Appendix 5.2E
Jurisdictional Delineation Report

APPROVED JURISDICTIONAL DETERMINATION

HIDDEN HILLS RANCH SOLAR PROJECT
Inyo County, California

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ACOE	United States Army Corps of Engineers
BrightSource	BrightSource Energy, Inc.
CWA	Clean Water Act
EPA	Environmental Protection Agency
F	Fahrenheit
GIS	Geographic Information System
GPS	Geographic Global Positioning System
ID	Identification
MW	Mega Watt
NA	Not Available
NRCS	National Resource Conservation Service
NWI	National Wetlands Inventory
OHWM	Ordinary High Water Mark
Project	BrightSource Energy Hidden Hills Ranch Proposed Project
RPW	Relatively Permanent Waters
SEGS	Solar Electric Generating System
TNW	Traditional Navigable Waters
U.S.	United States
URS	URS Corporation
USDA	United States Department of Agriculture
USFS	United States Forest Service
USGS	United States Geological Survey
WRCC	Western Regional Climate Center
WUS	Waters of the United States

BrightSource Energy, Inc. is proposing to design, construct, and operate a 1,000-megawatt solar electricity generating system at the Hidden Hills Ranch (Project) site. The Project site is located approximately 40 miles west of Las Vegas, Nevada, along the Nevada-California state line, within Inyo County, California (Figure 1). The project site includes approximately 3,097 acres of private land.

This report contains the results of a delineation of waters of the United States (WUS) that occur at the Project site and a description of those water features that may be subject to regulation by the U.S. Army Corps of Engineers (ACOE) under Section 404 of the federal Clean Water Act 1977 (33 U.S.C. § 1344 [2007]). This report is intended for use by the ACOE to verify the extent of jurisdictional wetlands and/or other WUS within the proposed Project site prior to the determination of project impacts.

The Project site is situated on an alluvial fan that emanates from the Spring Valley Mountains to the east. This alluvial fan is composed of two different layers: a porous, sandy surface layer and a hardpan layer that contribute to the hydrology of the Project site as most of the surface waters infiltrate quickly to groundwater recharge. Surface waters that enter the Project site occur only during heavy rains and dissipate quickly into the well-drained, sandy surface soils. As a result of the soft sandy substrate and the heavy pulsatile nature of the storm and fluvial events, the desert washes are a transient feature that may vary in course from one storm event to another. This is evidenced by the lack of consistency between the USGS blue-line streams mapped in 1984 to the data acquired during the 2011 surveys. Of the nine USGS blue-line streams, only 6 were identified in the Project site and of those, the channel path had differed widely between the survey dates.

Of the 69 desert washes that were identified at the project site, only one was found to extend beyond the project site boundary. None of the 69 desert washes were found to have any connectivity to relatively permanent waterways or traditional navigable waterways, including Pahrump Playa, located approximately 2 miles from the terminus of the closest desert wash.

The jurisdictional delineation revealed the presence of 13.92 acres of non-jurisdictional waters at the Project site. No jurisdictional WUS including wetlands were identified during the jurisdictional delineation at the Project site.

SECTION 1 INTRODUCTION

BrightSource Energy, Inc. (BrightSource) is proposing to design, construct, and operate a 1,000-megawatt (MW) solar electricity generating system (SEGS) utilizing a dry cooling system at the Hidden Hills Ranch (Project) site. The system will utilize a closed loop water transport system that will be super heated by solar array into steam to drive a SEGS, which will generate clean, renewable energy.

The Project site is located approximately 40 miles west of Las Vegas, Nevada, along the Nevada-California state line, within Inyo County, California (Figure 1). The project site includes approximately 3,000 acres of private land. A jurisdictional delineation of the Project site was conducted to provide information to the United States (U.S.) Army Corps of Engineers (ACOE), which will use the information to verify the extent of jurisdictional wetlands and other waters of the United States (WUS) at the Project site prior to the determination of project impacts.

This report describes the results of a field investigation and assessment to determine whether potential WUS, regulated under the Clean Water Act (CWA), are located within the boundaries of an area currently designated as the Project site (Figure 2). The definition of WUS is provided in Section 2.

1.1 REPORT OBJECTIVE

This report contains the results of a delineation of WUS that occur at the Project site and a description of those water features that may be subject to regulation by the U.S. Army Corps of Engineers (ACOE) under Section 404 of the federal Clean Water Act 1977 (33 U.S.C. § 1344 [2007]). This report is intended for use by the ACOE to verify the extent of the jurisdictional wetlands and WUS within the proposed Project site prior to the determination of project impacts.

The delineation was conducted according to the guidelines of the online edition of the ACOE *Wetlands Delineation Manual* (Environmental Laboratory 1987), *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* (ACOE 2008a), *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (ACOE 2008b), and *Delineating Playas in the Arid Southwest A literature Review* (ACOE 2001).

1.2 REGULATORY BACKGROUND

1.2.1 U.S. Army Corps of Engineers Jurisdiction

Under Section 404 of the CWA, the ACOE regulates the discharge of dredged and fill materials into WUS. These jurisdictional WUS include intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, and wetlands adjacent to any water of the U.S. (33 CFR § 328). In areas subject to tidal influence, Section 404 jurisdiction extends to the high-tide line. Certain WUS are considered "special aquatic sites" because they are generally recognized as having particular ecological value. Such sites include sanctuaries and refuges, mudflats, wetlands, vegetated shallows, coral reefs, and riffle and pool complexes. Special aquatic sites are defined by the U.S. Environmental Protection Agency (EPA) and may be afforded additional consideration in the permit process for a project.

ACOE also regulates navigable waters under Section 10 of the Rivers and Harbors Act as "…those waters of the United States that are subject to the ebb and flow of the tide shoreward to the mean high water mark and/or are presently used, or have been used in the past, or may be susceptible to use to transport interstate or foreign commerce" (33 CFR § 322.2).

Projects that impact jurisdictional wetlands and non-wetland WUS require a permit from ACOE. Two types of permit are generally issued for construction projects involving dredge or fill in wetlands or WUS: individual permits and nationwide permits. Nationwide permits are issued by ACOE for specific types of activities that have minimal individual or cumulative adverse environmental impacts. Individual permits are required for more complex projects that exceed the impact threshold for nationwide permits.

1.2.1.1 Solid Waste Agency of Northern Cook County v. United States Army Corps of Engineers

On January 9, 2001, the U.S. Supreme Court (Court) issued a decision in Solid Waste Agency of Northern Cook County (SWANCC) v. United States Army Corps of Engineers. The case involved the filling of hydrologically isolated waters that had formed from remnant excavation ditches on a 533-acre parcel. In the decision, the Court denied ACOE jurisdiction over isolated water bodies, which ACOE had previously regulated using the "Migratory Bird Rule" established in 1986. The Court defined isolated waters as any body of water that is non-navigable, intrastate, and lacking any significant nexus to navigable bodies of water (Pooley 2002).

Isolated seasonal wetlands (i.e. wetlands that are not hydrologically connected with other jurisdictional wetlands or non-wetland WUS are generally considered non-jurisdictional.

1.2.1.2 Rapanos v. United States and Carabell v. Army Corps of Engineers

Two cases recently brought before the U.S. Supreme Court, *Rapanos v. United States* (No. 04-1034) and *Carabell v. Army Corps of Engineers* (No. 04-1384) (hereafter referred to as "Rapanos"), challenged ACOE interpretation of WUS (ACOE 2007a). The ACOE had interpreted the CWA 33 U.S.C. 1362(7) to regulate wetland areas that are separated from a tributary of a navigable water by a narrow, constructed

berm, where evidence of an occasional hydrologic connection existed between the wetland and the tributary. Also, the case questioned Congress' authority under the Commerce Clause to apply the CWA to the wetlands at issue.

On June 19, 2006, the Court held 5 to 4 in favor of tightening the definition of "waters of the United States." According to the opinion, a water or wetland constitutes "navigable waters" under the CWA if it possesses a "significant nexus" to waters that are currently navigable or could feasibly be made navigable.

ACOE and the EPA issued a joint memorandum on June 5, 2007, issuing new guidelines for establishing whether or not wetlands or other WUS fall within ACOE jurisdiction (ACOE 2007a). As a result, the agencies assert jurisdiction over traditional navigable waters (TNW), wetlands adjacent to TNWs, non-navigable tributaries to TNWs that are relatively permanent waters (RPW) and wetlands that abut RPWs. The agencies may also take jurisdiction over non-navigable tributaries that are not RPWs, wetlands that are adjacent to non-RPWs, and wetlands adjacent to but not directly abutting a relatively permanent non-navigable tributary. The agencies will generally not assert jurisdiction over swales, erosional features or ditches excavated wholly in and draining only uplands and that don't carry a relatively permanent flow of water.

SECTION 2 ENVIRONMENTAL SETTING

The Project site is located in Pahrump Valley and is surrounded by both public and private lands. This region is in the Mojave Desert in southeastern California with the majority of the project site on the Calvada Springs, U.S. Geological Survey (USGS) 7.5 minute Quadrangle (USGS 1984) and minor areas to the north and southeast on the Mound Spring and Stump Spring Quadrangles (1984), respectively (Appendix D). Average rainfall in this region is 3 to 7 inches with mean annual air temperatures ranging from 61 to 68 degrees Fahrenheit (F) and a frost free period of 200 to 220 days (NRCS 2006). The highest annual temperature averages are in the months of July and August at 103.9 and 103.3 degrees F, respectively. December and January have the lowest average temperatures at 32 degrees F (WRCC 2010).

2.1 PROJECT LOCATION

The Project site is located in Inyo County approximately 23 miles east of Tecopa, California and approximately five miles south of Pahrump, Nevada on the Old Spanish Trail Highway (Figure 1). The Project site is immediately north of the unincorporated town of Calvada Springs, California (Figure 2).

2.2 SITE DESCRIPTION

The Project site consists of approximately 3,097 acres that will be owned by BrightSource. Adjoining land is privately owned. The Project site is divided by a grid-work of both maintained and unmaintained dirt roads into several large parcels (Figure 2). One parcel to the south, immediately adjacent to the Project site, is developed with a residential building and several smaller buildings. The Project site boundary to the south is demarcated by the Old Spanish Trail Highway running west to east from Tecopa, California to Highway 160 in Clark County, Nevada. The eastern boundary of the project is demarcated by the California-Nevada state line and a dirt access road that runs the length of the eastern project boundary.

2.3 VEGETATION COMMUNITIES AND WILDLIFE

2.3.1 Vegetation

Vegetation communities in the Project site were classified using *A Manual of California Vegetation* (Sawyer and Keeler-Wolf 1995), *California Vegetation* (Holland 1986), and *Biotic Communities of Southwestern United States and Northwestern Mexico* (Brown 1994). The Project site contains the following five vegetation communities: (1) Mojave Creosote bush series; (2) Mojave Creosote bush-white bursage scrub; (3) Desert saltbush scrub; (4) Mojave Desert wash scrub, Mesquite series; and (5) Disturbed/Developed lands. A non-inclusive list of the species observed within the Project site is included in Appendix G. The predominant natural plant community is Creosote bush-white bursage scrub series. Mixed Saltbush series is common on basin floors and Saltgrass series is present on wet basin-fill and lacustrine deposits, outside of the Project site and adjacent to Pahrump Playa (Figure 2). The same vegetation is found along the drainage system as in upland areas. In many drainage locations, however, a higher density of vegetation was observed.

2.3.1.1 Mojave Creosote Bush Scrub and Creosote Bush-White Bursage Scrub

Mojave creosote bush scrub (Sawyer and Keeler-Wolf 1995, Holland 1986, and Brown 1994) is the dominant plant community at the Project site followed closely by Creosote Bush-White Bursage Scrub. These communities are typically found below 3,000 to 4,000 feet in the southwestern region of the United States. It is extensive from the Death Valley region southward across the Mojave Desert to the little San Bernardino Mountains, eastward to northwestern Arizona and southern Nevada. This plant community is generally composed of widely-spaced shrubs of approximately 2 to 10 feet in height with bare ground between, and typically intergrades with Joshua tree woodland and other desert scrub communities. This community is dominated by creosote bush (*Larrea tridentata*) and when white bursage (*Ambrosia dumosa*) is commonly present, the community transitions to Creosote Bush-White Bursage Scrub. Other common plant species present throughout this community and within the Project site include Nevada joint fir (*Ephedra nevadensis*), spiny hop-sage (*Grayia spinosa*), and cheesebush (*Hymenoclea salsola*). Plant growth generally occurs during late winter and early spring months, when annual precipitation is sufficient. Many species of ephemeral herbs may flower in late March and April if winter rains are sufficient.

2.3.1.2 Desert Saltbush Scrub

Desert saltbush scrub, mixed saltbush series, (Holland 1986, Brown 1994 and Sawyer and Keeler-Wolf 1995) is characterized by low-growing, grayish, micro-phyllous shrubs and the presence of some succulent species. This community is widely scattered on margins of dry lake beds in the Colorado, Mojave, and Great Basin deserts. Although the percent cover is typically low, with much bare ground exposed between the widely spaced shrubs, densely vegetated areas are also present. Although a variety of saltbush species' of the genus *Atriplex* can be present, this vegetation community is often dominated by a single species of saltbush. The dominant saltbush species on site included four-winged saltbush (*Atriplex canescens*) and shadscale (*Atriplex confertifolia*). These species were typically found in small, patchy, groupings on site where water appeared to leach salts from the soils. These areas were found in upland and drainage areas.

2.3.1.3 Mojave Desert Wash Scrub, Mesquite Series

The Mojave Desert wash scrub, Mesquite series, (Holland 1986, Brown 1994 and Sawyer and Keeler-Wolf 1995) is characterized by a low, scrubby, remarkably diverse scrub habitat. This desert wash woodland is dominated by an open and scattered canopy of honey mesquite trees (*Prosopis glandulosa*). This community is found throughout the Mojave Desert, typically occurring in the sandy bottoms of wide canyons; incised arroyos of upper bajadas; and within braided, shallow washes of the lower bajadas, usually below 5,000 feet. At the Project site, this series is extremely limited and only occurred in a few drainage areas. A few mesquite were found scattered around the Project site in areas that appeared to pool during heavy rains, like ditches along roadsides. This vegetation community is rare at the Project site.

2.3.1.4 Disturbed/Developed Lands

Disturbed/developed lands are generally characterized as those areas that are either devoid of vegetation as a result of site grading, or developed or occupied with structures and/or landscaped with non-native ornamental plants or shade trees. In general, the disturbed areas are so heavily modified that native and non-native vegetation cannot become established. Examples of disturbed/developed areas include paved and un-surfaced roads, graded or cleared areas, driveways, parking areas, houses, cement foundations, and existing structures.

Disturbed/developed lands are present throughout various areas of the Project site. These areas include un-surfaced roads, as well as developed areas supporting small structures, and recently disturbed areas created by vehicles used for parcel marking. Vegetative cover for this area type is entirely absent.

2.3.2 Observed Wildlife

During the field investigation, URS Corporation (URS) biologists observed wildlife activity and numerous burrows within the Project site. A list of observed wildlife is presented in Appendix G.

2.4 SOILS

The Project site lies in the ecoregion, Subsection 322Ac (Amagorosa Desert – Pahrump Valley). Typical soils for the ecoregion are generally and briefly described on the USDA, Forest Service *Ecological Subregions of California* website (USFS 1998). This subsection is mainly on very gently to moderately sloping alluvial fans, nearly level basin floor, and dry lake beds. There are large playas on the lake beds. The Pahrump Valley is oriented in a northwest to southeast direction. Fluvial erosion and deposition and aeolian deflation and deposition are the main geomorphic processes. The soils are mostly Typic Torripsamments and Typic Torriorthents on younger fans and Typic Calciorthids and Typic Haplargids on older fans. They are Typic Torrifluvents, Typic Torripsamments, Typic Torriorthents, Typic Calciorthids, and shallow Typic Paleorthids on basin floor. Soils on hills are mostly Lithic Torriorthents. The soils are well drained, except on poorly drained playas. The soil temperature regimes are thermic. Soil moisture regimes are aridic (USFS 1998).

The *Soil Survey of Clark County, Nevada* (NRCS 2007) and soil survey data of the *Mojave Desert Area, Northeast Part, California* (2007), and *Nye County, Nevada* (2010), were all accessed from the *NRCS Web Soil Survey* website (NRCS 2011a). Soil survey data was inaccessible from known resources for Inyo County at the writing of this report. Assumptions are made that since the Property site shares the state boundary with Clark County, Nevada, that the soils are similar or close to the soil survey data presented on the NRCS Web Soil Survey website. All three sets of data indicate that one soil mapping unit, with 5 sub-units, occur at the Project site. Table 1 includes a list of these soil mapping units and sub-units and a brief description of each. None of the mapped soils are included on the Hydric Soils of California List (NRCS 2011b).

Table 1. Soil Mapping Units and Descriptions

Soil Mapping Unit[1]	Description[1]
441 - Corbilt gravelly loamy fine sand • Found on Fan Piedmonts • 0 to 4 percent slopes	This unit is about: *1. 85 percent Corbilt gravelly loamy fine sand,* *2. 5 percent Grapevine gravelly loamy fine sand,* *3. 5 percent Petronodic Haplocalcids loamy fine sand,* *4. 4 percent Vegastorm gravelly fine sandy loam, and* *5. 1 percent Bluepoint loamy fine sand.*
Major Components	
1. Corbilt gravelly loamy fine sand	• Mixed alluvium on fan skirts • Slope is 0 to 4 percent • Surface rock fragments: 0 percent stones, 0 percent cobble, 35 percent gravel. • 4 layers: 1. 0 to 4 in; gravelly loamy fine sand 2. 4 to 32 in: gravelly fine sandy loam 3. 32 to 56 in: very gravelly sand loam 4. 56 to 60 in: cemented material (Duripan) • Runoff is very low, saturated conductivity class is high, natural drainage class is well drained, and permeability is moderately rapid.
2. Grapvine gravelly loamy fine sand	• This unit is found on alluvial flats. • Slope is 0 to 2 percent.
3. Petronodic Haplocalcids loamy fine sand	• This unit is found on lake terraces. • Slope is 0 to 4 percent. • Classification: coarse-loamy, mixed, superactive, thermic Petronodic Haplocalcids.
4. Vegastorm gravelly fine sand loam	• This unit is found on alluvial flats. • Slope is 0 to 4 percent.
5. Bluepoint loamy fine sand	• This unit is found on dunes. • Slope is 4 to 15 percent.

[1]*Soil Suvey of Clark County, Nevada* (USDA-NRCS, 2007).

2.5 HYDROLOGY

The Pahrump Valley groundwater basin, is a closed watershed located at the base of four different mountain ranges at an elevation ranging between 2,457 feet at Stewart (dry) Lake (Figure 2) to approximately 3,000 feet above sea level in the southwestern area of the basin (CDWR 2004). The mountain ranges to the west and northwest include the Nopah and Resting Springs Ranges, California, at an average elevation of 6,400 feet; the Kingston Range, California to the south at an elevation of 7,300 feet; and the Spring Mountains, Nevada to the east, representing the largest contributing range with a maximum elevation of 11,910 feet (Figure 3; CDWR 2004).

Average precipitation ranges from 3 to 7 inches and is received predominantly as rainfall in the western ranges and as snowfall in the Spring Mountains to the east. Precipitation normally occurs in isolated storm events resulting in a surge paradigm which is especially exacerbated by the surrounding ranges (NRCS 2006).

The Project site is located at the toe of large overlapping alluvial fans emanating from the Spring Mountains to the east (Figure 3). The Spring Mountain alluvial fan is composed of two different layers with an impermeable-cemented layer below and a sandy and porous layer above (CDWR 2004, NRCS 2006). Hence most of the water that reaches the western aspect of the Spring Mountain alluvial fans permeates quickly into ground water and follows the deeper, approximately 55 feet, impermeable-cemented layer down slope to the underlying aquifer (CDWR 2004, NRCS 2006).

Several small alluvial fan derived desert washes cross the state border down slope from Nevada to California at the Project site. These ephemeral drainages dissipate quickly as the slope gradient diminishes from east to west. Several of the washes exhibit a braided or anastomose morphology and often interconnect with other nearby washes either by natural forces or by following earthen roadways that form a grid over the Project site. The well drained sandy soils (Corbilt class) that are found throughout the site are a contributing factor to the quick infiltration of surface waters (i.e. the desert washes). As the gradient and resulting fluvial velocity decreases, suspended sediments quickly fall out of solution, as evidenced by several sand and gravel sheets, and create a broad sheet flow effect which further reduces the fluvial velocity and increase permeation into the porous sandy substrate. In areas where large sheetflood zones form, discrete channels may reform for short distances before dissipating completely as volume loss to the groundwater table or by evapotranspiration. The sheetflood zones are not a result from a change in substrate but are likely the result of changes in micro-topography and total fluvial volume (Vyverberg 2010).

A few isolated areas of pooling are located in the lower areas of the project site where the slope dissipates and becomes level (Appendix C). These pooling areas may be relicts from previous hydrological events or from anthropogenic actions. These areas are ephemeral and only hold water during ground saturation and would only exhibit surface waters during a storm event. Soils in these areas may have higher silt content but would be classified as well drained. These areas are apparent as having an increase in non-hydrophytic vegetation density.

2.6 SITE CONDITIONS

The WUS investigation took place on January 31 to February 4, 2011. Precipitation was above normal for this time of year. Late December 2010, rain events brought record breaking storms to the region with 3.32 inches of rain in December 2010, of that 2.89 inches fell between December 19th and December 22nd. An additional 0.45 inches of rain fell in January (Weather Underground 2011). These isolated storms likely resulted in more pronounced hydrological indicators than what would be typical for this region.

The site is disturbed as seen by the division of the Project site into parcels that are bordered by dirt roads. These roads often interfere with the natural flow of several desert washes that traverse the site from east to west. The southeast of the Project site burned several years ago and still has remnant charcoaled stems of creosote bush. The Creosote bush-white bursage plant community has recovered in this area but is obviously younger than the surrounding areas.

Soils throughout the project site range from well drained coarse sands and mixed gravels to finer sands with a minor silt component. No soils were found that would contribute to prolonged saturation. A few pooling areas in the western reaches of the Project site showed some thin surface clays as evidenced from soil cracking. Very few areas also exhibited surface efflorescence from the evaporation and capillary action of waters that bring dissolved salts to the surface layer. Soil pH levels are assumed to be in the normal range based on the well-drained substrate and typical growth of the observed plant communities.

The average slope of the Project site is less than one percent from east to west. Micro-topography throughout the site is the result of accretion of fluvial deposits from the Spring Mountain alluvial fan and from the incising of these deposits from active and older ephemeral drainages. Micro-topography resulting from these processes may vary by at most by 4.5 feet in the channel bottom to the adjacent upland. There was no evidence in the Project site of large scale aeolian sand deposits.

SECTION 3 METHODOLOGY

The proposed delineation of potential WUS presented in this report is based on the definitions of "waters," "wetlands," and "ordinary high water marks" (OHWM) (ACOE 1987, 2006). Indicators of OHWM includes; waterline mark on bank, water staining, shelving or cut banks, exposed roots, sediment deposits, presence of litter and debris, and changes in substrate and/or vegetation. The Project site was evaluated for the presence of WUS using standard methods described in the *Field Guide for Wetland Delineation: 1987 Corps of Engineers Manual* (ACOE 1987), *Interim Regional Supplement to the ACOE of Engineers Wetland Delineation Manual: Arid West Region* (ACOE 2006), *Final Summary Report: Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest* (ACOE 2001b), *Coordination on Jurisdictional Determinations under Clean Water Act Section 404 in Light of the SWANCC and Rapanos Supreme Court Decisions* (ACOE 2007a), and *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (ACOE 2008b). The jurisdictional status, of all waters delineated, was evaluated by assessing the surface connectivity of these areas with downstream WUS and a search for previous jurisdictional delineations and Section 404 permit applications in the area of the Project site.

Areas considered and proposed to be jurisdictional were based on wetland delineation practices that are in compliance with the Rapanos decision (ACOE 1987, 2007a, and 2008b). Methodology to determine what is proposed jurisdictional and what is proposed non-jurisdictional involved two criteria:

1. OHWM: Areas with higher density vegetation but lacked any of the OHWM characteristics were eliminated as proposed jurisdictional, whereas proposed jurisdictional washes exhibited conditions indicative of OHWMs.

2. Connectivity: Ephemeral washes that were not connected to the Pahrump Playa (L2USJ), an NWI wetland, were eliminated as proposed jurisdictional (Cowardin et al. 1979, NWI 2011). Connectivity was determined and confirmed by using topographic maps, current aerial photography and field reconnaissance.

Potential WUS at the Project site were identified by URS personnel through review of existing documentation and verified during the field investigation. During the field investigation URS personnel gathered information on the physical parameters such as topographic demarcation, soil characteristics, vegetation cover, and connectivity of drainages to Pahrump Playa.

3.1 DATA REVIEW

Information gathered during URS's review of existing data is summarized by data source in the following sub-sections. URS biologists conducted a review of existing data to provide a preliminary assessment of potential WUS within the Project site. Data reviewed include soil surveys of surrounding counties and soil data retrieved from various documents (Section 3.1.1), USGS topographic maps (Appendix D) (Section 3.1.2), and aerial photography (Section 3.1.3).

3.1.1 Soils

The Soil Survey of Clark County, Nevada (NRCS 2007) and soil survey data of Inyo County, California, of the Mojave Desert Area, Northeast Part, California (2007), and Nye County, Nevada (2010), were all accessed from the USDA – Natural Resource Conservation Service, Web Soil Survey website (NRCS 2011a). Soil survey data was inaccessible from known resources for Inyo County at the writing of this report. Assumptions are made that since the Property area shares the state boundary with Clark County, Nevada, that the soils are similar or close to the soil survey data presented on the NRCS Web Soil Survey website. All three sets of data indicate that one soil mapping unit, with 5 sub-units, occur within the Project area. Table 1 includes a list of these soil mapping units and sub-units and a brief description of each. None of the mapped soils are included on the Hydric Soils of California List (NRCS 2011b).

3.1.2 Vegetation

Plants were identified to species using The Jepson Manual: Higher Plants of California (Hickman 1993) and The Jepson Desert Manual (Baldwin et al. 2002). The National List of Plant Species that Occur in Wetlands (Reed 1988) was used to determine the wetland indicator status of the plants. None of the species recorded on the Project area were on the list of wetland plant indicator species for the region.

3.1.3 USGS Topographic Maps

The Caldera Springs, California; Mound Springs, California; and Stump Spring, Nevada, 7.5-minute quadrangles indicate that the elevation of the Project area varies from approximately 2,280 to 2,380 feet above mean sea level (USGS 2011). The surface topography of the Project site slopes primarily to the southwest. A copy of portions of the Caldera Springs, California; Mound Springs, California; and Stump Spring, Nevada, 7.5 minute quadrangles, within the vicinity of the Project site, are included as Appendix D.

The USGS topographic data indicates nine unnamed “blue lines” within the Project site. Blue lines typically represent water features including streams and ephemeral washes. Drainages mapped at the Project site (represented by dark blue lines) are indicated on the maps in Appendix C.

3.1.4 Aerial Photographs

URS personnel reviewed recent aerial photography dated 2010 with one-foot topographic contours (VTN 2010). Aerial photographs (scale 1 inch = 200 feet) are included in Appendix C. Vegetation patterns that are typically indicative of ephemeral washes and pool areas were noted on the aerial photography. The field review focused on these areas.

3.1.5 Previous Reports

URS personnel searched for past reports of the Project site and areas adjacent to the Project. Reports searched for included Jurisdictional Delineation of WUS, approved Section 404 Jurisdictional Delineations, preliminary jurisdictional delineations, and Individual and Nationwide permit applications. No previous reports, for the Project site and areas adjacent to the Project, were found.

3.2 FIELD INVESTIGATION

The field review focused on gathering information relative to areas of high-density vegetation and other wash indicators (i.e., OHWM, connectivity, USGS topographic map "blue lines", and changes in substrate and vegetation) to evaluate their jurisdictional status.

Two teams of two URS Biologists conducted field investigations of the Project site, from Jan 31 – Feb 4, 2011, to identify and map OHWM of potentially jurisdictional WUS and non-jurisdictional waters within the Project boundary. During the field investigation, URS personnel reviewed the Project site via pedestrian and vehicular transects, which focused primarily on areas identified as ephemeral wash systems using aerial and topographic maps made during the data review prior to the field investigation, and observations from vehicles driven on partially maintained dirt roads throughout the Project site. URS collected field data, including the width and depth of the OHWM, and two photographs (the first upstream view and the second downstream view) for reference at each location identification (ID) taken in the ephemeral wash systems within the project site. The field teams collected geographic information for representative data points and recorded them using individual Trimble GeoXH, 2008 version, global positioning system (GPS) units with sub-meter accuracy. URS assigned identification numbers to each water body. Data for Drainages 001-034 were collected by GPS unit A, while data for Drainages 1-35, were collected by GPS unit B. The numbering system was setup to avoid overlap of numbering schemes by either team. Field reconnaissance was not limited to ephemeral wash systems that are likely to be jurisdictional based on current guidelines; URS also collected data for drainage features likely to be non-jurisdictional. GPS data collected in the field were exported to geographic information systems (GIS) and overlaid onto ortho-rectified aerial photographs (VTN 2010).

SECTION 4 FINDINGS

4.1 SUMMARY OF RESULTS

4.1.1 Proposed Jurisdictional and Non-Jurisdictional Status of Areas Evaluated

The field review focused on gathering information relative to areas of high-density vegetation and other wash indicators (i.e. OHWM, connectivity, USGS topographic map "blue lines", and changes in substrate and vegetation) to evaluate their jurisdictional status. The reviewed areas are represented by Drainage ID numbers. The locations of the Drainages are noted on the aerial photographs in Appendix C. Data collected at each Drainage ID is summarized in Appendix B. Representative photographs taken during the field review associated with each data point are included in the Photographic Log in Appendix A.

4.1.1.1 USGS "Blue-line" Streams

From the USGS 1984 data set nine USGS blue line streams enter the Project site from the upslope area to the east. Of these nine streams, six were identified to be currently in the Project site and were mapped based on the previously described methodology. As a result of the age of the data set (1984) and the transient nature of desert wash hydrogeomorphology, field results differed from the USGS data significantly. For example, three of the nine blue-line streams were absent and not delineated during the field mapping effort. Also, of the six blue-line streams that were identified in the field the path of the washes differed from the USGS map data. This result is consistent with the pulsatile or flashflood nature of these fluvial systems. Many of the washes identified are shallow erosional features that have meandered in their lateral extent as evidenced from the soil surface staining observed in the aerial photography. The aerial photography suggests there are several features that were not mapped or may have different channel dimensions or paths. These aerial signatures represent latent features as stained surface soils as well as features currently present and measureable.

