showing OHWM

Photograph 1: View of Drainage 2094, facing south, downstream

Photograph 2: Drainage 2094, view of OHWM

Photograph 1: View of Drainage 2095, facing northeast, upstream showing OHWM

Photograph 2: View of Drainage 2095, facing southwest, downstream

Photograph 1: View of Drainage 2096, facing northwest, upstream

Photograph 2: Drainage 2096, view of OHWM

Photograph 1: View of Drainage 2097, facing east, upstream

Photograph 2: Drainage 2097, view of OHWM

Photograph 1: View of Drainage 2098, facing southeast, downstream

Photograph 2: Drainage 2098, view of OHWM

Photograph 1: View of Drainage 2099, facing northeast, upstream

Photograph 2: Drainage 2099, view of OHWM

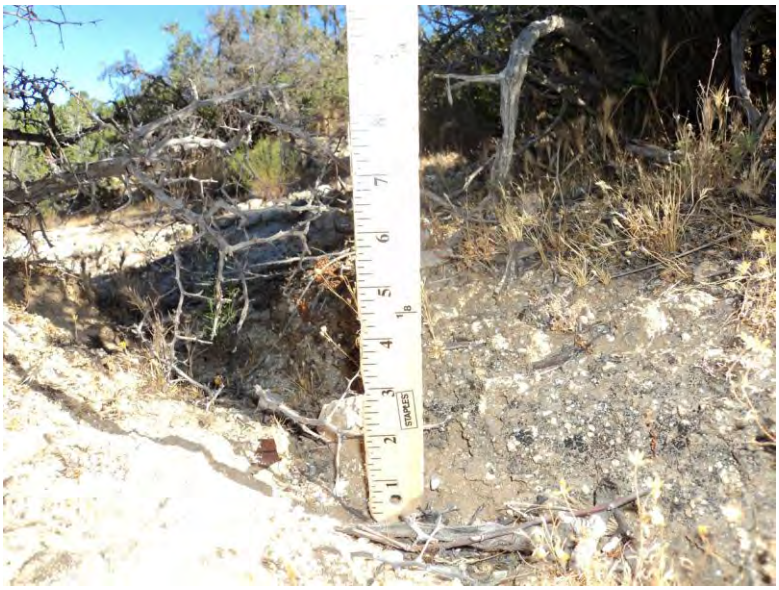
Photograph 1: View of Drainage 2100, facing southwest, downstream

Photograph 2: Drainage 2100, view of OHWM

Photograph 1: View of Drainage 2101, facing southwest, downstream

Photograph 2: Drainage 2101, view of OHWM

Photograph 1: View of Drainage 2102, facing east, upstream



Photograph 2: Drainage 2102, view of OHWM

Photograph 1: View of Drainage 2103, facing east, upstream

Photograph 2: View of Drainage 2103, facing west, downstream

Photograph 1: View of Drainage 2104, facing southeast, downstream

Photograph 2: Drainage 2104, view of OHWM

Photograph 1: View of Drainage 2106, facing east, downstream

Photograph 2: Drainage 2106, view of OHWM

Photograph 1: View of Drainage 2107, facing southwest, downstream

Photograph 2: Drainage 2107, view of OHWM

Photograph 1: View of Drainage 2109, facing northeast, upstream

Photograph 2: Drainage 2109, view of OHWM

Photograph 1: View of Drainage 2112, facing north, downstream

Photograph 2: Drainage 2112, view of OHWM

Photograph 1: View of Drainage 2114, facing northwest, upstream

Photograph 2: Drainage 2114, view of OHWM

Photograph 1: View of Drainage 2115, facing east, downstream showing OHWM

Photograph 2: View of Drainage 2115, facing west, upstream

Photograph 1: View of Drainage 2116, facing north, downstream showing OHWM

Photograph 2: View of Drainage 2116, facing south, upstream

Photograph 1: View of Drainage 2117, facing southeast, downstream

Photograph 2: Drainage 2117, view of OHWM

Photograph 1: View of Drainage 2118, facing south, downstream

Photograph 2: Drainage 2118, view of OHWM

Photograph 1: View of Drainage 2120, facing east, upstream showing OHWM

Photograph 2: View of Drainage 2120, facing west, downstream

Photograph 1: View of Drainage 2121, facing north, upstream

Photograph 2: View of Drainage 2121, facing south, downstream showing OHWM

Photograph 1: View of Drainage 2122, facing north, upstream

Photograph 2: Drainage 2122, view of OHWM

Photograph 1: View of Drainage 2123, facing east, upstream

Photograph 2: View of Drainage 2123, facing west, downstream

Photograph 1: View of Drainage 2124, facing north, upstream

Photograph 2: View of Drainage 2124, facing south, downstream

Photograph 1: View of Drainage 2125, facing south, downstream

Photograph 2: View of Drainage 2125, facing north, upstream showing OHWM

Photograph 1: Drainage 2128, view of OHWM

Photograph 2: View of Drainage 2128, acing north, upstream

Photograph 1: View of Drainage 2129, facing north, upstream showing OHWM

Photograph 2: View of Drainage 2129, facing south, downstream

Photograph 1: View of Drainage 2130, facing south, downstream

Photograph 2: Drainage 2130, view of OHWM

Photograph 1: View of Drainage 2131, facing north, upstream

Photograph 2: View of Drainage 2131, facing south, downstream

Photograph 1: View of Drainage 2132, facing north, upstream

Photograph 2: Drainage 2132, view of OHWM

Photograph 1: Drainage 2133, view of OHWM

Photograph 2: View of Drainage 2133, facing east, upstream

Photograph 1: View of Drainage 2134, facing east, upstream showing OHWM

Photograph 2: View of Drainage 2134, facing west, downstream

Photograph 1: View of Drainage 2135, facing east, upstream

Photograph 2: Drainage 2135, view of OHWM

Photograph 1: View of Drainage 2137, facing south, downstream

Photograph 2: View of Drainage 2137, facing north, upstream showing OHWM

Photograph 1: View of Drainage 2138, facing east, downstream

Photograph 2: View of Drainage 2138, facing west, upstream

Photograph 1: View of Drainage 2140, facing east, upstream

Photograph 2: View of Drainage 2140, facing west, downstream

Photograph 1: View of Drainage 2141, facing north, downstream

Photograph 2: View of Drainage 2141, facing south, upstream

Photograph 1: View of Drainage 2142, facing northwest, downstream

Photograph 2: Drainage 2142, view of OHWM

Photograph 1: View of Drainage 2143, facing northwest, downstream

Photograph 2: Drainage 2143, view of OHWM

Photograph 1: View of Drainage 2144, facing east, upstream

Photograph 2: View of Drainage 2144, facing west, downstream

Photograph 1: View of Drainage 2146, facing northwest, downstream

Photograph 2: View of Drainage 2146, facing southeast, upstream

Photograph 1: View of Drainage 2147, facing northwest, downstream

Photograph 2: View of Drainage 2147, facing southeast, upstream

Photograph 1: View of Drainage 2148, facing north, downstream

Photograph 2: Drainage 2148, view of OHWM

Photograph 1: View of Drainage 2149, facing north, upstream

Photograph 2: View of Drainage 2149, facing south, downstream

Photograph 1: View of Drainage 2150, facing east, upstream

Photograph 2: View of Drainage 2150, facing west, downstream

Photograph 1: View of Drainage 2151, facing south, downstream

Photograph 2: Drainage 2151, view of OHWM

Photograph 1: View of Drainage 2152, facing east, downstream

Photograph 2: Drainage 2152, view of OHWM

Photograph 1: View of Drainage 2153, facing north, upstream

Photograph 2: Drainage 2153, view of OHWM

Photograph 1: View of Drainage 2154, facing east, downstream

Photograph 2: View of Drainage 2154, facing west, upstream

Photograph 1: View of Drainage 2155, facing east, downstream showing OHWM

Photograph 2: View of Drainage 2155, facing west, upstream

Photograph 1: View of Drainage 2156, facing north, upstream

Photograph 2: View of Drainage 2156, facing south, downstream

Photograph 1: View of Drainage 2157, facing northwest, upstream

Photograph 2: View of Drainage 2157, facing southeast, downstream

Photograph 1: View of Drainage 2163, facing south, upstream

Photograph 2: Drainage 2163, view of OHWM

Photograph 1: View of Drainage 2164, facing north, upstream showing OHWM

Photograph 2: View of Drainage 2164, facing south, downstream

Photograph 1: View of Drainage 2165, facing north, upstream showing OHWM

Photograph 2: View of Drainage 2165, facing south, downstream

Photograph 1: View of Drainage 2166, facing north, upstream

Photograph 2: View of Drainage 2166, facing south, upstream showing OHWM

Photograph 1: View of Drainage 2170, facing north, upstream showing OHWM

Photograph 2: View of Drainage 2170, facing south, downstream

Photograph 1: View of Drainage 2171, facing east, downstream

Photograph 2: View of Drainage 2171, facing west, upstream

Photograph 1: View of Drainage 2172, facing west, downstream

Photograph 2: Drainage 2172, view of OHWM

Photograph 1: View of Drainage 2175, facing north, upstream

Photograph 2: View of Drainage 2175, facing south, downstream

Photograph 1: View of Drainage 2176, facing northeast, upstream

Photograph 2: View of Drainage 2176, facing southwest, downstream

Photograph 1: View of Drainage 2177, facing south, downstream

Photograph 2: Drainage 2177, view of OHWM

Photograph 1: View of Drainage 2179, facing northwest, downstream

Photograph 2: View of Drainage 2179, facing southeast, upstream

Photograph 1: View of Drainage 2185, facing east, upstream

Photograph 2: View of Drainage 2185, facing west, downstream

Photograph 1: View of Drainage 2186, facing east, upstream

Photograph 2: Drainage 2186, view of OHWM

Photograph 1: View of Drainage 2187, facing east, upstream

Photograph 2: View of Drainage 2187, facing west, downstream showing OHWM

Photograph 1: View of Drainage 2188, facing east, upstream

Photograph 2: View of Drainage 2188, facing west, downstream

Photograph 1: View of Drainage 2189, facing west, downstream

Photograph 2: Drainage 2189, view of OHWM

Photograph 1: View of Drainage 2190, facing north, downstream

Photograph 2: View of Drainage 2190, facing south, upstream

Photograph 1: View of Drainage 2191, facing east, upstream

Photograph 2: Drainage 2191, view of OHWM

Photograph 1: View of Drainage 2192, facing north, upstream

Photograph 2: View of Drainage 2192, facing south, downstream

Photograph 1: View of Drainage 2193, facing northwest, downstream

Photograph 2: Drainage 2193, view of OHWM

Photograph 1: View of Drainage 2194, facing northwest, downstream

Photograph 2: View of Drainage 2194, facing southeast, upstream

Photograph 1: View of Drainage 2195, facing northwest, downstream

Photograph 2: View of Drainage 2195, facing southeast, upstream

Photograph 1: View of Drainage 2196, facing northwest, downstream

Photograph 2: View of Drainage 2196, facing southeast, upstream

Photograph 1: View of Drainage 2198, facing north, upstream

Photograph 2: Drainage 2198, view of OHWM

Photograph 1: View of Drainage 2199, facing south, upstream

Photograph 2: Drainage 2199, view of OHWM

Photograph 1: View of Drainage 2200, facing west, downstream

Photograph 2: Drainage 2200, view of OHWM

Photograph 1: View of Drainage 2201, facing north, downstream

Photograph 2: View of Drainage 2201, facing south, upstream

Photograph 1: View of Drainage 2202, facing south, upstream

Photograph 2: Drainage 2202, view of OHWM

Photograph 1: View of Drainage 2203, facing north, downstream

Photograph 2: View of Drainage 2203, facing south, upstream

Photograph 1: View of Drainage 2204, facing north, upstream

Photograph 2: View of Drainage 2204, facing south, downstream

Photograph 1: View of Drainage 2208, facing north, upstream

Photograph 2: Drainage 2208, view of OHWM

Photograph 1: View of Drainage 2209, facing south, upstream

Photograph 2: Drainage 2209, view of OHWM

Photograph 1: View of Drainage 2211, facing east, upstream

Photograph 2: View of Drainage 2211, facing west, downstream

Photograph 1: View of Drainage 2212, facing north, downstream

Photograph 2: Drainage 2212, view of OHWM

Photograph 1: View of Drainage 2213, facing north, downstream

Photograph 2: View of Drainage 2213, facing south, upstream

Photograph 1: View of Drainage 2216, facing north, downstream

Photograph 2: Drainage 2216, view of OHWM

Photograph 1: View of Drainage 2218, facing east, upstream

Photograph 2: View of Drainage 2218, facing west, downstream

Photograph 1: View of Drainage 2219, facing east, upstream

Photograph 2: Drainage 2219, view of OHWM

Photograph 1: View of Drainage 2220, facing east, upstream

Photograph 2: View of Drainage 2220, facing west, downstream

Photograph 1: View of Drainage 2221, facing north, upstream

Photograph 2: View of Drainage 2221, facing south, downstream

Photograph 1: View of Drainage 2222, facing west, downstream

Photograph 2: View of Drainage 2222, facing east, upstream showing OHWM

Photograph 1: View of Drainage 2223, facing east, upstream

Photograph 2: View of Drainage 2223, facing west, downstream showing OHWM

Photograph 1: View of Drainage 2225, facing north, upstream

Photograph 2: View of Drainage 2225, facing south, downstream

Photograph 1: View of Drainage 2226, facing east, upstream

Photograph 2: View of Drainage 2226, facing west, downstream

Photograph 1: View of Drainage 2229, facing north, upstream

Photograph 2: View of Drainage 2229, facing south, upstream

Photograph 1: View of Drainage 2230, facing east, upstream showing OHWM

Photograph 2: View of Drainage 2230, facing west, downstream

Photograph 1: View of Drainage 2231, facing northeast, upstream

Photograph 2: View of Drainage 2231, facing southwest, downstream showing OHWM

Photograph 1: View of Drainage 2232, facing north, downstream

Photograph 2: Drainage 2232, view of OHWM

Photograph 1: View of Drainage 2233, facing north, upstream

Photograph 2: View of Drainage 2233, facing south, downstream showing OHWM

Photograph 1: View of Drainage 2234, facing south, downstream

Photograph 2: Drainage 2234, view of OHWM

Photograph 1: View of Drainage 2235, facing north, downstream

Photograph 2: View of Drainage 2235, facing south, upstream

Photograph 1: View of Drainage 3001, facing northeast, downstream

Photograph 2: View of Drainage 3001, facing west, upstream

Photograph 1: View of Drainage 3002, facing northeast, downstream showing OHWM

Photograph 2: View of Drainage 3002, facing southwest, upstream

Photograph 1: View of Drainage 3003, facing northwest, downstream

Photograph 2: View of Drainage 3003, facing south, upstream

Photograph 1: View of Drainage 3004, facing east, downstream

Photograph 2: View of Drainage 3004, facing west, upstream

Photograph 1: View of Drainage 3005, facing northeast, downstream

Photograph 2: Drainage 3005, view of OHWM

Photograph 1: View of Drainage 3006, facing east, downstream

Photograph 2: View of Drainage 3006, facing west, upstream

Photograph 1: View of Drainage 3007, facing northeast, downstream

Photograph 2: View of Drainage 3007, facing southwest, upstream

Photograph 1: View of Drainage 3008, facing northeast, downstream

Photograph 2: View of Drainage 3008, facing southwest, upstream

Photograph 1: View of Drainage 3009, facing northeast, downstream

Photograph 2: View of Drainage 3009, facing southwest, upstream

Photograph 1: View of Drainage 3011, facing northeast, downstream showing OHWM

Photograph 2: View of Drainage 3011, facing southwest, upstream

Photograph 1: View of Drainage 3012, facing northwest, downstream

Photograph 2: View of Drainage 3012, facing south, upstream showing OHWM

Photograph 1: View of Drainage 3015, facing northwest, downstream showing OHWM

Photograph 2: View of Drainage 3015, facing southeast, upstream

Photograph 1: View of Drainage 3016, facing east, upstream showing OHWM

Photograph 2: View of Drainage 3016, facing west, downstream

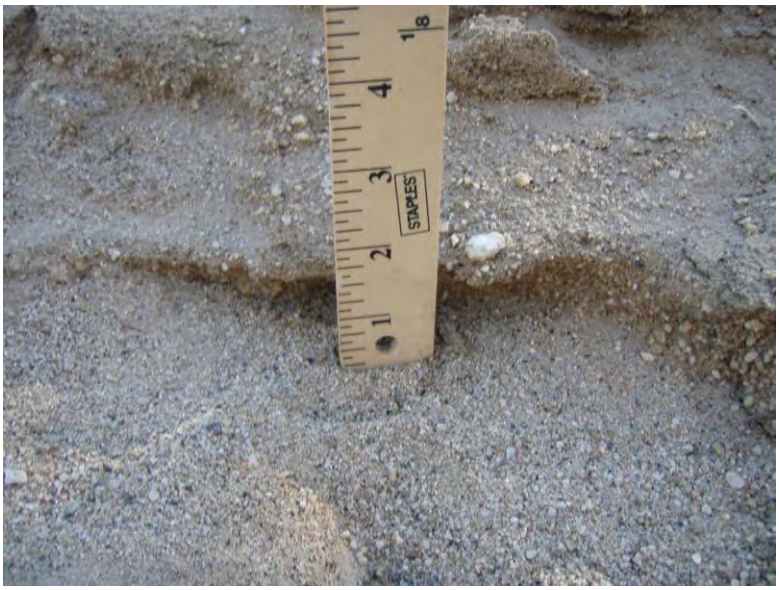
Photograph 1: View of Drainage 3017, facing east, upstream