4.1.1.2 Channel Path and Morphology

The typical pattern of channel morphology found during the field delineation is the result of sporadic heavy rains that are concentrated and delivered to the project site from the east as a series of terraces that act as collection areas for precipitation and are delivered to the project site by small incised ravines that lead to smaller alluvial fans while transitioning into the Project site. These wash features often become altered by the maintained state-line road in their normal path and may run along the roadway for short distances before traveling in an east to west direction. Most of the channels quickly become braided and quickly lose energy from the lack of gradient and the porous, course, sandy substrate. Moisture in these channels is ephemeral as evidenced by a lack of vegetative response from comparing the closely associated vegetation from the upland vegetation. While extending westward the gradient of the Project site continues to lessen and the channel morphology changes from a braided and often intermittent morphology to either a sediment depositional area representing the terminus of the channel or a pooling area that may show areas of surface cracking from the last of the suspended sediment i.e. minor silts and clays falling out of solution at the tail end of the surface flow. These areas do not however reflect a standing water environment that would lead to hydric conditions. These pooling areas do not reflect a significant change in vegetation composition from the surrounding area but may show a slight increase in

vegetation density. Evapotranspiration in this environment is rapid and the soils lack the ability to hold moisture for periods long enough to support hydric conditions. In an attempt to create a comprehensive representation of the fluvial morphology these features were identified separately in the GIS mapping effort. These features should not be interpreted; however, as wetland features.

In several areas small channels were mapped in the existing and often-used roadways found at the Project site. These roadways altered the path and possibly the extent of the channels. In one instance found in Drainage ID 007 the channel was mapped from the east side of the Property to where it exited the property on the west side as it followed an east to west established dirt road. Many other roadways altered the path of channels and at times resulted in the terminus of the channel in the roadway due to small earthen berms adjacent to the roadways that the water in the channel lacked the ability to breach.

4.1.1.3 Potential WUS

Potential WUS at the Project site were identified by URS personnel through review of existing documentation and verified during the field investigation. During the field investigation URS personnel gathered information on the physical parameters and substrate, topographic demarcation, vegetation, and the connectivity of the drainage areas to a downstream potential WUS and defined wetland by NWI, Pahrump Playa.

4.1.2 Non-wash Data Points

URS biologists collected data points (Appendix B) and took representative photos (Appendix A) of areas that had and appeared to have attributes of ephemeral wash systems on the 2010 aerial photographs and USGS Topographic 7.5 minute quadrangles (USGS 1984), but did not show characteristics of a wash or drainage system during the field investigation (lack of defined bed and bank) and also lack of connectivity to a downstream WUS.

4.2 CONCLUSION

The Project site is located in the Pahrump Valley of the Mojave Desert and contains many unnamed ephemeral washes. The Project site drains to the west and southwest. Downstream of the Project site is the Pahrump Playa, listed a NWI wetland (NWI 2011).

The Project site covers 3,097 acres and is crossed by approximately 69 ephemeral washes, 6 of which are “blue lines” on the USGS topographic maps (Drainage ID 023, 15, 22, 23, 26, and 30), as presented on the aerial photographs (Appendix C). Of these washes, none exhibited conditions that meet the criteria of a jurisdictional wetland, discussed in Section 3.0 of this report, and therefore are proposed as non-jurisdictional waters. The washes proposed as non-jurisdictional waters are represented on the aerial photographs via a solid dark blue line (Appendix C).

The field review focused on gathering information relative to areas of high-density vegetation and evidence of water flow to evaluate their jurisdictional status. The reviewed areas are represented by Drainage ID 001 through 004 (Group A) and 1 through 35 (Group B), and described in Appendix B. The non-jurisdictional waters within the Project site are summarized in Appendix B. The washes are listed in

the table according to the characteristics and criteria as described in Sections 1.0 and 3.0 of this report including linear feet and area (square feet) of each drainage.

As shown in at the bottom of the table in Appendix B, a total of 606,400.05 square feet (13.92-acres) of the 3,097 acre Project site qualify for consideration as non-jurisdictional waters. All the washes listed in Appendix B did not meet one or more of the criteria discussed in Sections 1 and 3 and therefore are proposed non-jurisdictional waters.

URS evaluated 69 drainage features and representative pooling and sheet flow areas. Based on these features, URS has developed the following conclusions.

- No washes at the Project site are proposed jurisdictional WUS as they did not exhibit the required characteristics of the criteria described below. Methodology to determine what is proposed jurisdictional and what is proposed non- jurisdictional involved two criteria:

    1. OHWM: Areas with higher density vegetation but lacked any of the OHWM characteristics were eliminated as proposed jurisdictional, whereas proposed jurisdictional washes exhibited conditions indicative of OHWMs as described in Section 3.0 of this report.
    2. Connectivity: Ephemeral washes that were not connected to the Pahrump Playa (L2USJ), a potential WUS and defined wetland by to NWI (Cowardin et al. 1979, NWI 2011), were eliminated as proposed jurisdictional. Connectivity was determined and confirmed by using topographic maps, current aerial photography, and field reconnaissance.

- 69 washes within the Project site are proposed non-jurisdictional waters, 6 of which are “blue lines” on USGS topographic maps (Drainage ID 023, 15, 22, 23, 26, and 30).

SECTION 5 REFERENCES

Baldwin, B., S. Boyd, B. J. Ertter, R. W. Patterson, T. J. Rosatti, D. H. Wilken, and M. Weatherwax (eds.) 2002 – The Jepson Desert Manual: Vascular Plants of Southeastern California. University of California Press, Berkeley, California. 624 pp.

Brady, N.C. 1974. The nature and properties of soils. 8th Ed., Macmillan Publ. Co., New York, NY.

Brown, D.E., (Editor). 1994. Biotic Communities of Southwestern United States and Northwestern Mexico. University of Utah Press, Salt Lake City, UT.

California Department of Water Resources (CDWR). 2004. Pharump Valley Groundwater Basin, California's Groundwater Bulletin 118. South Lahontan Hydrologic Region. Sacramento, CA.

CalFlora. 2011. Information on California Plants for Conservation, Research, and Education. Accessed from: www.calflora.org

Cowardin, L.M., Carter, V., Golet, F.C., and E.T. LaRoe. 1979. Classification of Wetlands and Deepwater Habitats of the United States. Washington, D.C: Government Printing Office

Hickman, J.C. (Editor). 1993. The Jepson Manual, Higher Plants of California. University of California Press. Berkeley, California.

Holland, R. 1986. Preliminary list of terrestrial natural communities of California. Department of Fish and Game, Sacramento, CA.

National Wetlands Inventory (NWI), 2011. The National Wetlands Inventory, United States Fish and Wildlife Service. Available at http://www.fws.gov/wetlands/

Natural Resource Conservation Service (NRCS). 2006. Soil Survey of Clark County Area, Nevada. United States Department of Agriculture, Natural Resource Conservation Service, Washington D.C.

——. 2010a. Determining Soil Texture by Feel Method (online). Accessed November 12, 2010. Available at: http://www.mt.nrcs.usda.gov/about/lessons/Lessons_Soil/feelmethod.html

——. 2011a. Web Soil Survey: National Cooperative Soil Survey. Accessed from http://websoilsurvey.nrcs.usda.gov/app/HomePage.htm

——. 2011b. NRCS Hydric Soils National List, FEB 2011. Accessed from http://soils.usda.gov/use/hydric/

Reed, P.B. 1988. National List of Plant Species That Occur in Wetlands: California (Region 0). Biological Report 88 (26.10) May 1988. National Ecology Research Center, National Wetlands Inventory, U.S. Fish and Wildlife Service, St. Petersburg, Florida.

Ruffolo, J. 2002. The U.S. Supreme Court Limits Federal Regulation of Wetlands: Implications of the SWANCC Decision. Prepared at the request of Senator Sheila Kuehl Chair, Senate Natural Resources and Wldlife Committee. Isbn 1-58703-150-7. Accessed from: http://www.library.ca.gov/crb/02/03/02-003.pdf

Pooley, D.S. 2002. The Future of Wetlands Regulation in the Wake of the SWANCC Decision. Sacramento: The Environmental Monitor, Association of Environmental Professionals.

Sawyer, J. O., and T. Keeler-Wolf. 1995. A manual of California vegetation. California Native Plant Society. Sacramento, California.

U.S. Army Corps of Engineers (ACOE), 1987. Code of Federal Regulations, Title 33 – Navigation and Navigable Waters, Chapter 2, Parts 320 – 330.

——. 1987. Corps of Engineers Wetland Delineation Manual Online Edition. Environmental Laboratory, Wetlands Research Program Technical Report Y-87-1 (on-line edition). http://el.erdc.usace.army.mil/elpubs/pdf/wlman87.pdf.

——. 2001a. Delineating Playas in the Arid Southwest A literature Review. Edited by William Brostoff, Robert W. Lichvar and Steven Sprecher. ERDC TR-01-4

——. 2001b. Final Summary Report: Guidelines for Jurisdictional Determinations for Waters of the United States in the Arid Southwest. U.S. Army Corps Engineers, South Pacific Division.

——. 2004. Review of Ordinary High Water Mark Indicators for Delineating Arid Streams in the Southwestern United States. Edited by Robert W. Lichvar and James S. Wakeley. ERDC TR-04-1. January.

——. 2006. Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region. Final Report, December 2006. ERDC/EL TR-06-16

——. 2007a. Coordination on Jurisdictional Determinations under Clean Water Act Section 404 in Light of the SWANCC and Rapanos Supreme Court Decisions.

——. 2007b. Jurisdictional Determination Form Instructional Guidebook. Joint EPA and Corps guidance document for completion of Approved Jurisdictional Determination Form.

——. 2007c. Wetland Plants of Specialized Habitats in the Arid West. Cold Regions Research and Engineering Laboratory, ERDC/CRREL TR-07-8. US Army Corps of Engineers, Engineer Research and Development Center, Hanover, NH.

——. 2008a. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0).

——. 2008b. A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. ERDC/CRREL TR-08-12

US Forest Service (USFS). 1997. Subsection 322Ac: Amargosa Desert-Pahrump Valley. Ecological Units of California. Accessed from: http://www.fs.fed.us/r5/projects/ecoregions/

——. 1998. Ecological Subregions of California: Section and Subsections Descriptions. Accessed from http://www.fs.fed.us/r5/projects/ecoregions/toc.htm

US Geological Survey (USGS). 1984. USGS 7.5 minute Quadrangle: Calvada Spring, Mound Spring, and Stump Spring.

——. 2011. The National Map. Accessed from http://nationalmap.gov/

VTN Consulting. 2010. Aerial Photography for Hidden Hills Ranch SEGS. Inyo County, CA.

Vyverberg, Kris. 2010. A Review of Stream Processes and Forms in Dryland Watersheds. California Department of Fish and Game. Sacramento, CA.

Weather Underground. 2011. Historical data for weather station: KNVPAHRU9 Calvada Springs, Pahrump Nevada. Accessed via www.wunderground.com

Western Regional Climate Center (WRCC). 2010. Western U.S. Climate Historical Summaries. Available at http://www.wrcc.dri.edu/CLIMATEDATA.html. Accessed November 2010.

Inset Map

Legend

- Project Location
- County Boundary
- City
- Highway

N

0 25 50

Miles

Source:
Roads: ESRI 2010
Base Map: ESRI 2010

Figure 1
State Location Map
BrightSource Energy Hidden Hills Ranch
Jurisdictional Delineation

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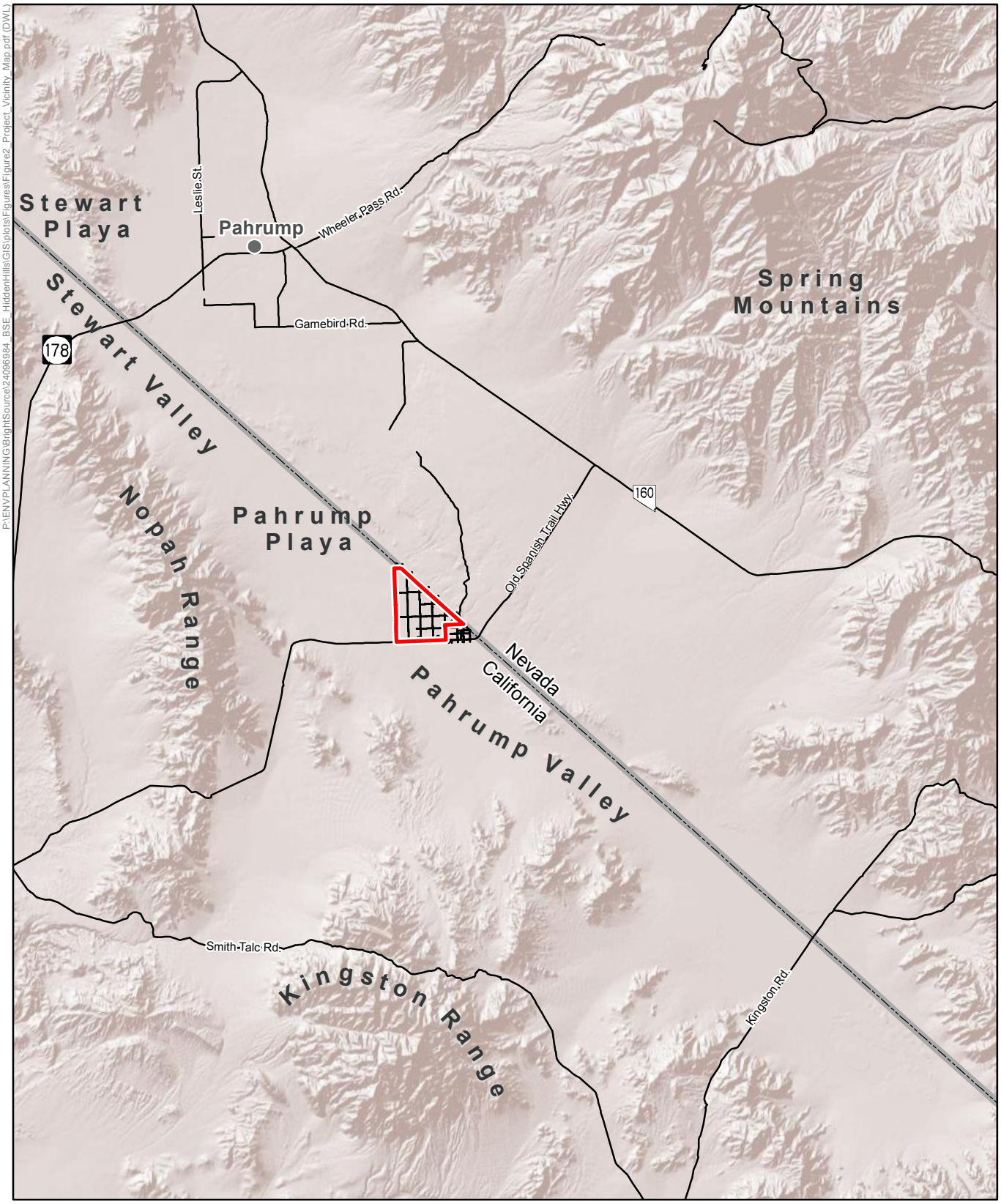

Legend

- Project Boundary
- State Line
- Road

N

0 3 6

Miles

Source:
Roads: VTN 2010
Project Boundary: VTN 2010
Base Map: ESRI 2010

Figure 2
Project Vicinity Map
BrightSource Energy Hidden Hills Ranch
Jurisdictional Delineation

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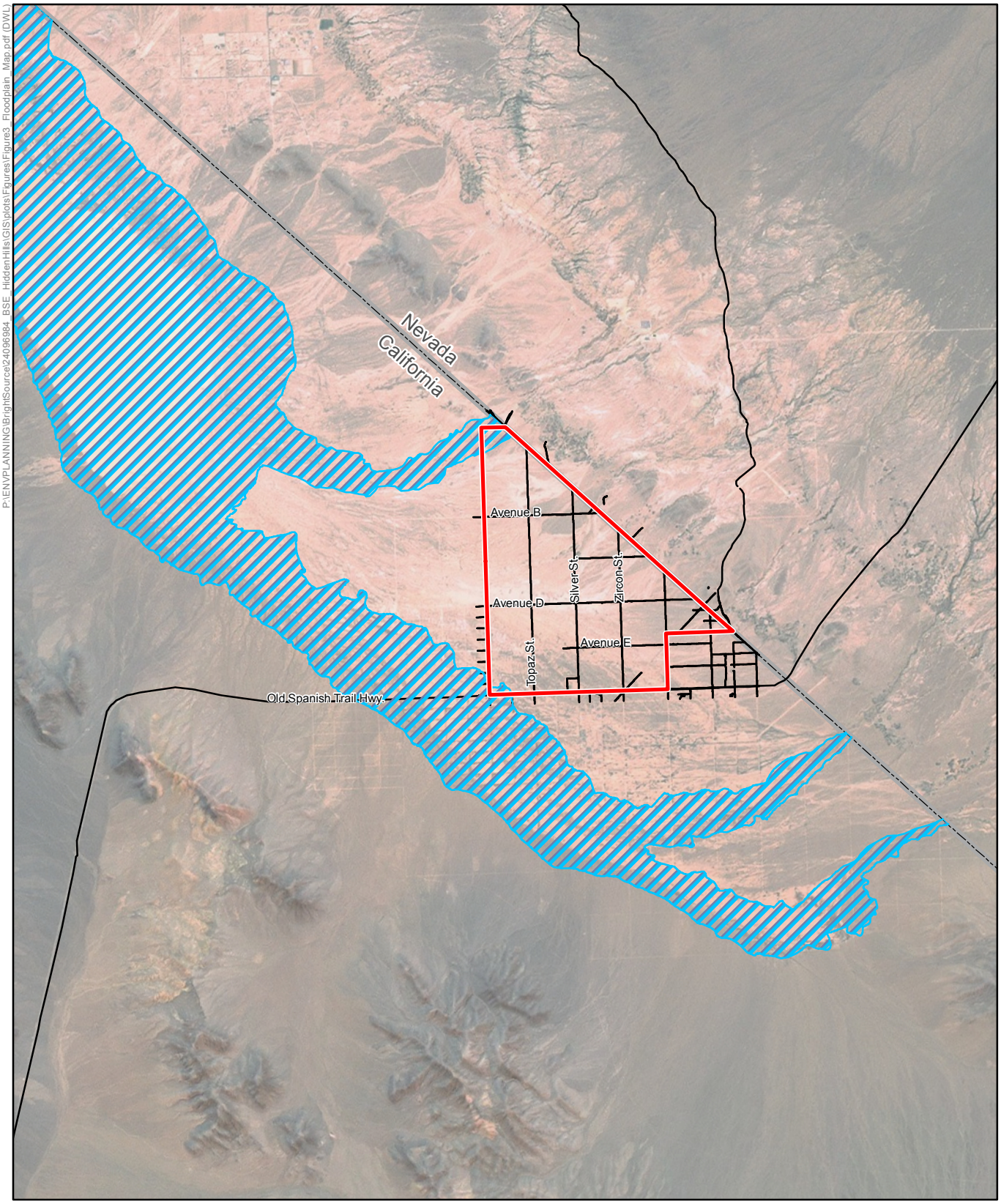

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Legend

- Project Boundary
- State Line
- 100 Year Floodplain
- Road

N

0 1 2

Miles

Source:
Roads: VTN 2010
Floodplain: VTN 2010
Aerial Imagery: ESRI 2010

Figure 3
Floodplain Map
BrightSource Energy Hidden Hills Ranch
Jurisdictional Delineation

APPENDIX A

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APPENDIX A

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APPENDIX A

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APPENDIX A

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APPENDIX A

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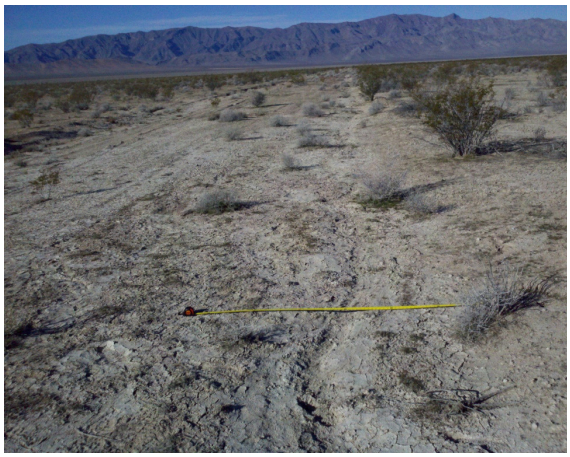

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APPENDIX A

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APPENDIX A

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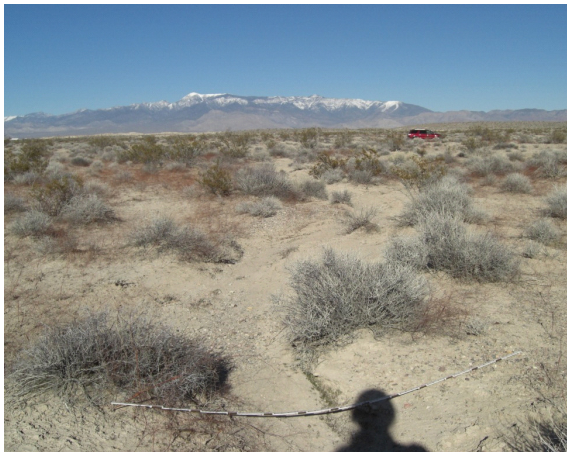

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Drainage (Wash) ID Num	GPS Data Pt	Feature ID	ID	OBJECT ID	GPS ID	Team	Date	Photo Pt	Blue Line	Feature Type	Surface Flow	Substrate	General Flow Direction	Riparian Buffer	OHWM	Bed and Banks	Natural Line	Soil Change	Shelving/Exposed Roots	Veg Destruction	Litter Disturbed	Sediment Deposition	Water Staining	Litter/Debris	Terrestrial Veg. Destruction	Sediment Sorting	Scour	Flow Events	Change in Plant Community	Drainage Width (ft)	Drainage Depth (ft)	US Waters	Revised Drainage NO	Revised GPS NO	Lat/Long DD	Long DD	Notes
001	01	A137_001.1	137	137	A	KS, JB, HR, RD, JPC	31-Jan-11	#1-3	No	Natural	Ephemeral/ Intermittent	Cobble/sand/silt	W		✓				✓		✓	✓		✓		✓	✓	✓		2.7	0.1	No	1	1-1	35.981383/-115.868871	-115.868871	Crosses road then follows North side of road
001	02	A138_001.2	138	138	A	KS, JB, HR, RD, JPC	31-Jan-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silt/sand/cobble	S		✓				✓		✓	✓		✓		✓	✓	✓		2.8	0.25	No	1	1-2	35.981607/-115.86914	-115.86914	
001	03	A139_001.3	139	139	A	KS, JB, HR, RD, JPC	31-Jan-11	#7-9	No	Natural	Ephemeral/ Intermittent	Silt/cobble	S		✓				✓		✓	✓		✓		✓	✓	✓		3.5	0.3	No	1	1-3	35.98149/-115.869207	-115.869207	
001	04	A140_001.4	140	140	A	KS, JB, HR, RD, JPC	31-Jan-11	#10-12	No	Natural	Ephemeral/ Intermittent	Silt sand	S		✓				✓		✓	✓		✓		✓	✓	✓		2.8	0.2	No	1	1-4	35.980953/-115.869307	-115.869307	
002	01	A141_002.1	141	141	A	KS, JB, HR, RD, JPC	31-Jan-11	#13-15	No	Natural	Ephemeral/ Intermittent	Silt sand	SW		✓	✓			✓		✓	✓					✓	✓		0.7	0.1	No	2	2-1	35.982236/-115.869987	-115.869987	Not clearly defined OHWM
002	02	A142_002.2	142	142	A	KS, JB, HR, RD, JPC	31-Jan-11	#16-18	No	Natural	Ephemeral/ Intermittent	Silt sand	SW		✓	✓			✓		✓	✓					✓	✓		3.2	0.1	No	2	2-2	35.981588/-115.870498	-115.870498	
002	03	A143_002.3	143	143	A	KS, JB, HR, RD, JPC	31-Jan-11	#19-21	No	Natural	Ephemeral/ Intermittent	Silt sand	SW		✓	✓			✓		✓	✓					✓	✓		3.4	0.5	No	2	2-3	35.981384/-115.870847	-115.870847	
002	04	A144_002.4	144	144	A	KS, JB, HR, RD, JPC	31-Jan-11	#22-24	No	Natural	Ephemeral/ Intermittent	Silt sand	SW		✓	✓			✓		✓	✓					✓	✓		2	0.6	No	2	2-4	35.98103/-115.871076	-115.871076	Braided
002	05	A145_002.5	145	145	A	KS, JB, HR, RD, JPC	31-Jan-11	#25-27	No	Natural	Ephemeral/ Intermittent	Silt sand	SW		✓	✓			✓		✓	✓					✓	✓		2	0.6	No	2	2-5	35.981052/-115.871355	-115.871355	Braided
002	06	A146_002.6	146	146	A	KS, JB, HR, RD, JPC	31-Jan-11	#28-30	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt sand	SW		✓	✓			✓		✓	✓					✓	✓		2	0.6	No	2	2-6	35.980987/-115.871594	-115.871594	Single channel
002	07	A149_002.7	149	149	A	KS, JB, HR, RD, JPC	31-Jan-11	#31-33	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓		✓	✓					✓	✓		3.5	0.25	No	2	2-7	35.980969/-115.872574	-115.872574	Merges with Wash ID 004
003	01	A147_003.1	147	147	A	KS, JB, HR, RD, JPC	31-Jan-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silt/sand/cobble	SW																	0.5	0.1	No	3	3-2	35.980982/-115.872397	-115.872397	
003	02	A150_003.2	150	150	A	KS, JB, HR, RD, JPC	31-Jan-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silt/sand/cobble	SW																	3.5	0.25	No	3	3-1	35.981569/-115.871527	-115.871527	
004	01	A148_004.1	148	148	A	KS, JB, HR, RD, JPC	31-Jan-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓		✓	✓	✓		✓			✓			✓	✓		1.3	0.25	No	4	4-2	35.980982/-115.872596	-115.872596	
004	02	A151_004.2	151	151	A	KS, JB, HR, RD, JPC	31-Jan-11	#4-6	No	Natural	Ephemeral/ Intermittent	Cobble sand	SW		✓		✓	✓	✓		✓			✓			✓	✓		3.3	0.25	No	4	4-1	35.981841/-115.871683	-115.871683	
005	01	A152_005.1	152	152	A	KS, JB, HR, RD, JPC	31-Jan-11	#1-3	No	Natural	Ephemeral/ Intermittent	Sand silt	SW		✓	✓			✓		✓			✓		✓	✓	✓		4.7	0.1	No	6	6-1	35.984642/-115.873131	-115.873131	
005	02	A153_005.2	153	153	A	KS, JB, HR, RD, JPC	31-Jan-11	#4-6	No		Ephemeral/ Intermittent	Sand silt	SW		✓	✓			✓		✓			✓		✓	✓	✓		3.3	0.2	No	6	6-2	35.984489/-115.873422	-115.873422	
005	03	A154_005.3	154	154	A	KS, JB, HR, RD, JPC	31-Jan-11	#7-9	No	Natural	Ephemeral/ Intermittent	Sand silt	W		✓	✓			✓		✓			✓		✓	✓	✓		1.8	0.1	No	6	6-3	35.984288/-115.874023	-115.874023	
006	01	A155_006.1	155	155	A	KS, JB, HR, RD, JPC	31-Jan-11	#1-3	No	Natural	Ephemeral/ Intermittent	Sandy silt	SW		✓	✓	✓		✓					✓		✓	✓	✓		2.8	0.3	No	8	8-1	35.984941/-115.873499	-115.873499	

006	02	A156_006.2	156	156	A	KS, JB, HR, RD, JPC	31-Jan-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓	✓	✓		✓					✓		✓	✓	✓		3	0.1	No	8	8-2	35.984636/-115.873768	-115.873768	
006	03	A157_006.3	157	157	A	KS, JB, HR, RD, JPC	31-Jan-11	#7-9	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓	✓	✓		✓					✓		✓	✓	✓		1.3	0.1	No	8	8-3	35.984669/-115.873782	-115.873782	
006	04	A158_006.4	158	158	A	KS, JB, HR, RD, JPC	31-Jan-11	#10-12	No	Natural	Ephemeral/ Intermittent	Silt/sand/cobble	SW		✓	✓	✓		✓					✓		✓	✓	✓		2.6	0.1	No	8	8-4	35.984708/-115.873803	-115.873803	
006	05	A159_006.5	159	159	A	KS, JB, HR, RD, JPC	31-Jan-11	#13-15	No	Natural	Ephemeral/ Intermittent	Silt/sand/cobble	W		✓	✓	✓		✓					✓		✓	✓	✓		1.4	0.3	No	8	8-5	35.984591/-115.874479	-115.874479	On road
006	06	A160_006.6	160	160	A	KS, JB, HR, RD, JPC	31-Jan-11	#16-18	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/sand/cobble	W		✓	✓	✓		✓					✓		✓	✓	✓		1.5	0.3	No	8	8-6	35.984593/-115.875595	-115.875595	On road
007	01	A162_007.1	162	162	A	KS, JB, HR	31-Jan-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	W		✓	✓			✓	✓	✓			✓		✓	✓	✓		1.6	0.2	No	10	10-1	35.986617/-115.875641	-115.875641	OHWM scatted throughout
007	02	A163_007.2	163	163	A	KS, JB, HR	31-Jan-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sand cobble	W		✓	✓			✓	✓	✓			✓		✓	✓	✓		2.3	0.2	No	10	10-2	35.986374/-115.875989	-115.875989	Flow direction transitions from west to south, where is runs into road
007	03	A164_007.3	164	164	A	KS, JB, HR	31-Jan-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sand cobble	SW		✓	✓			✓	✓	✓			✓		✓	✓	✓		7.6	0.1	No	10	10-3	35.986354/-115.877089	-115.877089	Follows north edge of road
007	03	A173_007.3	173	173	A	KS, JB, HR	01-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓			✓	✓	✓		✓		✓		✓	✓			4.9	0.2	No	10	10-4	35.986365/-115.88181	-115.88181	OHWM scatted throughout
007	04	A174_007.4	174	174	A	KS, JB, HR	01-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓			✓	✓	✓		✓		✓		✓	✓			3.3	0.2	No	10	10-5	35.9864/-115.888953	-115.888953	
007	05	A175_007.5	175	175	A	KS, JB, HR	01-Feb-11	#13-15	No	Artificial (man-made)	Ephemeral/ Intermittent	Silts	W		✓			✓	✓	✓		✓		✓		✓	✓			21.3	0.5	No	10	10-6	35.986342/-115.900522	-115.900522	Doesn't follow topo, follows road.
007	06	A176_007.6	176	176	A	KS, JB, HR	01-Feb-11	#16-18	No	Artificial (man-made)	Ephemeral/ Intermittent	Silts	W		✓			✓	✓	✓		✓		✓		✓	✓			5.5	0.1	No	10	10-7	35.98644/-115.900536	-115.900536	Doesn't follow topo, follows road.
007	07	A177_007.7	177	177	A	KS, JB, HR	01-Feb-11	#19-21	No	Artificial (man-made)	Ephemeral/ Intermittent	Silts	W		✓			✓	✓	✓		✓		✓		✓	✓			50	0.25	No	10	10-8	35.986366/-115.917664	-115.917664	
007	08	A178_007.8	178	178	A	KS, JB, HR	01-Feb-11	#22-24	No	Artificial (man-made)	Ephemeral/ Intermittent	Silts	W		✓			✓	✓	✓		✓		✓		✓	✓			4.9	0.2	No	10	10-9	35.98638/-115.935798	-115.935798	
008	01	A165_008.1	165	165	A	KS, JB, HR	31-Jan-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓	✓			✓	✓		✓				✓	✓	✓		3.1	0.1	No	12	12-1	35.9868/-115.875918	-115.875918	OHWM scatted throughout
008	02	A166_008.2	166	166	A	KS, JB, HR	31-Jan-11	#4-6	No	Natural	Ephemeral/ Intermittent	Fine sand	SW		✓	✓			✓	✓		✓				✓	✓	✓		2.3	0.3	No	12	12-2	35.986751/-115.876081	-115.876081	
008	03	A167_008.3	167	167	A	KS, JB, HR	31-Jan-11	#7-9	No	Natural	Ephemeral/ Intermittent	Fine sand/cobbles	SW		✓	✓			✓	✓		✓				✓	✓	✓		1.2	0.1	No	12	12-3	35.986703/-115.876133	-115.876133	
008	04	A168_008.4	168	168	A	KS, JB, HR	31-Jan-11	#10-12	No	Natural	Ephemeral/ Intermittent	Sand	SW		✓	✓			✓	✓		✓				✓	✓	✓		0.3	0.1	No	12	12-4	35.986576/-115.876183	-115.876183	
008	05	A169_008.5	169	169	A	KS, JB, HR	31-Jan-11	#13-15	No	Natural	Ephemeral/ Intermittent	Sand	SW		✓	✓			✓	✓		✓				✓	✓	✓		2.8	0.1	No	12	12-5	35.986485/-115.876286	-115.876286	Connects with road
008	06	A170_008.6	170	170	A	KS, JB, HR	31-Jan-11	#16-18	No	Natural	Ephemeral/ Intermittent	Sand	W		✓	✓			✓	✓		✓				✓	✓	✓		5.4	0.1	No	12	12-6	35.9867/-115.876524	-115.876524	
008	07	A171_008.7	171	171	A	KS, JB, HR	31-Jan-11	#19-21	No	Natural	Ephemeral/ Intermittent	Sand	SW		✓	✓			✓	✓		✓				✓	✓	✓		4.5	0.1	No	12	12-7	35.986694/-115.876778	-115.876778	
008	08	A172_.008.8	172	172	A	KS, JB, HR	31-Jan-11	#22-24	No	Natural	Ephemeral/ Intermittent	Sand	SW		✓	✓			✓	✓		✓				✓	✓	✓		2.6	0.1	No	12	12-8	35.986462/-115.877163	-115.877163	
009	01	A179_009.1	179	179	A	KS, JB	01-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓		✓	✓			✓				✓	✓			1.5	0.1	No	13	13-1	35.987005/-115.876132	-115.876132	

009	02	A180_009.2	180	180	A	KS, JB	01-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓		✓	✓			✓				✓	✓			1.9	0.3	No	13	13-2	35.987081/-115.87624	-115.87624	
009	03	A181_009.3	181	181	A	KS, JB	01-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓		✓	✓			✓				✓	✓			2.75	0.25	No	13	13-3	35.987133/-115.876373	-115.876373	
009	04	A182_009.4	182	182	A	KS, JB	01-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓		✓	✓			✓				✓	✓			4.25	0.1	No	13	13-4	35.986702/-115.876754	-115.876754	Merges with Wash ID 008
010	01	A183_010.1	183	183	A	KS, JB	01-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/cobble	SW		✓	✓		✓	✓		✓			✓		✓	✓			2.25	0.6	No	14	14-1	35.987577/-115.876855	-115.876855	
010	02	A184_010.2	184	184	A	KS, JB	01-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/cobble	SW		✓	✓		✓	✓		✓			✓		✓	✓			3.1	0.1	No	14	14-2	35.987267/-115.877283	-115.877283	
010	03	A185_010.3	185	185	A	KS, JB	01-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/cobble	SW		✓	✓		✓	✓		✓			✓		✓	✓			4	0.1	No	14	14-3	35.987391/-115.877376	-115.877376	
010	04	A186_010.4	186	186	A	KS, JB	01-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/cobble	SW		✓	✓		✓	✓		✓			✓		✓	✓			3.3	0.1	No	14	14-4	35.986452/-115.878204	-115.878204	
010	05	A187_010.5	187	187	A	KS, JB	01-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/cobble	SW		✓	✓		✓	✓		✓			✓		✓	✓			2.25	0.2	No	14	14-5	35.986459/-115.87841	-115.87841	
011	01	A188_011.1	188	188	A	KS, JB	01-Feb-11	#1-3	No		Ephemeral/ Intermittent	Sand/silt	SW		✓		✓	✓	✓								✓			3.1	0.1	No	15	15-1	35.987869/-115.87725	-115.87725	
011	02	A189_011.2	189	189	A	KS, JB	01-Feb-11	#4-6	No		Ephemeral/ Intermittent	Sand/silt	SW		✓		✓	✓	✓								✓			3.1	0.1	No	15	15-2	35.987329/-115.87753	-115.87753	Merges with Wash ID 010
012	01	A190_012.1	190	190	A	KS, JB	01-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles/silt	SW		✓	✓		✓	✓							✓	✓			4.9	0.2	No	16	16-1	35.988142/-115.877578	-115.877578	
012	02	A191_012.2	191	191	A	KS, JB	01-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles/silt	SW		✓	✓		✓	✓							✓	✓			2.4	0.2	No	16	16-2	35.988147/-115.878023	-115.878023	
012	03	A192_012.3	192	192	A	KS, JB	01-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles/silt	SW		✓	✓		✓	✓							✓	✓			2.2	0.2	No	16	16-3	35.988105/-115.878041	-115.878041	
012	04	A193_012.4	193	193	A	KS, JB	01-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles/silt	SW		✓	✓		✓	✓							✓	✓			3.2	0.1	No	16	16-4	35.988073/-115.878011	-115.878011	
012	05	A194_012.5	194	194	A	KS, JB	01-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles/silt	SW		✓	✓		✓	✓							✓	✓			3.25	0.25	No	16	16-5	35.987307/-115.879151	-115.879151	
012	06	A195_012.6	195	195	A	KS, JB	01-Feb-11	#16-18	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles/silt	SW		✓	✓		✓	✓							✓	✓			2.75	0.2	No	16	16-6	35.986453/-115.879592	-115.879592	
012	07	A198_012.7	198	198	A	KS, JB	01-Feb-11	#19-21	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles/silt	SW		✓	✓		✓	✓							✓	✓			2.1	0.2	No	16	16-7	35.988163/-115.878067	-115.878067	
013	01	A196_013.1	196	196	A	KS, JB	01-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓		✓			✓		✓	✓			7	0.3	No	17	17-1	35.988332/-115.877841	-115.877841	
013	02	A197_013.2	197	197	A	KS, JB	01-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓		✓			✓		✓	✓			1.4	0.25	No	17	17-2	35.988226/-115.878103	-115.878103	
013	03	A199_013.3	199	199	A	KS, JB	01-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓		✓			✓		✓	✓			4.75	0.1	No	17	17-3	35.98826/-115.879258	-115.879258	
014	01	A200_014.1	200	200	A	KS, JB	01-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/Sand	SW		✓	✓			✓			✓		✓		✓	✓			2.75	0.3	No	19	19-1	35.989941/-115.87989	-115.87989	
014	02	A201_014.2	201	201	A	KS, JB	01-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/Sand	SW		✓	✓			✓			✓		✓		✓	✓			2.9	0.1	No	19	19-2	35.989489/-115.88034	-115.88034	

014	03	A202_014.3	202	202	A	KS, JB	01-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silt/Sand	SW		✓	✓			✓			✓		✓		✓	✓			3.75	0.2	No	19	19-3	35.987985/-115.881521	-115.881521	Merges with road (Gold St.), then runs perpendicular to road that Wash ID 007 follows (Ave D).
015	01	A203_015.1	203	203	A	KS, JB	02-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓			✓								✓			4.9	0.1	No	20	20-1	35.990225/-115.880262	-115.880262	
015	02	A204_015.2	204	204	A	KS, JB	02-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓			✓								✓			2.5	0.1	No	20	20-2	35.989458/-115.88154	-115.88154	Merges with Gold St.
016	01	A205_016.1	205	205	A	KS, JB	02-Feb-11	#1-3	No		Ephemeral/ Intermittent	Sandy silt	SW		✓	✓						✓				✓	✓			5.9	0.2	No	21	21-1	35.990808-115.881015	-115.881015	
016	02	A206_016.2	206	206	A	KS, JB	02-Feb-11	#4-6	No		Ephemeral/ Intermittent	Sandy silt	SW		✓	✓						✓				✓	✓			2.1	0.75	No	21	21-2	35.989985/-115.881554	-115.881554	Merges with Gold St.
016	03	A211_016.3	211	211	A	KS, JB	02-Feb-11	#7-9	No		Ephemeral/ Intermittent	Sandy silt	SW		✓	✓						✓				✓	✓			7.75	0.2	No	21	21-3	35.987065/-115.881661	-115.881661	Runs along Gold St.
016	04	A212_016.4	212	212	A	KS, JB	02-Feb-11	#10-12	No		Ephemeral/ Intermittent	Sandy silt	SW		✓	✓						✓				✓	✓			3.75	0.3	No	21	21-4	35.986464/-115.881683	-115.881683	Confluence with Wash ID 007
017	01	A207_017.1	207	207	A	KS, JB	02-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sand/silt	SW		✓	✓			✓							✓	✓			1.9	0.25	No	22	22-1	35.991395/-115.881639	-115.881639	
017	02	A208_017.2	208	208	A	KS, JB	02-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sand/silt	SW		✓	✓			✓							✓	✓			2.25	0.2	No	22	22-2	35.990408/-115.881698	-115.881698	
017	03	A209_017.3	209	209	A	KS, JB	02-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sand/silt	SW		✓	✓			✓							✓	✓			1.5	0.1	No	22	22-3	35.990303/-115.882293	-115.882293	
017	04	A210_017.4	210	210	A	KS, JB	02-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sand/silt	SW		✓	✓			✓							✓	✓			1.25	0.25	No	22	22-4	35.990236/-115.882856	-115.882856	
018	01	A213_018.1	213	213	A	KS, JB	02-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			2.25	0.3	No	18	18-1	35.987443/-115.881697	-115.881697	
018	02	A214_018.2	214	214	A	KS, JB	02-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			1.9	0.3	No	18	18-2	35.986918/-115.882722	-115.882722	
018	03	A215_018.3	215	215	A	KS, JB	02-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			2.1	0.75	No	18	18-3	35.986466/-115.883777	-115.883777	Confluence with Wash ID 007
019	01	A216_019.1	216	216	A	KS, JB	02-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓								✓			2	0.9	No	23	23-1	35.991715/-115.882171	-115.882171	
019	02	A217_019.2	217	217	A	KS, JB	02-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓								✓			6.5	0.1	No	23	23-2	35.991242/-115.882729	-115.882729	
020	01	A218_020.1	218	218	A	KS, JB	02-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	6.75	0.75	No	24	24-1	35.992184/-115.882777	-115.882777	
020	02	A219_020.2	219	219	A	KS, JB	02-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	8.5	0.2	No	24	24-2	35.991826/-115.883071	-115.883071	
020	03	A220_020.3	220	220	A	KS, JB	02-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	5	0.2	No	24	24-3	35.991711/-115.883149	-115.883149	Bifurcation
020	04	A221_020.4	221	221	A	KS, JB	02-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	5.1	0.9	No	24	24-4	35.991628/-115.88293	-115.88293	
020	05	A222_020.5	222	222	A	KS, JB	02-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	4.25	0.75	No	24	24-5	35.991001/-115.883292	-115.883292	Bifurcation
020	06	A223_020.6	223	223	A	KS, JB	02-Feb-11	#16-18	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	2.9	0.75	No	24	24-6	35.990916/-115.883388	-115.883388	

020	07	A224_020.7	224	224	A	KS, JB	02-Feb-11	#19-21	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	3.25	0.66	No	24	24-7	35.990891/-115.883227	-115.883227	
020	08	A225_020.8	225	225	A	KS, JB	02-Feb-11	#22-24	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	4	0.66	No	24	24-8	35.989356/-115.88354	-115.88354	
020	09	A226_020.9	226	226	A	KS, JB	02-Feb-11	#25-27	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	3.75	0.33	No	24	24-9	35.989736/-115.88401	-115.88401	
020	10	A227_020.10	227	227	A	KS, JB	02-Feb-11	#28-30	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	3.5	0.4	No	24	24-10	35.986931/-115.885667	-115.885667	
020	11	A228_020.11	228	228	A	KS, JB	02-Feb-11	#31-33	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	4	0.33	No	24	24-11	35.987362/-115.886255	-115.886255	
020	12	A229_020.12	229	229	A	KS, JB	02-Feb-11	#34-36	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	4.25	0.75	No	24	24-13	35.986453/-115.887698	-115.887698	Outlet to Ave D. and into Wash ID 007
020	13	A230_020.12	230	230	A	KS, JB	02-Feb-11	#37-39	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓		✓		✓		✓			✓		✓	✓		✓	3.5	0.5	No	24	24-12	35.986459/-115.886045	-115.886045	
021	01	A231_021.1	231	231	A	KS, JB	02-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			2.9	0.5	No	25	25-1	35.992348/-115.882998	-115.882998	
021	02	A232_021.2	232	232	A	KS, JB	02-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			4.66	0.5	No	25	25-2	35.99197/-115.883644	-115.883644	
021	03	A233_021.3	233	233	A	KS, JB	02-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			5.9	0.9	No	25	25-3	35.99152/-115.884301	-115.884301	
021	04	A234_021.4	234	234	A	KS, JB	02-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			3.5	0.9	No	25	25-4	35.991158/-115.884578	-115.884578	
021	05	A235_021.5	235	235	A	KS, JB	02-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			2.5	0.2	No	25	25-5	35.991212/-115.88476	-115.88476	
021	06	A236_021.6	236	236	A	KS, JB	02-Feb-11	#16-18	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			5	0.1	No	25	25-6	35.98834/-1515.889051	-115.889051	
021	07	A237_021.7	237	237	A	KS, JB	02-Feb-11	#19-21	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			5.75	0.25	No	25	25-7	35.988627/-115.889284	-115.889284	
021	08	A238_021.8	238	238	A	KS, JB	02-Feb-11	#22-24	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			4.5	0.25	No	25	25-8	35.988127/-115.890491	-115.890491	
021	09	A239_021.9	239	239	A	KS, JB	02-Feb-11	#25-27	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓				✓					✓		✓	✓			2.25	0.3	No	25	25-9	35.987669/-115.890488	-115.890488	Confluence with Zircon St.
021	10	A240_021.10	240	240	A	KS, JB	02-Feb-11	#28-30	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sandy silt	SW		✓	✓			✓					✓		✓	✓			1.5	0.1	No	25	25-10	35.986516/-115.892743	-115.892743	Confluence with Zircon St.
022	01	A241_022.1	241	241	A	KS, JB	02-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓		✓	✓					✓		✓	✓			4.25	0.2	No	26	26-1	35.994245/-115.885479	-115.885479	
022	02	A242_022.2	242	242	A	KS, JB	02-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓		✓	✓					✓		✓	✓			2.1	0.9	No	26	26-2	35.993566/-115.88603	-115.88603	Confluence with Wash ID 023
022	03	A243_022.3	243	243	A	KS, JB	02-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓		✓	✓					✓		✓	✓			2.75	0.66	No	26	26-3	35.992846/-115.887214	-115.887214	
022	04	A244_022.4	244	244	A	KS, JB	02-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓		✓	✓					✓		✓	✓			2.66	0.5	No	26	26-4	35.990608/-115.890508	-115.890508	

022	05	A245_022.5	245	245	A	KS, JB	02-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓		✓	✓					✓		✓	✓			6	0.25	No	26	26-5	35.988439/-115.89284	-115.89284	Confluence with Zircon St.
022	06	A246_022.6	246	246	A	KS, JB	02-Feb-11	#16-18	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓	✓		✓	✓					✓		✓	✓			2.25	0.33	No	26	26-6	35.987537/-115.894304	-115.894304	
023	01	A247_023.1	247	247	A	KS, JB	03-Feb-11	#1-3	Yes	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	SW		✓			✓	✓			✓		✓		✓	✓			5.9	0.25	No	28	28-1	35.994821/-115.886171	-115.886171	
023	02	A248_023.2	248	248	A	KS, JB	03-Feb-11	#4-6	Yes	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	SW		✓			✓	✓			✓		✓		✓	✓			1.2	0.9	No	28	28-2	35.993589/-115.886001	-115.886001	Confluence with Wash ID 022 after crossing Ave C.
024	01	A249_024.1	249	249	A	KS, JB	03-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	S		✓			✓	✓					✓		✓	✓			4.1	1	No	29	29-1	35.995249/-115.886729	-115.886729	
024	02	A250_024.2	250	250	A	KS, JB	03-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	S		✓			✓	✓					✓		✓	✓			2.5	0.5	No	29	29-2	35.994395/-115.887786	-115.887786	
024	03	A268_024.3	268	268	A	KS, JB	03-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	S		✓			✓	✓					✓		✓	✓			4.6	0.2	No	29	29-3	35.994123/-115.887837	-115.887837	
024	04	A269_024.4	269	269	A	KS, JB	03-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	S		✓			✓	✓					✓		✓	✓			2.9	0.5	No	29	29-4	35.993615/-115.888118	-115.888118	
024	05	A270_024.5	270	270	A	KS, JB	03-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	S		✓			✓	✓					✓		✓	✓			2.5	0.25	No	29	29-5	35.993001/-115.888753	-115.888753	
024	06	A271_024.6	271	271	A	KS, JB	03-Feb-11	#16-18	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	S		✓			✓	✓					✓		✓	✓			2.5	0.5	No	29	29-6	35.992456/-115.889484	-115.889484	
025	01	A251_025.1	251	251	A	KS, JB	03-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			5.25	0.33	No	27	27-1	35.993756/-115.886219	-115.886219	
025	02	A252_025.2	252	252	A	KS, JB	03-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			3.9	0.2	No	27	27-2	35.993694/-115.886371	-115.886371	Begins to follow Ave C.
025	03	A253_025.3	253	253	A	KS, JB	03-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			4.25	0.25	No	27	27-3	35.993683/-115.887182	-115.887182	
025	04	A254_025.4	254	254	A	KS, JB	03-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			5.5	0.2	No	27	27-4	35.993585/-115.888032	-115.888032	
025	05	A255_025.5	255	255	A	KS, JB	03-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			1.66	0.66	No	27	27-5	35.991993/-115.890041	-115.890041	
025	06	A256_025.6	256	256	A	KS, JB	03-Feb-11	#16-18	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			2.66	0.2	No	27	27-6	35.991929/-115.889999	-115.889999	
025	07	A257_025.7	257	257	A	KS, JB	03-Feb-11	#19-21	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			3.5	0.2	No	27	27-7	35.991641/-115.890236	-115.890236	
025	8	A260_025.10	260	260	A	KS, JB	03-Feb-11	#22-24	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			6.5	0.2	No	27	27-12	35.99102/-115.890594	-115.890594	
025	09	A258_025.8	258	258	A	KS, JB	03-Feb-11	#25-27	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			3.66	0.66	No	27	27-8	35.991648/-115.890482	-115.890482	
025	10	A259_025.9	259	259	A	KS, JB	03-Feb-11	#28-30	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			3.9	0.5	No	27	27-10	35.991533/-115.890596	-115.890596	
025	11	A261_025.11	261	261	A	KS, JB	03-Feb-11	#31-33	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			4.9	0.1	No	27	27-14	35.990576/-115.890606	-115.890606	Exits roadway and meets up with Wash ID 022

025	12	A262_025.12	262	262	A	KS, JB	03-Feb-11	#34-36	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			2.1	0.3	No	27	27-9	35.991606/-115.890599	-115.890599	
025	13	A263_025.13	263	263	A	KS, JB	03-Feb-11	#37-39	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			5	0.1	No	27	27-11	35.991307/-115.890848	-115.890848	
025	14	A264_025.14	264	264	A	KS, JB	03-Feb-11	#40-42	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			2.66	0.25	No	27	27-13	35.991004/-115.891149	-115.891149	
025	15	A265_025.15	265	265	A	KS, JB	03-Feb-11	#43-45	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			3.5	0.1	No	27	27-15	35.990731/-115.891565	-115.891565	
025	16	A266_025.16	266	266	A	KS, JB	03-Feb-11	#46-48	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			2.3	0.1	No	27	27-16	35.989619/-115.893431	-115.893431	
025	17	A267_025.17	267	267	A	KS, JB	03-Feb-11	#49-51	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓									✓		✓	✓			1.3	0.25	No	27	27-17	35.98931/-115.894223	-115.894223	
026	01	A272_026.1	272	272	A	KS, JB	03-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓			✓						✓		✓	✓			3.3	0.6	No	30	30-1	35.995517/-115.887073	-115.887073	
026	02	A273_026.2	273	273	A	KS, JB	03-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓			✓						✓		✓	✓			4.4	0.4	No	30	30-2	35.994816/-115.888043	-115.888043	
026	03	A274_026.3	274	274	A	KS, JB	03-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓			✓						✓		✓	✓			2.1	0.5	No	30	30-3	35.993702/-115.889719	-115.889719	
027	01	A275_027.1	275	275	A	KS, JB	03-Feb-11	#1-3	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓			✓						✓		✓	✓			5.9	0.75	No	31	31-1	35.9967/-115.888598	-115.888598	
027	02	A276_027.2	276	276	A	KS, JB	03-Feb-11	#4-6	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	SW		✓			✓						✓		✓	✓			2.6	0.3	No	31	31-2	35.995946/-115.890501	-115.890501	
027	03	A277_027.3	277	277	A	KS, JB	03-Feb-11	#7-9	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	W		✓			✓						✓		✓	✓			4.9	0.25	No	31	31-3	35.995951/-115.891504	-115.891504	
027	04	A278_027.4	278	278	A	KS, JB	03-Feb-11	#10-12	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	NE		✓			✓						✓		✓	✓			4.6	0.2	No	31	31-4	35.996297/-115.892509	-115.892509	
027	05	A279_027.5	279	279	A	KS, JB	03-Feb-11	#13-15	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silty sand	NE		✓			✓						✓		✓	✓			1.9	0.2	No	31	31-5	35.996394/-115.893966	-115.893966	
028	01	A280_028.1	280	280	A	KS, JB	03-Feb-11	#1-3	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓			✓						✓		✓	✓			2.5	0.1	No	32	32-1	35.997825/-115.890051	-115.890051	
028	02	A281_028.2	281	281	A	KS, JB	03-Feb-11	#4-6	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓			✓						✓		✓	✓			5.3	0.3	No	32	32-2	35.997509/-115.890494	-115.890494	
028	03	A282_028.3	282	282	A	KS, JB	03-Feb-11	#7-9	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓			✓						✓		✓	✓			4.5	0.2	No	32	32-3	35.997192/-115.891692	-115.891692	
028	04	A283_028.4	283	283	A	KS, JB	03-Feb-11	#10-12	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓			✓						✓		✓	✓			4.5	4.5	No	32	32-4	35.99676/-115.892855	-115.892855	
029	01	A284_029.1	284	284	A	KS, JB	03-Feb-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silty sand	SE		✓			✓								✓				3.1	0.25	No	33	33-1	35.998255/-115.890603	-115.890603	
029	02	A285_029.2	285	285	A	KS, JB	03-Feb-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silty sand	SE		✓			✓								✓				2.6	0.2	No	33	33-2	35.997438/-115.89061	-115.89061	
030	01	A286_030.1	286	286	A	KS, JB	03-Feb-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓			✓			✓		✓	✓		✓				6.5	0.2	No	34	34-1	35.998496/-115.890916	-115.890916	
030	02	A287_030.2	287	287	A	KS, JB	03-Feb-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓			✓			✓		✓	✓		✓				5.2	0.2	No	34	34-2	35.998312	-115.891775	
030	03	A288_030.3	288	288	A	KS, JB	03-Feb-11	#7-9	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓			✓			✓		✓	✓		✓				2.3	0.1	No	34	34-3	35.997253	-115.893973	
031	01	A289.031.1	289	289	A	KS, JB	03-Feb-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓			✓			✓					✓				4	0.25	No	35	35-1	35.998719	-115.891205	
031	02	A290.031.2	290	290	A	KS, JB	03-Feb-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓			✓			✓					✓				1.9	0.33	No	35	35-2	35.998033	-115.893169	

032	01	A291_032.1	291	291	A	KS, JB	03-Feb-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓			✓				✓				4.9	0.33	No	36	36-1	35.999036	-115.891608	
032	02	A292_032.2	292	292	A	KS, JB	03-Feb-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓			✓				✓				4.75	0.2	No	36	36-2	35.998117	-115.893171	
032	03	A293_032.3	293	293	A	KS, JB	03-Feb-11	#7-9	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓			✓				✓				2.5	0.2	No	36	36-3	35.997444	-115.893656	
033	01	A294_033.1	294	294	A	KS, JB	03-Feb-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓							✓				2.4	0.4	No	37	37-1	35.999144	-115.891797	
033	02	A295_033.2	295	295	A	KS, JB	03-Feb-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓							✓				3	0.2	No	37	37-2	35.998968	-115.891944	
034	01	A296_034.1	296	296	A	KS, JB	03-Feb-11	#1-3	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓							✓				3	0.2	No	38	38-1	35.999506	-115.89223	
034	02	A297_034.2	297	297	A	KS, JB	03-Feb-11	#4-6	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓							✓				4.25	0.2	No	38	38-2	35.999219	-115.893005	
034	03	A298_034.3	298	298	A	KS, JB	03-Feb-11	#7-9	No	Natural	Ephemeral/ Intermittent	Silty sand	SW		✓				✓							✓				1.5	0.1	No	38	38-3	35.99872	-115.893916	
1	1	B1_1.1	1	1	B	RD, JPC	31-Jan-11	2468,2469	No	Natural	Ephemeral/ Intermittent	Sands	SW																	3	0.2	No	5	5-1	35.983666	-115.871856	
1	2	B2_1.2	2	2	B	RD, JPC	31-Jan-11	2470,2471	No	Natural	Ephemeral/ Intermittent	Sands	SW																	3.4	0.2	No	5	5-2	35.983494	-115.872622	
1	3	B3_1.3	3	3	B	RD, JPC	31-Jan-11	2472,2473	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Cobbles	SW																	2.7	0.1	No	5	5-3	35.981181	-115.872692	
2	1	B4_2.1	4	4	B	RD, JPC	31-Jan-11	2474,2475	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	SW																	2	0.1	No	9	9-1	35.985821	-115.874624	
2	2	B5_2.2	5	5	B	RD, JPC	31-Jan-11	2476,2477	No	Natural	Ephemeral/ Intermittent	Sands	SW																	3	0.1	No	9	9-2	35.985884	-115.874785	
2	3	B6_2.3	6	6	B	RD, JPC	31-Jan-11	2478,2479	No	Natural	Ephemeral/ Intermittent	Sands	SW																	2.7	0.1	No	9	9-3	35.985032	-115.876451	
2	4	B7_2.4	7	7	B	RD, JPC	31-Jan-11	2480,2481	No	Natural	Ephemeral/ Intermittent	Sands	SW																	2	0.2	No	9	9-4	35.985005	-115.876457	
3	1	B8_3.1	8	8	B	RD, HR	01-Feb-11	4223,4224	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		2.6	0.4	No	73	73-1	36.015359	-115.913954	
3	2	B9_3.2	9	9	B	RD, HR	01-Feb-11	4225,4226	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		4.1	1.2	No	73	73-2	36.015383	-115.915151	
3	3	B10_3.3	10	10	B	RD, HR	01-Feb-11	4227,4228	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		2.5	0.1	No	73	73-3	36.01537	-115.916938	Wash converges with road, then changes to braiding and pooling, and contiues to sheet flow in a southwesterly direction
4	1	B11_4.1	11	11	B	RD, HR	01-Feb-11	4229,4230	No	Natural	Ephemeral/ Intermittent	Silts	S		✓					✓	✓	✓		✓			✓	✓		2.5	0.1	No	71	71-1	36.01538	-115.912592	Wash spreads into road. Some sheet flows to western flow of road.
4	2	B12_4.2	12	12	B	RD, HR	01-Feb-11	4231,4232	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓					✓	✓	✓		✓			✓	✓		1.8	0.1	No	71	71-2	36.015276	-115.912916	
4	3	B13_4.3	13	13	B	RD, HR	01-Feb-11	4233,4234	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓					✓	✓	✓		✓			✓	✓		2.5	0.1	No	71	71-3	36.014956	-115.913328	Disapates into the road but can still see bed characteristics. Wash pools south of point.
5	1	B14_5.1	14	14	B	RD, HR	01-Feb-11	4235,4236	No	Natural	Ephemeral/ Intermittent	Silts	S		✓				✓	✓		✓		✓	✓	✓	✓	✓		2	0.1	No	72	72-1	36.015324	-115.913075	Bed and Banks are not well defined. OHWM is scattered.
5	2	B15_5.2	15	15	B	RD, HR	01-Feb-11	4237,4238	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓				✓	✓		✓		✓	✓	✓	✓	✓		5.4	0.1	No	72	72-2	36.015119	-115.913304	Disapates into sheet flow.
6	1	B16_6.1	16	16	B	RD, HR	01-Feb-11	4239,4240	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		7	0.1	No	70	70-1	36.014493	-115.911506	

6	2	B17_6.2	17	17	B	RD, HR	01-Feb-11	4241,4242	No	Natural	Ephemeral/ Intermittent	Cobbles	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		2.4	0.1	No	70	70-2	36.014358	-115.911803	A little bit of braiding, but not well defined channels.
6	3	B18_6.3	18	18	B	RD, HR	01-Feb-11	4243,4244	No	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		2.4	0.2	No	70	70-3	36.01421	-115.912071	A little bit of braiding, but not well defined channels.
6	4	B19_6.4	19	19	B	RD, HR	01-Feb-11	4245,4246	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		1.6	0.1	No	70	70-4	36.013954	-115.912412	Splits to points #5 and #6
6	5	B20_6.5	20	20	B	RD, HR	01-Feb-11	4247,4248	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		0.5	0.1	No	70	70-6	36.013434	-115.912974	Dissapates
6	6	B21_6.6	21	21	B	RD, HR	01-Feb-11	4249,4250	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		1.7	0.1	No	70	70-5	36.013855	-115.912354	Gentle braiding
6	7	B22_6.7	22	22	B	RD, HR	01-Feb-11	4251,4252	No	Natural	Ephemeral/ Intermittent	Cobbles	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		1	0.1	No	70	70-8	36.012926	-115.913194	Gentle braiding
6	8	B23_6.8	23	23	B	RD, HR	01-Feb-11	4253,4254	No	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		0.8	0.2	No	70	70-9	36.012754	-115.913239	Gentle braiding, wash splits
6	9	B24_6.9	24	24	B	RD, HR	01-Feb-11	4255,4256	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		1	0.1	No	70	70-7	36.013097	-115.912709	Upstream channel above split (point #8)
6	10	B25_6.10	25	25	B	RD, HR	01-Feb-11	4257,4258	No	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		1.5	0.2	No	70	70-10	36.012318	-115.913668	
6	11	B26_6.11	26	26	B	RD, HR	01-Feb-11	4259,4260	No	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		0.7	0.1	No	70	70-11	36.010963	-115.914494	
7	1	B27_7.1	27	27	B	RD, HR	01-Feb-11	4261,4262	No	Natural	Ephemeral/ Intermittent	Gravel	S		✓	✓			✓	✓		✓		✓	✓	✓	✓	✓		5	0.3	No	69	69-1	36.013588	-115.910346	Heavy braiding from edge of road all the way downstream to point #5. Average width of braid is about 25ft.
7	2	B28_7.2	28	28	B	RD, HR	01-Feb-11	4263,4264	No	Natural	Ephemeral/ Intermittent	Gravel	S		✓	✓			✓	✓		✓		✓	✓	✓	✓	✓		1	0.2	No	69	69-2	36.013105	-115.910849	Heavy braiding from edge of road all the way downstream to point #5. Average width of braid is about 25ft.
7	3	B29_7.3	29	29	B	RD, HR	01-Feb-11	4265,4266	No	Natural	Ephemeral/ Intermittent	Gravel	S		✓	✓			✓	✓		✓		✓	✓	✓	✓	✓		3.5	0.2	No	69	69-3	36.012819	-115.911133	Heavy braiding from edge of road all the way downstream to point #5. Average width of braid is about 25ft.
7	4	B30_7.4	30	30	B	RD, HR	01-Feb-11	4267,4268	No	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓		✓		✓	✓	✓	✓	✓		0.4	0.1	No	69	69-4	36.011648	-115.912669	Heavy braiding from edge of road all the way downstream to point #5. Average width of braid is about 25ft.
7	5	B31_7.5	31	31	B	RD, HR	01-Feb-11	4269,4270	No	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓		✓		✓	✓	✓	✓	✓		1.7	0.3	No	69	69-5	36.011237	-115.913164	Heavy braiding from edge of road all the way downstream to point #5. Average width of braid is about 25ft.
8	1	B32_8.1	32	32	B	RD, HR	01-Feb-11	4271,4272	No	Natural	Ephemeral/ Intermittent	Sands	S		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1.6	0.2	No	68	68-1	36.012973	-115.909541	OHWM scatted throughout
8	2	B33_8.2	33	33	B	RD, HR	01-Feb-11	4273,4274	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		0.4	0.1	No	68	68-2	36.012378	-115.910111	
9	1	B34_9.1	34	34	B	RD, HR	01-Feb-11	4275,4276	No	Natural	Ephemeral/ Intermittent	Sands	NW		✓	✓			✓	✓	✓	✓		✓		✓	✓	✓		3	0.1	No	67	67-1	36.009462	-115.904875	Starts at opening of wash on eastern side of road. Follows easter side of road moving NW.
9	2	B35_9.2	35	35	B	RD, HR	01-Feb-11	4277,4278	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	NW		✓	✓			✓	✓	✓	✓		✓		✓	✓	✓		2.2	0.1	No	67	67-2	36.010096	-115.905717	Flows along road then disperses into sheet flow.