Photograph 2: View of Drainage 3017, facing southwest, downstream

Photograph 1: View of Drainage 3018, facing east, upstream

Photograph 2: View of Drainage 3018, facing west, downstream

Photograph 1: View of Drainage 3019, facing northwest, downstream



Photograph 2: Drainage 3019, view of OHWM

Photograph 1: View of Drainage 3020, facing northwest, downstream

Photograph 2: View of Drainage 3020, facing southeast, upstream

Photograph 1: View of Drainage 3024, facing northwest, downstream

Photograph 2: View of Drainage 3024, facing northwest, upstream

Photograph 1: View of Drainage 3025, facing east, upstream

Photograph 2: Drainage 3025, view of OHWM

Photograph 1: View of Drainage 3026, facing east, upstream

Photograph 2: View of Drainage 3026, facing west, downstream

Photograph 1: View of Drainage 3027, facing east, downstream showing OHWM

Photograph 2: View of Drainage 3027, facing west, upstream

Photograph 1: View of Drainage 3028, facing north, downstream

Photograph 2: View of Drainage 3028, facing south, upstream showing OHWM

Photograph 1: View of Drainage 3031, facing north, downstream

Photograph 2: View of Drainage 3031, facing south, upstream

Photograph 1: View of Drainage 3032, facing east, downstream showing OHWM

Photograph 2: View of Drainage 3032, facing southwest, upstream

Photograph 1: View of Drainage 3033, facing northwest, upstream showing OHWM

Photograph 2: View of Drainage 3033, facing southeast, downstream

Photograph 1: View of Drainage 3034, facing north, upstream showing OHWM

Photograph 2: View of Drainage 3034, facing south, downstream

Photograph 1: View of Drainage 3035, facing east, downstream

Photograph 2: View of Drainage 3035, facing west, upstream showing OHWM

Photograph 1: View of Drainage 3037, facing northeast, downstream

Photograph 2: View of Drainage 3037, facing southwest, upstream

Photograph 1: View of Drainage 3038, facing northwest, upstream

Photograph 2: View of Drainage 3038, facing southwest, downstream

Photograph 1: View of Drainage 3039, facing east, downstream

Photograph 2: View of Drainage 3039, facing west, upstream showing OHWM

Photograph 1: View of Drainage 3040, facing north, downstream

Photograph 2: View of Drainage 3040, facing southwest, upstream showing OHWM

Photograph 1: View of Drainage 3045, facing northeast, downstream

Photograph 2: View of Drainage 3045, acing southwest, upstream

Photograph 1: View of Drainage 3046, facing north, upstream

Photograph 2: View of Drainage 3046, facing south, upstream showing OHWM

Photograph 1: View of Drainage 3047, facing northwest, upstream

Photograph 2: View of Drainage 3047, facing southeast, downstream

Photograph 1: View of Drainage 3048, facing east, downstream

Photograph 2: View of Drainage 3048, facing west, upstream

Photograph 1: View of Drainage 3049, facing northwest, upstream

Photograph 2: View of Drainage 3049, facing southeast, downstream

Photograph 1: View of Drainage 3050, facing north, upstream

Photograph 2: Drainage 3050, view of OHWM

Photograph 1: View of Drainage 3051, facing northwest, upstream

Photograph 2: View of Drainage 3051, facing southeast, downstream

Photograph 1: View of Drainage 3052, facing north, upstream

Photograph 2: View of Drainage 3052, facing south, downstream showing OHWM

Photograph 1: View of Drainage 3053, facing north, upstream

Photograph 2: Drainage 3053, view of OHWM

Photograph 1: View of Drainage 3054, facing north, upstream

Photograph 2: View of Drainage 3054, facing south, downstream

Photograph 1: View of Drainage 3055, facing northwest, upstream

Photograph 2: View of Drainage 3055, facing southeast, downstream

Photograph 1: View of Drainage 3056, facing east, downstream

Photograph 2: View of Drainage 3056, facing west, upstream

Photograph 1: View of Drainage 3057, facing north, upstream

Photograph 2: Drainage 3057, view of OHWM

Photograph 1: View of Drainage 3058, facing east, downstream showing OHWM

Photograph 2: View of Drainage 3058, facing west, upstream

Photograph 1: View of Drainage 3059, facing east, downstream

Photograph 2: View of Drainage 3059, facing north, upstream showing OHWM

Photograph 1: View of Drainage 3060, facing north, upstream

Photograph 2: View of Drainage 3060, facing south, downstream

Photograph 1: View of Drainage 3061, facing northeast, upstream showing OHWM

Photograph 2: View of Drainage 3061, facing southwest, downstream

Photograph 1: View of Drainage 3062, facing northeast, upstream

Photograph 2: View of Drainage 3062, facing southwest, downstream

Photograph 1: View of Drainage 3063, facing east, upstream

Photograph 2: View of Drainage 3063, facing west, downstream

Photograph 1: View of Drainage 3064, facing northeast, downstream

Photograph 2: Drainage 3064, view of OHWM

Photograph 1: View of Drainage 3065, facing east, downstream

Photograph 2: View of Drainage 3065, facing west, upstream

Photograph 1: View of Drainage 3066, facing east, upstream

Photograph 2: View of Drainage 3066, facing west, downstream showing OHWM

Photograph 1: View of Drainage 3067, facing north, upstream

Photograph 2: View of Drainage 3067, facing south, downstream

Photograph 1: View of Drainage 3068, facing east, view vegetation

Photograph 2: View of Drainage 3068, facing northwest, upstream showing OHWM

Photograph 1: View of Drainage 3069, facing west, downstream

Photograph 2: Drainage 3069, view of OHWM

Photograph 1: View of Drainage 3071, facing southeast, downstream

Photograph 2: View of Drainage 3071, facing west, upstream

Photograph 1: View of Drainage 3072, facing north, upstream

Photograph 2: View of Drainage 3072, facing south, downstream

Photograph 1: View of Drainage 3073, facing northeast, downstream

Photograph 2: View of Drainage 3073, facing southwest, upstream

Photograph 1: View of Drainage 3074, facing northwest, upstream

Photograph 2: View of Drainage 3074, facing southeast, downstream

Photograph 1: View of Drainage 3075, facing northeast, downstream

Photograph 2: View of Drainage 3075, facing southwest, upstream showing OHWM

Photograph 1: View of Drainage 3076, facing northwest, downstream

Photograph 2: View of Drainage 3076, facing southeast, upstream

Photograph 1: View of Drainage 3077, facing east, upstream

Photograph 2: Drainage 3077, view of OHWM

Photograph 1: View of Drainage 3078, facing north, upstream

Photograph 2: View of Drainage 3078, facing southwest, view of vegetation

Photograph 1: View of Drainage 3079, facing north, downstream

Photograph 2: View of Drainage 3079, facing south, upstream

Photograph 1: View of Drainage 3080, facing east, downstream

Photograph 2: View of Drainage 3080, facing west, upstream showing OHWM

Photograph 1: View of Drainage 3081, facing east, upstream

Photograph 2: View of Drainage 3081, facing west, downstream

Photograph 1: View of Drainage 3082, facing west, view of vegetation

Photograph 2: Drainage 3082, view of OHWM

Photograph 1: View of Drainage 3083, facing east, downstream

Photograph 2: View of Drainage 3083, facing west, upstream showing OHWM

Photograph 1: View of Drainage 3084, facing east, downstream

Photograph 2: View of Drainage 3084, facing west, upstream

Photograph 1: View of Drainage 3085, facing northwest, downstream

Photograph 2: View of Drainage 3085, facing southeast, upstream showing OHWM

Photograph 1: View of Drainage 3088, facing east, upstream

Photograph 2: View of Drainage 3088, facing west, downstream

Photograph 1: View of Drainage 3089, facing south, upstream

Photograph 2: Drainage 3089, view of OHWM

Photograph 1: View of Drainage 3090, facing south, upstream

Photograph 2: Drainage 3090, view of OHWM

Photograph 1: View of Drainage 3091, facing east, upstream

Photograph 2: View of Drainage 3091, facing west, downstream

Photograph 1: View of Drainage 3092, facing southeast, upstream

Photograph 2: Drainage 3092, view of OHWM

Photograph 1: View of Drainage 3093, facing northwest, downstream

Photograph 2: View of Drainage 3093, facing southeast, upstream

Photograph 1: View of Drainage 3094, facing northwest, upstream showing OHWM

Photograph 2: View of Drainage 3094, facing southeast, downstream

Photograph 1: View of Drainage 3095, facing northeast, downstream

Photograph 2: View of Drainage 3095, facing southwest, upstream

Photograph 1: View of Drainage 3097, facing northwest, upstream showing OHWM

Photograph 2: View of Drainage 3097, facing southeast, downstream

Photograph 1: View of Drainage 3098, facing north, upstream

Photograph 2: View of Drainage 3098, facing south, downstream

Photograph 1: View of Drainage 3099, facing northeast, downstream

Photograph 2: View of Drainage 3099, facing southwest, upstream

Photograph 1: View of Drainage 3100, facing east, downstream

Photograph 2: View of Drainage 3100, facing west, upstream

Photograph 1: View of Drainage 3101, facing east, downstream

Photograph 2: View of Drainage 3101, facing west, upstream showing OHWM

Photograph 1: View of Drainage 3102, facing east, downstream

Photograph 2: View of Drainage 3102, facing west, upstream

Photograph 1: View of Drainage 3103, facing east, downstream

Photograph 2: Drainage 3103, view of OHWM

Photograph 1: View of Drainage 3104, facing north, downstream

Photograph 2: View of Drainage 3104, facing south, upstream

Photograph 1: View of Drainage 3105, facing northeast, downstream

Photograph 2: View of Drainage 3105, facing southwest, upstream

Photograph 1: View of Drainage 3106, facing northeast, downstream

Photograph 2: View of Drainage 3106, facing southwest, upstream

Photograph 1: View of Drainage 3107, facing north, upstream

Photograph 2: View of Drainage 3107, facing south, downstream

Photograph 1: View of Drainage 3108, facing northwest, upstream

Photograph 2: View of Drainage 3108, facing southeast, downstream

Photograph 1: View of Drainage 3109, facing north, upstream

Photograph 2: View of Drainage 3109, facing south, downstream showing OHWM

Photograph 1: View of Drainage 3110, facing northeast, upstream

Photograph 2: View of Drainage 3110, facing southwest, downstream

Photograph 1: View of Drainage 3111, facing northwest, upstream

Photograph 2: View of Drainage 3111, facing southeast, downstream showing OHWM

Photograph 1: View of Drainage 3112, facing northwest, upstream

Photograph 2: View of Drainage 3112, facing southeast, downstream

Photograph 1: View of Drainage 3113, facing northwest, upstream

Photograph 2: View of Drainage 3113, facing southeast, downstream

Photograph 1: View of Drainage 3114, facing north, upstream

Photograph 2: View of Drainage 3114, facing south, downstream

Photograph 1: View of Drainage 3115, facing north, upstream

Photograph 2: View of Drainage 3115, facing south, downstream showing OHWM

Photograph 1: View of Drainage 3116, facing northeast, upstream

Photograph 2: View of Drainage 3116, facing south, downstream

Photograph 1: View of Drainage 3117, facing northwest, upstream

Photograph 2: View of Drainage 3117, facing southeast, downstream

Photograph 1: View of Drainage 3118, facing southwest, downstream

Photograph 2: Drainage 3118, view of OHWM

Photograph 1: View of Drainage 3119, facing north, downstream

Photograph 2: View of Drainage 3119, facing south, upstream showing OHWM

Photograph 1: View of Drainage 3121, facing east, upstream

Photograph 2: View of Drainage 3121, facing west, downstream

Photograph 1: View of Drainage 3122, facing northwest, downstream

Photograph 2: View of Drainage 3122, facing southeast, upstream showing OHWM

Photograph 1: View of Drainage 3123, facing northeast, downstream

Photograph 2: View of Drainage 3123, facing southwest, upstream

Photograph 1: View of Drainage 3124, facing north, upstream

Photograph 2: View of Drainage 3124, facing south, downstream

Photograph 1: View of Drainage 3125, facing north, downstream

Photograph 2: View of Drainage 3125, facing south, upstream

Photograph 1: View of Drainage 3126, facing east, upstream

Photograph 2: View of Drainage 3126, facing east, view of vegetatioin

Photograph 1: View of Drainage 3127, facing northeast, downstream

Photograph 2: View of Drainage 3127, facing southwest, upstream

Photograph 1: View of Drainage 3128, facing northeast, upstream

Photograph 2: View of Drainage 3128, facing southwest, downstream showing OHWM

Photograph 1: View of Drainage 3129, facing northwest, upstream

Photograph 2: View of Drainage 3129, facing southeast, downstream

Photograph 1: View of Drainage 3130, facing southwest, downstream

Photograph 2: Drainage 3130, view of OHWM

Photograph 1: View of Drainage 3131, facing northwest, upstream showing OHWM

Photograph 2: View of Drainage 3131, facing southeast, downstream

Photograph 1: View of Drainage 3132, facing northeast, upstream

Photograph 2: View of Drainage 3132, facing southwest, downstream showing OHWM

Photograph 1: View of Drainage 3133, facing east, downstream

Photograph 2: View of Drainage 3133, facing west, upstream showing OHWM

Photograph 1: View of Drainage 3134, facing north, upstream

Photograph 2: View of Drainage 3134, facing south, downstream

Photograph 1: View of Drainage 3135, facing northeast, downstream

Photograph 2: View of Drainage 3135, facing southwest, upstream

Photograph 1: View of Drainage 3136, facing north, downstream

Photograph 2: Drainage 3136, view of OHWM

Photograph 1: View of Drainage 3137, facing northwest, upstream

Photograph 2: View of Drainage 3137, facing southeast, downstream

Photograph 1: View of Drainage 3138, facing east, downstream showing OHWM

Photograph 2: View of Drainage 3138, facing west, upstream

Photograph 1: View of Drainage 3139, facing east, downstream

Photograph 2: View of Drainage 3139, facing west, upstream showing OHWM

Photograph 1: View of Drainage 3140, facing northwest, upstream

Photograph 2: View of Drainage 3140, facing southeast, downstream showing OHWM

Photograph 1: View of Drainage 3141, facing east, downstream

Photograph 2: View of Drainage 3141, facing west, upstream

Photograph 1: View of Drainage 3143, facing northeast, downstream

Photograph 2: View of Drainage 3143, facing southwest, upstream

Photograph 1: View of Drainage 3144, facing southeast, downstream

Photograph 2: Drainage 3144, view of OHWM

Photograph 1: View of Drainage 3145, facing northeast, upstream

Photograph 2: View of Drainage 3145, facing southwest, downstream

Photograph 1: View of Drainage 3146, facing east, downstream

Photograph 2: View of Drainage 3146, facing west, upstream

Photograph 1: View of Drainage 3147, facing northwest, downstream

Photograph 2: View of Drainage 3147, facing southeast, upstream

Photograph 1: View of Drainage 3152, facing northwest, downstream

Photograph 2: View of Drainage 3152, facing southeast, upstream

Photograph 1: View of Drainage 3153, facing northwest, downstream

Photograph 2: View of Drainage 3153, facing southeast, upstream

Photograph 1: View of Drainage 3154, facing northwest, downstream

Photograph 2: View of Drainage 3154, facing southeast, upstream

Photograph 1: View of Drainage 3159, facing north, downstream

Photograph 2: View of Drainage 3159, facing south, upstream

Photograph 1: View of Drainage 3161, facing northeast, upstream

Photograph 2: View of Drainage 3161, facing southwest, downstream

Photograph 1: View of Drainage 3162, facing southeast, upstream

Photograph 2: Drainage 3162, view of OHWM

Photograph 1: View of Drainage 3167, facing northeast, upstream

Photograph 2: View of Drainage 3167, facing southwest, downstream

Photograph 1: View of Drainage 3175, facing north, upstream

Photograph 2: View of Drainage 3175, facing south, downstream

Photograph 1: View of Drainage 3181, facing east, upstream

Photograph 2: View of Drainage 3181, facing west, downstream

Photograph 1: View of Drainage 3184, facing north, upstream

Photograph 2: View of Drainage 3184, facing south, downstream

Photograph 1: View of Drainage 3190, facing northeast, upstream

Photograph 2: View of Drainage 3190, facing southwest, downstream

Photograph 1: View of Drainage 3195, facing northeast, upstream

Photograph 2: View of Drainage 3195, facing southwest, downstream

Photograph 1: View of Drainage 3196, facing north, upstream

Photograph 2: View of Drainage 3196, facing south, downstream

Photograph 1: View of Drainage 3199, facing northeast, upstream

Photograph 2: View of Drainage 3199, facing southwest, downstream

Photograph 1: View of Drainage 3202, facing northeast, upstream

Photograph 2: View of Drainage 3202, facing southwest, downstream

Photograph 1: View of Drainage 3203, facing northeast, upstream showing OHWM

Photograph 2: View of Drainage 3203, facing southwest, downstream

Photograph 1: View of Drainage 3205, facing east, downstream

Photograph 2: View of Drainage 3205, facing west, upstream

Photograph 1: View of Drainage 3206, facing north, upstream

Photograph 2: View of Drainage 3206, facing south, upstream

Photograph 1: View of Drainage 3207, facing northeast, upstream

Photograph 2: View of Drainage 3207, facing southwest, downstream

Photograph 1: View of Drainage 3209, facing north, upstream showing OHWM

Photograph 2: View of Drainage 3209, facing south, downstream

Photograph 1: View of Drainage 3211, facing north, upstream

Photograph 2: View of Drainage 3211, facing south, downstream

Photograph 1: View of Drainage 3212, facing north, upstream

Photograph 2: View of Drainage 3212, facing south, downstream

Photograph 1: View of Drainage 3213, facing north, upstream

Photograph 2: View of Drainage 3213, facing south, downstream

Photograph 1: View of Drainage 3214, facing east, upstream showing OHWM

Photograph 2: View of Drainage 3214, facing west, downstream

Photograph 1: View of Drainage 3216, facing northeast, upstream

Photograph 2: View of Drainage 3216, facing southwest, downstream

Photograph 1: View of Drainage 3217, facing east, upstream showing OHWM

Photograph 2: View of Drainage 3217, facing west, downstream

Photograph 1: Drainage 3218, view of OHWM

Photograph 2: View of Drainage 3218, facing north, upstream

Photograph 1: View of Drainage 3219, facing east, upstream

Photograph 2: View of Drainage 3219, facing west, downstream

Photograph 1: View of Drainage 3220, facing east, upstream

Photograph 2: View of Drainage 3220, facing west, downstream

Photograph 1: View of Drainage 3221, facing north, downstream

Photograph 2: View of Drainage 3221, facing south, upstream

Photograph 1: View of Drainage 3222, facing north, downstream

Photograph 2: View of Drainage 3222, facing south, upstream

Photograph 1: View of Drainage 3223, facing east, upstream

Photograph 2: View of Drainage 3223, facing west, downstream

ATTACHMENT D: COMPLETED DRAINAGE SURVEY DATA FORMS

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward
Date: 04/26/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 feet
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment deposition
Average Height of OHWM: 2 inches
Average Width of OHWM: 2 feet
Describe Water Quality: N/A
Describe any Pollutants: Shooting range in drainage/trash
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage stops at an access road.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/26/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Gravel

Substrate Composition Notes:

Type of Vegetation within Bed: Mixed Desert Scrub

Percent Vegetation Cover within Bed: 10

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows to drainage 1001.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/26/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Gravel

Substrate Composition Notes:

Type of Vegetation within Bed: Mixed Desert Scrub

Percent Vegetation Cover within Bed: 3

Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 4 feet

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: Trash/ shooting range near road

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage stops or dissipates and does not flow into another drainage.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/27/10 Time: Not Available Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 2

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 6 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Sediment deposition

Average Height of OHWM: 1 inch

Average Width of OHWM: 3 feet

Describe Water Quality: N/A

Describe any Pollutants: Trash/ shooting range on eastern end

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/27/10 Time: Not Available Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 2

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 6 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 5 feet

Describe Water Quality: N/A

Describe any Pollutants: Trash

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/27/10 Time: Not Available Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 10

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 foot

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/27/10 Time: Not Available Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 4 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into drainage 1006.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/27/10 Time: Not Available Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 10

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 2 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into drainage 1007.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/27/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 2

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 8 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 3 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/27/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 15

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 5 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward
Date: 04/28/10 Time: Not Available Weather: Rain

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 foot
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour line
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 foot
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Rain

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 10

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 foot

Average Width of TOB to TOB: 2 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Presence of litter and debris

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Rain

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 1 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 foot

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Rain

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 2

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 4 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Rain

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 1:1 or less

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Rain

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 foot

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Presence of litter and debris

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 2

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 3 feet

Average Width of TOB to TOB: 6 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Sediment deposition

Average Height of OHWM: 1 inch

Average Width of OHWM: 4 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 4 feet

Average Width of TOB to TOB: 6 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Presence of litter and debris

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 1:1 or less

Primary Substrate Composition: Cobbles

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 4

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 4 feet

Average Width of TOB to TOB: 6 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 2 inches

Average Width of OHWM: 3 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows to culvert under Old Highway 80.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 3

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 3 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 foot

Average Width of TOB to TOB: 4 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows to drainage 1019.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 foot

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 feet

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows to culvert under Old Highway 80.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/28/10 Time: Not Available Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 3

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: 2 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into drainage 1021.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/29/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 10

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 2 feet

Average Width of TOB to TOB: 5 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into drainage 1021.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward
Date: 04/29/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 feet
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour line
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 foot
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into dirt road.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Jeff Coward

Date: 04/29/10 Time: Not Available Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Mixed Desert Scrub

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 foot

Average Width of TOB to TOB: 2 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour line

Average Height of OHWM: 1 inch

Average Width of OHWM: 1 foot

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage stops or dissipates and does not flow into another drainage.

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 8:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 foot
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 9:16 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 6 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 9:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Significant percentage of cobble present
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 10:15 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Significant amount of cobble also present
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 13 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/02/10 Time: 10:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Sands

Substrate Composition Notes: Significant amount of cobble also present

Type of Vegetation within Bed: Unvegetated

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 inch

Average Width of TOB to TOB: 3 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour

Average Height of OHWM: 1 inch

Average Width of OHWM: 3 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/02/10 Time: 10:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Sands

Substrate Composition Notes: Significant amount of cobble also present

Type of Vegetation within Bed: Unvegetated

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 1 inch

Average Width of TOB to TOB: 10 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Deposition

Presence of litter or debris

Average Height of OHWM: 1 inch

Average Width of OHWM: 3 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 12:30 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 12 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 1:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Significant amounts of sand also present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 3 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 2:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 26 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 5 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 2:43 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 16 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/02/10 Time: 2:56 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 7:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 8:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 9 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 8:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 9:02 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 16 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 9:27 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Significant amount of cobble also present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 9:58 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Significant amount of cobble also present
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 10:45 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 10:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 12:25 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Significant cobbles present, especially in upper reaches
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/03/10 Time: 12:49 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Cobbles

Substrate Composition Notes: Significant Sands present, especially in lower reaches

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 7 inches

Average Width of TOB to TOB: 20 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Sediment sorting
Shelving

Average Height of OHWM: 2 inches

Average Width of OHWM: 5 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 1:01 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes: Significant Sands present, especially in lower reaches
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 21 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 1:19 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Significant Sands present, especially in lower reaches
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/03/10 Time: 1:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 4 inches

Average Width of TOB to TOB: 16 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour

Sediment sorting

Average Height of OHWM: 1 inch

Average Width of OHWM: 4 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/03/10 Time: 3:18 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 7:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 7:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some gravel and cobbles present also
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 7:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present also
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest

Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 19 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 8:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 8:19 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Artificial
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Gravel also present, in road
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 9 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 8:36 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 9:03 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 14 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 9:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 9:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 10:03 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Some sands present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 10:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 17 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/04/10 Time: 10:29 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Cobbles

Substrate Composition Notes: Some sands present

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 8

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 10 inches

Average Width of TOB to TOB: 26 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour

Sediment sorting

Average Height of OHWM: 4 inches

Average Width of OHWM: 6 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/04/10 Time: 10:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Cobbles

Substrate Composition Notes: Some sands present

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 7 inches

Average Width of TOB to TOB: 26 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Deposition

Sediment sorting

Average Height of OHWM: 1 inch

Average Width of OHWM: 3 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 10:43 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/04/10 Time: 10:54 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes: Some cobbles present

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 5 inches

Average Width of TOB to TOB: 19 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Sediment sorting

Presence of litter or debris

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 11:15 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Some sands present, especially at lower end
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 feet
Average Width of TOB to TOB: 5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 11:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 14 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 1:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobble present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 1:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobble present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/04/10 Time: 1:34 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Deposition
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 7:15 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Change in plant community
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 0.1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 7:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 19 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/05/10 Time: 8:05 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 2:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Unvegetated

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 4 inches

Average Width of TOB to TOB: 12 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Shelving

Scour

Average Height of OHWM: 2 inches

Average Width of OHWM: 4 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 8:16 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 11 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/05/10 Time: 8:45 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes: Some cobbles present

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 5

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 6 inches

Average Width of TOB to TOB: 28 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour

Sediment sorting

Average Height of OHWM: 2 inches

Average Width of OHWM: 8 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 8:52 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 9:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles and gravel present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 9:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Some sands present
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 32 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Deposition
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 9:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 9:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/05/10 Time: 12:12 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes: Some cobbles present

Type of Vegetation within Bed: Unvegetated

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 16 inches

Average Width of TOB to TOB: 7 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Change in plant community
Deposition

Average Height of OHWM: 2 inches

Average Width of OHWM: 8 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 12:35 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 34 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 12:55 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Some sands present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 12:58 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Some sands present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 1:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/05/10 Time: 1:45 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes: Some cobbles present

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 10

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: Southwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 9 inches

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Deposition
Sediment sorting

Average Height of OHWM: 1 inch

Average Width of OHWM: 4 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/05/10 Time: 2:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: Loggerhead shrike (CSC) observed near top of watershed
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 7:33 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Change in plant community
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 7:41 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 14 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 7:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present in lower end
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/07/10 Time: 8:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes: Some cobbles present

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 20

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: Southwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 6 inches

Average Width of TOB to TOB: 3 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Deposition
Sediment sorting

Average Height of OHWM: 1 inch

Average Width of OHWM: 10 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 8:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 21 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Change in plant community
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 8:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 2 inches
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 8:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Presence of litter or debris
Average Height of OHWM: 2 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 9:02 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Some sands present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Change in plant community
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 9:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes: Some sands present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 10:01 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 10:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 11:11 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 34 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 1:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 2:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 2:24 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 34 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/07/10 Time: 2:34 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 7:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Some cobbles present
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 7:27 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 7:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 7:41 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Silts
Substrate Composition Notes: Dirt
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 19 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 7:51 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Silts
Substrate Composition Notes: Dirt
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/08/10 Time: 8:05 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Unvegetated

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 4 inches

Average Width of TOB to TOB: 30 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Deposition
Shelving

Average Height of OHWM: 1 inch

Average Width of OHWM: 2 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 8:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 8:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 9:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Silts
Substrate Composition Notes: Dirt
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 14 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 10:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Deposition
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 10:07 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 10:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 32 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 1:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 1:18 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 1:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Change in plant community
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 3:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Change in plant community
Average Height of OHWM: 5 inches
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/08/10 Time: 3:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 7:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Change in plant community
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 7:56 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 8:13 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 8:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 9:17 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 9:24 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 9:37 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Change in plant community
Deposition
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 10:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 10:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 10:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 11:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher

Date: 06/09/10 Time: 12:33 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 3:1

Primary Substrate Composition: Sands

Substrate Composition Notes:

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 10

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 4 inches

Average Width of TOB to TOB: 22 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Scour

Sediment sorting

Average Height of OHWM: 2 inches

Average Width of OHWM: 4 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 1:04 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 1:36 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 3:19 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 13 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/09/10 Time: 3:23 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 7:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 16 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Sediment Sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 7:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Sediment Sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 8:02 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Sediment Sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 8:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Sediment Sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 8:16 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Sediment Sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 8:23 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 11 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Sediment Sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 8:39 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 8:45 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 9:23 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 9:33 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 11:17 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Deposition
Average Height of OHWM: 3 inches
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 11:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 32 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 11:34 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 11:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 21 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 12:07 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 12:39 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 1:02 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 1:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 1:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 1:36 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 1:41 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 2:05 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 32 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 2:11 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 31 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 2:21 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/10/10 Time: 2:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 8:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 9:56 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 10:25 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 10:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 21 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 10:51 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 11:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 17 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 11:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 32 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 11:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 11:54 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 31 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 1:13 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 1:23 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 8 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 36 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 1:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 32 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 1:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 1:59 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/11/10 Time: 2:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/12/10 Time: 7:16 AM Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/12/10 Time: 7:49 AM Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/12/10 Time: 7:59 AM Weather: Overcast

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/12/10 Time: 8:09 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/12/10 Time: 8:14 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Bill Fischer & Larry Butcher
Date: 06/12/10 Time: 8:29 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 8:51 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 9:03 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 19 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 9:12 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 9:20 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 33 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 9:27 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 9:37 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 9:40 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 16 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 11:15 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 11:49 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 12:58 PM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 1:03 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 1:20 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 35 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 1:25 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 19 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 1:30 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a side channel off of a main drainage channel.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 1:46 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 1:50 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 30 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/12/10 Time: 2:00 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 7:14 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 7:24 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 7:31 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 32 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 7:44 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 7:55 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 33 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 8:02 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 8:08 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 35 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 8:13 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 8:20 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 35
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 8:36 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 8:44 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South

Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

The upper reaches of this drainage are in the dirt road.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 8:52 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

The upper reaches of this drainage are in the dirt road.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 9:15 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows along an access road and terminates west of the road.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 9:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 16 inches
Average Width of TOB to TOB: 5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 2 inches
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a large drainage with cat-claw acacia nearby.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 9:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 34 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 9:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 9:52 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 9:58 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 10:07 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Deposition
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 10:18 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows southwest through an access road.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 10:25 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 10:33 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage runs off of an access road down a steep slope of cobble to sandy substrate.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 12:28 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 14 inches
Average Width of TOB to TOB: 7 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: One fledgling and one adult loggerhead shrike observed in this drainage
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage runs through an access road.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 12:41 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 35
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 9 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage runs down the middle off an access road.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 12:47 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 14 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage follows along the access road, and then heads perpendicular to road heading northwest.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/14/10 Time: 1:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the road and runs perpendicular to it, and then heads to the northwest.

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/15/10 Time: 7:43 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 11 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Scour
Average Height of OHWM: 2 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: John Kunna & Larry Butcher
Date: 06/15/10 Time: 7:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 16 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Deposition
Scour
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage begins at an access road.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Lauren Brudney
Date: 08/26/10 Time: 8:30 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 25 inches
Average Width of TOB to TOB: 18 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 2 inches
Average Width of OHWM: 9 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

The east side of the drainage looks like it could be used as a road. The drainage eventuall\y flows under Old Highway 80 through a culvert.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Lauren Brudney
Date: 08/26/10 Time: 8:40 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 feet
Average Width of TOB to TOB: 10.5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 1.5 inches
Average Width of OHWM: 3.5 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into D1451

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Lauren Brudney
Date: 08/26/10 Time: 8:52 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 3 inches
Average Width of OHWM: 1.5 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road and connects to a larger drainage outside of the survey area.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Lauren Brudney
Date: 08/26/10 Time: 9:03 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 3.5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road and connects to a larger drainage outside of the survey area.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Lauren Brudney
Date: 08/26/10 Time: 9:12 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 2.5 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road and connects to a larger drainage outside of the survey area. When crosses the access road, there is a small portion that diverges which we called and island (not two drainages), but it only accounts for approix

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Lauren Brudney
Date: 08/26/10 Time: 9:22 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3.5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 2.5 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road and connects to a larger drainage outside of the survey area.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Lauren Brudney
Date: 08/26/10 Time: 9:32 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 1.5 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road and connects to a larger drainage outside of the survey area.

Surveyor, Date, and Weather Information:

Surveyors: Jeff Coward & Lauren Brudney
Date: 09/20/10 Time: 9:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 22 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a non-contiguous drainage. It drains into the access road and then stops.

Surveyor, Date, and Weather Information:

Surveyors: Jeff Coward & Lauren Brudney
Date: _____ Time: 10:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 19 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Only a small portion of this drainage was within the survey boundary. It is a small tributary that flows into drainage 1451.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 8:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: historic tin can in drainage
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 8:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 7 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 48 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 9:52 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows southwest on an access road, and then flows south off of the access road.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 9:52 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 24 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts north of an access road. An existing concrete culvert below the access road is broken and clogged. Drainage flows over the access road and existing concrete culvert. The south end of concrete culvert is exposed.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 11:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 17 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage runs through an access road, and then runs south.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 11:46 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type:
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 feet
Average Width of TOB to TOB: 26 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Deposition
Average Height of OHWM: 12 inches
Average Width of OHWM: 20 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage begins in an access road.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 12:00 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 40 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 40 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into an access road. The access road acts as a drainage feature.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 12:28 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 60
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This feature identifies an access road that is within the OHWM of Carrizo Creek. The width of the access road is approximately 50 feet.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 1:34 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Cobbles
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 22 inches
Average Width of TOB to TOB: 9 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Vegetation matted down, bent, or absent
Average Height of OHWM: 10 inches
Average Width of OHWM: 26 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This feature identifies an access road that is within the OHWM of Carrizo Creek. The width of the access road is approximately 35 feet.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 1:34 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 5 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 2:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 4.5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 5 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 3:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 24 inches
Average Width of TOB to TOB: 25 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 5 inches
Average Width of OHWM: 168 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This feature identifies an access road that is within the OHWM of Carrizo Creek.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 3:21 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 12 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 3 inches
Average Width of OHWM: 36 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage 2041 is in a road that runs perpendicular to drainage 2040.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 3:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 6 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage 2042 flows into access road to steel pole location 94.