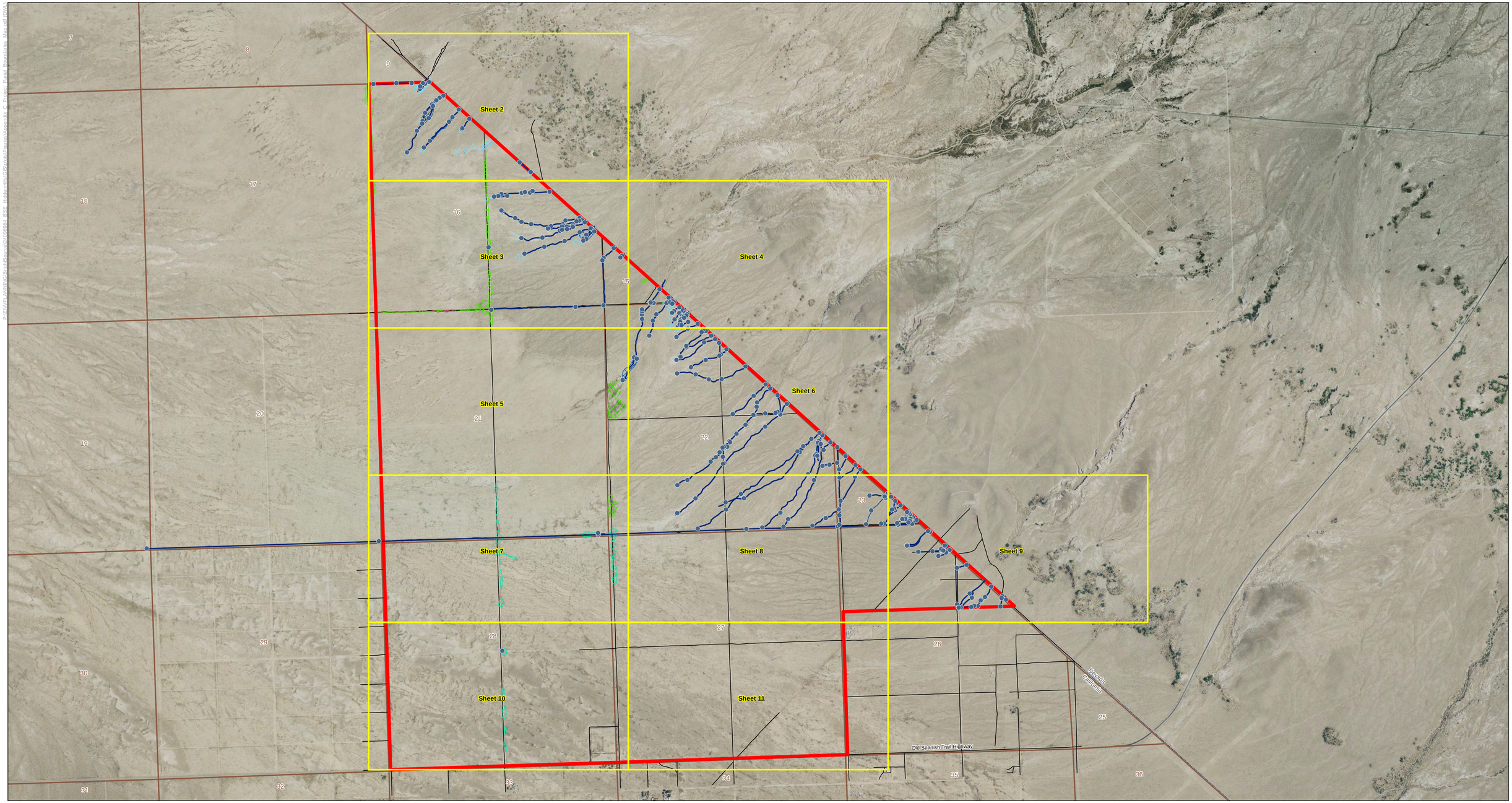
10	1	B36_10.1	36	36	B	RD, HR	02-Feb-11	4279,4280	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	W		✓	✓				✓		✓				✓	✓	✓		11	0.1	No	65	65-1	36.008187	-115.903445	Bed and Banks and OHWM characteristics sporatic throughout.
10	2	B37_10.2	37	37	B	RD, HR	02-Feb-11	4281,4282	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓				✓		✓				✓	✓	✓		1.3	2	No	65	65-2	36.008153	-115.904984	Flows mostly along north side of unused road, with some braiding throughout.
10	3	B38_10.3	38	38	B	RD, HR	02-Feb-11	4283,4284	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓				✓		✓				✓	✓	✓		2.4	0.1	No	65	65-3	36.008159	-115.905624	Braiding throughout
10	4	B39_10.4	39	39	B	RD, HR	02-Feb-11	4285,4286	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓				✓		✓				✓	✓	✓		0.5	0.2	No	65	65-4	36.008131	-115.907225	Braiding throughout
11	1	B40_11.1	40	40	B	RD, HR	02-Feb-11	4287,4288	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓				✓	✓	✓		✓		✓		✓		0.4	0.1	No	64	64-1	36.008009	-115.906777	Sporatic bed and banks and OHWM characteristics
11	2	B41_11.2	41	41	B	RD, HR	02-Feb-11	4289,4290	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓				✓	✓	✓		✓		✓		✓		1.7	0.3	No	64	64-2	36.008009	-115.907471	Braiding starts 50 ft upstream of this point and continures downstream to point #3.
11	3	B42_11.3	42	42	B	RD, HR	02-Feb-11	4291,4292	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓				✓	✓	✓		✓		✓		✓		1.1	0.1	No	64	64-3	36.00798	-115.907803	Disappates into sheet flow toward the road.
12	1	B43_12.1	43	43	B	RD, HR	02-Feb-11	4293,4294	No	Natural	Ephemeral/ Intermittent	Sands	W		✓	✓			✓	✓	✓	✓		✓		✓	✓	✓		1	0.1	No	66	66-1	36.00826	-115.904787	
12	2	B44_12.2	44	44	B	RD, HR	02-Feb-11	4295,4296	No	Natural	Ephemeral/ Intermittent	Sands	W		✓	✓			✓	✓	✓	✓		✓		✓	✓	✓		2.2	0.3	No	66	66-2	36.008205	-115.905383	Connects and flows into Wash ID 10
13	1	B45_13.1	45	45	B	RD, HR	02-Feb-11	4297,4298	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		2	0.1	No	63	63-1	36.006461	-115.901172	In Blue Line complex.
13	2	B46_13.2	46	46	B	RD, HR	02-Feb-11	4299,4300	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.2	No	63	63-2	36.006331	-115.902286	Shallow braiding and sheet throughout Wash ID 13, approximately 30ft in width.
13	3	B47_13.3	47	47	B	RD, HR	02-Feb-11	4301,4302	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.8	0.1	No	63	63-3	36.005994	-115.903441	Wash ID 13 meets Wash ID 15
13	4	B48_13.4	48	48	B	RD, HR	02-Feb-11	4303,4304	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.6	0.1	No	63	63-4	36.006331	-115.90573	Mound of about 8 mesquite trees/shrubs.
13	5	B49_13.5	49	49	B	RD, HR	02-Feb-11	4305,4306	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	63	63-5	36.006581	-115.906212	
13	6	B50_13.6	50	50	B	RD, HR	02-Feb-11	4307,4308	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.1	0.1	No	63	63-6	36.007046	-115.907195	
13	7	B51_13.7	51	51	B	RD, HR	02-Feb-11	4309,4310	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.1	0.1	No	63	63-7	36.007096	-115.907263	All apperance of channelization disappears and pools into a large area abutting the road.
14	1	B52_14.1	52	52	B	RD, HR	02-Feb-11	4311,4312	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		2.6	0.1	No	62	62-1	36.006316	-115.900977	Blue Line Complex. Braiding and sheet flow throughout.
14	2	B53_14.2	53	53	B	RD, HR	02-Feb-11	4313,4314	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		1.1	0.2	No	62	62-2	36.006282	-115.901229	Upstream disturbance from recent vehicle distruction (last couple of weeks?).
14	3	B54_14.3	54	54	B	RD, HR	02-Feb-11	4215,4316	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.2	No	62	62-3	36.006249	-115.901418	

14	4	B55_14.4	55	55	B	RD, HR	02-Feb-11	4317,4318	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.5	0.2	No	62	62-4	36.006016	-115.902466	Channelization affected by disturbance. Most of the flow on the west side of road.
15	1	B56_15.1	56	56	B	RD, HR	02-Feb-11	4319,4320	Yes	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	61	61-1	36.005936	-115.902201	Blue Line Complex. Receives some sheet flow off of Wash ID 16
15	2	B57_15.2	57	57	B	RD, HR	02-Feb-11	4321,4322	Yes	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	61	61-2	36.005935	-115.902574	Wash ID 15 connects with Wash ID 14.
15	3	B58_15.3	58	58	B	RD, HR	02-Feb-11	4323,4324	Yes	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	61	61-3	36.005849	-115.903678	
15	4	B59_15.4	59	59	B	RD, HR	02-Feb-11	4325,4326	Yes	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1.2	0.2	No	61	61-4	36.00616	-115.904986	Wash ID 15 connects with Wash ID 13.
16	1	B60_16.1	60	60	B	RD, HR	02-Feb-11	4327,4328	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		3	0.3	No	60	60-1	36.006171	-115.900783	Blue Line.
16	2	B61_16.2	61	61	B	RD, HR	02-Feb-11	4229,4330	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		2	0.3	No	60	60-2	36.00599	-115.901723	
16	3	B62_16.3	62	62	B	RD, HR	02-Feb-11	4331,4332	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		2.5	0.1	No	60	60-3	36.005687	-115.902758	
16	4	B63_16.4	63	63	B	RD, HR	02-Feb-11	4333,4334	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		1.2	0.2	No	60	60-4	36.005289	-115.904136	
16	5	B64_16.5	64	64	B	RD, HR	02-Feb-11	4335,4336	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	60	60-5	36.005297	-115.905776	Wash disappears.
17	1	B65_17.1	65	65	B	RD, HR	02-Feb-11	4337,4338	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓		✓		✓	✓			✓		✓	✓	✓		1	0.1	No	59	59-1	36.005897	-115.901733	Splits from Wash ID 16.
17	2	B66_17.2	66	66	B	RD, HR	02-Feb-11	4339,4340	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓		✓		✓	✓			✓		✓	✓	✓		0.5	0.1	No	59	59-2	36.005772	-115.902191	
17	3	B67_17.3	67	67	B	RD, HR	02-Feb-11	4341,4342	No	Natural	Ephemeral/ Intermittent	Silts	W		✓	✓		✓		✓	✓			✓		✓	✓	✓		0.5	0.1	No	59	59-3	36.005738	-115.902575	Connects back to Wash ID 16
18	1	B68_18.1	68	68	B	RD, HR	02-Feb-11	4343 ,4344	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		4.5	0.1	No	56	56-1	36.005737	-115.900248	OHWM scatted throughout
18	2	B69_18.2	69	69	B	RD, HR	02-Feb-11	4345,4346	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		0.8	0.1	No	56	56-2	36.005372	-115.900701	Braiding trends along side channel.
18	3	B70_18.3	70	70	B	RD, HR	02-Feb-11	4347,4348	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓		✓		✓		✓	✓	✓		0.5	0.1	No	56	56-3	36.005138	-115.900947	Wash peters out into sheet flow along with the outside braiding trends.
19	1	B71_19.1	71	71	B	RD, HR	02-Feb-11	4349,4350	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓	✓			✓		✓	✓	✓		4	0.2	No	55	55-1	36.005682	-115.900174	OHWM scatted throughout
19	2	B72_19.2	72	72	B	RD, HR	02-Feb-11	4351,4352	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓	✓			✓		✓	✓	✓		0.4	0.2	No	55	55-2	36.005107	-115.900709	Small patch of Licens present.
19	3	B73_19.3	73	73	B	RD, HR	02-Feb-11	4353,4354	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓	✓			✓		✓	✓	✓		0.3	0.1	No	55	55-3	36.005018	-115.900953	Very last area to see OHWM charcteristics.
20	1	B75_20.1	75	75	B	RD, HR	02-Feb-11	4355,4356	No	Natural	Ephemeral/ Intermittent	Silts	W		✓				✓	✓	✓			✓		✓	✓	✓		4	0.1	No	57	57-1	36.005784	-115.900343	OHWM scatted throughout. Like lava flow at first.
20	2	B76_20.2	76	76	B	RD, HR	02-Feb-11	4357,4358	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓				✓	✓	✓			✓		✓	✓	✓		1	0.1	No	57	57-2	36.005543	-115.901208	
20	3	B77_20.3	77	77	B	RD, HR	02-Feb-11	4359,4360	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓				✓	✓	✓			✓		✓	✓	✓		1	0.1	No	57	57-3	36.005022	-115.902404	
20	4	B78_20.4	78	78	B	RD, HR	02-Feb-11	4361,4362	No	Natural	Ephemeral/ Intermittent	Silts	W		✓				✓	✓	✓			✓		✓	✓	✓		0.5	0.1	No	57	57-4	36.004701	-115.904013	
20	5	B79_20.5	79	79	B	RD, HR	02-Feb-11	None	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓			✓	✓	✓			✓		✓	✓	✓		0.4	0.1	No	57	57-5	36.004302	-115.905571	Starts to disapate quickly.
21	1	B80_21.1	80	80	B	RD, HR	03-Feb-11	4363,4364	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓				✓	✓	✓		✓	✓	✓	✓	✓		3.3	0.1	No	53	53-1	36.004464	-115.898583	Light braiding throughout, including sporatic BB and OHWM characteristics.
21	2	B81_21.2	81	81	B	RD, HR	03-Feb-11	4365,4366	No	Natural	Ephemeral/ Intermittent	Silts	SW		✓	✓				✓	✓	✓		✓	✓	✓	✓	✓		3	0.3	No	53	53-2	36.003874	-115.899399	Wash connects with unmaintained road.

21	3	B82_21.3	82	82	B	RD, HR	03-Feb-11	4367,4368	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	S		✓	✓				✓	✓	✓		✓	✓	✓	✓	✓		1.5	0.4	No	53	53-3	36.003723	-115.899514	Road slopes toward the west side.
21	4	B83_21.4	83	83	B	RD, HR	03-Feb-11	4369,4370	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓				✓	✓	✓		✓	✓	✓	✓	✓		3	0.3	No	53	53-4	36.000867	-115.899534	Flow connects with another unmaintained road.
21	5	B84_21.5	84	84	B	RD, HR	03-Feb-11	4371,4372	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓				✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	53	53-5	36.000825	-115.901723	
21	6	B85_21.6	85	85	B	RD, HR	03-Feb-11	4373,4374	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	W		✓	✓				✓	✓	✓		✓	✓	✓	✓	✓		1.5	0.1	No	53	53-6	36.000812	-115.908309	Disapates into sheet flow.
22	1	B86_22.1	86	86	B	RD, HR	03-Feb-11	4375,4376	Yes	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓				✓		✓	✓	✓		1.5	0.1	No	52	52-1	36.00398	-115.897968	Blue Line. BB and OHWM characteristics slight and spratic.
22	2	B87_22.2	87	87	B	RD, HR	03-Feb-11	4377,4378	Yes	Natural	Ephemeral/ Intermittent	Gravel	SW		✓	✓			✓	✓				✓		✓	✓	✓		0.1	0.1	No	52	52-2	36.003866	-115.898101	Ending point into pooling and sheet flow. Continues for about 50ft.
23	1	B88_23.1	88	88	B	RD, HR	03-Feb-11	4379,4380	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	3.5	0.3	No	50	50-1	36.001772	-115.895111	Blue Line. Highwater mark between 3ft and 6ft throughout. About a 50ft braiding floodplain on either side of the Wash until Point #5.
23	2	B89_23.2	89	89	B	RD, HR	03-Feb-11	4381,4382	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	3	0.1	No	50	50-2	36.000922	-115.895876	
23	3	B90_23.3	90	90	B	RD, HR	03-Feb-11	4383,4384	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	2.4	0.2	No	50	50-3	36.00021	-115.896554	Wash splits with island in the middle. About 25ft width.
23	4	B91_23.4	91	91	B	RD, HR	03-Feb-11	4385,4386	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	2	0.2	No	50	50-4	35.99993	-115.896555	Channels come back together.
23	5	B92_23.5	92	92	B	RD, HR	03-Feb-11	4387,4388	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	1.5	0.1	No	50	50-6	35.997478	-115.897165	Wash bed becomes more silty with find sand. Wash starts to split into shallow braiding. Mesquite no longer along the wash.
23	6	B93_23.6	93	93	B	RD, HR	03-Feb-11	4389,4390	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓	✓	0.5	0.05	No	50	50-8	35.996089	-115.898225	Bed and Bank disappears and turns to sheet flow into large open area of dense creosote, eriogonum, annuals, and grasses.
23	2301	B94_23.2301	94	94	B	RD, HR	03-Feb-11	4391	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		Yes															100	0.1	No	50	50-5	35.997503	-115.897279	Braiding Width for Wash ID 23
23	2302	B95_23.2302	95	95	B	RD, HR	03-Feb-11	4392	Yes	Natural	Ephemeral/ Intermittent	Cobbles	W		Yes															100	0.1	No	50	50-7	35.997407	-115.897078	Braiding Width for Wash ID 24
24	1	B96_24.1	96	96	B	RD, HR	03-Feb-11	4393,4394	No	Natural	Ephemeral/ Intermittent	Silts	S	✓	✓					✓	✓			✓			✓	✓		0.5	0.1	No	51	51-2	36.000402	-115.896543	Bed and Bank, OHWM sporatic throughout.
24	2	B97_24.2	97	97	B	RD, HR	03-Feb-11	4395,4396	No	Natural	Ephemeral/ Intermittent	Silts	SW	✓	✓					✓	✓			✓			✓	✓		0.3	0.1	No	51	51-1	36.00053	-115.896528	Connects to Wash ID 23.
25	1	B98_25.1	98	98	B	RD, HR	03-Feb-11	4397,4398	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	NW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.3	0.1	No	49	49-1	36.000914	-115.895617	Cut on edge of unmaintained road.
25	2	B99_25.2	99	99	B	RD, HR	03-Feb-11	4399,4400	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Silts	NW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.3	0.2	No	49	49-2	36.000952	-115.895843	Connects to Wash ID 23.

26	1	B100_26.1	100	100	B	RD, HR	03-Feb-11	4401,4402	Yes	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓		2.5	0.1	No	48	48-1	36.001229	-115.894424	Blue Line. OHWM sporatic.
26	2	B101_26.2	101	101	B	RD, HR	03-Feb-11	4403,4404	Yes	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓		0.2	0.1	No	48	48-2	36.000941	-115.894574	At road, sheet flow increases, spreads along road. Disturbance from vehicles (recent. Surveyors?) driving through sheet flow and 'blue line' where channel cannot be followed.
26	3	B102_26.3	102	102	B	RD, HR	03-Feb-11	4405,4406	Yes	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓		✓	✓	✓	✓	✓			✓	✓	✓	✓		0.7	0.2	No	48	48-3	36.000878	-115.894617	Sheet flow between points #3 and #4.
26	4	B108_26.4	108	108	B	RD, HR	03-Feb-11	4417,4418	Yes	Natural	Ephemeral/ Intermittent	Sands	N		✓	✓			✓	✓	✓	✓			✓	✓	✓	✓		1.4	0.1	No	48	48-4	36.000196	-115.895433	
26	5	B109_26.5	109	109	B	RD, HR	03-Feb-11	4419,4420	Yes	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓	✓	✓			✓	✓	✓	✓		1	0.2	No	48	48-5	35.9998	-115.895717	Between points #4 and #5, braided area about 15 ft in width. (7.5ft on either side of point)
26	6	B110_26.6	110	110	B	RD, HR	03-Feb-11	4421,4422	Yes	Natural	Ephemeral/ Intermittent	Sands	S		✓	✓			✓	✓	✓	✓			✓	✓	✓	✓		1	0.1	No	48	48-6	35.998852	-115.896039	Between points #5 and #6, slight braiding and heavy sheet flow on either side of channel (15 ft on either side)
27	1	B103_27.1	103	103	B	RD, HR	03-Feb-11	4407,4408	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓			✓	✓	✓		✓	✓	✓		✓		4	0.2	No	47	47-1	36.001005	-115.894124	Blue Line. Wash splits at point #1.
27	2	B104_27.2	104	104	B	RD, HR	03-Feb-11	4409,4410	No	Natural	Ephemeral/ Intermittent	Sands	W		✓	✓	✓			✓	✓	✓		✓	✓	✓		✓		3	0.1	No	47	47-2	36.00092	-115.89425	Connects with road.
27	3	B105_27.3	105	105	B	RD, HR	03-Feb-11	4411,4412	No	Natural	Ephemeral/ Intermittent	Sands	W		✓	✓	✓			✓	✓	✓		✓	✓	✓		✓		1.5	0.1	No	47	47-3	36.00092	-115.894325	Connects with road.
28	1	B106_28.1	106	106	B	RD, HR	03-Feb-11	4413,4414	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓			✓	✓	✓		✓	✓	✓	✓			1	0.3	No	46	46-1	36.000923	-115.894037	
28	2	B107_28.2	107	107	B	RD, HR	03-Feb-11	4415,4416	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓			✓	✓	✓		✓	✓	✓	✓			1.3	0.3	No	46	46-2	36.000821	-115.894159	Channel disappers because of recent vehicle distruction. (last couple of weeks?)
29	1	B111_29.1	111	111	B	RD, HR	03-Feb-11	4423,4424	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓				✓	✓				✓	✓	✓	✓		0.3	0.1	No	45	45-1	36.000594	-115.893615	Starts from runoff from west side of the road
29	2	B112_29.2	112	112	B	RD, HR	03-Feb-11	4425,4426	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓				✓	✓				✓	✓	✓	✓		1	0.1	No	45	45-2	36.000356	-115.894044	
29	3	B113_29.3	113	113	B	RD, HR	03-Feb-11	4227,4428	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓				✓	✓				✓	✓	✓	✓		0.3	0.1	No	45	45-3	36.000253	-115.894199	Starts to spread into sheet flow and dissapates.
30	1	B114_30.1	114	114	B	RD, HR	03-Feb-11	4429,4430	Yes	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.3	0.3	No	44	44-1	36.00039	-115.893353	Blue Line. Starts from small wash from east side of the road and road runoff on west side of the road.
30	2	B115_30.2	115	115	B	RD, HR	03-Feb-11	4431,4432	Yes	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		2.2	0.1	No	44	44-2	36.000221	-115.893638	Between points #1 and #2, channel widens and starts braiding and forming shallow floodplains to 10 ft on either side of this point, where flow begins to scatter. Width of braiding is about 25ft.

30	3	B116_30.3	116	116	B	RD, HR	03-Feb-11	4433,4434	Yes	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓		✓	✓	✓	✓		✓	✓	✓	✓	✓		0.5	0.1	No	44	44-3	35.999835	-115.894015	Channel starts to spread to sheet flow and spreads out to about 100ft with a 25ft width, then dissapates.
31	1	B117_31.1	117	117	B	RD, HR	03-Feb-11	4335,4336	No	Manipulated (man-altered)	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓		✓	✓		✓		✓	✓	✓	✓	✓		0.5	0.3	No	43	43-1	36.000246	-115.893167	Between point #1 and #2; slight braiding with sheet flow of a few feet on either side of the channel
31	2	B118_31.2	118	118	B	RD, HR	03-Feb-11	4337,4338	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓		✓	✓		✓		✓	✓	✓	✓	✓		1.5	0.1	No	43	43-2	36.000032	-115.893449	
31	3	B119_31.3	119	119	B	RD, HR	03-Feb-11	4439,4340	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓		✓	✓		✓		✓	✓	✓	✓	✓		2	0.2	No	43	43-3	35.999729	-115.893619	Connects with Wash ID 23.
31	4	B120_31.4	120	120	B	RD, HR	03-Feb-11	4441,4342	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓		✓	✓		✓		✓	✓	✓	✓	✓		1.3	0.2	No	43	43-4	35.999353	-115.893779	Wash begins to spread out into sheet flow and a hard to define braiding pattern.
32	1	B121_32.1	121	121	B	RD, HR	03-Feb-11	4443,4444	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		2	0.1	No	42	42-1	36.000149	-115.893045	
32	2	B122_32.2	122	122	B	RD, HR	03-Feb-11	4445,4446	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		1.1	0.1	No	42	42-2	36.000033	-115.893291	
32	3	B123_32.3	123	123	B	RD, HR	03-Feb-11	4447,4448	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		0.6	0.3	No	42	42-3	35.999884	-115.893493	
32	4	B124_32.4	124	124	B	RD, HR	03-Feb-11	4449,4450	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	42	42-4	35.999817	-115.893581	Wash connects to Wash ID 31
33	1	B125_33.1	125	125	B	RD, HR	03-Feb-11	4451,4452	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓		✓		✓		✓	✓			0.3	0.1	No	41	41-1	35.999984	-115.893316	Splits off of Wash ID 32.
33	2	B126_33.2	126	126	B	RD, HR	03-Feb-11	4453,4454	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓		✓		✓		✓	✓			0.5	0.1	No	41	41-2	35.999848	-115.893472	
33	3	B127_33.3	127	127	B	RD, HR	03-Feb-11	4455,4456	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓		✓		✓		✓	✓			2	0.1	No	41	41-3	35.999753	-115.893597	Wash connects with Wash ID 31.
34	1	B128_34.1	128	128	B	RD, HR	03-Feb-11	4457,4458	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.3	No	40	40-1	36.000134	-115.893012	
34	2	B129_34.2	129	129	B	RD, HR	03-Feb-11	4459,4460	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		0.5	0.1	No	40	40-2	36.000049	-115.893097	
34	3	B130_34.3	130	130	B	RD, HR	03-Feb-11	4461,4462	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1.3	0.1	No	40	40-3	35.999908	-115.893269	
34	4	B131_34.4	131	131	B	RD, HR	03-Feb-11	4463,4464	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.2	No	40	40-4	35.999659	-115.89359	
34	5	B132_34.5	132	132	B	RD, HR	03-Feb-11	4465,4466	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓	✓	✓	✓		✓	✓	✓	✓	✓		1	0.1	No	40	40-5	35.999484	-115.893638	BB and OHWM disappears and spreads out into sheet flow.
35	1	B133_35.1	133	133	B	RD, HR	03-Feb-11	4467,4468	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓		✓	✓		✓		✓		✓		0.8	0.1	No	39	39-1	35.999646	-115.892971	
35	2	B134_35.2	134	134	B	RD, HR	03-Feb-11	4469,4470	No	Natural	Ephemeral/ Intermittent	Sands	SW		✓	✓			✓		✓	✓		✓		✓		✓		0.7	0.1	No	39	39-2	35.999449	-115.893484	Wash disappeares into sheet flow with Wash IDs 33 and 34.



Legend

- Project Boundary
- Delineation Map Panel Boundaries
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

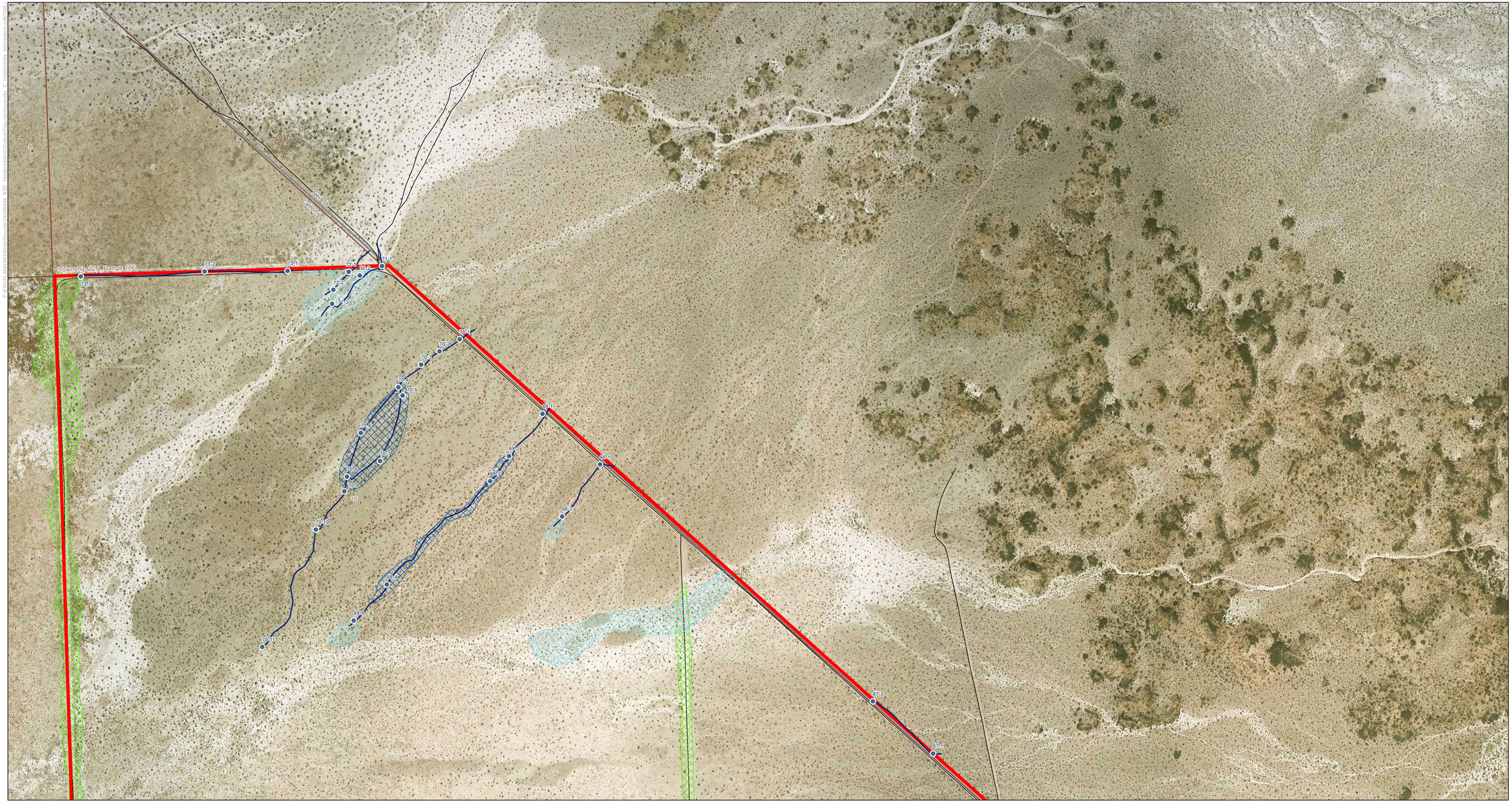
Source:
Aerial Imagery: ESRI 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

0 500 1,000 2,000 Feet

Appendix C
Project Panel Boundaries Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 1 of 11



Legend

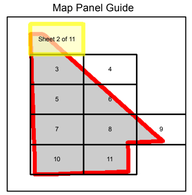
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

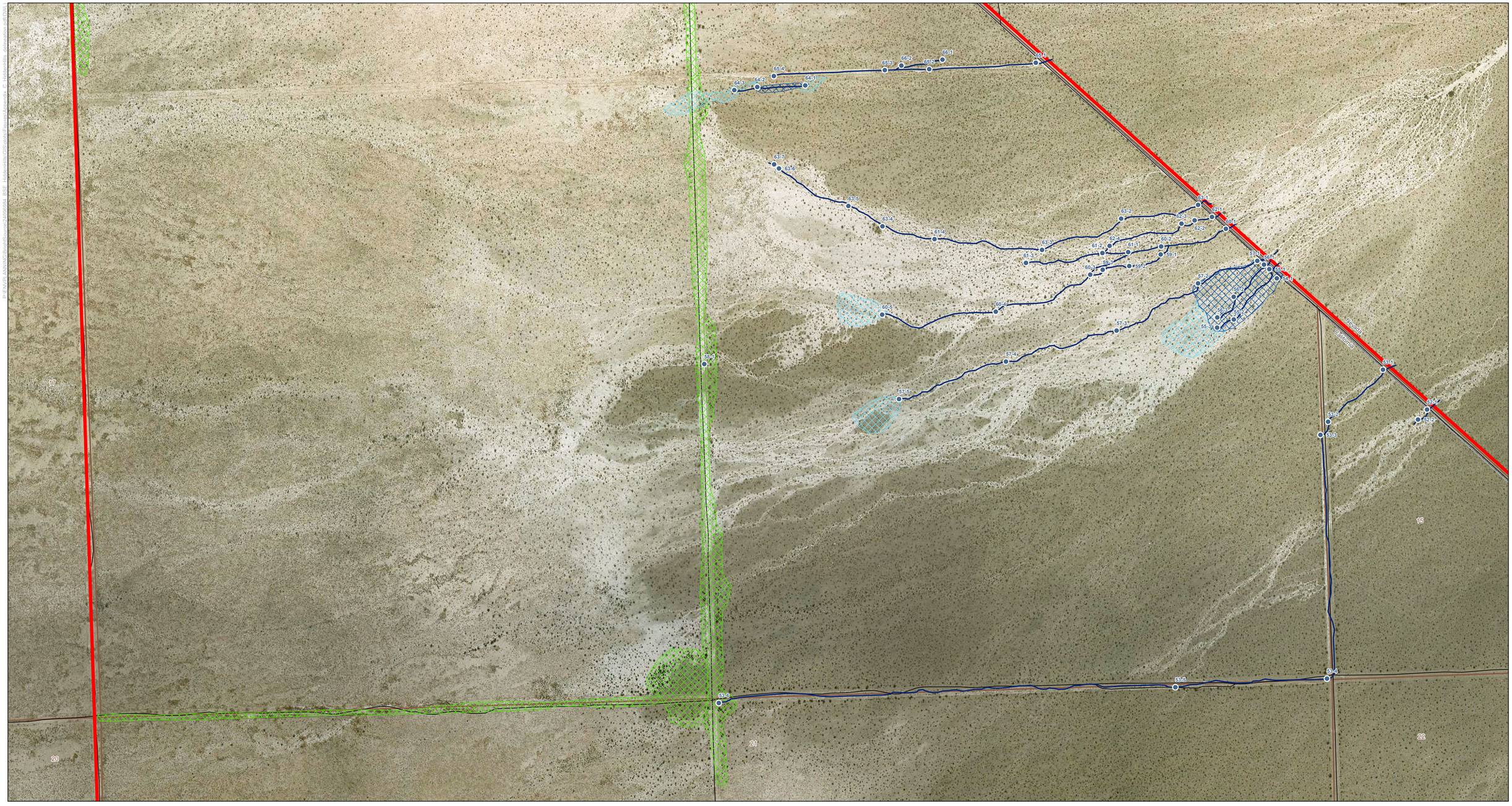
0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 2 of 11



Legend

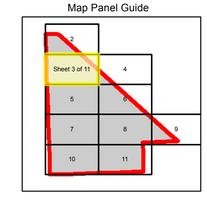
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

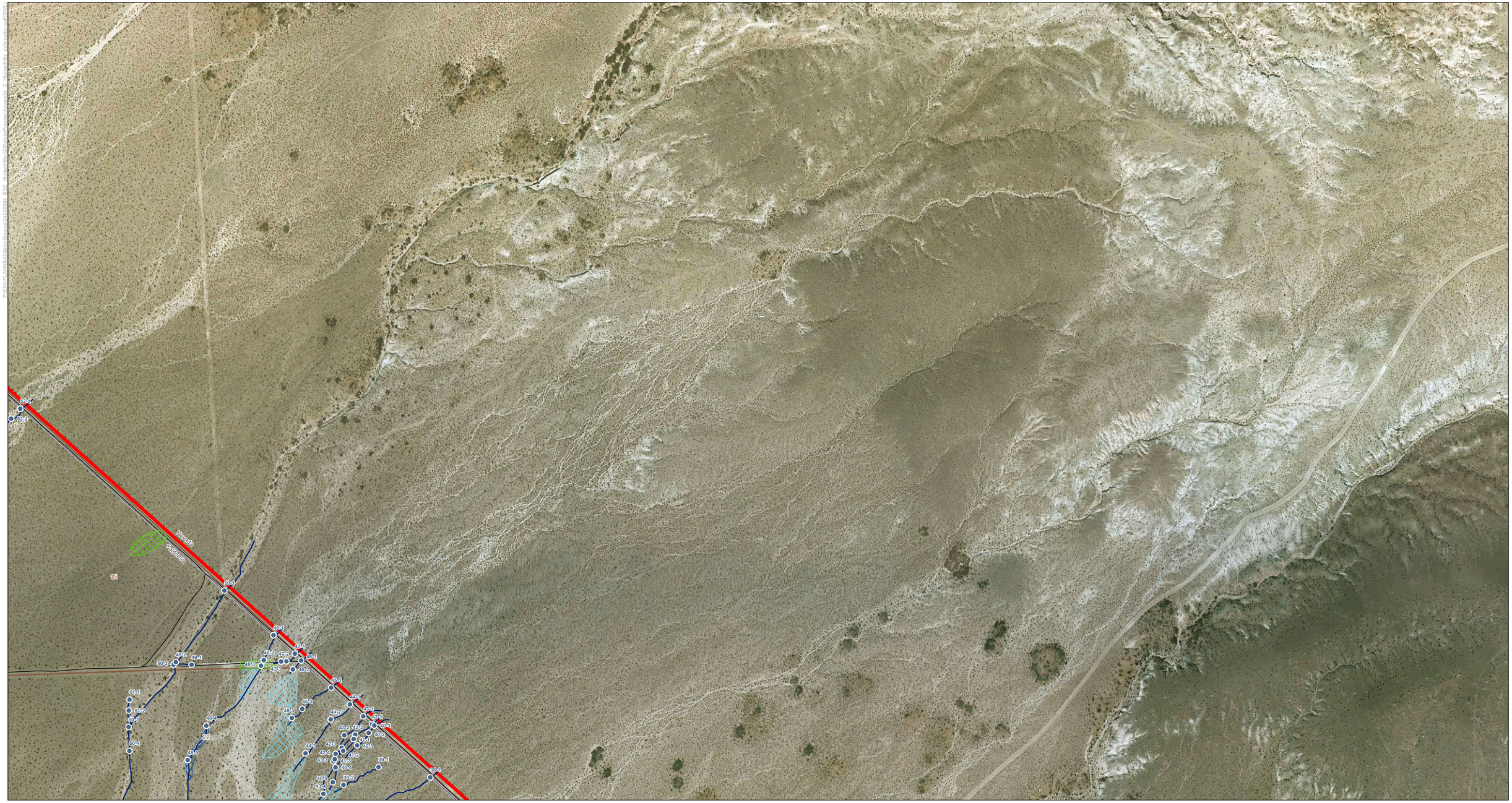
0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 3 of 11



Legend

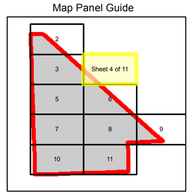
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 4 of 11

Legend

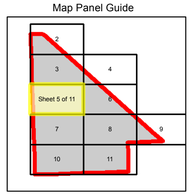
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

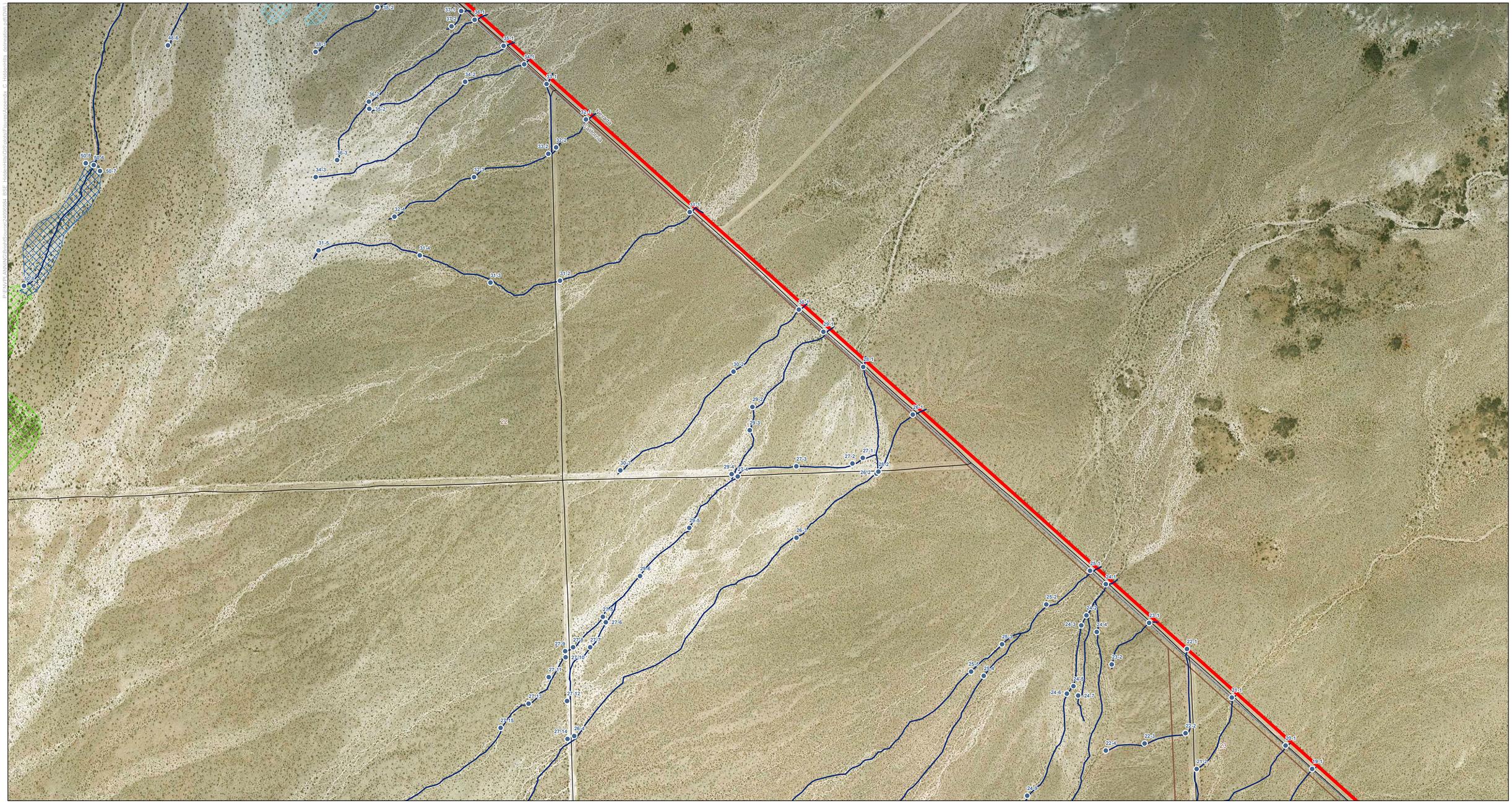
0 100 200 400 Feet

Map Panel Guide



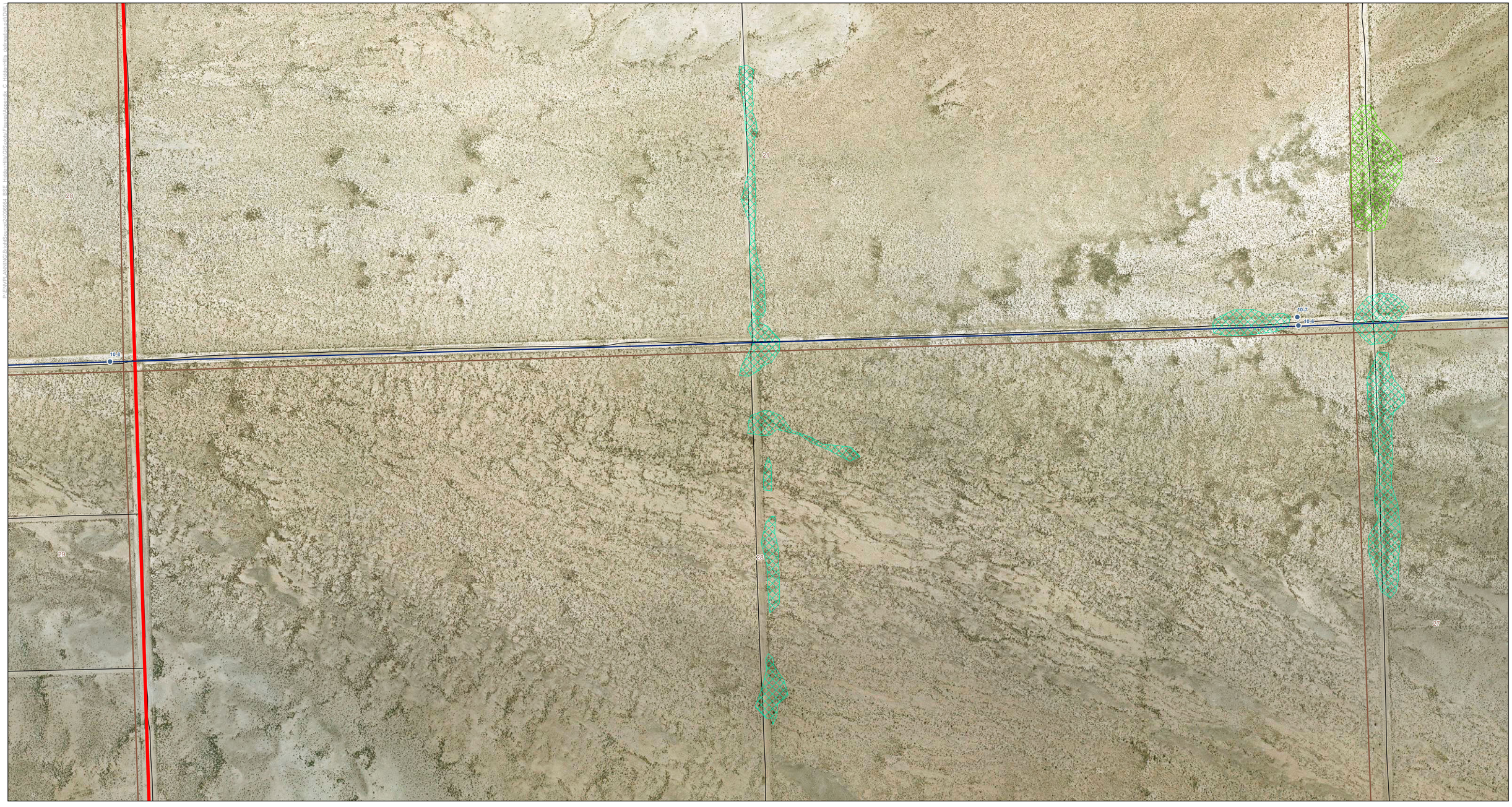
Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 5 of 11



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 6 of 11



Legend

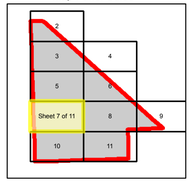
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

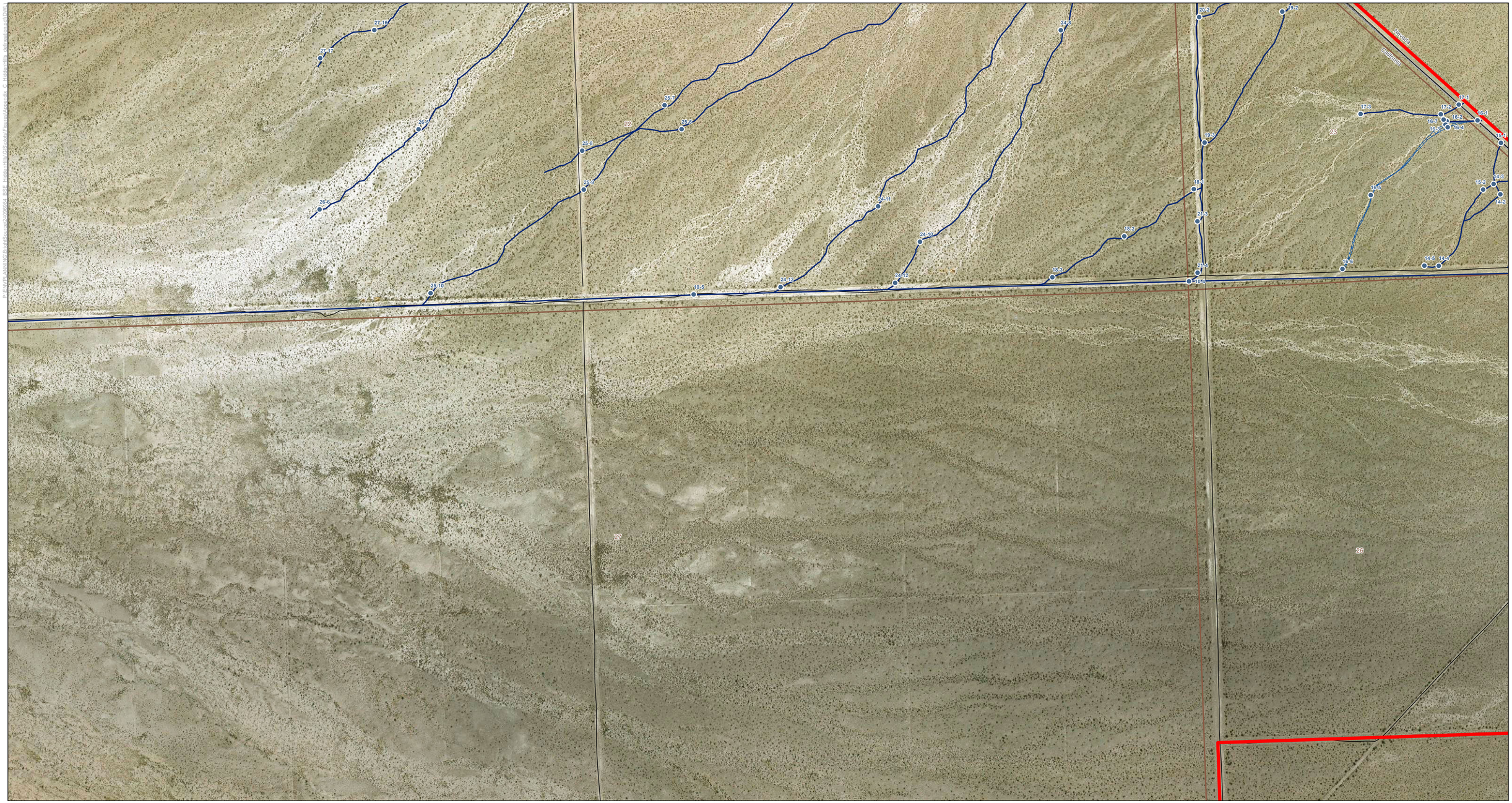
0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 7 of 11



Legend

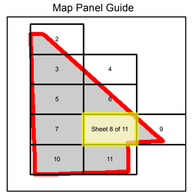
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

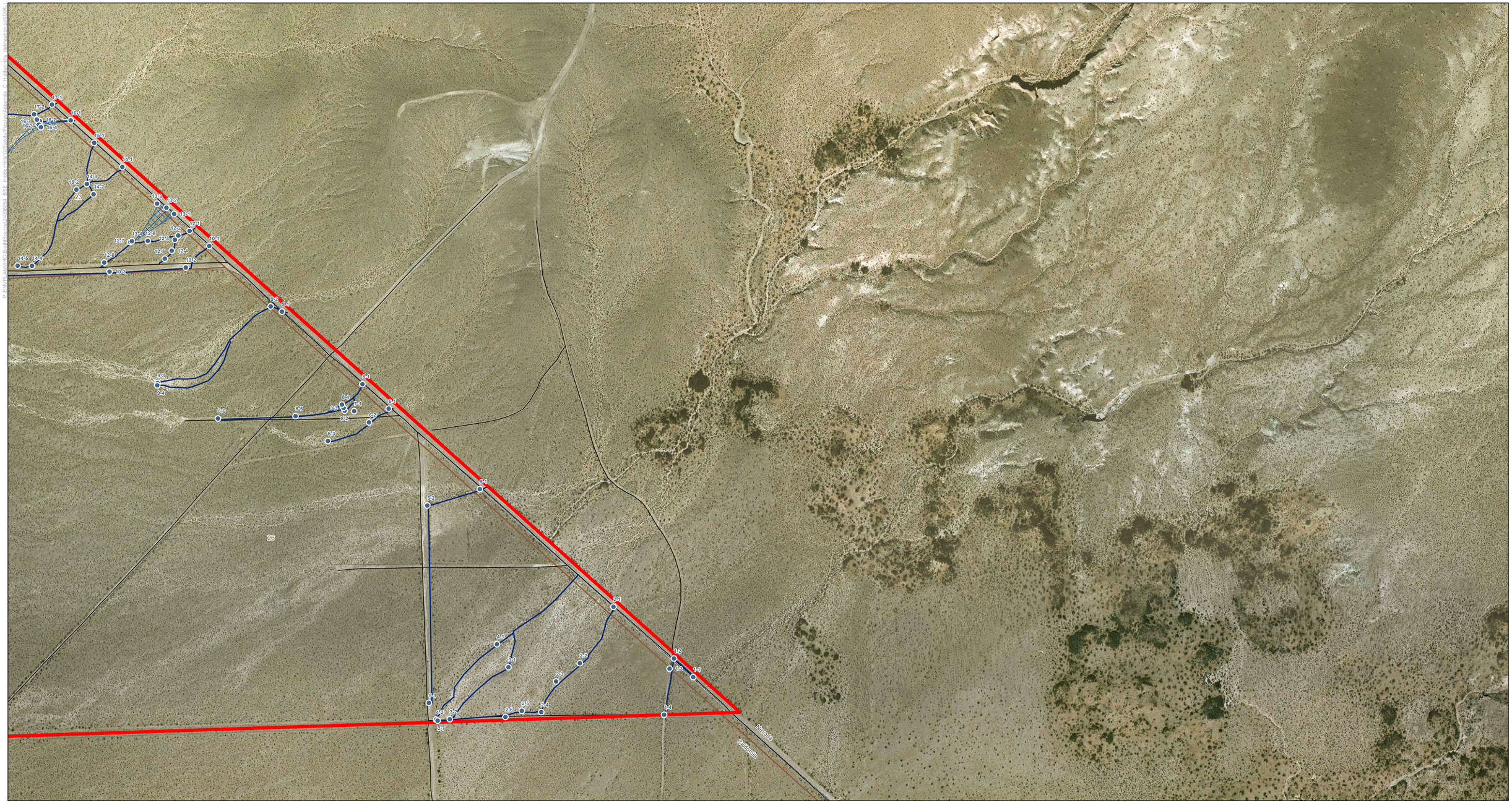
0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 8 of 11



Legend

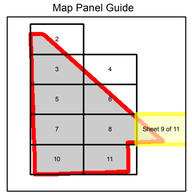
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 9 of 11

Legend

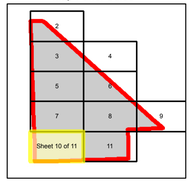
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 10 of 11

Legend

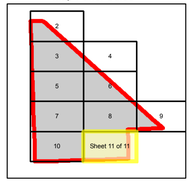
- Project Boundary
- Photographic Point
- Ephemeral Desert Wash
- Anastomose Desert Wash
- Sheet Flow Area
- Pooling Area
- Pooling Area - Moist
- Section Boundary
- State Boundary
- Road

Source:
Aerial Imagery: VTN 2010
Project Boundary: VTN 2010
Wash Data: URS Corporation 2010 - 2011
Wash Features: URS Corporation 2011
Photographic Points: URS Corporation 2011

N

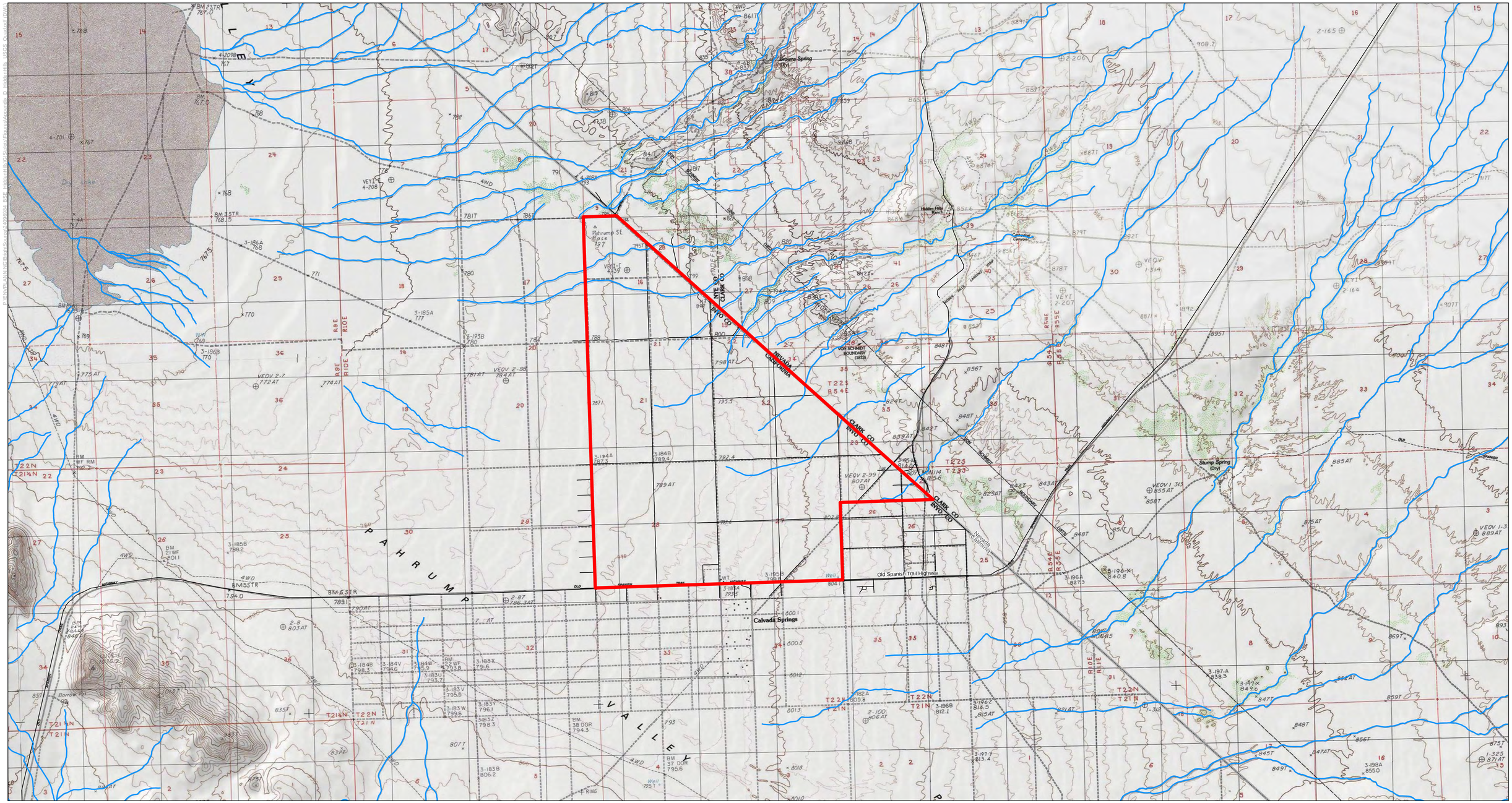
0 100 200 400 Feet

Map Panel Guide



Appendix C
Delineation Map
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

Sheet 11 of 11



Legend

- Project Boundary
- USGS NHD Washes
- Road
- State Boundary

Appendix D
USGS Quadrangle
Bright Source Energy Hidden Hills Ranch
Jurisdictional Delineation

N

0 1,000 2,000 4,000 Feet

Source:
Wash Data: USGS NHD 2010
Project Boundary: VTN 2010

Map depicted on the following USGS 7.5' quadrangles:
Mound Spring, Stump Spring, Calvada Springs,
and Hidden Hills Ranch

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

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

SECTION I: BACKGROUND INFORMATION

A. REPORT COMPLETION DATE FOR APPROVED JURISDICTIONAL DETERMINATION (JD): March 28, 2011

B. DISTRICT OFFICE, FILE NAME, AND NUMBER:Ventura, CA Field Office

C. PROJECT LOCATION AND BACKGROUND INFORMATION:

State:CA County/parish/borough: Inyo City: Calvada Springs
Center coordinates of site (lat/long in degree decimal format): Lat. ° **Pick List**, Long. ° **Pick List**.
Universal Transverse Mercator: 599112 m E 3982992 m N
Name of nearest waterbody: Pahrump Playa (dry) Lake
Name of nearest Traditional Navigable Water (TNW) into which the aquatic resource flows: None
Name of watershed or Hydrologic Unit Code (HUC): 16060015

- ☒ Check if map/diagram of review area and/or potential jurisdictional areas is/are available upon request.
- ☐ Check if other sites (e.g., offsite mitigation sites, disposal sites, etc…) are associated with this action and are recorded on a different JD form.