Surveyor, Date, and Weather Information:

Surveyors: Peter Boice & Derek Siver
Date: 06/02/10 Time: 4:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 17 inches
Average Width of TOB to TOB: 7 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 6 inches
Average Width of OHWM: 48 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into access road to steel pole location 94.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 7:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 14 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
A clear, natural line impression on the bank
Average Height of OHWM: 5 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into access road to steel pole location 94.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 8:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Falls down off of access road through cobbles to sand.
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 16 inches
Average Width of TOB to TOB: 60 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
A clear, natural line impression on the bank
Average Height of OHWM: 5 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows into access road to steel pole location 94.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 8:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: cobbles
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 48 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage 2046 flows into access road to steel pole location 94.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 10:04 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: cobbles
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 4-5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 54 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 3 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage 2048 connects with drainage 2047 at main access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 10:25 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 84 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This feature identifies an access road that is within the OHWM of Carrizo Creek. The width of the access road is approximately 50 feet.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 10:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Average Height of OHWM: 6 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows through access road. Drainage has straw wattle erosion control device on southwest side. There are pieces of broken concrete in the drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 12:48 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 48 inches
Average Width of TOB to TOB: 10 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 25 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is within previously recorded top of bank (TOB) of Carrizo Creek that surrounds pad SP 90.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 1:04 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 22 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 5 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is within previously recorded top of bank (TOB) of Carrizo Creek that surrounds pad SP 90.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice

Date: 06/03/10 Time: 1:25 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Sands

Substrate Composition Notes: and gravel

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 15

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: North

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 36 inches

Average Width of TOB to TOB: 8 feet

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Sediment sorting

Scour

Average Height of OHWM: 2 inches

Average Width of OHWM: 60 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 2:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Shape file 2056 delineates the southern half of pad SP 87. Southern half of pad SP 87 is within OHWM of Carrizo Creek.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 2:17 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Shape file 2057 delineates the southern half of pad SP 88. Southern 1/3 of pad SP 88 is within OHWM of Carrizo Creek. Top of Bank extends north 100 feet into the pad.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 2:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 16
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 36 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is braided with meandering flows as indicated by a lack of vegetation.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 3:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 18
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 36 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 5 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is braided with meandering flows as indicated by a lack of vegetation.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/03/10 Time: 3:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 48 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 48 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 6:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
A clear, natural line impression on the bank
Average Height of OHWM: 6 inches
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 6:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows down a road that is perpendicular to the main access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 10:39 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins in access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 10:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 foot
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins in access road, and then flows north.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 11:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows along and across an access road. Within access road drainage expands into numerous braided drainages that reconnect on the northeast side of the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 11:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 15 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 133 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins in access road, and flows north.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 11:23 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 12 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 138 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 11:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins in access road, and flows east.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 12:36 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 5 inches
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins in access road, and flows northeast, and also flows adjacent to access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 2:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 24 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 4 inches
Average Width of OHWM: 18 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins in access road, and flows northeast.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 1:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 18 feet
Average Width of TOB to TOB: 50 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 18 feet
Average Width of OHWM: 50 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows along access road to steel pole location 74 and then heads north over main access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 2:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 16 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows northeast from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/04/10 Time: 2:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 36 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows along access road and northeast from access.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 7:43 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 96 inches
Average Width of TOB to TOB: 50 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 48 inches
Average Width of OHWM: 50 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows east adjacent to access road. A silt fence erosion control device has been installed 15 feet west of the eastern extent of the mapped drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 8:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 feet
Average Width of TOB to TOB: 50 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Average Height of OHWM: 48 inches
Average Width of OHWM: 50 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows within access road to pad SP 72. In two locations the drainage becomes braided and spread out, to the point that the entire width of the road is the drainage. Drainage then flows off the access road and becomes a blue line drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 9:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Cobbles
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 9 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 80 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows southwest from access road. A straw wattle erosion control device is installed 3 feet from where the drainage intersects with the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 9:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Cobbles
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 9 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 80 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows southwest from access road. A silt fence erosion control device is installed 3 feet from where the drainage intersects with the access road. Drainage becomes numerous braided small drainages that exhibit ponding in some areas but generally

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 9:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Bedrock
Substrate Composition Notes: and cobbles
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 feet
Average Width of TOB to TOB: 97 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 40 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows northwest from the access road. Drainage is braided with two drainage features that weave in and out from each other. A straw wattle erosion control device is In place on the northwest side of the road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 9:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Bedrock
Substrate Composition Notes: and cobbles
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows southwest from the access road. Drainage is braided with two drainage features that weave in and out from each other. A straw wattle erosion control device is In place on the southwest side of the road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 10:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Bedrock
Substrate Composition Notes: and cobbles
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 29 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows west inside access road and flows northwest from the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 10:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Bedrock
Substrate Composition Notes: and cobbles
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 72 inches
Average Width of TOB to TOB: 8 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows south across access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/05/10 Time: 12:17 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows parallel to access road and southwest over access road. Silt fence erosion control device on southwest side of access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/06/10 Time: 7:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road to D2094.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 7:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 24 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 7:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 7:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 3-4 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 8:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 32 inches
Average Width of TOB to TOB: 18 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 105 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road. Drainage merges with two other adjacent drainage features 7 feet downstream.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 8:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 80 inches
Average Width of TOB to TOB: 20 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 30 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road. Drainage merges with two other adjacent drainage features 7 feet downstream.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 9:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobles
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 72 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road. Drainage merges with two other adjacent drainage features 7 feet downstream. A straw wattle erosion control device is 4 feet downstream in the drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 9:16 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobles
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
A clear, natural line impression on the bank
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road. A straw wattle erosion control device is in place in the drainage 2 feet downstream from the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 9:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobles
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
A clear, natural line impression on the bank
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 10:46 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 39 inches
Average Width of TOB to TOB: 28 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows across access road. Silt fence erosion control device in place in drainage 6 feet downstream on the southeast side of access road. Abundant debris, chemical containers, and garbage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 11:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 foot
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows as a rut in an adjacent two-track road. Flows into D2104 at access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 11:16 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 6 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 11:46 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 11:57 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage is a rut within the access road. All other tributaries are also ruts within adjacent two track roads. Drainage enlarges and widens to entire width of access road near main paved road. Silt fence erosion control device is installed at botto

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 12:07 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Shelving
Average Height of OHWM: 4 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage starts as numerous small rivulets that converge into a rut in an adjacent two track road and drains into D2108.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 12:21 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobbles
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 21
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 4 inches
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage starts as numerous small rivulets that converge into a rut in an adjacent two track road and drains into D2108.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 1:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobbles
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows off access road. A straw wattle erosion control device is in place 3 feet downstream in drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 1:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobbles
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 3 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 30 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows off access road. A straw wattle erosion control device is in place 5 feet downstream in drainage. A silt fence erosion control device is in place 13 feet downstream in the drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 2:15 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 8 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 29 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage is within a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 2:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Bedrock
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 3 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows off the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 3:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 1-2 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 18 inches
Average Width of TOB to TOB: 5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 45 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows through the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 4:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 4 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 3 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage is within a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/07/10 Time: 4:15 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 4 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage is within a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 6:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 2-3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 8 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 5 inches
Average Width of OHWM: 45 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage has fence on northern side of access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 6:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 2-3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows across access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 7:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobles
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 7:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and cobles
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 7:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 5 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage is a rut in a road adjacent to the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 7:46 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 3 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 8 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage is a rut in a road adjacent to the access road. Drainage flows into D2125.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 7:46 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 3 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 4 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire drainage is a rut in a road adjacent to the access road. Drainage flows into D2125.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 7:51 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 3 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 4 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows across access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 8:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 8:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 8:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 10 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 7 inches
Average Width of OHWM: 72 inches
Describe Water Quality: N/A
Describe any Pollutants: Wood, metal, chemical containers.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in an adjacent road within the pad.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 9:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in an adjacent road within the pad.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 9:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Bedrock
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5-6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 10:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows down the access road and off the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 12:10 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
A clear, natural line impression on the bank
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: Trash can in drainage.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in an adjacent road within the pad.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 12:36 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 12 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is in a large 'V' shaped formation.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 1:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 8 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 1:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 37 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 1:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 16 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 16 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage in large wash formation. Top of bank may be up to 20 feet across and 6 feet high.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 1:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 7 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 6 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 2:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 13 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/08/10 Time: 2:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel, cobbles, and pieces of concrete.
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 25 inches
Average Width of TOB to TOB: 7 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
A clear, natural line impression on the bank
Average Height of OHWM: 3 inches
Average Width of OHWM: 6 feet
Describe Water Quality: N/A
Describe any Pollutants: Pieces of concrete, and insulation.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage has silt fence and straw wattle erosion control device in place 3 feet downstream.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 7:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 14 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Vegetation matted down, bent, or absent
Average Height of OHWM: 10 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage has silt fence and straw wattle erosion control device in place 3 feet downstream.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 7:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
A clear, natural line impression on the bank
Average Height of OHWM: 11 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

GPS line file 2150 delineates Top of Bank of Carrizo Creek.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 7:45 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
A clear, natural line impression on the bank
Average Height of OHWM: 7 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows across paved access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 8:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 59 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 7 inches
Average Width of OHWM: 28 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 8:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 1-2 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 38 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 27 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 8:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 6 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 4 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage starts as an artificially created drainage on southwest side of access road. Drainage begins at access road. Numerous drainages flowing into and out of access road, with no measurable connectivity. Flow and connectivity of entire access road to b

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 8:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins at access road. Numerous drainages flowing into and out of access road, with no measurable connectivity. Flow and connectivity of entire access road to be determined at a later date. Silt fence erosion control device in place 2 feet downst

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 8:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 8:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 8:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 9:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 14 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 9 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage begins as a rut in the access road and flows south from access road. Redundant straw wattle erosion control device around drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 10:14 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage is a rut in the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 10:37 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 48 inches
Average Width of TOB to TOB: 137 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 4 inches
Average Width of OHWM: 28 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows south across access road. Straw wattle erosion control device on south side of access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 11:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 75
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 70 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Change in plant community
Average Height of OHWM: 10 inches
Average Width of OHWM: 69 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows along access road and south from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 11:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 13 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows along access road and south from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 11:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 24 inches
Average Width of TOB to TOB: 49 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows along access road and into another drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 11:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows along access road and into another drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 11:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows from access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 12:18 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 7 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage flows across access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 1:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 90
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Change in plant community
Water staining
Average Height of OHWM: 7 inches
Average Width of OHWM: 43 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 1:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 90
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 2 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Change in plant community
Water staining
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 1 inch
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 1:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/09/10 Time: 2:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: Yes Type: Puddles
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 120 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Vegetation matted down, bent, or absent
Average Height of OHWM: 4 inches
Average Width of OHWM: 67 inches
Describe Water Quality: Appeared to be good quality
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 7:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 55 inches
Average Width of TOB to TOB: 50 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 48 inches
Average Width of OHWM: 50 feet
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 8:20 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 113 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 5 inches
Average Width of OHWM: 113 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 8:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 7 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 8:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 25
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 8:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 6 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 9:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 115 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 10:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 11:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 10 feet
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 36 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Entire access road was mapped as a drainage as it is the only downhill sloping feature with a measurable bed and bank. Other adjacent roads connect with the main access road and generally slope downhill. Road/drainage is frequently graded and an OHWM can

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 11:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and bedrock
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 1 foot
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 12:15 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 14 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 5 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 12:28 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 5 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 12:34 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 1:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 5 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/10/10 Time: 1:56 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 240 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Water staining
Change in plant community
Average Height of OHWM: 5 inches
Average Width of OHWM: 240 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice

Date: 06/11/10 Time: 8:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Bedrock

Substrate Composition Notes: and sands

Type of Vegetation within Bed: Mixed Desert Scrub

Percent Vegetation Cover within Bed: 30

Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 30 inches

Average Width of TOB to TOB: 120 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Vegetation matted down, bent, or absent
Scour

Average Height of OHWM: 4 inches

Average Width of OHWM: 72 inches

Describe Water Quality: N/A

Describe any Pollutants: Abundant amounts of trash, shot gun shells, metal, plastics, and wood are a general feature of the downhill section of the drainage near the access road.

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 9:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 9:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 10:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 65 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 10:27 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Scour
Average Height of OHWM: 2 inches
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice

Date: 06/11/10 Time: 1:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Gravel

Substrate Composition Notes: and sands

Type of Vegetation within Bed: Mixed Desert Scrub

Percent Vegetation Cover within Bed: 20

Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 5 inches

Average Width of TOB to TOB: 36 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Bed and banks

Change in plant community

Average Height of OHWM: 4 inches

Average Width of OHWM: 36 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice

Date: 06/11/10 Time: 1:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Gravel

Substrate Composition Notes: and sands

Type of Vegetation within Bed: Mixed Desert Scrub

Percent Vegetation Cover within Bed: 20

Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 5 inches

Average Width of TOB to TOB: 10 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Bed and banks

Scour

Average Height of OHWM: 2 inches

Average Width of OHWM: 3 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 2:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 37 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 30 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 2:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 37 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 30 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 2:51 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/11/10 Time: 2:57 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage splits with island features in middle.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:27 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage has silt fence and straw wattle erosion control devices in place on the south side of the access road.
Drainage flows over access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage starts at road. Silt fence erosion control device in place at beginning of drainage.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:41 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage starts as rut in the access road. Drainage flows over silt fence erosion control device at road and downhill.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice

Date: 06/12/10 Time: 7:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Gravel

Substrate Composition Notes: and sands

Type of Vegetation within Bed: Unvegetated

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Mixed Desert Scrub

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 3 inches

Average Width of TOB to TOB: 10 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Vegetation matted down, bent, or absent

Bed and banks

Average Height of OHWM: 1 inch

Average Width of OHWM: 4 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 7:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 8:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 8:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 9:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 30 inches
Average Width of TOB to TOB: 80 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Flows from a culvert under a driveway that has a diameter of 2 feet. Flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 9:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 4 inches
Average Width of OHWM: 17 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Flows northwest into drainage 3002. The drainage starts at a dirt road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 9:53 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Small drainage running into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 9:58 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Very small drainage that joins with drainage 3004 and then flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 10:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 8 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a very small drainage that flows into drainage 3007 which then flows into drainage 3002. This drainage seems to flow from the Boulevard Substation. It has small granite rocks placed at the top near the substation.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 10:45 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is roadside runoff that flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 10:45 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3002. It flows east and as it reaches drainage 3002 it falls into a hole and flows underground to the drainage. Ground squirrels have been digging in this area so it is hard to determine bed and bank here.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 10:59 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 40 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Sediment sorting
Average Height of OHWM: 3 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a roadside ditch that flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 12:00 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 122 inches
Average Width of TOB to TOB: 240 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Change in plant community
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a roadside ditch that flows into drainage 3012 which flows into 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 12:16 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 27 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Change in plant community
Average Height of OHWM: 5 inches
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small roadside drainage that flows into drainage 3012 which flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 12:16 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes: and gravel, and cobbles
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 26 inches
Average Width of TOB to TOB: 44 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a smaller drainage that flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 12:50 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 46 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 7 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a very small drainage that flows into drainage 3002,

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 12:58 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 46 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 7 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage that flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 1:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

These are smaller roadside drainages that flow into a larger roadside drainage that eventually flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 1:11 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

These are smaller roadside drainages that flow into a larger roadside drainage that eventually flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 1:14 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a smaller roadside drainage that flows into a larger roadside drainage that then flows into drainage 3002.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 1:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road. It also flows much further but we stopped at 17.5 feet from the centerline of the access road.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 1:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage that seems to flow west into a larger drainage outside the survey area. There should not be a jagged line at the end as seen in the GPS unit.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 1:34 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage has been manipulated. Just outside the survey area it turns into an off-road vehicle trail; however, water would still flow downhill into another drainage outside the survey area.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Peter Boice
Date: 06/12/10 Time: 1:43 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Average Height of OHWM: 2 inches
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage stops at the access road and then starts up again on the other side. It is much wider on the east side of the access road.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 9:29 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 75
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 24 inches
Average Width of TOB to TOB: 92 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Shelving
Average Height of OHWM: 3 inches
Average Width of OHWM: 44 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a smaller drainage along the road (road runoff) that flows into drainage 3027. Lots of sage in the drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 9:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 33 inches
Average Width of TOB to TOB: 90 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Presence of litter or debris
Average Height of OHWM: 4 inches
Average Width of OHWM: 35 inches
Describe Water Quality: N/A
Describe any Pollutants: Some metal and trash within drainage.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a smaller drainage along the road (road runoff) that flows into drainage 3027. Also some sage within the drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 10:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 25 inches
Average Width of TOB to TOB: 75 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Average Height of OHWM: 3 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a smaller drainage that runs along the road (road runoff) and flows into drainage 3029 which eventually flows into drainage 3027.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 12:23 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 12 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 1 inch
Average Width of OHWM: 4.5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Small drainage that flows into drainage 3027. One creosote bush on bank and a few sage sprigs on bank.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 12:39 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 4 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a drainage that starts at the road. We stopped at 17.5 feet (access road buffer); however, the drainage continues east.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 12:53 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Mixed Desert Scrub
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a small drainage that eventually flows into drainage 3032 as it heads east. Sage, rabbitbush, and cholla within drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 1:06 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 23 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: Some plastic under dirt.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a small roadside drainage that flows into drainage 3032 right at the road.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 1:21 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 13 inches
Average Width of TOB to TOB: 21 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 7.5 inches
Describe Water Quality: N/A
Describe any Pollutants: Some rubber hose debris
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road. It continues east; however, we stopped at the access road buffer of 17.5 feet from the centerline of the road. There is some rabbitbush and creosote on the drainage bank, but none within the bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 1:34 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 17 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows along the access road (road runoff) and meets up with drainage 3035.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 3:15 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 42 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1.5 inches
Average Width of OHWM: 24 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage, made by roadside runoff, that starts at the edge of the road and flows into drainage 3037. Chamise-redshank understory is present within the drainage.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/02/10 Time: 3:41 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 37 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 0.9 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage, made by roadside runoff, that starts at the edge of the road and flows into drainage 3037.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 7:21 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 19 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage, made by roadside runoff, flows north along the access road for awhile and then turns east. Only mapped 17.5 meters (access road buffer) from the centerline of the access road, but it continues northeast. Some vegetation surrounding drainage

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 7:41 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 9 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is made by road runoff. It starts in the middle of the access road and flows to drainage 3042. Some sage and buckwheat within the drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 7:56 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 0.5 inch
Average Width of TOB to TOB: 4 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is made by road runoff. It starts toward the middle of the access road and flows into drainage 3042. Has some grasses and other small non-native plants that comprise the understory of a chamise-redshank chaparral vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 8:07 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 8 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and flows east. It continues past the survey area and turns north. The vegetation in the bed is similar to the understory in chamise-redshank chaparral vegetation type consisting of such plants as buckwheat and gras

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 8:18 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a manipulated channel between two access roads. It flows north across one of the access roads that it had been paralleling. Across the access road it is no longer manipulated. It fans out for a little bit and then flows through some vegetation and

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 8:37 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 9 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road (this is the access road east of Tule Jim Lane) and flows east. Only mapped 17.5 feet (the access road buffer), but drainage continues further. There are some grasses within the bed that are similar to those that co

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 10:27 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 38 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 36 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the north end of the access road and flows southeast into drainage 3049. Lots of chamise, sugarberry, and other chamise-redshank chaparral understory type vegetation on drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 10:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 8 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Bed and banks
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a continuation of drainage 3049. Some oaks around drainage too, but mostly redshank.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 11:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 13 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is the same as drainage 3052 and 3049. Can't see where drainage goes (tried to follow it for awhile, but lose it in some vegetation where it flattens out). Some buckwheat and other understory from chamise-redshank chaparral understory.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 12:31 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: 2-3 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 81 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 42 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is fairly long. Only mapped the portion in the survey area. There are yuccas, chollas, sages, and other understory vegetation associated with chamise-redshank chaparral vegetation type within the bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 1:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 17 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 2:02 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and flows east into drainage 3057. Some grasses and other understory vegetation associated with chamise-redshank chaparral vegetation type within the drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 2:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 18 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 2 inches
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts across an access road in an area where it appears to pool. It then flows under the access road through a culvert and eventually meets up with drainage number 3057. Some buckwheat in the bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 2:48 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 16 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 4.5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage crosses under an access road through a culvert. On the north side of the access road the drainage has been dug up and sand has been filled in portions. Did not measure this side due to this manipulation. Some buckwheat and other chamise-reds

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 2:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 11 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 4.5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a very small drainage that flows into drainage 3060.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 3:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 16 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.3 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at access road and continues southwest. Only mapped 17.5 feet which is the access road survey buffer. There are understory type grasses in the drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/03/10 Time: 3:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 50 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and continues northeast. Only mapped 17.5 feet which is the access road survey area buffer. There are a lot of grasses and other vegetation associated with the understory of chamise-redshank chaparral vegetation typ

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 6:59 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 12 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road through a culvert. Only mapped 17.5 feet to each side of the road (the access road buffer), but continues much further on both sides.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 7:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and is caused by roadside runoff. It flows to drainage 3065.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 7:15 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 16 inches
Average Width of TOB to TOB: 33 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage runs parallel to the road. It continues and flows into drainage 3065. The ordinary high water mark braids throughout the drainage making it fairly small; however, there are a few areas where it may flood over, but it was hard to define.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 9:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road (east edge) and flows into drainage 3071. There are some lupine, grasses, and other understory associated with chamise-redshank chaparral vegetation type within the drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 10:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 32 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1.5 inches
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the east edge of the access road and flows into drainage 3071. It has a lot of vegetation in it, but not in the part we mapped. All vegetation is understory associated with chamise-redshank chaparral vegetation type. Some grasses a

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 12:38 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 61 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Average Height of OHWM: 1.5 inches
Average Width of OHWM: 29 inches
Describe Water Quality: N/A
Describe any Pollutants: There is yard debris and concrete within the drainage.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage went across an access road that was not marked as survey, but was just outside. The drainage was wide and appears to pool on both sides of the road and then flows into a larger drainage outside the survey area that flows east. Mostly exotic

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 12:59 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows under access road through a culvert. Only mapped 17.5 meters from centerline of road (access road buffer), but continues much farther. Mostly exotic vegetation and grassy understory associated with chamise-redshank chaparral vegetation

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 2:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Vegetated
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1.4 inches
Average Width of TOB to TOB: 40 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 31.2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows into drainage 3075. Drainage is full of grasses and wildflower understory vegetation associated with chamise-redshank chaparral vegetation type. There is rumex and monkey flower in the drainage

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 2:14 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 19 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 0.6 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows into drainage 3075. Drainage is full of grasses and wildflower understory vegetation associated with chamise-redshank chaparral vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 2:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Vegetated
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 19 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage parallels the access road and then flows south into drainage 3075. Drainage is full of grasses and wildflower understory vegetation associated with chamise-redshank chaparral vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/04/10 Time: 3:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 53 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3075 on the east side of the access road. It starts at the edge of the access road. This vegetation is grasses and wildflowers typical of chamise-redshank understory vegetation.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 7:34 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage parallels the access road (flowing north) and then turns east to a bigger drainage just outside the project area. The bigger drainage falls outside the 17.5 foot buffer (access road buffer), but parallels the road just outside the buffer for

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 7:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 11 inches
Average Width of TOB to TOB: 42 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1.7 inches
Average Width of OHWM: 22 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of an access road. It meets up with a bigger drainage that flows north and parallels the access road, but is outside the 17.5 foot access road buffer for the survey area. Some understory vegetation associate with chamise-r

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 8:25 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 22 inches
Average Width of TOB to TOB: 128 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 36 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: Yes Describe: However, there is only one willow downstream in the survey area. Just outside, upstream of the survey area, there is a riparian corridor.
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows west to a bigger drainage that flows north. The bigger drainage is outside the 17.5 foot access road buffer for survey area, but is just outside and runs north parallel to road. Willows just up

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 9:46 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: East

Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 31 inches
Average Width of TOB to TOB: 132 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 1.6 inches
Average Width of OHWM: 39 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and drains into a larger drainage that parallels the access road just outside the 17.5 foot buffer for the access road survey area. Riparian Scrub seems to mostly follow the eastern portion of the channe

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 12:25 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: There is also a fair bit of bedrock in the drainage.
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 11 inches
Average Width of TOB to TOB: 50 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 1. 9 inches
Average Width of OHWM: 16.2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and flows to a larger drainage that parallels the access road, but falls just outside the 17.5 foot access road survey area buffer. There is silt fencing here to prevent erosion. Understory vegetation associated wit

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 12:43 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 11 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and flows to a larger drainage that parallels the access road, but falls just outside the 17.5 foot access road survey area buffer. There is silt fencing here to prevent erosion.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 12:52 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15.5 inches
Average Width of TOB to TOB: 43 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 2 inches
Average Width of OHWM: 17 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Smaller drainage that connects to large drainage just outside survey area.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 1:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 21 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into a larger drainage outside the survey area. Understory associated with chamise-redshank vegetation type in drainage bed. Some oaks around the drainage also.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 1:19 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 7 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Starts at access road. Has been manipulated with silt fencing to prevent erosion near the access road. Lots of bedrock as well as sand.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 2:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 25 inches
Average Width of TOB to TOB: 108 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 33 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage that flows into drainage 3088. Some oak around drainage also.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 2:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 13 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage that flows into drainage 3088. Some oak around drainage also.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 2:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 41 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage that flows into drainage 3090 which then flows into drainage 3088.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 2:57 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Oak Woodland
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 27 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 22 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage that flows into drainage 3088. There is also quite a bit of redshank near here too. The vegetation in the drainage is understory associated with these habitats. Sage is prominent.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 3:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Oak Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 22 inches
Average Width of TOB to TOB: 46 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This is a small drainage that flows into drainage 3088. Calling this oak woodland, but there is also a lot of sage and redshank nearby.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/05/10 Time: 3:31 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Oak Woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 181 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road. It flows into a larger drainage outside the 17.5 foot access road survey area buffer. Surrounding vegetation is mostly oak and redshank. Vegetation in the bed is similar to understory associated with th

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 7:10 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2.6 inches
Average Width of TOB to TOB: 42 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 0.7 inch
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road. It flows into a larger drainage outside the 17.5 foot access road survey area buffer.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 7:25 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 13 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage appears to flow a long way; however, we were unable to follow it to a larger drainage.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 7:46 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5.3 inches
Average Width of TOB to TOB: 101 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.9 inch
Average Width of OHWM: 76 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage has flowing water. In the water there are tons of juvenile western toads, western toad tadpoles, watersliders, and some unidentified fish (mesquitofish or topminnow?). Only mapped portion in survey area, but the drainage continues much farth

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 7:55 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 35
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 49 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is a very large braided drainage. It flows under access road through a culvert. Only mapped 17.5 feet on east side of access road (access road buffer). Vegetation in bed is understory associated with chamise-redshank chaparral vegetation com

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 8:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 19 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is part of a much larger drainage. There is not much water present at the eastern mapped portion, but the substrate is still very muddy so lots of water must have been present recently. Water is present at the western end of the mapped area.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 9:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 191 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 152 inches
Describe Water Quality: N/A
Describe any Pollutants: There was old wood boards in the center of the drainage. See picture of downstream.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is large and crosses the access road through a culvert. In a portion of the drainage there is water. In the water observed mesquitofish, juvenile western toads, western toad tadpoles, water skippers, and other freshwater aquatic invertebrate

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 10:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 37 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Shelving
Average Height of OHWM: 2.8 inches
Average Width of OHWM: 19 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: Saw a horned lizard. Ran into culvert.
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Starts at access road and eventually flows into drainage 3101. Vegetation in bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 10:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 17 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows under the access road through a culvert. Only mapped 17.5 feet from the centerline of the road (the access road survey area buffer).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 10:41 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 5.5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage crosses under the access road through a culvert. Only mapped 17.5 feet from the centerline of the road (access road survey area buffer).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 10:43 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 11 inches
Average Width of TOB to TOB: 31.5 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.75 inch
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage starts at access road and flows into drainage 3104. Vegetation in bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 10:51 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10.5 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 0.75 inch
Average Width of OHWM: 11 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage eventually flows into an intermittent drainage that flows into a lake. The lake is several hundred feet away. Vegetation in bed is understory associated with chamise-redshank chaparral vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 11:06 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows to the access road and then flows under the access road through a culvert.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 11:59 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3107 which flows to the access road and then flows under the access road through a culvert. Vegetation in bed is understory type vegetation associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 12:07 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is the same as drainage 3107. It flows under the access road through a culvert. There is straw wattle present to help prevent erosion. The drainage continues south; however, only mapped 17.5 feet from the centerline of the access road (acces

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 12:16 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Bedrock
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 13 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows into a larger drainage that parallels the access road just outside the survey area.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 12:25 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 13 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.3 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts along the south side of the access road and then continues southeast to a larger drainage outside the survey area. Only mapped 17.5 feet from the centerline f the access road (access road survey area buffer). The drainage has some str

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 12:29 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 24 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and continues to a larger drainage outside the survey area. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 1:24 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 75 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 39 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and flows into a larger drainage outside the survey area. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer). Some chamise and grass understory within the drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 1:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows to a larger drainage outside the survey area. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 1:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 54 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.8 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows to a larger drainage outside the survey area. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 1:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 13 inches
Average Width of TOB to TOB: 46 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts the edge of the access road and flows to a larger drainage outside the survey area. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer). Portion mapped has been manipulated to become a larger

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 1:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows north for a ways. Appears to connect with another drainage outside of survey area. Only mapped 17.5 feet from the centerline of access road (access road survey area buffer). Some erosion manipu

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 1:56 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes: Also, some bedrock present.
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 11 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows along the access road and eventually connects to a larger drainage outside the survey area. Only mapped 17.5 feet past the centerline of the access road (access road survey area buffer). Some erosion manipulation at this drainage using

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 2:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and eventually connects to a larger drainage outside the survey area. Some erosion manipulation at this drainage using straw wattle.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/07/10 Time: 2:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 16 inches
Average Width of TOB to TOB: 62 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 16 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at access road and flows to a larger drainage outside the survey area. Some erosion manipulation using silt fencing.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 7:21 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: Yes Type: Flowing
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 13 inches
Average Width of TOB to TOB: 94 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Water staining
Average Height of OHWM: 2.5 inches
Average Width of OHWM: 48 inches
Describe Water Quality: Appears to be good quality. The water is clear (not turbid). Many species living in and around drainage (i.e. western toad, water sliders, unidentified fish, and many songbird species).
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: Yes Describe: Willows, rumex sp, monkey flower, watercress, and stinging nettle present.
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3023. There are willows, monkeyflower, stinging nettles, watercress, and rumex sp.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 7:59 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: Yes Type: Flowing
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 49 inches
Average Width of TOB to TOB: 298 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Water staining
Average Height of OHWM: 1 inch
Average Width of OHWM: 40 inches
Describe Water Quality: Appears to be good quality. The water is clear (not turbid). Many species living in and around drainage (i.e. western toad, water sliders, unidentified fish, and many songbird species).
Describe any Pollutants:
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: Yes Describe: Willows, rumex sp, monkey flower, watercress, and stinging nettle present.
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is surrounded by rocks in many places. Toward the southern end the main substrate becomes bedrock. There are willows, monkeyflower, stinging nettles, watercress, and rumex sp.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 9:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 23.5 inches
Average Width of TOB to TOB: 244 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 2.8 inches
Average Width of OHWM: 24 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3125. Vegetation in bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 10:23 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 2:1
Primary Substrate Composition: Vegetated
Substrate Composition Notes:
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: Yes Type: Flowing
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 444 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Water staining
Vegetation absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 35 inches
Describe Water Quality: Cow footprints and cow dung in the drainage; therefore the drainage was slightly turbid. There was juvenile western toad and western toad tadpoles present.
Describe any Pollutants:
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: Yes Describe: Vegetation includes willows, monkey flower, stinging nettle, and rushes.
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3125. There is also a fair bit of muck in here. Vegetation is Riparian Scrub vegetation including monkey flower, willow, stinging nettle, and rushes.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 12:28 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: Yes Type: Flowing
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 21 inches
Average Width of TOB to TOB: 100 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Water staining
Average Height of OHWM: 2 inches
Average Width of OHWM: 20 inches
Describe Water Quality: Some algae in water, but otherwise clear (not turbid). Observed mesquitofish, juvenile western toads, western toad tadpoles, water skippers, and other freshwater aquatic invertebrates in drainage.
Describe any Pollutants: Some concrete blocks near culvert.
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the access road and flows to a larger drainage outside the survey area. Only mapped 17.5 feet from the centerline of the road (access road survey area buffer). Some manipulation due to erosion using straw wattle. There were some m

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 12:46 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2.5 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is at the edge of the access road. Only mapped 17.5 feet from the centerline of the road (access road survey area buffer). Vegetation in bed is understory associated with chamise-redshank chaparral vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 1:04 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 61 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 36 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is at the edge of the access road. Only mapped 17.5 feet from the centerline of the road (access road survey area buffer). Vegetation in bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 1:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 45 inches
Average Width of TOB to TOB: 216 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1.5 inches
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage is at the edge of the access road and flows into drainage 3130. Only mapped 17.5 feet from the centerline of the road (access road survey area buffer). Vegetation in bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 1:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 17 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows under the access road through a culvert. Appears to be manipulated near the access road where area by the culvert has been dug out to be larger and capture water. Only mapped 17.5 feet from the centerline of the access road (access roa

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/08/10 Time: 2:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 70 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 38 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows under the access road through a culvert. It is wider by the access road. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer). Vegetation in bed is associated with chamise-redshank vegetation ty

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 7:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes: Also some bedrock and sand within the bed.
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows into drainage 3133. Gets much narrower as it gets closer to 3133; however, only mapped 17.5 feet from the centerline of the access road (access road survey area buffer). Vegetation within the d

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 7:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes: Also some bedrock and sand within the bed.
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 23 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 11 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage crosses under the access road through a culvert. On the south side of the access road the area near the culvert has been dug out so the water pools here, although it still flows through the culvert. Upstream from the culvert a pipe has been

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 8:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 36 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows along the edge of the access road and then turns north and flows to a larger drainage outside of the survey area. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer). The north side of the dra

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 8:18 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows under the access road through a culvert. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer). Toward the eastern end of the mapped area the soil is moist indicating that water may have flowed t

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 9:11 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 14 inches
Average Width of TOB to TOB: 44 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.3 inch
Average Width of OHWM: 19 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows along the south edge of the access road and then flows into drainage 3137. At the western end of the drainage the soil is really moist and it looks like there was water there recently (a possible seep).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 9:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 16 inches
Average Width of TOB to TOB: 71 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 28 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows along the northern edge of the access road and then flows into drainage 3137.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 9:41 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 10 inches
Average Width of TOB to TOB: 34 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Scour
Average Height of OHWM: 3 inches
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road and flows into a larger drainage (drainage 3137?) outside the survey area. Only mapped 17.5 feet from the centerline of access road (access road survey area buffer). Vegetation in bed is understory and

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 9:50 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows across the access road and continues east. Only mapped 7.5 feet from the centerline of the road (access road survey area buffer).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 10:14 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 19 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage starts at the edge of the access road. Only mapped 17.5 feet from centerline of access road (access road survey area buffer).