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

- ☒ Office (Desk) Determination. Date: January 15, 2011
- ☒ Field Determination. Date(s): Jan. 31 - February 4, 2011

SECTION II: SUMMARY OF FINDINGS

A. RHA SECTION 10 DETERMINATION OF JURISDICTION.

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

- ☐ Waters subject to the ebb and flow of the tide.
- ☐ Waters are presently used, or have been used in the past, or may be susceptible for use to transport interstate or foreign commerce. Explain: .

B. CWA SECTION 404 DETERMINATION OF JURISDICTION.

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

1. **Waters of the U.S.**
   a. **Indicate presence of waters of U.S. in review area (check all that apply):** [1]
   - ☐ TNWs, including territorial seas
   - ☐ Wetlands adjacent to TNWs
   - ☐ Relatively permanent waters[2] (RPWs) that flow directly or indirectly into TNWs
   - ☐ Non-RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands directly abutting RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands adjacent to but not directly abutting RPWs that flow directly or indirectly into TNWs
   - ☐ Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs
   - ☐ Impoundments of jurisdictional waters
   - ☐ Isolated (interstate or intrastate) waters, including isolated wetlands

   b. **Identify (estimate) size of waters of the U.S. in the review area:**
   Non-wetland waters: linear feet: width (ft) and/or acres.
   Wetlands: acres.

   c. **Limits (boundaries) of jurisdiction** based on: **Pick List**
   Elevation of established OHWM (if known): .

2. **Non-regulated waters/wetlands (check if applicable):**[3]
   - ☒ Potentially jurisdictional waters and/or wetlands were assessed within the review area and determined to be not jurisdictional. Explain: **Sixty-nine ephemeral washes located in the project site were identified as not having connectivity to an RPW or TNW. These isolated water features would not have the potential to affect interstate commerce if altered or destroyed**.

---

[1] Boxes checked below shall be supported by completing the appropriate sections in Section III below.
[2] For purposes of this form, an RPW is defined as a tributary that is not a TNW and that typically flows year-round or has continuous flow at least "seasonally" (e.g., typically 3 months).
[3] Supporting documentation is presented in Section III.F.

SECTION III: CWA ANALYSIS

A. TNWs AND WETLANDS ADJACENT TO TNWs

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

1. TNW
Identify TNW: .

Summarize rationale supporting determination: .

2. Wetland adjacent to TNW
Summarize rationale supporting conclusion that wetland is "adjacent": .

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

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

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

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

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

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

(i) General Area Conditions:
Watershed size: **Pick List**
Drainage area: **Pick List**
Average annual rainfall: inches
Average annual snowfall: inches

(ii) Physical Characteristics:
(a) Relationship with TNW:
☐ Tributary flows directly into TNW.
☐ Tributary flows through **Pick List** tributaries before entering TNW.

Project waters are **Pick List** river miles from TNW.
Project waters are **Pick List** river miles from RPW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Project waters are **Pick List** aerial (straight) miles from RPW.
Project waters cross or serve as state boundaries. Explain: .

Identify flow route to TNW[5]: .
Tributary stream order, if known: .

---

[4] Note that the Instructional Guidebook contains additional information regarding swales, ditches, washes, and erosional features generally and in the arid West.
[5] Flow route can be described by identifying, e.g., tributary a, which flows through the review area, to flow into tributary b, which then flows into TNW.

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

Tributary is: ☐ Natural
☐ Artificial (man-made). Explain: .
☐ Manipulated (man-altered). Explain: .

Tributary properties with respect to top of bank (estimate):
Average width: feet
Average depth: feet
Average side slopes: **Pick List.**

Primary tributary substrate composition (check all that apply):

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

Tributary condition/stability [e.g., highly eroding, sloughing banks]. Explain: .
Presence of run/riffle/pool complexes. Explain: .
Tributary geometry: **Pick List**
Tributary gradient (approximate average slope): %

(c) Flow:
Tributary provides for: **Pick List**
Estimate average number of flow events in review area/year: **Pick List**
Describe flow regime: .
Other information on duration and volume: .

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

Subsurface flow: **Pick List**. Explain findings: .
☐ Dye (or other) test performed: .

Tributary has (check all that apply):
☐ Bed and banks
☐ OHWM[6] (check all indicators that apply):

☐ clear, natural line impressed on the bank	☐ the presence of litter and debris
☐ changes in the character of soil	☐ destruction of terrestrial vegetation
☐ shelving	☐ the presence of wrack line
☐ vegetation matted down, bent, or absent	☐ sediment sorting
☐ leaf litter disturbed or washed away	☐ scour
☐ sediment deposition	☐ multiple observed or predicted flow events
☐ water staining	☐ abrupt change in plant community
☐ other (list):	

☐ Discontinuous OHWM.[7] Explain: .

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

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

(iii) Chemical Characteristics:
Characterize tributary (e.g., water color is clear, discolored, oily film; water quality; general watershed characteristics, etc.).
Explain: .
Identify specific pollutants, if known: .

---

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

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

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

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

(i) Physical Characteristics:

(a) General Wetland Characteristics:
Properties:
  Wetland size: acres
  Wetland type. Explain: .
  Wetland quality. Explain: .
Project wetlands cross or serve as state boundaries. Explain: .

(b) General Flow Relationship with Non-TNW:
Flow is: **Pick List**. Explain: .

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

Subsurface flow: **Pick List**. Explain findings: .
  ☐ Dye (or other) test performed: .

(c) Wetland Adjacency Determination with Non-TNW:
☐ Directly abutting
☐ Not directly abutting
  ☐ Discrete wetland hydrologic connection. Explain: .
  ☐ Ecological connection. Explain: .
  ☐ Separated by berm/barrier. Explain: .

(d) Proximity (Relationship) to TNW
Project wetlands are **Pick List** river miles from TNW.
Project waters are **Pick List** aerial (straight) miles from TNW.
Flow is from: **Pick List.**
Estimate approximate location of wetland as within the **Pick List** floodplain.

(ii) Chemical Characteristics:

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

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

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

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

All wetland(s) being considered in the cumulative analysis: **Pick List**
Approximately ( ) acres in total are being considered in the cumulative analysis.

For each wetland, specify the following:

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

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

C. SIGNIFICANT NEXUS DETERMINATION

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

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

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

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

1. **Significant nexus findings for non-RPW that has no adjacent wetlands and flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary itself, then go to Section III.D:Not Applicable. All identified drainages lack connectivity to Pahrump Playa. Pahrump Playa could not be determined to be a TNW.

2. **Significant nexus findings for non-RPW and its adjacent wetlands, where the non-RPW flows directly or indirectly into TNWs.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

3. **Significant nexus findings for wetlands adjacent to an RPW but that do not directly abut the RPW.** Explain findings of presence or absence of significant nexus below, based on the tributary in combination with all of its adjacent wetlands, then go to Section III.D: .

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

1. **TNWs and Adjacent Wetlands.** Check all that apply and provide size estimates in review area:
   - ☐ TNWs: linear feet width (ft), Or, acres.
   - ☐ Wetlands adjacent to TNWs: acres.

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

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

3. **Non-RPWs[8] that flow directly or indirectly into TNWs.**
☐ Waterbody that is not a TNW or an RPW, but flows directly or indirectly into a TNW, and it has a significant nexus with a TNW is jurisdictional. Data supporting this conclusion is provided at Section III.C.

Provide estimates for jurisdictional waters within the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: .

4. **Wetlands directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands directly abut RPW and thus are jurisdictional as adjacent wetlands.
☐ Wetlands directly abutting an RPW where tributaries typically flow year-round. Provide data and rationale indicating that tributary is perennial in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

☐ Wetlands directly abutting an RPW where tributaries typically flow "seasonally." Provide data indicating that tributary is seasonal in Section III.B and rationale in Section III.D.2, above. Provide rationale indicating that wetland is directly abutting an RPW: .

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

5. **Wetlands adjacent to but not directly abutting an RPW that flow directly or indirectly into TNWs.**
☐ Wetlands that do not directly abut an RPW, but when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisidictional. Data supporting this conclusion is provided at Section III.C.

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

6. **Wetlands adjacent to non-RPWs that flow directly or indirectly into TNWs.**
☐ Wetlands adjacent to such waters, and have when considered in combination with the tributary to which they are adjacent and with similarly situated adjacent wetlands, have a significant nexus with a TNW are jurisdictional. Data supporting this conclusion is provided at Section III.C.

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

7. **Impoundments of jurisdictional waters.[9]**
As a general rule, the impoundment of a jurisdictional tributary remains jurisdictional.
☐ Demonstrate that impoundment was created from "waters of the U.S.," or
☐ Demonstrate that water meets the criteria for one of the categories presented above (1-6), or
☐ Demonstrate that water is isolated with a nexus to commerce (see E below).

E. ISOLATED [INTERSTATE OR INTRA-STATE] WATERS, INCLUDING ISOLATED WETLANDS, THE USE, DEGRADATION OR DESTRUCTION OF WHICH COULD AFFECT INTERSTATE COMMERCE, INCLUDING ANY SUCH WATERS (CHECK ALL THAT APPLY):[10]
☐ which are or could be used by interstate or foreign travelers for recreational or other purposes.
☐ from which fish or shellfish are or could be taken and sold in interstate or foreign commerce.
☐ which are or could be used for industrial purposes by industries in interstate commerce.
☐ Interstate isolated waters. Explain: .
☒ Other factors. Explain:From the ephemeral, isolated washes identified, the modification or destruction of these washes would not have an affect on interstate commerce.

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[8] See Footnote # 3.
[9] To complete the analysis refer to the key in Section III.D.6 of the Instructional Guidebook.
[10] Prior to asserting or declining CWA jurisdiction based solely on this category, Corps Districts will elevate the action to Corps and EPA HQ for review consistent with the process described in the Corps/EPA *Memorandum Regarding CWA Act Jurisdiction Following Rapanos.*

Identify water body and summarize rationale supporting determination: .

Provide estimates for jurisdictional waters in the review area (check all that apply):
☐ Tributary waters: linear feet width (ft).
☐ Other non-wetland waters: acres.
Identify type(s) of waters: **.**
☐ Wetlands: acres.

F. NON-JURISDICTIONAL WATERS, INCLUDING WETLANDS (CHECK ALL THAT APPLY):
☒ If potential wetlands were assessed within the review area, these areas did not meet the criteria in the 1987 Corps of Engineers Wetland Delineation Manual and/or appropriate Regional Supplements.
☒ Review area included isolated waters with no substantial nexus to interstate (or foreign) commerce.
☐ Prior to the Jan 2001 Supreme Court decision in "*SWANCC*," the review area would have been regulated based solely on the "Migratory Bird Rule" (MBR).
☒ Waters do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction. Explain:**Connectivity of waters identified in the project site to an RPW or TNW could not be established by means of desktop or field determintaion.**
☐ Other: (explain, if not covered above): **.**

Provide acreage estimates for non-jurisdictional waters in the review area, where the sole potential basis of jurisdiction is the MBR factors (i.e., presence of migratory birds, presence of endangered species, use of water for irrigated agriculture), using best professional judgment (check all that apply):
☐ Non-wetland waters (i.e., rivers, streams): linear feet width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

Provide acreage estimates for non-jurisdictional waters in the review area that do not meet the "Significant Nexus" standard, where such a finding is required for jurisdiction (check all that apply):
☒ Non-wetland waters (i.e., rivers, streams): **166,761** linear feet, **3.5 (avg)** width (ft).
☐ Lakes/ponds: acres.
☐ Other non-wetland waters: acres. List type of aquatic resource: .
☐ Wetlands: acres.

SECTION IV: DATA SOURCES.

A. SUPPORTING DATA. Data reviewed for JD (check all that apply - checked items shall be included in case file and, where checked and requested, appropriately reference sources below):
☒ Maps, plans, plots or plat submitted by or on behalf of the applicant/consultant: .
☒ Data sheets prepared/submitted by or on behalf of the applicant/consultant.
☐ Office concurs with data sheets/delineation report.
☐ Office does not concur with data sheets/delineation report.
☐ Data sheets prepared by the Corps: .
☐ Corps navigable waters' study: .
☒ U.S. Geological Survey Hydrologic Atlas: .
☐ USGS NHD data.
☒ USGS 8 and 12 digit HUC maps.
☒ U.S. Geological Survey map(s). Cite scale & quad name:1:2400 Calvada Springs.
☒ USDA Natural Resources Conservation Service Soil Survey. Citation:Web Soil Survey Online, January 15, 2011.
☐ National wetlands inventory map(s). Cite name: NWI - online.
☐ State/Local wetland inventory map(s): .
☐ FEMA/FIRM maps: .
☐ 100-year Floodplain Elevation is: (National Geodectic Vertical Datum of 1929)
☒ Photographs: ☒ Aerial (Name & Date):GoogleEarth Pro, data January 20, 2007, VTN Consulting. 2010. Aerial Photography for Hidden Hills Ranch SEGS. Inyo County, CA.
or ☐ Other (Name & Date): .
☐ Previous determination(s). File no. and date of response letter: .
☐ Applicable/supporting case law: .
☐ Applicable/supporting scientific literature: .
☒ Other information (please specify):California Department of Water Resources (CDWR). 2004. Pharump Valley Groundwater Basin, California's Groundwater Bulletin 118.

B. ADDITIONAL COMMENTS TO SUPPORT JD: , .

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 001

Location Hidden Hills

County INYO County

Additional Information GPS A

GPS Data # 01/02/03

crosses road, follows north side of road

At Each GPS point taken:

- Width (ft): 2.7ft / 2.8 ft / 3.5in / 2.8in
- Depth (ft): 1.5in / 3in / 4in / 2in
- Substrate: sand, cobbles, bedrock, silt, other (explain) cobble, sand, silt / silt cobble / silt cobble / silt + sand
- Photo # and direction, upstream: White board #1 / #4 / #7 / #10 NE(2) / N(5) / N(8) / N(11)
- Photo # and direction, downstream: W(3) / S(6) / S(9) / S(12)
- Bank Slope: 1%, gentle / 20° / 40° / 60°
- General Flow Direction (look at Topo): SE, SE, SE, SE
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks BB
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank NL
    - Changes in the character of soil CC
    - (o) Shelving or cut banks, exposed roots ER
    - Vegetation matted down, bent, or absent V
    - (o) Litter disturbed or washed away L
    - (o) Sediment deposition SD
    - Water staining WS
    - (o) The presence of litter and debris slight LD
    - Destruction of terrestrial vegetation TV
    - (o) Sediment sorting SS
    - (o) Scour minor S
    - (o) Multiple observed or predicted flow events FE
    - Abrupt change in plant community PC
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____
- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

Creosote
Ambrosia
Indian Rice Grass
(trumpet) Eriogonum
Salsola
Mallow

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 002,
Location Hidden Hills
County Inyo County
Additional Information GPS A
GPS Data # 01/02/03/04 (braided) (05 braid) (6) channel (7) - merge with wash #44

At Each GPS point taken:

- Width (ft): 8in / 3.2 ft / 3.4 ft / braid / braid channels avg 2ft / 3.5ft
- Depth (ft): 2in / 1in / 5in / braid / braid channel average 2in / .25ft
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt sand / silt sand / silt sand / silt sand
- Photo # and direction, upstream: White Board #13, #16, #19, #22, #25 NE(14) / NE(17) / NE(20) / NE(23) / NE(26)
- Photo # and direction, downstream: SW(15) / SW(18) / SW(21) / SW(24) / SW(27)
- Slope: 5° / 8° / 32° / (braiding / braiding / South edge of braiding / north edge of braiding
- General Flow Direction (look at Topo): gental slope SW / gental slope / gental slope / gental slope
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

  _____

  _____

- Tributary has (circle all that apply):
  - (Bed and Banks) Not clearly defines OHWM
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - (Litter disturbed or washed away)
    - (Sediment deposition)
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 003
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01, 02

At Each GPS point taken:

- Width (ft): 1/2 ft / 3.5 ft.
- Depth (ft): 0.1 ft / 3in
- Substrate: sand, cobbles, bedrock, silt, other (explain)
- Photo # and direction, upstream: Board #1, 4 NE(2), NE(5)
- Photo # and direction, downstream: SW(3), SW(6)
- Slope: 90°
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 004
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01, 02

At Each GPS point taken:

- Width (ft): 1.3 ft / 3.3 /
- Depth (ft): .25 ft / 3in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt / cobble sand
- Photo # and direction, upstream: Chute #1, #4 NE(2) NE(5)
- Photo # and direction, downstream: SW(3) SW(6)
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - (o) Clear, natural line impressed on the bank
    - (o) Changes in the character of soil
    - (o) Shelving or cut banks, exposed roots
    - o Vegetation matted down, bent, or absent
    - (o) Litter disturbed or washed away
    - o Sediment deposition
    - o Water staining
    - (o) The presence of litter and debris
    - o Destruction of terrestrial vegetation
    - o Sediment sorting
    - (o) Scour
    - (o) Multiple observed or predicted flow events
    - o Abrupt change in plant community
    - o Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 005
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01, 02, 03

At Each GPS point taken:

- Width (ft): 4.7ft / 3.3ft / 1.8ft /
- Depth (ft): 1in / 2in / 1in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) sand silt / sand silt
- White #1, #4, #7
- Photo # and direction, upstream: NE (2) / NE (5) / E (8)
- Photo # and direction, downstream: SW (3) / SW (6) / W (9)
- Slope: 1° / 5° / 1°
- General Flow Direction (look at Topo): gentle slope toward SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width):
    _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 006
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04/05/06

At Each GPS point taken:

- Width (ft): 2.8 ft / 3 ft / 16 in / 2.6 ft / 1.4 ft (on road) / 1.5 ft (on road)
- Depth (ft): 4 in / 1 in / 1 in / 1 in / 4 in
- Substrate: sand, cobbles, bedrock, silt, other (explain) sandy silt / sandy silt / silty sand / silt sand cobble /
- Photo # and direction, upstream: white #1 / #4 / #7 / #10 #13 #16 NE(2) / NE(5) / NE(8) / NE(11) / E(14) / E(17)
- Photo # and direction, downstream: SW(3) / SW(6) / SW(9) / SW(12) / W(15) / W(18)
- Slope: 65° / braiding / braiding / braiding / single channel road / single channel road /
- General Flow Direction (look at Topo): SW / SW / SW / SW / W / W /
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

  _____

  _____

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - (OHWM Present: Yes/No (circle all that apply):
    - (Clear, natural line impressed on the bank #5
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting
    - (Scour
    - (Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

  Ephedra nevadaensis

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 007
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03

At Each GPS point taken:

- Width (ft): 1.6ft / 2.3ft / 7.6ft
- Depth (ft): 2in / 2in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand / sand cobble
- Photo # and direction, upstream: White #1 #4 #7 E(2) / E transition to N(5) / E(8)
- Photo # and direction, downstream: W(3) / W transition to S(6) (runs into road) / W(9) Road (N edge)
- Slope: 1° –
- General Flow Direction (look at Topo): W
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply): scattered
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/2011 **Wash ID Number and Name (if named):** 008
Location hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04/05/06/07/08
connects w/Road

At Each GPS point taken:

- Width (ft): 3.1 ft / 2.3 ft / 1.2 ft / .3 ft / 2.8 ft / 5.4 ft / 4.5 ft / 2.6 ft
- Depth (ft): 1 in / 4 in / 1 in / .1 ft / 1 in / 1 in / 1 in / 1 in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand / fine sand / sand (fine) cobbles / san
- Photo # and direction, upstream: NE(2) / NE(5) / NE(8) / NE(11) / NE(14) / E(17) / NE
  White #1, #4, #7, #10, #13, #16, #19
- Photo # and direction, downstream: SW(3) / SW(6) / SW(9) / SW(12) / SW(15) / W(18) / SW
- Slope: gental 1° / gential 1°
- General Flow Direction (look at Topo): SW / SW / SW / SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

  _____

  _____

- Tributary has (circle all that apply):
  - Bed and Banks scattered
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots scattered
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

* 4 photos of Allium?

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/11 **Wash ID Number and Name (if named):** 00~~#~~7
Location Hidden Hills Ranch
County Inyo
Additional Information GPS A
GPS Data # 0~~#~~3/04/5/6/7/8

At Each GPS point taken:

- Width (ft): 4.9 / 3.3 / 21.3 / 5.5 / 50 / 4.9 (50')
- Depth (ft): .2 / .2 / .5 / .1 / .25 / 2
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt
- Photo # and direction, upstream: E-NE 60° / E / E / E / ~~multiple~~ photos (4 more of debris) to show evidence of flow
- Photo # and direction, downstream: W / W / W / W / W(4) / W
- Slope: 1%
- General Flow Direction (look at Topo): E-W, Doesn't follow Topo, follows road.
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes No (circle all that apply):
    - Clear, natural line impressed on the bank
    - (Changes in the character of soil)
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 009
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04 - Meets up with 008

At Each GPS point taken:

- Width (ft): 1.5/1.9/2.75/4.25
- Depth (ft): .1/.3/.25/.1
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sandy silt
- Photo # and direction, upstream: SSE (150°)/"
- Photo # and direction, downstream: W (250°)/"
- Slope: 10
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (circled) Bed and Banks
  - (circled) OHWM Present: (Yes)/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - (circled) Changes in the character of soil
    - (circled) Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - (circled) Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (circled) Sediment sorting
    - (circled) Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 010
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04/05

At Each GPS point taken:

- Width (ft): 2.25/3.1/4/3.3/2.25
- Depth (ft): 0.6/.1/.1/.1/.2
- Substrate: sand, cobbles, bedrock, silt, other (explain) Silt/cobbles
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 011
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02 - Meets up w/010

At Each GPS point taken:

- Width (ft): 3.1 / 3.1
- Depth (ft): .1 / .1
- Substrate: sand, cobbles, bedrock, silt, other (explain)
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope: 3%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 012
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04/05/06/07

At Each GPS point taken:

- Width (ft): 4.9/2.4/2.2/3.2/3.25/2.75/2.1
- Depth (ft): .2/.2/.2/.1/.25/.2/.2
- Substrate: sand, cobbles, bedrock, silt, other (explain)
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 013
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/08

At Each GPS point taken:

- Width (ft): 7/1.4/4.75
- Depth (ft): .3/.25/.1
- Substrate: sand, cobbles, bedrock, silt, other (explain)
- Photo # and direction, upstream:
- Photo # and direction, downstream:
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

12
W:
D:

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 014
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03 - Confluence w/ ~~feature 002~~ (Gold Street) Road that runs perpendicular to road that feature 007 follows. (Ave. D)

At Each GPS point taken:

- Width (ft): 2.75 / 2.9 / 3.75
- Depth (ft): .3 / .1 / .2
- Substrate: sand, cobbles, bedrock, silt, other (explain)
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: (Yes) No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 015
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01 / 02 - Meets up w/ Gold St.

At Each GPS point taken:

- Width (ft): 4.9 / 2.5
- Depth (ft): .1 / .1
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 016
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02 - Meets upwash Gold St. /03 - Along Gold St. /04 - confluence w/ 002

At Each GPS point taken:

- Width (ft): 5.9 / 2.1 / 1.75 / 3.75
- Depth (ft): .2 / .75 / .2 / .3
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sandy silt
- Photo # and direction, upstream: NE 1" / N
- Photo # and direction, downstream: SW / 1" / S
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 017
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04

At Each GPS point taken:

- Width (ft): 1.9 / 2.25 / 1.5 / 1.25
- Depth (ft): .25 / .2 / .1 / .25
- Substrate: (sand), cobbles, bedrock, (silt), other (explain) Mostly silt, some cobbles
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): _____

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: (Yes) No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 018
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01 / 02 / 03 - confluence with 007

At Each GPS point taken:

- Width (ft): 2.25 / 1.9 / 2.1
- Depth (ft): .3 / .3 / .75
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sandy silt
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: (Yes) No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 019
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02

At Each GPS point taken:

- Width (ft): 2 / 6.5
- Depth (ft): Nr · 9 / .1
- Substrate: sand, cobbles, bedrock, silt, other (explain) sandy silt
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (O) Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - (O) Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 020
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04/05/06/07/08/09/10/11/12

Bifurcation

Outlet to Ave D. (Feature #007

split 8.5

At Each GPS point taken:

- Width (ft): 6.75/ / 5 / 5.1 / 4.25 / 2.9 / 3.25 / 4 / 3.75 / 3.5 / 4 /
- Depth (ft): .75 / .2 / .2 / .9 / .75 / .75 / .66 / .66 / .33 / .4 / .33 /
- Substrate: sand, cobbles, bedrock, silt, other (explain) sandy silt w/ gravel
- Photo # and direction, upstream: NE 12: 3.5 / .5
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - (o) Clear, natural line impressed on the bank
    - o Changes in the character of soil
    - (o) Shelving or cut banks, exposed roots
    - o Vegetation matted down, bent, or absent
    - (o) Litter disturbed or washed away
    - o Sediment deposition
    - o Water staining
    - (o) The presence of litter and debris
    - o Destruction of terrestrial vegetation
    - (o) Sediment sorting
    - (o) Scour
    - o Multiple observed or predicted flow events
    - (o) Abrupt change in plant community
    - o Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 021
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04/05/06/07/08/09 confluence w/ Zircon St. /10

At Each GPS point taken:

- Width (ft): 2.9/4.66/5.9/3.5/2.5/5/5.75/4.5/2.25/1.5
- Depth (ft): .5/.5/.9/.9/.2/.1/.25/.25/.3/.1
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sandy silt w/ cobbles
- Photo # and direction, upstream: _____
- Photo # and direction, downstream: _____
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 022
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01 / 02 - confluence / 03 / 04 / 05 / 06
w/ 023 co. confluence / crosses w/ Zirkon st.