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 10:28 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage crosses the access road. Only mapped 17.5 feet from the centerline of the access road (access road survey area buffer); however, drainage continues and meets up with a larger drainage outside the survey area.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 10:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 13 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows under the access road through three large culverts. It was difficult to take measurements due to very thick vegetation. Vegetation in bed is understory associate with chamise-redshank chaparral vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 10:44 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 19 inches
Average Width of TOB to TOB: 131 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 72 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows along the edge of the access road and then flows into drainage 3144. The drainage looks mostly like road erosion and there is one portion of the road that has been eroded so that half the road missing at the drainage.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 11:59 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 16 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage appears to flow into a larger drainage outside the survey area. Appears to be used by cattle quite often.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 12:27 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2.5 inches
Average Width of TOB to TOB: 10 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3147. Understory associated with chamise-redshank chaparral vegetation type in drainage bed.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 12:34 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Bedrock
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 18 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3147.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 1:31 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: A lot of bedrock in drainage also.
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 17 inches
Average Width of TOB to TOB: 48 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3147.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 1:37 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 11 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 2.5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3147.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 1:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Also a lot of bedrock in drainage.
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 50 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 14 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage eventually flows into drainage 3147 (the part of 3147 is outside the survey area). Vegetation in bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 2:25 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes: Lots of bedrock in drainage bed too.
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 56 inches
Average Width of TOB to TOB: 72 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3152. Vegetation is understory associated with chamise-redshank chaparral.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 2:35 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 29 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3153.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 3:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 2 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3153.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 3:14 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3153.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 3:21 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3153. Vegetation in bed is understory associated chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/09/10 Time: 3:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3152. Vegetation in bed is understory associated chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 7:05 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 76 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3152.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 7:18 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 25 inches
Average Width of TOB to TOB: 59 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3152. Vegetation in drainage bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 7:31 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 82 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 58 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3152. Vegetation in bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 7:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Manipulated
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 1:1 or less
Primary Substrate Composition: Muck
Substrate Composition Notes:
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 70
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: Yes Type: Other
Additional Notes: Both flowing and standing
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 38 inches
Average Width of TOB to TOB: 108 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Water staining
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 17 inches
Describe Water Quality: The water quality appears to be good. It is clear (not turbid).
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Lots of rushes within the drainage bed. Surrounding vegetation consists of oaks and willows. Further out surrounding vegetation consists of chamise-redshank chaparral.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 8:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 13 inches
Average Width of TOB to TOB: 48 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 11.5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3162.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 8:31 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 1:1 or less
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Oak Woodland
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 24 inches
Average Width of TOB to TOB: 49 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Presence of litter or debris
Average Height of OHWM: 1.5 inches
Average Width of OHWM: 13 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3162. Vegetation within drainage bed associated with oak woodland vegetation type. There is also a lot of redshank surrounding the drainage.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 8:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Oak Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 19 inches
Average Width of TOB to TOB: 41 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation within drainage bed is understory associated with oak woodland vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 8:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Oak Woodland
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Oak Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

The vegetation within the drainage is understory associate with oak woodland vegetation type. There is also a lot of redshank surrounding the drainage.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 9:27 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 11 inches
Average Width of TOB to TOB: 50 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 13 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 10:01 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Vegetated
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 65 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 45 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3167. Vegetation in drainage is understory associated with chamise-redshank chaparral.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 10:40 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Northeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 48 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

The vegetation within the drainage bed is understory associated with chamise-redshank chaparral.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 11:56 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Seasonal Creek
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Riparian Scrub
Percent Vegetation Cover within Bed: 80
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: Yes Type: Flowing
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1 Flow Direction: Southeast
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 92 inches
Average Width of TOB to TOB: 256 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Change in plant community
Culverts
Average Height of OHWM: 2 inches
Average Width of OHWM: 80 inches
Describe Water Quality: The water quality appears good. Lots of vegetation growing and western toad observed. Water appears to be clear (not turbid).
Describe any Pollutants: None
Cowardin Classification: Riverine-Intermittent

Biological Characteristics:

Riparian Corridor Present?: Yes Describe: There are rushes, willows, monkeyflower, and other water-dependent vegetation present.
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: No
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

This drainage flows into drainage 3170. There is monkeyflower, rushes, willows, and other water-dependent vegetation within the drainage. The drainage is also surrounded by oak, willows, and redshank.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 12:08 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Oak Woodland
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Riparian Scrub

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 37 inches
Average Width of TOB to TOB: 42 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 2 inches
Average Width of OHWM: 12 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

The vegetation within the drainage bed is understory (mostly sage) associated with oak woodland. The surrounding vegetation is oak woodland and Riparian Scrub.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/10/10 Time: 1:07 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes: Also lots of vegetation and bedrock substrate.
Type of Vegetation within Bed: Chamise Redshank Chaparral
Percent Vegetation Cover within Bed: 40
Surrounding Vegetation Type: Chamise Redshank Chaparral

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: East
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Also lots of vegetation and bedrock substrate. The vegetation in the drainage bed is understory associated with chamise-redshank vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 7:50 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 1-2 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 31 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Vegetation matted down, bent, or absent
scour
Average Height of OHWM: 0.6 inch
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation in bed is understory associated with Juniper Woodland.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 9:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 61 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 11 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 9:31 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 28 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.6 inch
Average Width of OHWM: 9 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation within the drainage bed is grasses and understory associated with Juniper Woodland understory.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 9:47 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 10:26 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 56 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 33 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation in drainage bed is grasses and understory associated with Juniper Woodland vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 10:49 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Scour
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 11:59 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 3:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: Northwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5.5 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 12:31 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 35 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.7 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation within drainage bed is grasses and understory associated with Juniper Woodland vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 2:01 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 36 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
Average Height of OHWM: 0.4 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

The vegetation in the drainage bed is understory associated with Juniper Woodland vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/11/10 Time: 3:08 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 5
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 37 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Sediment sorting
scour
Average Height of OHWM: 0.4 inch
Average Width of OHWM: 13 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation in drainage bed is understory associated with Juniper Woodland vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/12/10 Time: 8:20 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 5 inches
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Sediment sorting
Presence of litter or debris
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/12/10 Time: 8:56 AM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Gravel
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 2
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 0.75 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation within drainage bed is understory associated with Juniper Woodland vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/12/10 Time: 10:12 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 3
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 47 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Sediment sorting
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 19 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

GPS line SP75drainageTOB delineates the Top Of Bank of a massive drainage on the east side of pad SP75drainageTOB. Drainage feature contains numerous braided drainages eroding down the eastern slope. Vegetation in bed is understory and vegetation associat

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/12/10 Time: 10:23 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 26 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Presence of litter or debris
Scour
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Danielle Muir & Lauren Brudney
Date: 06/12/10 Time: 12:50 PM Weather: Partial Cloudy

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 2:1
Primary Substrate Composition: Sands
Substrate Composition Notes:
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 1
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 9 inches
Average Width of TOB to TOB: 27 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Scour
Vegetation matted down, bent, or absent
Average Height of OHWM: 0.5 inch
Average Width of OHWM: 7 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Vegetation within drainage bed is understory associated with Juniper Woodland vegetation type.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir

Date: 06/14/10 Time: 7:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Gravel

Substrate Composition Notes: and sands

Type of Vegetation within Bed: Juniper Woodland

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: 4-5 Flow Direction: Southwest

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 5 inches

Average Width of TOB to TOB: 17 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Bed and banks

Scour

Average Height of OHWM: 1 inch

Average Width of OHWM: 3 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 8:09 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 15
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 17 inches
Average Width of TOB to TOB: 45 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 8:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 40 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 15 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 9:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 20
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 6 inches
Average Width of TOB to TOB: 20 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 9:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3-4 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 4 inches
Average Width of TOB to TOB: 70 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 9:22 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 22 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 6 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 9:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 2-3 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 7 inches
Average Width of TOB to TOB: 40 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 9:38 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 17 inches
Average Width of TOB to TOB: 50 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 10:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Juniper Woodland
Percent Vegetation Cover within Bed: 10
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Meandering Drainage Gradient: > 6 Flow Direction: South
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 12 inches
Average Width of TOB to TOB: 44 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 2 inches
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 10:15 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 4 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 15 inches
Average Width of TOB to TOB: 44 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Presence of litter or debris
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 10:32 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: Southwest
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 8 inches
Average Width of TOB to TOB: 40 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 5 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 10:42 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 3 inches
Average Width of TOB to TOB: 6 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Scour
Average Height of OHWM: 1 inch
Average Width of OHWM: 4 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir

Date: 06/14/10 Time: 10:54 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural

Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel

Average Side Slope: 4:1 or greater

Primary Substrate Composition: Gravel

Substrate Composition Notes: and sands

Type of Vegetation within Bed: Unvegetated

Percent Vegetation Cover within Bed: 0

Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A

Additional Notes:

Drainage Geometry: Relatively Straight Drainage Gradient: > 6 Flow Direction: South

Bed and Bank Present?: Yes

Average Height Top-of-Bank (TOB): 3 inches

Average Width of TOB to TOB: 5 inches

Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes

OHWM Indicators: Bed and banks

Scour

Average Height of OHWM: 1 inch

Average Width of OHWM: 3 inches

Describe Water Quality: N/A

Describe any Pollutants: None

Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A

Tributary Adjacent to a Wetland?: No Describe: N/A

Habitat for:

Sensitive Species?: None

Fish/Spawning Area?: N/A

Other Environmentally Sensitive Areas?: None

How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 12:03 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 20 inches
Average Width of TOB to TOB: 132 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: A clear, natural line impression on the bank
Average Height of OHWM: 8 inches
Average Width of OHWM: 20 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/14/10 Time: 12:11 PM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: Unvegetated
Percent Vegetation Cover within Bed: 0
Surrounding Vegetation Type: Juniper Woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 25 inches
Average Width of TOB to TOB: 40 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 1 inch
Average Width of OHWM: 10 inches
Describe Water Quality: N/A
Describe any Pollutants: None
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/15/10 Time: 7:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: juniper woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: juniper woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 30 inches
Average Width of TOB to TOB: 71 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Bed and banks
Vegetation matted down, bent, or absent
Average Height of OHWM: 4 inches
Average Width of OHWM: 8 inches
Describe Water Quality: N/A
Describe any Pollutants: Numerous shot gun shells, paper, metal and wood associated with target practice.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/15/10 Time: 7:30 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: juniper woodland
Percent Vegetation Cover within Bed: 30
Surrounding Vegetation Type: juniper woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 3 Flow Direction: North
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 1 inch
Average Width of TOB to TOB: 25 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 25 inches
Describe Water Quality: N/A
Describe any Pollutants: Numerous shot gun shells, paper, metal and wood associated with target practice.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage becomes braided with island features on the north end of the drainage before it connects with D3221.

Surveyor, Date, and Weather Information:

Surveyors: Derek Siver & Danielle Muir
Date: 06/15/10 Time: 8:00 AM Weather: Sunny

General Characteristics:

Drainage Condition (natural, artificial, manipulated): Natural
Type of Feature (seasonal creek, ephemeral channel, etc.): Ephemeral Channel
Average Side Slope: 4:1 or greater
Primary Substrate Composition: Gravel
Substrate Composition Notes: and sands
Type of Vegetation within Bed: juniper woodland
Percent Vegetation Cover within Bed: 50
Surrounding Vegetation Type: juniper woodland

Flow Characteristics:

Water Present?: No Type: N/A
Additional Notes:
Drainage Geometry: Relatively Straight Drainage Gradient: 5 Flow Direction: West
Bed and Bank Present?: Yes
Average Height Top-of-Bank (TOB): 2 inches
Average Width of TOB to TOB: 15 inches
Mark (Ordinary Height Water Mark [OHWM]) Present?: Yes
OHWM Indicators: Vegetation matted down, bent, or absent
Sediment sorting
Average Height of OHWM: 1 inch
Average Width of OHWM: 3 inches
Describe Water Quality: N/A
Describe any Pollutants: Numerous shot gun shells, paper, metal and wood associated with target practice.
Cowardin Classification: Riverine-Ephemeral

Biological Characteristics:

Riparian Corridor Present?: No Describe: N/A
Tributary Adjacent to a Wetland?: No Describe: N/A
Habitat for:
Sensitive Species?: None
Fish/Spawning Area?: N/A
Other Environmentally Sensitive Areas?: None
How Many Tributaries Does this Feature Flow through Before Reaching Named Creek?: Unknown

Additional Field Notes:

Drainage connects with D3221.

ATTACHMENT E: SITE SP-83 WETLAND DELINEATION

SDG&E: East County Substation Project
SECTION 404 JURISDICTIONAL DETERMINATION AT SITE SP-83

Jacumba, San Diego County
CALIFORNIA

Prepared For:

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Date:
September 2010

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Michael Rochelle, BS, GIS Technician

1.0 INTRODUCTION

1.1 Study Background

The San Diego Gas & Electric (SDG&E) East County Substation Project site east of SP-83 (Study Area) covers approximately 0.9 acre within a 200 feet by 200 feet square area. It is located west of the San Diego and Arizona Eastern Railroad (railroad) north of Jacumba, San Diego County, California (Figure 1). Land use adjacent to the Study Area is undeveloped desert scrub range land to the west and north, the railroad line and developed farmland to the east, and minor development to the south. The construction of the railroad has altered the natural hydrology of the area by the placement of the railroad bed, which prohibits the flow of water originating in the foothills to the west and from lands to the north that historically could flow east and south. There is a culvert under the railroad at the southern end of the larger basin of which the Study Area is a part that provides an outlet for flow in a channel to the east.

On 14 September 2010, WRA Inc. (WRA) conducted a routine wetland delineation to determine the presence of potential wetlands and non-wetland waters subject to federal jurisdiction under Section 404 of the Clean Water Act within the Study Area. This report presents the results of this delineation.

Although not the focus of this delineation, all of the waters mapped for this study (i.e., Waters of the United States) are also regulated by the Regional Water Quality Control Board as Waters of the State under the Porter-Cologne Act. Lastly, the California Department Fish and Game may regulate the waters on site under Section 1602, Lake and Stream Bed Alteration Agreement as they historically were a portion of Carrizo Creek, prior to the construction of the railroad.

Wetlands and non-wetland waters were identified primarily for the purpose of avoidance. Therefore, work related to the project will not result in filling or any impact to Waters of the United States or to Waters of the State at this site, and no related permits will be necessary.

1.2 Regulatory Background

<u>Section 404 of the Clean Water Act</u>

Section 404 of the Clean Water Act gives the U.S. Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (Corps) regulatory and permitting authority regarding discharge of dredged or fill material into “navigable waters of the United States”. Section 502(7) of the Clean Water Act defines navigable waters as “waters of the United States, including territorial seas.” Section 328 of Chapter 33 in the Code of Federal Regulations defines the term “waters of the United States” as it applies to the jurisdictional limits of the authority of the Corps under the Clean Water Act. A summary of this definition of “waters of the U.S.” in 33 CFR 328.3 includes: (1) waters used for commerce; (2) interstate waters and wetlands; (3) “other waters” such as intrastate lakes, rivers, streams, and wetlands; (4) impoundments of waters; (5) tributaries to the above waters; (6) territorial seas; and (7) wetlands adjacent to waters. Therefore, for purposes of the determining Corps jurisdiction under the Clean Water Act, “navigable waters” as defined in the Clean Water Act are the same as “waters of the U.S.” defined in the Code of Federal Regulations above.

In 2006, the Supreme Court addressed the jurisdictional scope of Section 404 of the Clean Water Act in *Rapanos v. U.S.* and in *Carabell v. U.S.* The decision provides two analytical standards for determining whether water bodies that are not traditional navigable waters (TNWs), including wetlands adjacent to those non-TNWs, are subject to Clean Water Act jurisdiction: (1) if the water body is relatively permanent, or if the water body is a wetland that directly abuts (e.g., the wetland is not separated from the tributary by uplands, a berm, dike, or similar feature) a relatively permanent water (RPW), or (2) if a water body, in combination with all wetlands adjacent to that water body, has a significant nexus with TNWs.

When determining whether a water body qualifies as TNW, relevant considerations include:

- whether a Corps district has determined that the water body is a navigable waters of the U.S. pursuant to 33 CFR Section 329.14; or

- the water body qualifies as a navigable water of the U.S. under any of the tests set forth in 33 CFR Section 329; or

- a federal court has determined that the water body is navigable-in-fact under federal law for any purpose; or

- the water body is navigable-in-fact under the standards that have been used by the federal courts.

As a result, the EPA and Corps will assert jurisdiction over the following categories of water bodies:

- TNWs;

- all wetlands adjacent to TNWs;

- non-navigable tributaries of TNWs that are relatively permanent (i.e, tributaries that typically flow year-round or have continuous flow at least seasonally); and

- wetlands that directly abut such tributaries.

In addition, the EPA and Corps will assert jurisdiction over every water body that is not an RPW if that water body is determined (on the basis of a fact-specific analysis) to a have a significant nexus with a TNW. The classes of water body that are subject to EPA and Corps jurisdiction only if such a significant nexus is demonstrated are:

- non-navigable tributaries that do not typically flow year-round or have continuous flow at least seasonally;

- wetlands adjacent to such tributaries; and

- wetlands adjacent to but that do not directly abut a relatively permanent, non-navigable tributary.

The limits of Corps jurisdiction under Section 404 as given in 33 CFR Section 328.4 are as follows: (a) *Territorial seas*: three nautical miles in a seaward direction from the baseline; (b) *Tidal waters of the U.S.*: high tide line or to the limit of adjacent non-tidal waters; (c*) Non-tidal*

waters of the U.S.: ordinary high water mark or to the limit of adjacent wetlands; (d) *Wetlands*: to the limit of the wetland.

2.0 METHODS

Prior to conducting field surveys, reference materials were reviewed, including the San Diego County Area Soil Survey (Natural Resource Conservation Service [NRCS] 2010), the Jacumba United States Geological Survey (USGS) 7.5-minute quadrangle (USGS 1997), and aerial photographs of the site.

A focused evaluation of indicators of wetlands and non-wetland waters was performed in the Study Area on 14 September 2010. The methods used in this study to delineate jurisdictional wetlands and non-wetland waters are based on the *U.S. Army Corps of Engineers Wetlands Delineation Manual* ("Corps Manual"; Environmental Laboratory 1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region ("Arid West Supplement*"; Corps 2008). The routine method for wetland delineation described in the Corps Manual was used to identify areas potentially subject to Corps Section 404 jurisdiction within the Project Area. A general description of the Study Area, including plant communities present, topography, and land use, was also generated during the delineation visit (see Section 3.0). The methods for evaluating the presence of wetlands and non-wetland waters employed during the site visit are described in detail below.

For the purposes of this delineation, all wetland features observed within the Study Area were mapped.

According to the "Wetlands that Periodically Lack Indicators of Wetland Hydrology" section of the Arid West Supplement (Corps 2008a), 30-year WETS tables data (NRCS 2010) can be used to make a determination as to whether climatic conditions at the time the site visit conducted meets the definition of typical climactic or hydrological conditions. Using data from WETS station CA6390 (Ocotillo Station) located in Imperial County approximately 15 miles east of the Study Area, it was determined that the normal annual rainfall for this area totals 4.04 inches, with a 30% chance that the rainfall will be greater than 4.75 inches and a 30% chance that the rainfall will be less than 2.40 inches. According to the University of California Integrated Pest Management Program (IPM) data provided by the Department of Agriculture and Natural Resources (2010), the precipitation recorded in the vicinity of the Study Area (Seeley, California, located approximately 35 miles east of the Study Area) totaled 1.54 inches during the 2009 to 2010 rainfall period (October 1 to September 24). This is the closest rainfall data available for the site, and may be an under representation of rainfall received in the area, but is a good estimate of rainfall to compare to the WETS data from Ocotillo. Based on this data, rainfall during this period and prior to the field work conducted for this delineation was below the normal range for the area.

2.1 Potential Section 404 Waters of the U.S.

2.1.1 Wetlands

The Study Area was evaluated for the presence or absence of indicators of the three wetland parameters described in the Corps Manual (Environmental Laboratory 1987) and Arid West Supplement (Corps 2008).

Section 328.3 of the Federal Code of Regulations defines wetlands as:

> "*Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas*."
>
> EPA, 40 CFR 230.3 and CE, 33 CFR 328.3 (b)

The three parameters used to delineate wetlands are the presence of: (1) hydrophytic vegetation, (2) wetland hydrology, and (3) hydric soils. According to the Corps Manual, for areas not considered "problem areas" or "atypical situations":

> "*....[E]vidence of a minimum of one positive wetland indicator from each parameter (hydrology, soil, and vegetation) must be found in order to make a positive wetland determination*."

Data on vegetation, hydrology, and soils collected at sample points during the delineation site visit was reported on Arid West Supplement data forms. Once an area was determined to be a potential jurisdictional wetland, its boundaries were delineated using Global Positioning System (GPS) equipment and mapped on an aerial map. The area of potential jurisdictional wetlands was measured digitally using ArcGIS software. Indicators described in the Arid West Supplement (Corps 2008) were used to make wetland determinations at each sample point in the Study Area and are summarized below.

<u>Vegetation</u>

Plant species identified in the Study Area were assigned a wetland status according to the U.S. Fish and Wildlife Service (USFWS) list of plant species that occur in wetlands (Reed 1988). This wetland classification system is based on the expected frequency of occurrence in wetlands as follows:

OBL	Always found in wetlands	>99% frequency
FACW (±)	Usually found in wetlands	67-99%
FAC	Equal in wetland or non-wetlands	34-66%
FACU	Usually found in non-wetlands	1-33%
UPL/NL	Upland/Not listed (upland)	<1%

The presence of hydrophytic vegetation was then determined based on indicator tests described in the Arid West Supplement (Corps 2008). The Arid West Supplement (Corps 2008) requires that a three-step process be conducted to determine if hydrophytic vegetation is present. The procedure first requires the delineator to apply the "50/20 rule" (Indicator 1; Dominance Test) described in the manual. To apply the "50/20 rule", dominant species are chosen independently from each stratum of the community. Dominant species are determined for each vegetation stratum from a sampling plot of an appropriate size surrounding the sample point. Dominant species are the most abundant species that individually or collectively account for more than 50 percent of the total vegetative cover in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total vegetative cover. If greater than 50 percent of the dominant species has an OBL, FACW, or FAC status, ignoring + and - qualifiers, the sample point meets the hydrophytic vegetation criterion.

If the sample point fails Indicator 1 and both hydric soils and wetland hydrology are not present, then the sample point does not meet the hydrophytic vegetation criterion, unless the site is a problematic wetland situation. However, if the sample point fails Indicator 1 but hydric soils and wetland hydrology are both present, the delineator must apply Indicator 2.

Indicator 2 is known as the Prevalence Index. The Prevalence Index is a weighted average of the wetland indicator status for all plant species within the sampling plot. Each indicator status is given a numeric code (OBL = 1, FACW = 2, FAC = 3, FACU = 4, and UPL = 5). Indicator 2 requires the delineator to estimate the percent cover of each species in every stratum of the community and sum the cover estimates for any species that is present in more than one stratum. The delineator must then organize all species into groups according to their wetland indicator status and calculate the Prevalence Index using the following formula, where A equals total percent cover:

$$PI = \frac{A_{OBL} + 2A_{FACW} + 3A_{FAC} + 4A_{FACU} + 5A_{UPL}}{A_{OBL} + A_{FACW} + A_{FAC} + A_{FACU} + A_{UPL}}$$

The Prevalence Index will yield a number between 1 and 5. If the Prevalence Index is equal to or less than 3, the sample point meets the hydrophytic vegetation criterion. However, if the community fails Indicator 2, the delineator must proceed to Indicator 3.

Indicator 3 is Morphological Adaptations. If more than 50 percent of the individuals of a FACU species have morphological adaptations for life in wetlands, that species is considered to be a hydrophyte and its indicator status should be reassigned to FAC. If such observations are made, the delineator must recalculate Indicators 1 and 2 using a FAC indicator status for this species. The sample point meets the hydrophytic vegetation criterion if either test is satisfied.

Some wetlands may lack any of the hydrophtyic vegetation indicators listed above, while exhibiting indicators of hydric soils and wetland hydrology. In such cases, identifying and delineating these wetlands will require special procedures or additional analysis of factors affecting this site.

<u>Soils</u>

The NRCS defines a hydric soil as follows:

> "*A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part*."
>
> Federal Register July 13, 1994,
> U.S. Department of Agriculture, NRCS

Soils formed over long periods of time under wetland (anaerobic) conditions often possess characteristics that indicate they meet the definition of hydric soils. Hydric soils can have a hydrogen sulfide (rotten egg) odor, low chroma matrix color, generally designated 0, 1, or 2, used to identify them as hydric, presence of redox concentrations, gleyed or depleted matrix, or high organic matter content.

Specific indicators that can be used to determine whether a soil is hydric for the purposes of wetland delineation are provided in the NRCS *Field Indicators of Hydric Soils in the U.S.* (USDA 2006). The Arid West Supplement (Corps 2008) provides a list of 23 of these hydric soil indicators which are known to occur in the Arid West region. Soil samples were collected and described according to the methodology provided in the Arid West Supplement. Soil chroma and values were determined by utilizing a standard Munsell soil color chart (GretagMacbeth 2000).

Hydric soils were determined to be present if any of the soil samples met one or more of the 23 hydric soil indicators described in the Arid West Supplement.

In some instances, hydric soils may not exhibit any of the indicators outlined in the Arid West Supplement (2008) and are considered to be problematic. Parent material color, conditions that inhibit the formation of redoximorphic features, and insufficient time for the development of hydric soil indicators may all be factors resulting in a lack of hydric soil indicators being present.

If the site supports hydrophytic vegetation and wetland hydrology, but indicators of hydric soils are not evident, it must be verified that at least one primary or two secondary indicators of wetland hydrology are present or that indicators are absent due to disturbance. In addition, landscape position must be analyzed to determine whether the site is likely to collect or concentrate water. If all of the above criteria are satisfied, then one or more of the following approaches can be used to determine whether the soil is hydric:

- Determine whether one or more of the following indicators is present:
    1) 1 cm Muck (A9)
    2) Reduced Vertic (F18)
    3) Red Parent Material (TF2)

- Determine whether one or more of the following problematic soil situations is present:
    1) Moderately to very strongly alkaline soils
    2) Volcanic ash
    3) Vegetated sand and gravel bars within floodplains
    4) Recently developed wetlands
    5) Seasonally ponded soils

- Use of alpha, alpha-dipyridyl dye to determine if reduced (ferrous) iron is present.

- Use of gauge data, water-table monitoring date or repeated direct hydrologic observations.

The seasonally ponding within the Study Area made identifying hydric soils problematic. The Arid West Supplement (2008) characterizes seasonally ponded soils as those that typically occur in basins and valleys throughout the Arid West. Best professional judgment, along with observations of hydrophytic vegetation and wetland hydrology, were used in determining whether soils on-site were hydric.

Hydrology

The Corps jurisdictional wetland hydrology criterion is met if an area is inundated or saturated for a period sufficient to create anoxic soil conditions during the growing season (a minimum of 14 consecutive days in the Arid West region). Evidence of wetland hydrology can include primary indicators, such as visible inundation or saturation, drift deposits, oxidized root channels, and salt crusts, or secondary indicators such as the FAC-neutral test, presence of a shallow aquitard, or crayfish burrows. The Arid West Supplement (Corps 2008) contains 16 primary hydrology indicators and 10 secondary hydrology indicators. Only one primary indicator is required to meet the wetland hydrology criterion; however, if secondary indicators are used, at least two secondary indicators must be present to conclude that an area has wetland hydrology.

The presence or absence of the primary or secondary indicators described in the Arid West Supplement was utilized to determine if sample points within the Project Area met the wetland hydrology criterion.

Due to the Mediterranean climate of the Arid West, this region is characterized by long, hot summer dry seasons. These dry seasons, coupled with variable precipitation, can allow wetlands to dry out completely or to not be inundated or saturated for several years in a row. Since hydrologic indicators are often not evident, the Corps considers such seasonal hydrology to be problematic. The Arid West Supplement (2008) suggests that areas potentially exhibiting problematic hydrology must first be examined for any indicators of hydrophytic vegetation and presence of hydric soils. Secondly, landscape position must be evaluated to determine whether it is likely to collect or concentrate water.

2.1.2 Non-wetland Waters of the U.S.

This study also evaluated the presence of “waters of the U.S.” other than wetlands that are potentially subject to Corps jurisdiction under Section 404 of the Clean Water Act.

1. All waters which are currently used, or were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2. All interstate waters including interstate wetlands;
3. All other waters such as intrastate lakes, rivers, streams (including intermittent streams), *mudflats*, sandflats, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
   (i) Which are or could be used by interstate or foreign travelers for recreational or otherpurposes;
   (ii) From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
   (iii) Which are used or could be used for industrial purposes by industries in interstate commerce;
4. All impoundments of waters otherwise defined as waters of the United States under this definition;
5. Tributaries of waters identified in paragraphs (s)(1) through (4) of this section;
6. The territorial sea;
7. Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (s)(1) through (6) of this section; waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of CWA (other than

cooling ponds as defined in 40 CFR 423.11(m) which also meet the criteria of this definition) are not waters of the United States.

3.0 PROJECT AREA DESCRIPTION

The Study Area is approximately 0.9 acre, a 200-foot by 200-foot site, and is located north of Jacumba, San Diego County, California (Figure 1). The majority of the Study Area is uniform in topography, bounded by undeveloped desert scrub and steep hills to the west and north, minor development to the south, and the railroad and farmland to the east. Elevations range from approximately 2,760 to 2,770 feet relative to NGVD (National Geodetic Vertical Datum).

Vegetation

Vegetation surrounding the Study Area consists of mixed desert scrub to the west and maintained agriculture fields to the east (on east side of railroad). The wetland Study Area is dominated by remnant desert wash species associated with the historic channel of Carrizo Creek, including mesquite (*Prosopis glandulosa*; UPL), with an understory of hydrophytic species, predominantly saltgrass (*Distichlis spicata*; FACW). Upland vegetation consists of brome grasses (*Bromus madritensis* and *Bromus diandrus*) and upland shrubs.

Hydrology

Natural hydrological sources for the Study Area include precipitation and surface run-off from adjacent lands. The natural hydrology has been altered from its natural state with the construction of the railroad. The sloped nature of the site allows water to drain towards the eastern portion of the Study Area and larger basin, with the railroad embankment acting as a barrier to water movement. Water now outflows from the Study Area and larger basin under the railroad and into an excavated ditch adjacent to the farm road and associated farmland east of the railroad.

Soils

The NRCS soil survey is available online for the San Diego County Area. The Study Area has one land type, Acid igneous rock land, and one native soil series, Indio silt loam, saline, 0 to 2 % slopes. Acid igneous rock land consists of rough broken terrain with large boulders and rock outcrops, and is exclusively an upland soil. The Indio silt loam does not appear on the national hydric soils list; however, an unnamed portion of the soil phase does appear on the hydric soils list and is listed as occurring within playas (USDA 2010). The soil description from the soil survey for this soil type is described in detail below and illustrated in Figure 2.

Indio Silt Loam, Saline, 0 to 2% Slopes. This soil is moderately saline with good drainage, very slow run-off, and is a nearly level soil on alluvial plains.

4.0 RESULTS

Vegetation, soils, and hydrology data collected during the delineation site visit are reported on standard Corps Arid West Region data forms in Appendix A. Two sample points were completed within the Study Area, a sample point within the area with wetland indicators and one point within an adjacent upland area.

The potential Section 404 jurisdictional area within the Study Area is best described as an inland seasonal saline emergent wetland as described in the following sections and shown on the map in Appendix A. Photos of representative portions of the Study Area are shown in Appendix B. A list of plant species observed during the site visit is included in Appendix C. Plant species are named using the Jepson Manual (Hickman 1993).

Appendix A depicts the extent of Corps-jurisdiction within the Study Area based on a wetland delineation conducted by WRA on 14 September 2010. Approximately 0.3 acre of potential Section 404 jurisdictional wetland was observed within the Study Area (Appendix A).

4.1 Potential Section 404 Waters of the U.S.

A potential Section 404 wetland area was observed within the Study Area (Appendix A). Dominant vegetation at the wetland sample point was saltgrass (FACW) with patches of fivehook bassia (*Bassia hyssopifolia*; FAC). Various shrubs and remnant desert wash vegetation from the historic Carrizo Creek also occur within this delineated wetland feature and larger basin area, including mesquite (UPL) and shadscale (*Atriplex canescens*; FACU), but are not dominant species throughout the wetland. Other annual vegetation was likely present within this wetland during the growing season; however, due to the timing of this survey, many species in the larger area of the wetland had senesced and could not be identified.

The matrix value and chroma observed from these soils were of low chroma (10YR3/2) and occurred within a depressional area that clearly is inundated and/or saturated for long duration, thus meeting the criteria for hydric soils.

Several primary wetland hydrology indicators were met for these wetlands. Inundation was visible on aerial imagery (B7), surface soil cracks were present (B6), water-stained leaves were present (B9), and a biotic crust was observed (B12). In addition, these areas appear to pond for longer durations than surrounding areas (other) based on the location of the wetland within the landscape (secondary indicator, drainage patterns [B10]).

The upland area did not have hydric soil indicators (had high chroma) and no hydrology indicators and topographically was not within the basin area that was clearly defined. Vegetation did not include wetland classified plants, and consisted of brome grasses (*Bromus madritensis* and *Bromus diandrus*) and shrubs, such as *Atriplex canescens* and *Prosopis glandulosa*, in adjacent areas.

5.0 POTENTIAL CORPS OF ENGINEERS JURISDICTION

The SDG&E East County Substation Project Study Area at SP-83 has approximately 0.3 acre of potential Section 404 Clean Water Act jurisdictional inland seasonal saline emergent wetland based on presence of three required wetland indicators. The wetland area was dominated by hydrophytic vegetation (FAC and FACW plant species) and contained several wetland hydrology indicators. Soils within the wetland were of low chroma within the depressional area that clearly ponds for long duration, meeting the criteria for hydric soils. The wetland soils have a saline influence as indicated by presence of salt tolerant plants. If necessary, the jurisdictional area should be verified by the Corps of Engineers, the regulatory agency responsible for making jurisdictional determinations.

This delineation is based on conditions observed 14 September 2010.

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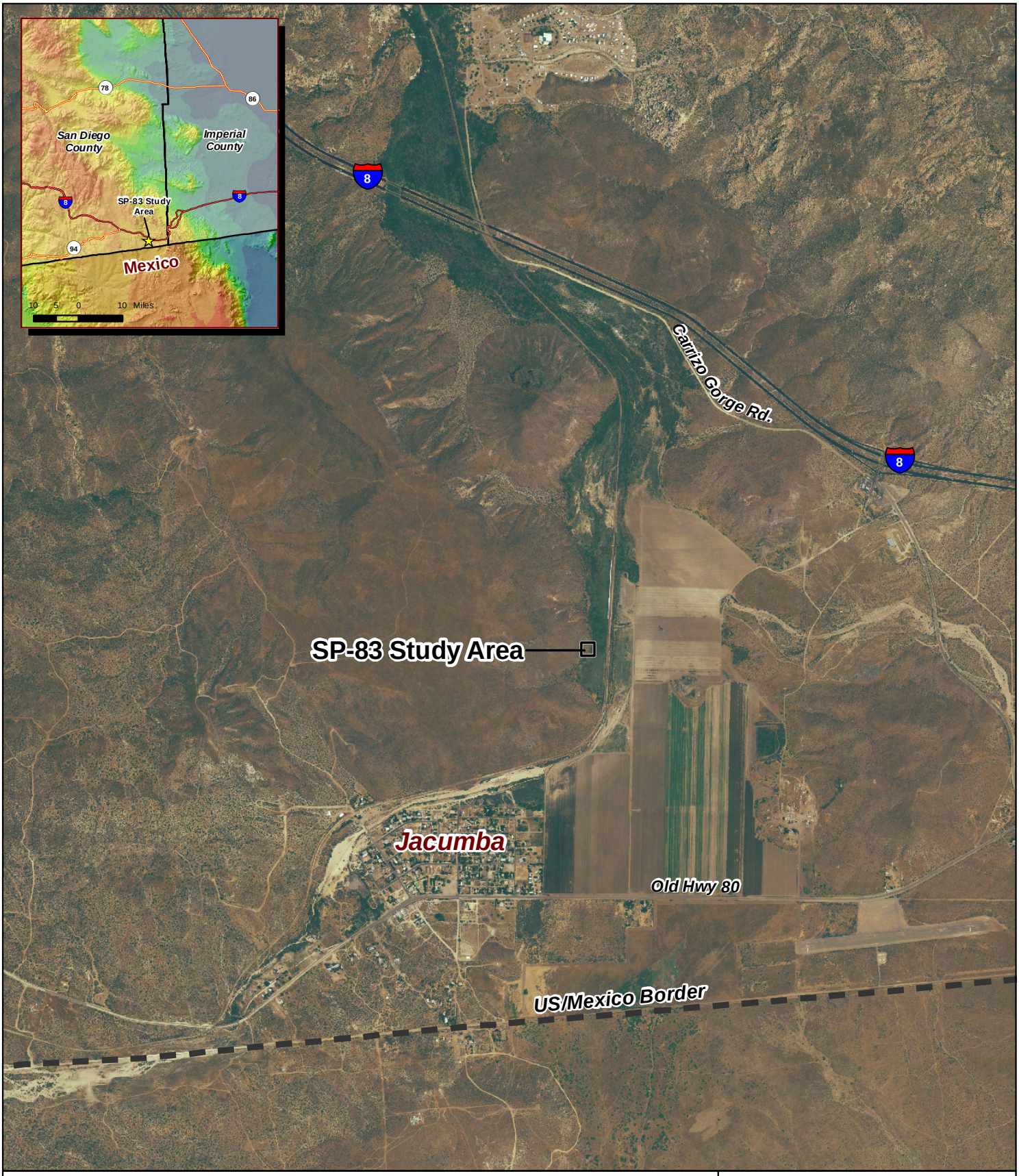