At Each GPS point taken:

- Width (ft): 4.25 / 2.1 / 2.75 / 2.66 / 6 / 2.25
- Depth (ft): .2 / .9 / .66 / .5 / .25 / .33
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 023
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02-confluence w/ 022, after crossing Ave. C

At Each GPS point taken:

- Width (ft): 5.9 / 1.2
- Depth (ft): .25 / .9
- Substrate: sand, cobbles, bedrock, silt, other (explain) sandy silt w/ cobbles
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: (Yes) No (circle all that apply):
    - Clear, natural line impressed on the bank
    - (Changes in the character of soil
    - (Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - (Sediment deposition
    - Water staining
    - (The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting
    - (Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 024
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03/04/05/06

At Each GPS point taken:

- Width (ft): 4.1/2.5/4.6/2.9/2.5/2.5/
- Depth (ft): 1/.5/.2/.5/.25/.5/
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sandy with gravel
- Photo # and direction, upstream: N
- Photo # and direction, downstream: S
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 025
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02 & 03/04/05/06/07/08/09/10/11 exits roadway and meets up with 022 /12/13/14/15/16/17
Begin to follow Ave. c

At Each GPS point taken:

- Width (ft): 5.25/3.9/4.25/5.5/1.66/2.66/3.5/3.66/3.9/6.5/4
- Depth (ft): .33/.2/.25/.2/.66/.2/.2/.66/.5/.2/.1
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt w/ cobbles and sand
- Photo # and direction, upstream: NE /2.1/5/2.66/3.5/2.3/1.3
- Photo # and direction, downstream: SW /.3/.1/.25/.1/.1/.25
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

  _____

  _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (3) The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (2) Sediment sorting
    - (6) Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 226
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 01/02/03

At Each GPS point taken:

- Width (ft): 3.3 / 4.4 / 2.1
- Depth (ft): .16 / .4 / .5
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty w/ gravel
- Photo # and direction, upstream: NE
- Photo # and direction, downstream: SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 027
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1 / 2 / 3 / 4 / 5

At Each GPS point taken:

- Width (ft): .75 / 2.6 / 4.9 / 4.6 / 1.9
- Depth (ft): 5.9 / 0.3 / 0.25 / 0.2 / 0.2 /
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand with cobbles
- Photo # and direction, upstream: 1 NE / 3 NE / 5 E / 7 SW / 9 SW
- Photo # and direction, downstream: 2 SW / 4 SW / 6 W / 8 NE / 10 NE
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - (OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting
    - (Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 028
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1/2/3/4

At Each GPS point taken:

- Width (ft): 2.5 / 5.3 / 4.5 / 4.5
- Depth (ft): 0.1 / 0.3 / 0.2 / 4.5
- Substrate: sand, cobbles, bedrock, silt, other (explain) Silty Sand
- Photo # and direction, upstream: 1 NE / 3 NE / 5 NE / 7 NE
- Photo # and direction, downstream: 2 SW / 4 SW / 6 SW / 8 SW
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 029
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 3.1 / 2.6
- Depth (ft): 0.25 / 0.2
- Substrate: sand, cobbles, bedrock, silt, other (explain) Silty sand
- Photo # and direction, upstream: 1 NW / 3 NW
- Photo # and direction, downstream: 2 SE / 4 SE
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 030
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1/2/3

At Each GPS point taken:

- Width (ft): 6.5 / 5.2 / 2.3
- Depth (ft): 0.20 / 0.20 / 0.10
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand
- Photo # and direction, upstream: 1 NE / 3 NE / 5 NE
- Photo # and direction, downstream: 2 SW / 4 SW / 6 SW
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 031
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 4 / 1.9
- Depth (ft): 0.25 / 0.33
- Substrate: sand, cobbles, bedrock, silt, other (explain) Silty sand
- Photo # and direction, upstream: 1 NE / 3 NE
- Photo # and direction, downstream: 2 SW / 4 SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 032
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1/2/3

At Each GPS point taken:

- Width (ft): 4.9 / 4.75 / 2.5
- Depth (ft): 0.33 / 0.20 / 0.20
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand
- Photo # and direction, upstream: 1 NE / 3 NE / 5 NE
- Photo # and direction, downstream: 2 SW / 4 SW / 6 SW
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 033
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 2.4 / 3
- Depth (ft): 0.4 / 0.2
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand
- Photo # and direction, upstream: 1 NE / 3 NE
- Photo # and direction, downstream: 2 SW / 4 SW
- Slope:
- General Flow Direction (look at Topo):
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list):

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 034
Location Hidden Hills
County Inyo
Additional Information GPS A
GPS Data # 1/2/3

At Each GPS point taken:

- Width (ft): 3/4.25/1.5
- Depth (ft): 0.20/0.20/0.10
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand
- Photo # and direction, upstream: 1 NE / 3 NE / 5 NE
- Photo # and direction, downstream: 2 SW / 4 SW / 6 SW
- Slope: _____
- General Flow Direction (look at Topo): _____
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

  _____

  _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

Wetlands and Other Waters of the United States

Photo Area. Tributary has:

DATE ~~Resource Number~~	WASH ID ~~Resource Type~~	~~Depth~~ Length within Study Area (feet)	Width or OHWM within Study Area (feet)	~~Acreage within Study Area~~	~~Substrate Dominant Vegetation (Sand, Cobbles, Silt)~~	GPS Data ~~Photo Numbers~~ #'s	~~Proposed Construction Method~~	Substrate ~~Mitigation Measures~~
✓ 2/3	027	5.9	.75	NE/SW	OHWM, Litter Debris,	01	Silty sand w/	
		.3	2.6		SS, S, CB	02	cobbles	
		.25	4.9	E/W		03		
		.2	4.6	SW/NE		04		
		.2	1.9			05		
✓ 2/3	028	.1	2.5	NE/SW	S, CB, SS, LD	01	Silty sand	
		.3	5.3			02		
		.2	4.5			03		
		.1	4.5			04		
✓ 2/3	029	.25	3.1	NW/SE	SS, CB	01	silty sand	
		.2	2.6			02		
✓ 2/3	030	.2	6.5	NE/SW	LD, SS, CB, SD	01	silty sand	
✓ 2/3	030	.2	5.2	NE/SW		02		
		.1	2.3			03		
✓ 2/3	031	.25	4	NE/SW	CB, SD, SS	01	silty sand	
		.33	1.9			02		
✓ 2/3	032	.33	4.9	NE/SW	SD, CB, SS	01		
		.2	4.75			02		
		.2	2.5			03		

Survey Date:

Investigator(s):

SD - Sediment Deposition

LD - Litter Debris
SS - Sediment Sorting
S - Scour

Wetlands and Other Waters of the United States

DATE ~~Resource Number~~	WASH ID ~~Resource Type~~	~~Length~~ Depth within Study Area (feet)	~~Width or~~ OHWM within Study Area (feet) Photo Dir. Photo Dir	~~Acreage within Study Area~~	Tributary Hts: Dominant Vegetation	GPS Photo Numbers Data #s	~~Proposed Construction Method~~ Substrate	~~Mitigation Measures~~
✓ 2/3	033	.4	2.4	NE/SW	SS, CB	01	silty sand	
		.2	3			02		
✓ 2/3	034	.2	3	NE/SW	SS, CB	01	silty sand	
		.2	4.25			02		
		.1	15					

Survey Date:

Investigator(s):

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/11 **Wash ID Number and Name (if named):** 1
Location Hidden Hills Ranch
County Inyo, CA
Additional Information GPS unit B
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 3.0 / 3.4
- Depth (ft): 0.2 / 0.2
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sand / Sand
- Photo # and direction, upstream: 1 / 1
- Photo # and direction, downstream: 1 / 1
- Slope: 1% WSW
- General Flow Direction (look at Topo): WSW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

  _____

  _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 1/31/11 **Wash ID Number and Name (if named):** 2
Location HBR
County Frys CA
Additional Information GPS unit B
GPS Data # 1/2/3/4

At Each GPS point taken:

- Width (ft): 2.0/3.0/[Broad 2.7/2.0]
- Depth (ft): 0.1/0.1 [Broad 0.1/0.2]
- Substrate: sand, cobbles, bedrock, silt, other (explain) sand
- Photo # and direction, upstream: 1/1
- Photo # and direction, downstream: 1/1
- Slope: 1% WSW
- General Flow Direction (look at Topo): WSW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

  _____

  _____

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width):
    _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 3
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3*

Map Sheet #1

At Each GPS point taken:

- Width (ft): 2.6ft / 4.1ft / 2.5ft /
- Depth (ft): 5in / 1.2ft / 1in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) fine sand. cobble silt gravel
- Photo # and direction, upstream: NE (4223) / NE (4225) / NE (4227)
- Photo # and direction, downstream: SW (4224) / SW (4226) / SW (4228)
- Slope: gradual
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - (OHWM Present: Yes/No (circle all that apply):
    - (Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots
    - (Vegetation matted down, bent, or absent
    - (Litter disturbed or washed away
    - (Sediment deposition
    - Water staining
    - (The presence of litter and debris
    - (Destruction of terrestrial vegetation
    - (Sediment sorting
    - (Scour
    - (Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

> heavy disturbance

- Chemical Characteristics: * point #3 - wash breaks out into road, changes to braiding, pooling, continues to flow (sheet) in a southwesterly westerly direction, vegetation distruction & liter debris, rack lines

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): none
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

  Salsola
  Horehound
  Distichlis

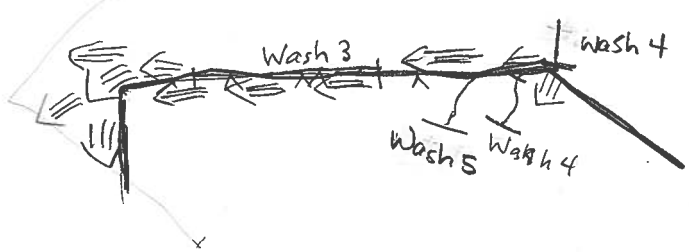
- List of other plant species:

  Creosote

  Desert Tortoise

- List of wildlife:

Note: Wash flows parallel w/ road and northern most project boundary. Road not well maintained and shows signs of strong sheet flow all the way from top northern Eastern corner (Wash #4) to Northwestern corner (pooling area).



— Road/Project Boundary

⇐ sheet flow

(Use reverse side if you need more space)

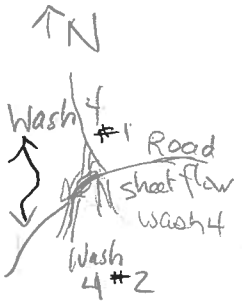
JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 4 - sheet flow on (eastern side of wash) Map Sheet #1
Location Hidden Hills
County Inyo
Additional Information GPS B HR RD
GPS Data # 1*/2/3 (pools south)

At Each GPS point taken:

- Width (ft): 2.5 ft / 1.8 ft / 2.5 ft /
- Depth (ft): 1 in / 1 in / 1 in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) fine sand silt
- Photo # and direction, upstream: N (4229) / NE (4231) / NE (4233
- Photo # and direction, downstream: S (4230) / SW (4232) / SW (4234)
- Slope: gradual 1°
- General Flow Direction (look at Topo): Southwest
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks – disappears into the road – can see bed characteristics
  - OHWM Present: Yes/No (circle all that apply): separate disappears at road comes back, mostly undefined
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - (o) Vegetation matted down, bent, or absent
    - (o) Litter disturbed or washed away
    - (o) Sediment deposition
    - Water staining
    - (o) The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - (o) Scour
    - (o) Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____



- Chemical Characteristics: * Point #1 – point taken at edge of project boundary where wash spreads into road some sheet flows across to western flow of road.

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

Ambrosia dumosa
Creosote

Desert Hackberry
Celtis ex

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 5
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

Map Sheet #1

~~GPS ID 4 data #3 is Actually GPS ID 5 data #1~~

At Each GPS point taken:

- Width (ft): 2ft / 5.4ft /
- Depth (ft): 1in / 1in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt sand
- Photo # and direction, upstream: N (4235) / NE (4237)
- Photo # and direction, downstream: S (4236) / SW (4238)
- Slope: gradual 1'
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks – not well defined – scattered disappears into sheet flow
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - (Destruction of terrestrial vegetation)
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 6
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5/6 (cont below) 7/8/9/10/11

Map Sheet #1

* #4 split

At Each GPS point taken:

	2	3	4	5	6	7	8	9	10	11
Width (ft):	7ft	2.4ft	2.4ft	1.6ft	6in	1.7ft	1.0ft	8in	1ft	1.5ft	7in
Depth (ft):	1in	1in	2in	1in	1in	1in	1in	2in	1in	2in	1in

- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, cobble, sand
- Photo # and direction, upstream: NE (4239) / NE (4241) / NE (4243) / NE (4245) / NE (424
- Photo # and direction, downstream: SW (4240) / SW (4242) / SW (4244) / SW (4246) / SW (42
- Slope: gradual, gentle 1°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks
  - OHWM Present: Yes No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - Vegetation matted down, bent, or absent
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - Sediment sorting
    - Scour
    - Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

#10
U: NE (4257)
D: SW (4258)

#6
Photo # U: NE (4249)
D: SW (4250)

#7
U: NE (4251)
D: SW (4252)

#8
U: NE (4253)
D: SW (4254)

#9
U: NE (4255)
D: SW (4256)

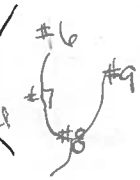
#11
U: NE (4259)
D: SW (4260)

Ambrosia
Salsola
Creosot
Atriplex
Eriogonum

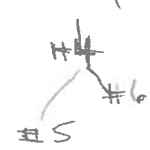
* between Pt's 2 & 3, a little bit of braiding but not defined channels

disappears at #5

@ pt #8, split
pt #9 upstream channel of split



at #4 splits to #6



- Chemical Characteristics:

pt # from 6 to gentle braiding 8

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

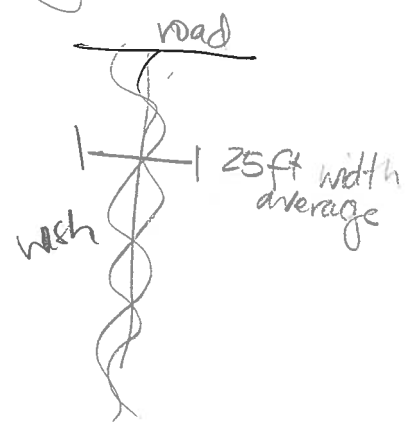
JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 7
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5

At Each GPS point taken:

- Width (ft): 5ft / 1ft / 3.5ft / 4in / 1.7ft /
- Depth (ft): 3in / 2in / 2in / 1in / 3in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, fine sand & cobbles
- Photo # and direction, upstream: N(4261) / N(4263) / N(4265) / NE(4267) / NE(4269)
- Photo # and direction, downstream: S(4262) / S(4264) / S(4266) / SW(4268) / SW(4270)
- Slope: gradual
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply): Heavy braiding from road to downstream
  - (Bed and Banks)
  - OHWM Present: (Yes)/No (circle all that apply):
    - Clear, natural line impressed on the bank — scattered
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - (Destruction of terrestrial vegetation)
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____



- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2014 **Wash ID Number and Name (if named):** 8
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 1.6ft / 4in
- Depth (ft): 2in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sand, Silt gravel fine sand
- Photo # and direction, upstream: N(4271) / NE (4273)
- Photo # and direction, downstream: S(4272) / SW (4274)
- Slope: gradual 1%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - (OHWM Present: Yes/No (circle all that apply): scattered
    - Clear, natural line impressed on the bank / Sporatic
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away)
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - (Destruction of terrestrial vegetation)
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/1/2011 **Wash ID Number and Name (if named):** 9 (follows eastern side of road)
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

Map Sheet #1

At Each GPS point taken:

- Width (ft): 3ft / 2.2 ft
- Depth (ft): 1in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) fine sand, silt, gravel
- Photo # and direction, upstream: SE (4275) / SE (4277)
- Photo # and direction, downstream: NW (4276) / NW (4278)
- Slope: gradual 1%
- General Flow Direction (look at Topo): W then SE to NW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (o) Bed and Banks
  - OHWM Present: (Yes)/No (circle all that apply): sporatic
    - o Clear, natural line impressed on the bank
    - o Changes in the character of soil
    - (o) Shelving or cut banks, exposed roots
    - (o) Vegetation matted down, bent, or absent
    - (o) Litter disturbed or washed away
    - (o) Sediment deposition
    - o Water staining
    - (o) The presence of litter and debris
    - o Destruction of terrestrial vegetation
    - (o) Sediment sorting
    - (o) Scour
    - (o) Multiple observed or predicted flow events
    - o Abrupt change in plant community
    - o Other (list): _____

Starts at opening of wash to road. flows along road then disperses into sheet flow

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 10
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4

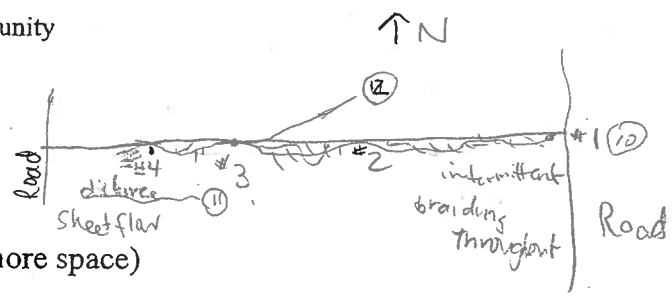
follows mostly northside of realitivity unused roadway with some braiding throughout

At Each GPS point taken:

- Width (ft): 11 in / 1.3 ft / 2.4 ft / 5 in /
- Depth (ft): 1 in / 2 in / 1 in / 2 in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) gravel, sand
- Photo # and direction, upstream: E (4279) / E (4281) / E (4283) / E (4285)
- Photo # and direction, downstream: W (4280) / W (4282) / W (4284) / W (4286)
- Slope: gradual 5°
- General Flow Direction (look at Topo): West
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks - sporatic
  - OHWM Present: Yes/No (circle all that apply): sporatic
    - Clear, natural line impressed on the bank sporatic after point 3, consistant
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - (Vegetation matted down, bent, or absent)
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour) sporatic
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:



(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** U
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3

At Each GPS point taken:

- Width (ft): 4in / 1.7ft / 1.1ft /
- Depth (ft): 1in / 3in / 1in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, gravel, sand
- Photo # and direction, upstream: E (4287) / E(4289) / E(4291)
- Photo # and direction, downstream: W (4288) / W(4290) / W(4292)
- Slope: 5°
- General Flow Direction (look at Topo): W
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks Sporatic
  - OHWM Present: Yes/No (circle all that apply): Sporatic
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - (o) Vegetation matted down, bent, or absent
    - (o) Litter disturbed or washed away
    - (o) Sediment deposition
    - Water staining
    - (o) The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (o) Sediment sorting
    - Scour Some
    - (o) Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

#2 braiding 50ft before and downstream to pt #3

#3 disappears into sheet flow toward road

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 12
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 1 ft / 2.2 ft /
- Depth (ft): 1 in / 3 in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) sand, silt, gravel
- Photo # and direction, upstream: ☒ (4293) / E (4295)
- Photo # and direction, downstream: W (4294) / W (4296)
- Slope: 5°
- General Flow Direction (look at Topo): W
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): connects to Wash 10

- Tributary has (circle all that apply):
  - (Bed and Banks) sporatic
  - OHWM Present: Yes/No (circle all that apply): sporatic
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away)
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics: at point #2 flowing into Wash #10

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 13 - sheet flow & shallow braiding throughout approxime 30ft ← w

Location Hidden Hills

County Inyo

Additional Information GPS B

GPS Data # 1/2/3/4/5/6/7

Map Sheet # 2 (Blue Line)

(In Blue Line complex)

At Each GPS point taken:

- Width (ft): 2ft/ 1ft/ 8in/ 6in/ 1ft/ 1in/ 1in
- Depth (ft): 1in/ 2in/ 1in/ 1in/ 1in/ 1in/ 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, fine sand, small gravel
- Photo # and direction, upstream: NE (4297)/ NE (4299)/ NE (4301)/ E (4303)/ E (4305)/ E(
- Photo # and direction, downstream: SW (4298)/ SW (4300)/ SW (4302)/ W (4304)/ W (4306)/ W(
- Slope: gradual 5°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: (Yes)/No (circle all that apply):
    - (Clear, natural line impressed on the bank) sporatic
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away)
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - (Destruction of terrestrial vegetation)
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

Ambrosia
Creosote
Mallow
Atriplex

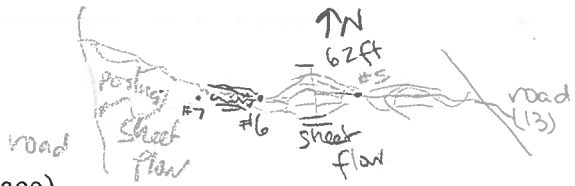
#7
photo E (4309)
W (4310)

D#7 all appearence of channelization disappears and pools into large area abutting the road

Wash 13 meets Wash at point #3

* pt #4 mesquite mound w/ about 8 trees/shrub

- Chemical Characteristics:



(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 14
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4

Blue Line Complex
Map Sheet #2

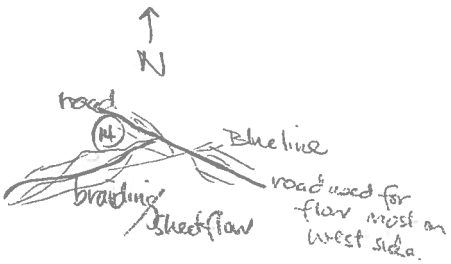
At Each GPS point taken:

- Width (ft): 2.6ft/1.1ft/1ft/6in/
- Depth (ft): 1in/ 2in/ 2in/ 2in/
- Substrate: sand, cobbles, bedrock, silt, other (explain) fine sand, silt, gravel
- Photo # and direction, upstream: E(4311)/ E(4313)/E(4315)/ E(4317)
- Photo # and direction, downstream: W(4312)/ W(4314)/ W(4316)/ W(4318)
- Slope: gradual 5°
- General Flow Direction (look at Topo): W
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (o) Bed and Banks
  - (o) OHWM Present: Yes/No (circle all that apply):
    - (o) Clear, natural line impressed on the bank
    - o Changes in the character of soil
    - (o) Shelving or cut banks, exposed roots
    - (o) Vegetation matted down, bent, or absent
    - (o) Litter disturbed or washed away
    - (o) Sediment deposition
    - o Water staining
    - (o) The presence of litter and debris
    - (o) Destruction of terrestrial vegetation
    - (o) Sediment sorting
    - (o) Scour
    - (o) Multiple observed or predicted flow events
    - o Abrupt change in plant community
    - o Other (list): _____

Pt #2 – point upstream, disturbance from recent vehicle distruction (last coup of years)

Pt #3 – point downstream (channel affected)



- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 15
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4

Blue Line Complex
Map Sheet #2
Blue Line = Wash #16

At Each GPS point taken:

- Width (ft): 1ft/ 1ft/ 1ft/ 1.2ft/
- Depth (ft): 1in/ 1.5in/ 1.5in/ 2in/
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, fine sand, gravel
- Photo # and direction, upstream: E (4319)/ E (4321)/ E(4323)/ E(4325)/
- Photo # and direction, downstream: W (4320)/ W (4322)/ W(4324)/ W(4326)/
- Slope: gradual 5°
- General Flow Direction (look at Topo): W
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): Blue Line Complex

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - (OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away)
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - (Destruction of terrestrial vegetation)
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

sheet flow off of W#16

pt #2 - W14 & W15 connect

@ pt #4 W15 & W13 connect

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 16
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5

At Each GPS point taken:

- Width (ft): 3ft/ 2ft/ 2.5ft/ 1.2ft/ 1ft
- Depth (ft): 4in/ 3in/ 1.5in/ 2in/ 1.5in
- Substrate: sand, cobbles, bedrock, silt, other (explain) Sand gravel, silt
- Photo # and direction, upstream: E (4327)/ E(4329)/ E(4331)/ E(4333)/ E(4335)
- Photo # and direction, downstream: W (4328)/ W(4330)/ W(4332)/ W(4334)/ W(4336)
- Slope: gradual 5°
- General Flow Direction (look at Topo): W
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): Blue line

- Tributary has (circle all that apply):
  - (•) Bed and Banks
  - (•) OHWM Present: Yes/No (circle all that apply): 5+ disappears
    - (•) Clear, natural line impressed on the bank
    - ○ Changes in the character of soil
    - (•) Shelving or cut banks, exposed roots
    - (•) Vegetation matted down, bent, or absent
    - (•) Litter disturbed or washed away
    - (•) Sediment deposition
    - ○ Water staining
    - (•) The presence of litter and debris
    - (•) Destruction of terrestrial vegetation
    - (•) Sediment sorting
    - (•) Scour
    - (•) Multiple observed or predicted flow events
    - ○ Abrupt change in plant community
    - ○ Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/201 **Wash ID Number and Name (if named):** 17
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3

@ #3 meets W16

At Each GPS point taken:

- Width (ft): 1ft / 6in / 6in
- Depth (ft): 1.5in / 1.5in / 1.5in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt sand
- Photo # and direction, upstream: NE(4337) / NE (4339) / E(4341)
- Photo # and direction, downstream: SW (4338) / SW(4340) / W(4342)
- Slope: gentle 5°
- General Flow Direction (look at Topo): SW to NW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):
  @ #1 connects to 16 @ #3

- Tributary has (circle all that apply):
  - (Bed and Banks) sporatic
  - OHWM Present: Yes/No (circle all that apply): Sporatic
    - Clear, natural line impressed on the bank
    - (Changes in the character of soil)
    - Shelving or cut banks, exposed roots
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away)
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 18
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3

Map Sheet #2

At Each GPS point taken:

- Width (ft): 4.5ft / 9in / 6in /
- Depth (ft): 1.5in / 1.5in / 1in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt fine sand small gravel
- Photo # and direction, upstream: NE (4343) / NE (4345) / NE (4347)
- Photo # and direction, downstream: SW (4344) / SW (4346) / SW (4348)
- Slope: gradual 5%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: Yes/No (circle all that apply): sporatic
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - Litter disturbed or washed away
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

PT #3 - W18 peters out into sheet flow along w/outside braiding trends

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 19
Location Hidden Hills
County Maricopa
Additional Information GPS B
GPS Data # 1/2/3

At Each GPS point taken:

- Width (ft): 4ft / 5in / 3in
- Depth (ft): 2in / 2in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, fine sand, gravel
- Photo # and direction, upstream: NE(4349) / NE(4351) / NE(4353)
- Photo # and direction, downstream: SW(4350 / SW(4352) / SW(4354)
- Slope: gentle 5°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): part of system w/ W1B

- Tributary has (circle all that apply):
  - (circled) Bed and Banks
  - OHWM Present: Yes/No (circle all that apply): sporatic
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (circled) Shelving or cut banks, exposed roots sporatic
    - (circled) Vegetation matted down, bent, or absent
    - (circled) Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (circled) The presence of litter and debris
    - Destruction of terrestrial vegetation
    - (circled) Sediment sorting
    - (circled) Scour
    - (circled) Multiple observed or predicted flow events
    - Abrupt change in plant community
    - Other (list): _____

pt #3 - very last area seeing any ohwm characteris

lichens

For measurement:
#PT 999 = Southern end braided / sheet flow area lower boundary.

#PT 998 - northern end braided / sheet flow area upper boundary.

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width):
    _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/2/2011 **Wash ID Number and Name (if named):** 20
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5

At Each GPS point taken:

- Width (ft): 4ft / 1ft / 1ft / 6in / 4in
- Depth (ft): 1in / 1.5in / 1.5in / 1.5in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, sand / silt sand gravel
- Photo # and direction, upstream: E (4355) / NE(4357) / NE(4359) / E (4361) / NE(4363)? (21?)
- Photo # and direction, downstream: W (4356) / SW(4358) / SW(4360) / W(4362) / SW(4364)? (21?)
- Slope: gentle 5%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks sporatic
  - OHWM Present: Yes/No (circle all that apply): sporatic - like lava flow - not clear at first
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away) #5 - starts to disperse
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

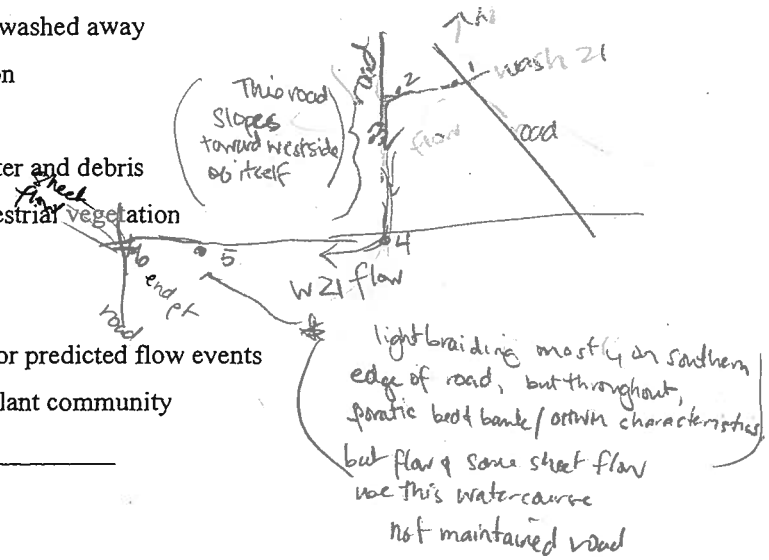
JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2014 **Wash ID Number and Name (if named):** 21
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5/6

At Each GPS point taken:

- Width (ft): 3.3 ft / 3ft / 15ft / 3ft / 1ft / 1.5 /
- Depth (ft): 1in / 3in / 4in / 3in / 1in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, sand, gravel
- Photo # and direction, upstream: NE (4363) / NE(4365) / N(4367) / E(4369) / E(4371) / E(4373)
- Photo # and direction, downstream: SW (4364) / SW (4366) / S(4368) / W (4370) / W(4372) / W(4374)
- Slope: gentle 5°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: Yes/No (circle all that apply):
    - Clear, natural line impressed on the bank sporatic
    - Changes in the character of soil
    - Shelving or cut banks, exposed roots
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away)
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - (Destruction of terrestrial vegetation)
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____



- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 22
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

Blue Line
Map Sheet #2

At Each GPS point taken:

- Width (ft): 1.5 ft / 1in
- Depth (ft): 1.5in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) cobble, silt, sand
- Photo # and direction, upstream: NE 4375 / NE 4377
- Photo # and direction, downstream: SW 4376 / SW 4378
- Slope: gentle 1%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks) slight very sporadic
  - (OHWM Present: Yes/No (circle all that apply): #2 - ends = pools + sheet flow lasts 50 ft
    - Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - Litter disturbed or washed away
    - Sediment deposition
    - Water staining
    - (The presence of litter and debris)
    - Destruction of terrestrial vegetation
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width):
    _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 23
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5/6

Blue Line Map Sheet # 3

At Each GPS point taken:

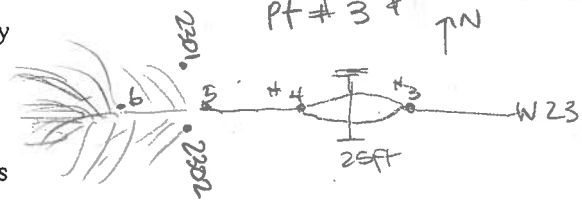
- Width (ft): 3.5ft / 3ft / 2.4ft / 2ft / 1.5ft / 6in /
- Depth (ft): 3.5in / 1.5in / 2 in / 2in / 1.5in / 1/2in /
- Substrate: sand, cobbles, bedrock, silt, other (explain) cobbles, fine sand, silt, gravel
- Photo # and direction, upstream: E 4379 / E 4381 / E 4383 / E 4385 / E 4387 / E 4389
- Photo # and direction, downstream: W 4380 / W 4382 / W 4384 / W 4386 / W 4388 / W 4390
- Slope: bank 55° / bank 30° / 25°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: (Yes)/No (circle all that apply):
    - (Clear, natural line impressed on the bank)
    - Changes in the character of soil
    - (Shelving or cut banks, exposed roots)
    - (Vegetation matted down, bent, or absent)
    - (Litter disturbed or washed away)
    - (Sediment deposition)
    - Water staining
    - (The presence of litter and debris)
    - (Destruction of terrestrial vegetation)
    - (Sediment sorting)
    - (Scour)
    - (Multiple observed or predicted flow events)
    - (Abrupt change in plant community)
    - Other (list): _____
  - Chemical Characteristics:

at Pt #6 between pt #5 and #6, wash has been sheet flow flood over sides and getting smaller then spreading out at pt #6 where bed & bank disappears

* High water mark 3ft to 6ft

Between pt #3 & #4 an island



Big open area of creosote & horehound and annuals

endura grass

#5 - brown silty, fine sand, starting to split into other tribs

mesquite has disappeared

Photo # 4391 & 4392

PT #2301 & #2302: points to show width of sheet flow distribution at initial significant breakthrough to delineate of wash channel.

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

  Prosopis glandulosa
  Gutierrezia
  Indian rice grass
  Big galleta
  Creosote
  Ambrosia dumosa
  Ambrosia
  Aster (stinkyleaves)?

- List of other plant species:

  Atriplex canescens, confertiflora
  Salsola
  small grass
  Malva
  Stanleya
  Bermuda

- List of wildlife:

  jackrabbit
  many tortoise burrows

About 100 ft floodplain total
≈ 50ft either side of center

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** Q4
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 6in / 3in
- Depth (ft): 1m / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, fine sand
- Photo # and direction, upstream: N 4393 / NE 4395
- Photo # and direction, downstream: S 4394 / SW 4396
- Slope: 45° to W23
- General Flow Direction (look at Topo): S
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): Small trib into 23

- Tributary has (circle all that apply):
  - Bed and Banks Sporatic
  - OHWM Present: Yes/No (circle all that apply): Sporatic
    - o Clear, natural line impressed on the bank
    - o Changes in the character of soil
    - o Shelving or cut banks, exposed roots
    - (o) Vegetation matted down, bent, or absent
    - (o) Litter disturbed or washed away
    - o Sediment deposition
    - o Water staining
    - (o) The presence of litter and debris
    - o Destruction of terrestrial vegetation
    - o Sediment sorting
    - (o) Scour
    - (o) Multiple observed or predicted flow events
    - o Abrupt change in plant community
    - o Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** J5
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 4in / 3in
- Depth (ft): 1.5 in / 2in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silt, fine sand cobble
- Photo # and direction, upstream: SE 4397 / SE 4399
- Photo # and direction, downstream: NW 4398 / NW 4400
- Slope: 30° to W23
- General Flow Direction (look at Topo): NW to W23
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): connects to W23
  cut on edge of unmaintained road

- Tributary has (circle all that apply):
  - (circled) Bed and Banks
  - OHWM Present: Yes/No (circle all that apply): Hymenoclea salsola
    - (circled) Clear, natural line impressed on the bank
    - Changes in the character of soil
    - (circled) Shelving or cut banks, exposed roots
    - (circled) Vegetation matted down, bent, or absent
    - (circled) Litter disturbed or washed away
    - (circled) Sediment deposition
    - Water staining
    - (circled) The presence of litter and debris
    - (circled) Destruction of terrestrial vegetation
    - (circled) Sediment sorting
    - (circled) Scour
    - (circled) Multiple observed or predicted flow events more recent
    - Abrupt change in plant community
    - Other (list): _____

- Chemical Characteristics:

(Use reverse side if you need more space)

- Characterize tributary (e.g. water color is clear, discolored, oily film; water quality, etc): Explain: _____

- Biological Characteristics (Channel Supports) (Check all that apply):
  - Vegetation difference between wash and upland (type, avg. width): _____
  - Habitat for:
    - Aquatic/wildlife diversity (explain findings): _____

- Presence of Drainage Structures: _____
  Photo #:
- List Dominant Plant Species:

- List of other plant species:

- List of wildlife:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

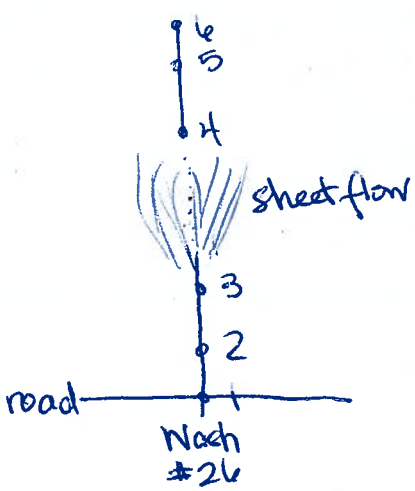
Date: 2/3/2011 **Wash ID Number and Name (if named):** 26
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5/6

Blue Line
Map Sheet # 3

At Each GPS point taken:

- Width (ft): 2.5ft / 2 in / 8 in / 1.4ft / 1 ft / 1 ft
- Depth (ft): 1in / 1in / 2in / 1.5 in / 2in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) gravel, sand
- Photo # and direction, upstream: NE (4401) / NE (4403) / NE (4405) / SW (4417) / NE (4419) / N (44
- Photo # and direction, downstream: SW (4402) / SW (4404) / SW (4406) / N (4418) / SW (4420) / S 442
- Slope: gentle 1%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Yes) Bed and Banks
  - OHWM Present: (Yes) No (circle all that apply): at beginning, sporatic, then changes toward sheet flow @ pt #2
    - 1 ○ Clear, natural line impressed on the bank
    - 2 (●) Changes in the character of soil
    - 3 (●) Shelving or cut banks, exposed roots
    - 4 (●) Vegetation matted down, bent, or absent
    - 5 (●) Litter disturbed or washed away
    - 6 (●) Sediment deposition
    - 7 ○ Water staining
    - 8 ○ The presence of litter and debris
    - 9 (●) Destruction of terrestrial vegetation
    - 10 (●) Sediment sorting
    - 11 (●) Scour
    - 12 (●) Multiple observed or predicted flow events
    - 13 ○ Abrupt change in plant community
    - ○ Other (list): _____



At Point #2: At road, sheet flow increases, spreads out along road, also disturbance w/ recent vehicle (surveyors) driving through sheet flow and Blue Line; where channel cannot be followed

At Point #5: Braided Area; 15ft (7.5ft on either side of point)

Between Points #5 + #6: slight braiding and heavy sheet flow on either side of channel (15ft on either side)

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

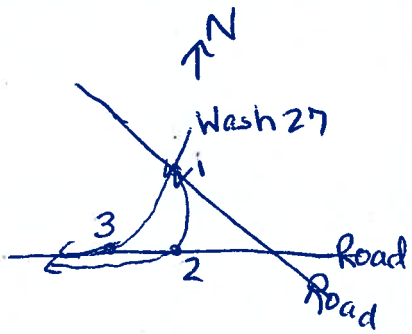
Date: 2/3/2011 **Wash ID Number and Name (if named):** 27
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3

Blue Line Map Sheet #3

At Each GPS point taken:

- Width (ft): 4 ft / 3 ft / 1.5 ft
- Depth (ft): 2 in / 1.5 in / 1 in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand
- Photo # and direction, upstream: NE 4407 / NE 4409 / E 4411
- Photo # and direction, downstream: SW 4408 / W 4410 / W 4412
- Slope: gentle 1%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - Bed and Banks at road
  - OHWM Present: Yes/No (circle all that apply):
    - (1) Clear, natural line impressed on the bank
    - 2 Changes in the character of soil
    - 3 Shelving or cut banks, exposed roots
    - (4) Vegetation matted down, bent, or absent
    - (5) Litter disturbed or washed away
    - (6) Sediment deposition
    - 7 Water staining
    - (8) The presence of litter and debris
    - (9) Destruction of terrestrial vegetation
    - (10) Sediment sorting
    - 11 Scour
    - (12) Multiple observed or predicted flow events
    - 13 Abrupt change in plant community
    - Other (list): _____



- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 28
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 1ft / 1.3ft
- Depth (ft): 3in / 3in
- Substrate: sand, cobbles, bedrock, silt, other (explain) sand, silt, gravel
- Photo # and direction, upstream: NE 4413 / NE 4415
- Photo # and direction, downstream: SW 4414 / SW 4416
- Slope:
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (●) Bed and Banks clear at road
  - OHWM Present: Yes/No (circle all that apply): sporatic
    - (1) ○ Clear, natural line impressed on the bank
    - 2 ○ Changes in the character of soil
    - 3 ○ Shelving or cut banks, exposed roots
    - (4) ○ Vegetation matted down, bent, or absent
    - 5 (○) Litter disturbed or washed away
    - 6 (○) Sediment deposition
    - 7 ○ Water staining
    - 8 (○) The presence of litter and debris
    - 9 (○) Destruction of terrestrial vegetation
    - 10 (○) Sediment sorting
    - 11 (○) Scour
    - 12 ○ Multiple observed or predicted flow events
    - 13 ○ Abrupt change in plant community
    - 14 ○ Other (list):

At Point #2: Channel disappears because of recent vehicle distruction (at very most after dec rain event)

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 29
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3

At Each GPS point taken:

- Width (ft): 4in/1ft/4in
- Depth (ft): 1in/1in/1.5in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand, gravel
- Photo # and direction, upstream: NE 4423 / NE 4425 / NE 4427
- Photo # and direction, downstream: SW 4424/ SW 4426/ SW 4428
- Slope: gentle 1%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River): Starts from runoff from west side of the road

- Tributary has (circle all that apply):
  - (a) Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - 1 o Clear, natural line impressed on the bank
    - 2 o Changes in the character of soil
    - 3 o Shelving or cut banks, exposed roots
    - (4) o Vegetation matted down, bent, or absent
    - (5) o Litter disturbed or washed away
    - 6 o Sediment deposition
    - 7 o Water staining
    - 8 o The presence of litter and debris
    - (9) o Destruction of terrestrial vegetation
    - (10) o Sediment sorting
    - (11) o Scour
    - (12) o Multiple observed or predicted flow events
    - 13 o Abrupt change in plant community
    - o Other (list): _____

At Point #3: Starts to spread into sheet flow and then dissipates

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 30
Location Hidden Hills
County Inyo
Additional Information GPS ~~A~~ B
GPS Data # 1/2/3

Blue Line
Map Sheet #3

At Each GPS point taken:

- Width (ft): 4in / 2.2ft / 6in
- Depth (ft): 3in / 1.5in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand and gravel
- Photo # and direction, upstream: NE 4429 / NE 4431 / NE 4433
- Photo # and direction, downstream: SW 4430 / SW 4432 / SW 4434
- Slope: 5% (Between Points #1 and #2, Bank slope is about 30°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (●) Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - 1 (●) Clear, natural line impressed on the bank
    - 2 ○ Changes in the character of soil
    - 3 (●) Shelving or cut banks, exposed roots
    - 4 (●) Vegetation matted down, bent, or absent
    - 5 (●) Litter disturbed or washed away
    - 6 (●) Sediment deposition
    - 7 ○ Water staining
    - 8 (●) The presence of litter and debris
    - 9 (●) Destruction of terrestrial vegetation
    - 10 (●) Sediment sorting
    - 11 (●) Scour Ripple marks
    - 12 (●) Multiple observed or predicted flow events
    - 13 ○ Abrupt change in plant community
    - 14 ○ Other (list): _____

On Project Site
Blue Line
Note:
Starts from small wash from east side of the road and from road runoff on west side of road.

Between Points #1 and #2:
Channel widens and starts braiding and forming shallow floodplains to 10f on either side until Point #3, where flow scatters.

At Point #2 - width of braiding about 25ft
At Point #3 - channel start to spread to sheet flow and spreads out about 100f w/ a 25ft width, then disappears

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 31
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4

Map Sheet #3

At Each GPS point taken:

- Width (ft): 1in / 1.5ft / 2ft / 1.3ft
- Depth (ft): 3in / 1.5in / 2in / 2in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand and gravel
- Photo # and direction, upstream: NE 4435 / NE 4437 / NE 4439 / NE 4441
- Photo # and direction, downstream: SW 4436 / SW 4438 / SW 4440 / SW 4442
- Slope: gradual 1%
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Y) Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - 1 (Y) Clear, natural line impressed on the bank
    - 2 ○ Changes in the character of soil
    - 3 (Y) Shelving or cut banks, exposed roots
    - 4 (Y) Vegetation matted down, bent, or absent
    - 5 ○ Litter disturbed or washed away
    - 6 (Y) Sediment deposition
    - 7 ○ Water staining
    - 8 (Y) The presence of litter and debris
    - 9 (Y) Destruction of terrestrial vegetation
    - 10 (Y) Sediment sorting
    - 11 (Y) Scour
    - 12 (Y) Multiple observed or predicted flow events
    - 13 ○ Abrupt change in plant community
    - 14 ○ Other (list): _____

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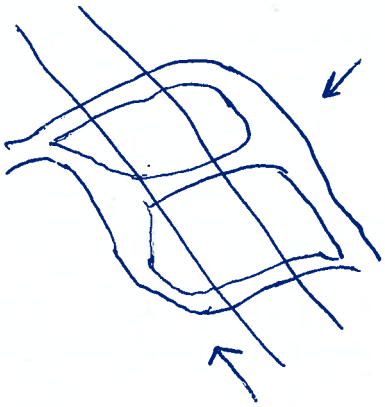


Between Point #1 and #2: Slight braiding and with sheet flow of a few feet on either side of the channel

At Point #3: Wash ID #32 connect

At Point #4: Wash begins to spread out into sheet flow and hard to define braiding pattern.

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 32
Location Hidden Hills Map Sheet #3
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4

At Each GPS point taken:

- Width (ft): 2ft / 1.1ft / 7in / 1ft
- Depth (ft): 1.5in / 1.5in / 3in / 1.5in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand and gravel
- Photo # and direction, upstream: NE 4443 / NE 4445 / NE 4447 / NE 4449
- Photo # and direction, downstream: SW 4444 / SW 4446 / SW 4448 / SW 4450
- Slope: gradual @ 1°, some banks at 15°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (o) Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - 1 (o) Clear, natural line impressed on the bank
    - 2 (o) Changes in the character of soil
    - 3 (o) Shelving or cut banks, exposed roots
    - 4 (o) Vegetation matted down, bent, or absent
    - 5 (o) Litter disturbed or washed away
    - 6 (o) Sediment deposition
    - 7 o Water staining
    - 8 (o) The presence of litter and debris
    - 9 (o) Destruction of terrestrial vegetation
    - 10 (o) Sediment sorting
    - 11 (o) Scour
    - 12 (o) Multiple observed or predicted flow events
    - 13 o Abrupt change in plant community
    - 14 o Other (list): _____

At Point #4: Wash 32 connects to Wash 31

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 33 (splits of Wash 32)
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3

At Each GPS point taken:

- Width (ft): 3in / 6in / 2ft
- Depth (ft): 1in / 1.5in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand and gravel
- Photo # and direction, upstream: NE 4451 / NE 4453 / NE 4455
- Photo # and direction, downstream: SW 4452 / SW 4454 / SW 4456
- Slope:
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: Yes/No (circle all that apply):
    - 1 o Clear, natural line impressed on the bank
    - 2 o Changes in the character of soil
    - 3 (o) Shelving or cut banks, exposed roots
    - 4 (o) Vegetation matted down, bent, or absent
    - 5 o Litter disturbed or washed away
    - 6 (o) Sediment deposition
    - 7 o Water staining
    - 8 (o) The presence of litter and debris
    - 9 o Destruction of terrestrial vegetation
    - 10 (o) Sediment sorting
    - 11 (o) Scour
    - 12 o Multiple observed or predicted flow events
    - 13 o Abrupt change in plant community
    - 14 o Other (list):

At Point # 3 Wash 33 meets Wash 31.

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 34
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2/3/4/5

At Each GPS point taken:

- Width (ft): 1ft/6in/1.3ft/1ft/1ft
- Depth (ft): 3in/1in/1.5in/2in/1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) Silty sand/gravel
- Photo # and direction, upstream: NE 4457/NE 4459/NE 4461/NE 4463/NE 4465
- Photo # and direction, downstream: SW 4458/SW 4460/SW 4462/SW 4464/SW 4466
- Slope: gradual 1°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Yes) Bed and Banks
  - OHWM Present: Yes/No (circle all that apply):
    - 1 ○ Clear, natural line impressed on the bank
    - 2 ○ Changes in the character of soil
    - 3 (○) Shelving or cut banks, exposed roots
    - 4 (○) Vegetation matted down, bent, or absent
    - 5 (○) Litter disturbed or washed away
    - 6 (○) Sediment deposition
    - 7 ○ Water staining
    - 8 (○) The presence of litter and debris
    - 9 (○) Destruction of terrestrial vegetation
    - 10 (○) Sediment sorting
    - 11 (○) Scour
    - 12 (○) Multiple observed or predicted flow events
    - 13 ○ Abrupt change in plant community
    - 14 ○ Other (list): _____

At Point #5:
Bed and Bank and OHWM ~~[illegible]~~ disappear and spreads out into sheet flow

- Chemical Characteristics:

(Use reverse side if you need more space)

JD Form Information (additional data)
(ASLD 303 East Peoria)

Date: 2/3/2011 **Wash ID Number and Name (if named):** 35
Location Hidden Hills
County Inyo
Additional Information GPS B
GPS Data # 1/2

At Each GPS point taken:

- Width (ft): 9in / 8in
- Depth (ft): 1.5in / 1in
- Substrate: sand, cobbles, bedrock, silt, other (explain) silty sand and gravel
- Photo # and direction, upstream: NE 4467 / NE 4469
- Photo # and direction, downstream: SW 4468 / SW 4470
- Slope: 1°
- General Flow Direction (look at Topo): SW
- Tributary: Primary or Secondary: Explain (connectivity to Aqua Fria River or New River):

- Tributary has (circle all that apply):
  - (Bed and Banks)
  - OHWM Present: Yes/No (circle all that apply):
    - 1 o Clear, natural line impressed on the bank
    - 2 o Changes in the character of soil
    - 3 (o) Shelving or cut banks, exposed roots
    - 4 o Vegetation matted down, bent, or absent
    - 5 (o) Litter disturbed or washed away
    - 6 (o) Sediment deposition
    - 7 o Water staining
    - 8 (o) The presence of litter and debris
    - 9 o Destruction of terrestrial vegetation
    - 10 (o) Sediment sorting
    - 11 o Scour
    - 12 (o) Multiple observed or predicted flow events
    - 13 o Abrupt change in plant community
    - o Other (list): _____

At point #2: Disappears into sheet flow w/ washes 33 and 34

- Chemical Characteristics:

(Use reverse side if you need more space)

DESIGN MEMORANDUM

amec

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/4/2011

Data Pt# Pool-1

Map Sheet #9

Pooling Area 1

Photo 4471 - E
4472 - N

Small pooling area at road (or parcel grid boundaries)

Starlaya, Atriplex Canescens,
Gutrezgia
Ambrosia
Lycium

Map Sheet #9

2/4/2011

~~Data~~ Pt# Pool-2

Eriodium circutum
~~Native~~
Astragulous ~~tenti formous~~ letiginousus
Hoffmannseggia glauca
Sphaeralcea ambigua

ground still moist

Map Sheet #9

Pool-3

2/4/2011

Pooling Point #2
Map Sheet # 2

Runoff from East, does not form distinct channels
but can after several more rain events
large pooling area at road, and surrounding area.

Creosote
Ambrosia
Gutrezgia
Salsola
Sphaeralcea
Ambrosia.

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/3/2011

GPS-B

Wash TID 26

Blue Line Map Sheet #3

Data # 1 / 2 / 3 / 4 / 5 / 6 (continuation)

- Width 2.5 ft / 2 in / 8 in / 1.4 ft / 1 ft / 1 ft /
- depth 1 in / 1 in / 2 in / 1.5 in / 2 in / 1 in
- substrate gravel, sand

- Photo Up: NE 4401 / NE 4403 / NE 4405 / S 4417 / NE 4419 / N 4421
- Photo dwn: SW 4402 / SW 4404 / SW 4406 / N 4418 / SW 4420 / S 4422
- Slope: gentle 1%
- Direction SW

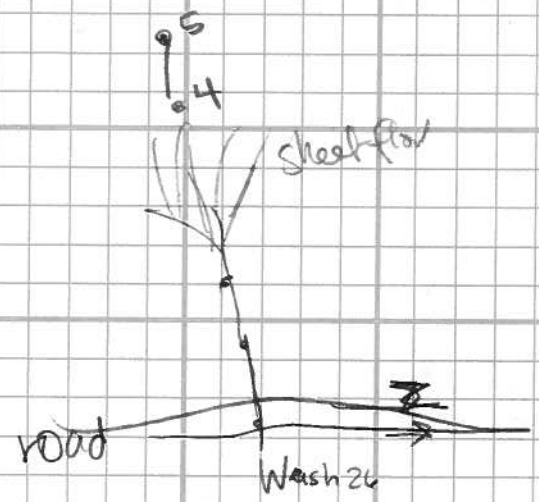
- Notes:
  - B&B Present
  - OHWM true at beginning – sporadic then changing more toward sheet flow @ pt #2

    List: 3, 4, 5, 6, 9, 10, 11, 12

@ pt # 2 – at road, sheet flow increase spreads out along road, also disturbance w/ recent vehicle (surveyor's? stakes w/ white flags) driving through sheet flow and blue line, where channel cannot be followed,

#5 braided area 15 ft across (7.5 ft either side of center)

between # 5 + #6 slight braiding and heavy sheet flow on either side of channel (15 ft either side)



DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/3/2011

GPS B

Data# 1/2/3

Wash ID# 27

Map Sheet #3

Blue Line

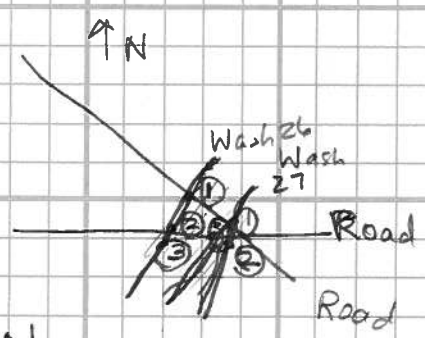
Width	4 ft /	3 ft /	1.5 ft /
Depth	2 in /	1.5 in /	1 in /
Substrate	sand, silt		
Photo Up	NE 4407 /	E 4409 /	E 4411
Photo Down	SW 4408 /	W 4410 /	W 4412
Slope	gentle 1°		
Flow Dir.	SW		

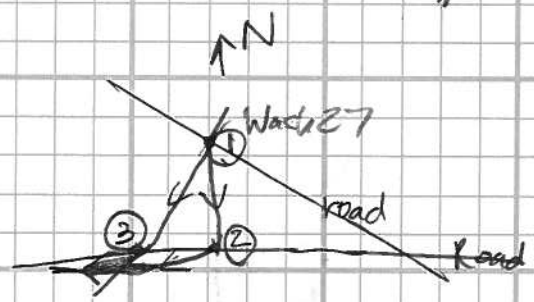
Notes:

B&B at 1st road

OHWM yes

1, 4, 5, 6, 8, 9, 10, 12





DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

GPS B

Nash ID #28

Data # 1/2

W 1 ft / 1.3 ft
D 3 in / 3 in
Sub sand, silt gravel
Photo Up NE 4413 / NE 4415
Photo Dam SW 4414 / SW 4416

B4B yes at road
OHWM
1, 4, 5, 6, 8, 9, 10, 12

at Point #2, channel disappears because of very recent vehicle distruction (after dec rain event)

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/3/2011

Wash ID 29

GPS B

Data # 1/2/3

W 4in / 1ft / 4in
D 1in / 1in / 1.5in
Substrate
Photo Up NE 4423 / NE 4425 / NE 4427
Photo Down SW 4424 / SW 4426 / SW 4428
Slope

Notes: starts at west side of road from runoff
at #3, starts to spread to sheet flow then disappears

✓ B+B
OHWM - yes
4, 5, 9, 10, 11, 12

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

amec

Wash ID 30
Blue Line
Map Sheet #3

2/3/2011

GPS B

Data # 1/2/3

W 4in / 2.2ft / 6in
D 3in / 1.5in / 1in
Substrate silt, sand, gravel
Photo Up NE 4429 / NE 4431 / NE 4433
Photo Dam SW 4430 / SW 4432 / SW 4434
Slope 5% (general) : Bank slopes between Pt #1 & Pt # 2 is about 30°
General Flow SW

Notes: Blue line, starts from small wash from east side of the road and road runoff from west side of road

✓ B+B

✓ OHWM
1, 3, 4, 5, 6, 8, 9, 10, 11, 12 ripples

① Between Pt #1 & Pt # 2 - channel widens, starts braiding, forms shallow floodplain, ~~dissipates~~ to 10 ft on either side until Pt # 3, where flow scatters.

② At pt # 2, width of braiding ≈ 25ft

③ At pt # 3 channel starts to spread, to sheet flow and dissipates and spreads out 100 ft further & 25ft wide

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

amec

Wash ID 31
Map Sheet #3

2/3/2011
GPS B

Data# 1 / 2 / 3 / 4

W 6in / 1.1ft / 2ft / 1.3ft /
D 3in / 1.5in / 2in / 2in /
Substrate sand, silt, gravel

Photo UP NE 4435 / NE 4437 / NE 4439 / NE 4441
Photo Down SW 4436 / SW 4438 / SW 4440 / SW 4442
Slope gradual 1%
Flow SW

Notes:

✓B+B

✓OHWM
1, 3, 4, 6, 8, 9, 10, 11, 12

① Between Pt#1 & pt#2:
Slight braiding and tight water sheet flow from few feet on either side of wash.

② At Pt#3
Wash ID# 32 connects

At Pt#4
Wash begins to spread out into sheet flow and hard to define pattern, other wash 32? braiding.

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/3/2011

Wash ID # 32

Map Sheet #3

GPS B

Data # 1 / 2 / 3 / 4

W	2 ft /	1.1 ft /	7 in /	1 ft
D	1.5 in /	1.5 in /	3 in /	1.5 in
Substrate	Sand, silt, gravel			
Photo Up	NE 4443 /	NE 4445 /	NE 4447 /	NE 4449
Photo Down	SW 4444 /	SW 4446 /	SW 4448 /	SW 4450
Slope	gradual 1°, banks 15°			
Flow	SW			

Notes:

✓ B+B

✓ OTHM 1, 2, 3, 4, 5, 6, 8, 9, 10, 11, 12

At Pt # 4 Wash 32 connects to Wash 31

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/3/2011
GPS B

Wash ID 33
splits off 32

Data # 1/2/3

W	3in	6in	2ft
D	1in	1.5in	1in
Photo Up	NE 4451	NE 4453	NE 4455
Photo Down	SW 4452	SW 4454	SW 4456

Pt #3 Wash 33 meets 31

✓ B&B
✓ OtWM

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/3/2011

Wash ID 34

GPS B

Data #1/2/3/4/5

W 1ft / 6in / 1.3ft / 1ft / 1ft
D 3in / 1in / 1.5in / 2in / 1in
Sub sand, silt, gravel
Photo Up NE 4457 / NE 4459 / NE 4461 / NE 4463 / NE 4465
Photo Down SW 4458 / SW 4460 / SW 4462 / SW 4464 / SW 4466

Slope gradual 1°
Flow SW

✓B4B

✓OHWM
3, 4, 5, 6, 8, 9, 10, 11, 12

@ pt #5 - spread into sheet flow
loose bed & bank + OHWM

DESIGN MEMORANDUM

Client: _____ Sheet _____ Of _____

Project: _____ Date: _____

Data For: _____ Work Order: _____

Prepared By: _____ Checked By: _____ File No. _____

2/3/2011 Wash ID 35

GPS B

Data # 1/2

W 9in / 8in

D 1.5in / 1in

Photo Up NE4467 / NE4469

Photo Dwn SW 4468 / SW4470

Slope 10°

Flow SW

B&B

~~OHWM~~

Appendix G

Plant and Wildlife Species Observed

Plant Species Observed on Property

Scientific Name	Common Name	Site Observations
GYMNOSPERMS		
Ephedraceae	**Ephedra Family**	
Ephedra nevadensis	Nevada joint fir	Infrequent throughout
MONOCOTS		
Liliaceae	**Lily Family**	
Allium sp.	Onion, garlic	Infrequent throughout
Poaceae	**Grass Family**	
Achnatherum hymenoides	Indian rice grass	Occasional in low-lying areas
Distichlis spicata	saltgrass	Infrequent only within moist areas
Pleuraphis rigida	galletta grass	Occasional in low-lying areas
EUDICOTS		
Asteraceae	**Sunflower Family**	
Ambrosia dumosa	white bur-sage	Frequent throughout
Bebbia juncea	sweetbush	Infrequent in low-lying areas
Gutirezzia microcephala	Sticky snakeweed	Frequent only within moist areas
Hymenloclea salsola	Cheese bush	Infrequent in low-lying areas
Brassacace	**Mustard Family**	
Stanleya pinnata	Princes' plume	Frequent only within moist areas
Cactaceae	**Cactus Family**	
Cylindropuntia echinocarpa	silver cholla, golden cholla	Infrequent throughout
Chenopodiaceae	**Goosefoot Family**	
Atriplex canescens	four-winged saltbush	Frequent throughout
Atriplex confertiflora	shadscale	Occasional throughout
Grayia spinosa	Spiny hop-sage	Occasional in low-lying areas
*Salsola tragus**	Russian thistle	Frequent throughout
Euphorbiaceae	**Spurge Family**	
Stillingia linearifolia	Linear-leaved stillingia	Infrequent in low-lying areas
Fabaceae	**Legume Family**	
Astragulous letiginousus	Freckled milkvetch	Frequent only within moist areas
Astragulous allochorus var. playanus	Halfmoon milkvetch	Infrequent only within moist areas
Hoffmannseggia glauca	Hog potato	Frequent only within moist areas
Prosopis glandulosa var. *torreyana*	honey mesquite	Frequent only within moist areas
Geraniaceae	**Geranium Family**	
*Erodium circutarium**	Red-stemmed filaree	Frequent only within moist areas
Malvaceae	**Mallow Family**	
Spherelcia ambigua var. robusta	Desert mallow	Frequent only within moist areas

Scientific Name	Common Name	Site Observations
Polygonaceae	**Buckwheat Family**	
Chorizanthe rigida	spiny-herb	Occasional throughout
Eriogonum inflatum var. inflatum	Desert trumpet	Frequent throughout
Solanaceae	**Nightshade Family**	
Lycium cooperi	Cooper's boxthorn	Infrequent in low-lying areas
Viscaceae	**Mistletoe Family**	
Phoradendron californicum	mesquite mistletoe	Infrequent on Honey Mesquite
Zygophyllaceae	**Caltrop Family**	
Larrea tridentata	creosote bush	Frequent throughout

* Denotes non-native species.

Observed Wildlife

Scientific Name	Common Name	Site Observations
Reptiles		
Gopherus agassizii	Desert tortoise	Burrows, carcass, scat
Uta stansburiana	Side-blotched lizard	Several visual occurrences
Birds		
Accipiter cooperii	Cooper's hawk	Several visual occurrences
Amphispiza belli	Sage sparrow	Several visual occurrences
Buteo jamaicensis	Red-tailed hawk	Several visual occurrences
Buteo regalis	Ferruginous hawk	Several visual occurrences
Cathartes aura	Turkey vulture	Several visual occurrences
Circus cyaneus	Northern Harrier (female)	One visual occurrence
Corvus corax	Common raven	Several visual occurrences
Eremophila alpestris	Horned lark	Several visual occurrences
Falco mexicanus	Prairie falcon	One visual occurrence
Falco sparverius	American kestrel	Several visual occurrences
Lanius ludovicianus	Loggerhead shrike	Several visual occurrences
Mammals		
Ammospermophilus leucurus	White-tailed antelope squirrel	Several visual occurrences
Canis latrans	Coyote	Tracks and Scat
Dipodomys deserti	Desert kangaroo rat	Numerous mounds with large holes
Dipodomys merriami	Merriam's kangaroo rat	Numerous mounds with k-rat sized holes
Lepus californicus	Black-tailed jackrabbit	Several visual occurrences, tracks, and scat
Sylvilagus audubonii	Desert cottontail, Audubon's cottontail	Several visual occurrences, scat, and tracks)
Thomomys bottae	Botta's Pocket gopher	Numerous mounds
Vulpes macrotis	Kit fox	Dens, tracks, and scat