Figure 1. Location Map

N
W E
S

San Diego County, CA

0 0.25 0.5 1 Miles

wra
ENVIRONMENTAL CONSULTANTS

Date: September 2010
Map By: Michael Rochelle
Base Source: NAIP

Path: L:\Acad 2000 Files\20000\20176\gis\ArcMap\Location2.mxd

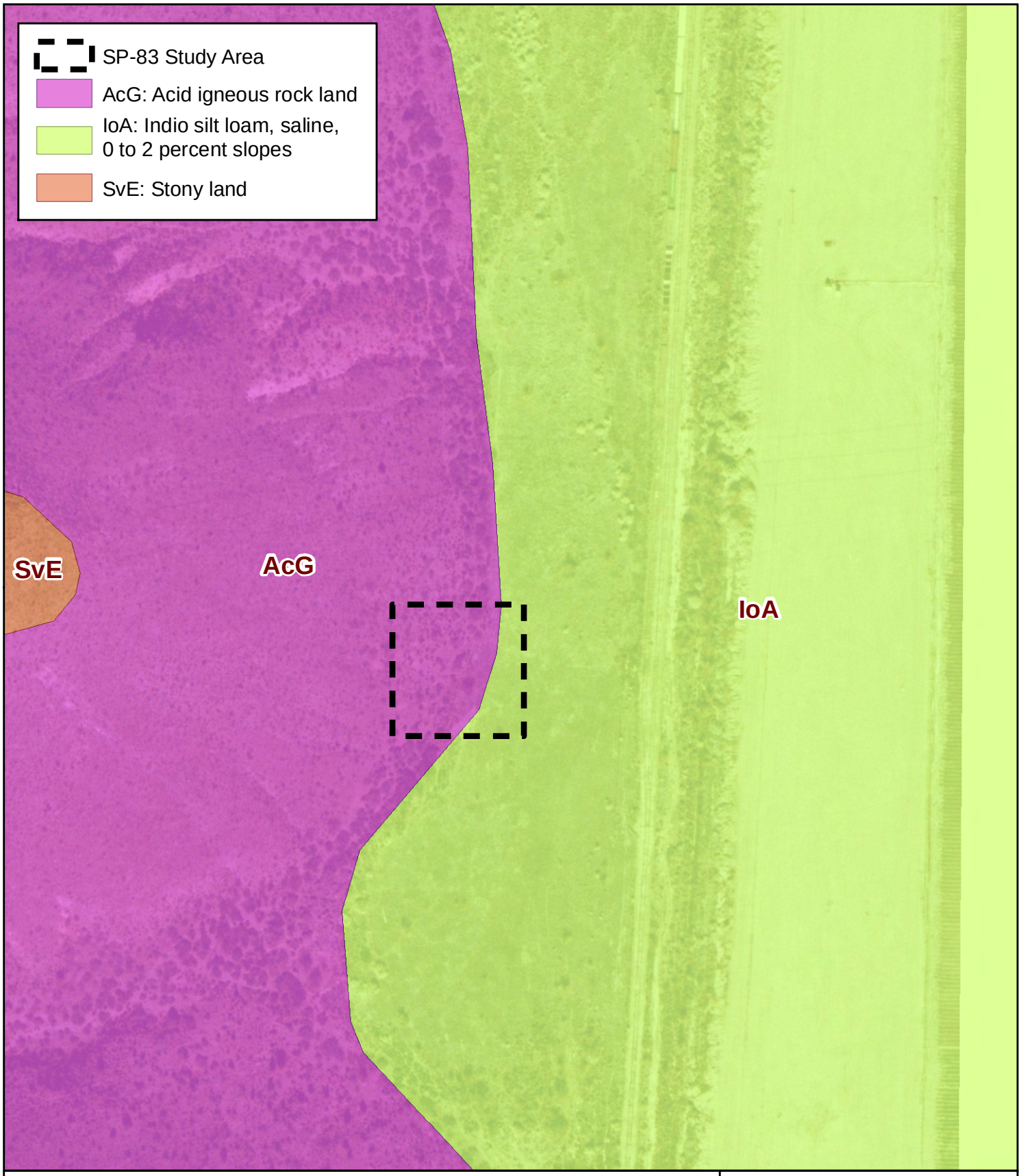

Figure 2. Soils Map

San Diego County, CA

0 100 200 400 Feet

Date: September 2010
Map By: Michael Rochelle
Base Source: USGS Seamless

Path: L:\Acad 2000 Files\20000\20176\gis\ArcMap\Soils2.mxd

Appendix A - Potential Section 404 Jurisdictional Map and Data Sheets

Appendix A. Potential Section 404 Jurisdictional Map

N
W E
S

1 inch = 100 feet

0 50 100 200 Feet

San Diego County, CA

wra
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Date: September 2010
Map By: Michael Rochelle
Base Source: USGS Seamless

Path: L:\Acad 2000 Files\20000\20176\gis\ArcMap\Delineation2.mxd

Wetland Determination Data Form - Arid West Region

Project/Site: East County Substation | City: Jacumba | County: San Diego | Sampling Date: 9/14/2010

Applicant/Owner: SDG&E | State: CA | Sampling Point: **P1**

Investigator(s): Bianca Dailey, Amanda McCarthy | Section,Township,Range: T18S,R8E,sec4

Landform (hillslope, terrace, etc.): depressional wetland | Local Relief (concave, convex, none): concave | Slope(%): 2

Subregion(LRR): LRR C (Medit. CA) | Lat: 32.6275°N | Long: 116.1800°W | Datum: NAD83

Soil Map Unit Name: Indio Silt Loam, saline, 0 to 2 percent slopes | NWI classification: None

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology | Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	☒ Yes ☐ No	**Is the Sampled Area within a Wetland?** ☒ **Yes** ☐ **No**
Hydric Soil Present?	☒ Yes ☐ No	
Wetland Hydrology Present?	☒ Yes ☐ No	

Remarks: Very large, broad, seasonal/depressional wetland that appears to be a historic portion of Carrizo Creek prior to construction of the railroad line. The wetland exhibits little topographical variation and is set between steep hills to the west and the railroad embankment to the east. Continues for some distance along the railroad embankment.

VEGETATION (use scientific names)

TREE STRATUM **Plot Size:** N/A	Absolute % cover	Dominant Species?	Indicator Status
1. *None*			
2.			
3.			
4.			
Tree Stratum Total Cover:			
SAPLING/SHRUB STRATUM **Plot Size:** N/A			
1. *None*			
2.			
3.			
4.			
Sapling/Shrub Stratum Total Cover:			
HERB STRATUM **Plot Size:** 10' x 10'			
1. *Distichlis spicata*	60	yes	FACW
2. *Bassia hyssopifolia*	3	no	FAC
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	63		
WOODY VINE STRATUM **Plot Size:** N/A			
1. *None*			
2.			
Woody Vines Total Cover:			

% Bare ground in herb stratum 20 % cover of biotic crust 10

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC?	1	(A)
Total number of dominant species across all strata?	1	(B)
% of dominant species that are OBL, FACW, or FAC?	100	(A/B)

Prevalence Index Worksheet

Total % cover of:			Multiply by:
OBL species	0	x1	0
FACW species	60	x2	120
FAC species	3	x3	9
FACU species	0	x4	0
UPL species	0	x5	0
Column Totals	63 (A)		129 (B)

Prevalence Index = B/A = 2.0

Hydrophytic Vegetation Indicators

- ☒ Dominance Test is >50%
- ☒ Prevalence Index is </= 3.0[1]
- ☐ Morphological adaptations (provide supporting data in remarks)
- ☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present ? ☒ Yes ☐ No

Remarks: Some dead thatch within sample point area. Sample location is dominated by saltgrass with large areas of bare ground in what appears to be an area that ponds for longer duration than other areas of the wetland.

SOIL

Sampling Point P1

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[1]	Texture	Remarks
0-10	10YR3/2	100	-	-	-	-	silt loam	soil dry and somewhat compacted

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ☐ Histosol (A1)
- ☐ Histic Epipedon (A2)
- ☐ Black Histic (A3)
- ☐ Hydrogen Sulfide (A4)
- ☐ Stratified Layers (A5)(LRR C)
- ☐ 1cm Muck (A9)(LRR D)
- ☐ Depleted Below Dark Surface (A11)
- ☐ Thick Dark Surface (A12)
- ☐ Sandy Mucky Mineral (S1)
- ☐ Sandy Gleyed Matrix (S4)
- ☐ Sandy Redox (S5)
- ☐ Stripped Matrix (S6)
- ☐ Loamy Mucky Mineral (F1)
- ☐ Loamy Gleyed Matrix (F2)
- ☐ Depleted Matrix (F3)
- ☐ Redox Dark Surface (F6)
- ☐ Depleted Dark Surface (F7)
- ☐ Redox Depressions (F8)
- ☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ☐ 1cm Muck (A9) (LRR C)
- ☐ 2cm Muck (A10)(LRR B)
- ☐ Reduced Vertic (F18)
- ☐ Red Parent Material (TF2)
- ☒ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present ? ☒ **Yes** ☐ **No**

Remarks: Soil is dry and compacted; difficult to make out any redox features due to the low chroma of the soil. Oxidized rhizospheres may be present, but were not observed. Depressional area that clearly ponds for long duration, supporting hydric soils.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
- ☐ Drift Deposits (B3)(Nonriverine)
- ☒ Surface Soil Cracks (B6)
- ☒ Inundation Visible on Aerial Imagery (B7)
- ☒ Water-Stained Leaves (B9)
- ☐ Salt Crust (B11)
- ☒ Biotic Crust (B12)
- ☐ Aquatic Invertebrates (B13)
- ☐ Hydrogen Sulfide Odor (C1)
- ☐ Oxidized Rhizospheres along Living Roots (C3)
- ☐ Presence of Reduced Iron (C4)
- ☐ Recent Iron Reduction in PLowed Soils (C6)
- ☒ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ☐ Water Marks (B1)(Riverine)
- ☐ Sediment Deposits (B2)(Riverine)
- ☐ Drift Deposits (B3)(Riverine)
- ☒ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	☐ Yes	☒ No	Depth (inches): _____
Water table present?	☐ Yes	☒ No	Depth (inches): _____
Saturation Present? (includes capillary fringe)	☐ Yes	☒ No	Depth (inches): _____

Wetland Hydrology Present ? ☒ **Yes** ☐ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: Area clearly ponds for long duration with surface soils cracking, water stained vegetation and thatch, and clear boundaries to movement of water (railroad embankment). Aerial imagery shows historic Carrizo Creek floodplain in area. No water present during sample survey due to late season survey effort (September). Larger basin area drains under railroad to the south.

Wetland Determination Data Form - Arid West Region

Project/Site East County Substation City Jacumba County San Diego Sampling Date 9/14/2010

Applicant/Owner SDG&E State CA Sampling Point **P2**

Investigator(s) Bianca Dailey, Amanda McCarthy Section,Township,Range T18S,R8E,sec4

Landform (hillslope, terrace, etc.) depressional wetland Local Relief (concave, convex, none) convex Slope(%) 10

Subregion(LRR) LRR C (Medit. CA) Lat: 32.6273°N Long: 116.1799°W Datum: NAD83

Soil Map Unit Name Acid igneous rock land NWI classification None

Are climatic/hydrologic conditions on-site typical for this time of year? ☒ Yes ☐ No (If no, explain in remarks)

Are any of the following significantly disturbed? ☐ Vegetation ☐ Soil ☐ Hydrology Are "Normal Circumstances" present? ☒ Yes ☐ No

Are any of the following naturally problematic? ☐ Vegetation ☐ Soil ☐ Hydrology (If needed, explain any answers in remarks)

SUMMARY OF FINDINGS - Attach site map showing sample point locations, transects, important features, etc.

Hydrophytic Vegetation Present? ☐ Yes ☒ No
Hydric Soil Present? ☐ Yes ☒ No
Wetland Hydrology Present? ☐ Yes ☒ No

Is the Sampled Area within a Wetland? ☐ **Yes** ☒ **No**

Remarks: Sample point is located at an upland area topographically higher than the adjacent basin area. Domianted by upland grasess with shrubs in adjacent areas.

VEGETATION (use scientific names)

TREE STRATUM **Plot Size:** N/A	Absolute % cover	Dominant Species?	Indicator Status
1. *None*			
2.			
3.			
4.			
Tree Stratum Total Cover:			
SAPLING/SHRUB STRATUM **Plot Size:** N/A			
1. *Atriplex canescens*			FACU
2. *Prosopis glandulosa*			UPL
3.			
4.			
Sapling/Shrub Stratum Total Cover:			
HERB STRATUM **Plot Size:** 10' x 10'			
1. *Bromus madritensis*	20	yes	UPL
2. *Bromus diandrus*	5	no	UPL
3.			
4.			
5.			
6.			
7.			
8.			
Herb Stratum Total Cover:	25		
WOODY VINE STRATUM **Plot Size:** N/A			
1. *None*			
2.			
Woody Vines Total Cover:			

% Bare ground in herb stratum 75 % cover of biotic crust

Dominance Test Worksheet

Number of Dominant Species that are OBL, FACW, or FAC? 0 (A)
Total number of dominant species across all strata? 1 (B)
% of dominant species that are OBL, FACW, or FAC? 0 (A/B)

Prevalence Index Worksheet

Total % cover of:		Multiply by:
OBL species	0 x1	0
FACW species	0 x2	6
FAC species	0 x3	0
FACU species	0 x4	0
UPL species	0 x5	0
Column Totals	0 (A)	0 (B)

Prevalence Index = B/A =

Hydrophytic Vegetation Indicators

☐ Dominance Test is >50%
☐ Prevalence Index is </= 3.0[1]
☐ Morphological adaptations (provide supporting data in remarks)
☐ Problematic hydrophytic vegetation[1] (explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present ? ☐ Yes ☒ No

Remarks: Upland dominated by brome grasses and various shrubs in adjacent areas.

SOIL

Sampling Point P2

Profile description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox %	Type[1]	Loc[1]	Texture	Remarks

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix. [2]Location: PL=Pore Lining, RC=Root Channel, M=Matrix

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

☐ Histosol (A1)
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☐ Stratified Layers (A5)(LRR C)
☐ 1cm Muck (A9)(LRR D)
☐ Depleted Below Dark Surface (A11)
☐ Thick Dark Surface (A12)
☐ Sandy Mucky Mineral (S1)
☐ Sandy Gleyed Matrix (S4)
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☐ Stripped Matrix (S6)
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☐ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

☐ 1cm Muck (A9) (LRR C)
☐ 2cm Muck (A10)(LRR B)
☐ Reduced Vertic (F18)
☐ Red Parent Material (TF2)
☐ Other (explain in remarks)

[3]Indicators of hydric vegetation and wetland hydrology must be present.

Restrictive Layer (if present):

Type:

Depth (inches):

Hydric Soil Present ? ☐ **Yes** ☒ **No**

Remarks: Rocky soils with high chroma, and clearly no indicators of wetland soils present.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (any one indicator is sufficient)

- ☐ Surface Water (A1)
- ☐ High Water Table (A2)
- ☐ Saturation (A3)
- ☐ Water Marks (B1)(Nonriverine)
- ☐ Sediment Deposits (B2)(Nonriverine)
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- ☐ Surface Soil Cracks (B6)
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Secondary Indicators (2 or more required)

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- ☐ Drift Deposits (B3)(Riverine)
- ☐ Drainage Patterns (B10)
- ☐ Dry-Season Water Table (C2)
- ☐ Thin Muck Surface (C7)
- ☐ Crayfish Burrows (C8)
- ☐ Saturation Visible on Aerial Imagery (C9)
- ☐ Shallow Aquitard (D3)
- ☐ FAC-Neutral Test (D5)

Field Observations:

Surface water present?	☐ Yes	☒ No	Depth (inches): _____
Water table present?	☐ Yes	☒ No	Depth (inches): _____
Saturation Present? (includes capillary fringe)	☐ Yes	☒ No	Depth (inches): _____

Wetland Hydrology Present ? ☐ **Yes** ☒ **No**

Describe recorded data (stream guage, monitoring well, aerial photos, etc.) if available.

Remarks: Upland clearly elevated from basin area with no indicators of wetland hydrology present.

Appendix B - Representative Photographs of the Project Area

Above: Wetland boundary, facing north

Below: Wetland boundary, facing south

Photographs taken 14 September 2010.

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Appendix C - Plant Species Observed in the Project Area

Appendix C. Plants observed by WRA at the SDG&E East County Substation Project, 14 September 2010. Indicator status is taken from the 1988 National list of plant species that occur in wetlands (Region 0).

Bold = native species

FAMILY	SCIENTIFIC NAME	COMMON NAME	WETLAND INDICATOR STATUS
Asteraceae	*Ambrosia acanthicarpa*	annual bursage	UPL
Asteraceae	*Artemisia tridentata*	big sagebrush	UPL
Asteraceae	*Hazardia squarrosa*	sawthooth goldenbush	UPL
Brassicaceae	*Brassica tournefortii*	mustard	UPL
Brassicaceae	*Sisymbrium orientale*	hedge mustard	UPL
Chenopodiaceae	*Atriplex canescens*	shadscale	FACU
Chenopodiaceae	*Atriplex rosea*	tumbling saltweed	FACU
Chenopodiaceae	*Bassia hyssopifolia*	fivehook bassia	FAC
Chenopodiaceae	*Chenopodium californicum*	goosefoot	UPL
Chenopodiaceae	*Salsola tragus*	tumbleweed	UPL
Fabaceae	*Acacia greggii*	catclaw	FACU
Fabaceae	*Prosopis glandulosa*	mesquite	UPL
Poaceae	*Achnatherum coronatum*	giant ricegrass	UPL
Poaceae	*Agrostis viridis*	bentgrass	UPL
Poaceae	*Avena barbata*	slender wild oats	UPL
Poaceae	*Bromus diandrus*	ripgut brome	UPL
Poaceae	*Bromus madritensis*	red brome	UPL
Poaceae	*Cynodon dactylon*	bermuda grass	FAC
Poaceae	*Distichlis spicata*	salt grass	FACW
Poaceae	*Schismus barbatus*	common Meditteranean grass	UPL
Polygonaceae	*Eriogonum sp.*	buckwheat	UPL
Tamaricaceae	*Tamarix ramosissima*	salt cedar	FAC