Appendix G (Available on City website)

State Aquatic Resources Delineation Report Phase 1 August 2021

State Jurisdictional Waters Delineation Report Phase 2 December 2020

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December 1, 2020

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Patti Murphy Desert Peak Energy Center, LLC One California, Suite 16 San Francisco, California 94111

Subject: State Jurisdictional Waters Delineation Report for the Desert Peak Energy Center Project, City of Palm Springs, Riverside County, California

Dear Ms. Murphy:

This report documents the results of a delineation of waters of the state under the jurisdiction of the Regional Water Quality Control Board ("RWQCB") and streambeds under the jurisdiction of the California Department of Fish and Wildlife ("CDFW") for the proposed Desert Peak Energy Center Project ("Project"). The Project Site is located in the City of Palm Springs in Riverside County (Figure 1, Project Location; figures are provided in Attachment A). The proposed Project includes a battery energy storage system facility and four potential routes for an overhead generation tie line (gen-tie line). The review area totals approximately 257.18 acres and includes parcels within which the battery energy storage system will be situated and the four potential gen-tie line routes.

This letter report is intended to describe the existing conditions of state jurisdictional waters and wetlands within the review area.

1 Project Location and Description

The Project is located in the City of Palm Springs at the southeastern intersection of Diablo Road and Dillon Road. In addition to the proposed battery energy storage system facility, four potential gen-tie line routes were surveyed and analyzed along both Diablo Road or Melissa Lane (Figure 1, Project Location). The Project Site is located approximately 0.5 miles north of Interstate ("I") 10, 1.15 miles east of State Route 62, and 1.6 miles west of North Indian Canyon Drive. The Project Site is located in Section 9, Township 3 South, and Range 4 East of the San Bernardino Baseline and Meridian, and is shown on the U.S. Geological Survey Desert Hot Springs 7.5-minute quadrangle (Figure 2, USGS Topographical Map). The approximate center of the site corresponds to 33°55′16.73″ north latitude and 116°34′30.92″ west longitude.

The Project includes construction and operation of a battery energy storage system facility and overhead gen-tie line. The battery energy storage system facility is a 400-megawatt by 4-hour facility on an approximately 35-acre footprint of the larger 170-acre Project Site, along with associated on-site switchyard, inverters, fencing, roads, and supervisory control and data acquisition ("SCADA") system, and would store 1,600 megawatt-hours of energy. The Project also includes a 230-kilovolt overhead gen-tie line, which would extend approximately 1 mile north to the Southern California Edison ("SCE") Devers Substation. Although only one gen-tie route will be chosen, four potential gen-tie line routes have been analyzed herein: one along Diablo Road and three potential routes along Melissa Lane.

2 Regulatory Background

2.1 State Statutes and Regulations – Regional Water Quality Control Board

The State of California has concurrent jurisdiction with the federal government over Section 401 Water Quality Certification for jurisdictional waters and wetlands of the United States. Where isolated waters and wetlands (not subject to federal jurisdiction) are involved, the state will exert independent jurisdiction via the Porter-Cologne Water Quality Control Act.

Section 401 of the Clean Water Act

Section 401 of the Clean Water Act requires that any applicant for a federal permit for activities that involve a discharge to waters of the United States provide the federal permitting agency a certification from the state in which the discharge is proposed that states that the discharge will comply with the applicable provisions under the federal Clean Water Act. Therefore, in California, before the U.S. Army Corps of Engineers ("ACOE") will issue a Section 404 permit, applicants must apply for and receive a Section 401 Water Quality Certification or waiver from the RWQCB.

Under Section 401 of the Clean Water Act, the RWQCB regulates at the state level all activities that are regulated at the federal level by ACOE.

Porter-Cologne Water Quality Control Act

The RWQCB regulates actions that would involve "discharging waste, or proposing to discharge waste, within any region that could affect the quality of the waters of the state" (California Water Code Section 13260[a]), pursuant to provisions of the state Porter-Cologne Water Quality Control Act. "Waters of the state" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state" (California Water Code Section 13050[e]).

Under the Porter-Cologne Water Quality Control Act, the RWQCB regulates all such activities, as well as dredging, filling, or discharging materials into waters of the state, that are not regulated by the ACOE due to a lack of connectivity with a navigable water body.

2.2 State Statutes and Regulations – California Department of Fish and Wildlife

California Fish and Game Code Sections 1600–1616 mandate that "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity."

CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses (including dry washes) and lakes characterized by the presence of (1) definable bed and banks and (2) existing fish or wildlife resources. Furthermore, CDFW jurisdiction extends to riparian habitat and may include oak woodlands in canyon bottoms. Historical court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear, but reemerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high water mark ("OHWM") to be claimed as jurisdictional. CDFW does not have jurisdiction over ocean or shoreline resources.

Under California Fish and Game Code Sections 1600–1616, CDFW has the authority to regulate work that will substantially divert or obstruct the natural flow of, or substantially change or use any material from, the bed, channel, or bank of any river, stream, or lake. CDFW also has the authority to regulate work that will deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake. This regulation takes the form of a requirement for a Lake or Streambed Alteration Agreement and is applicable to all projects.

3 Methods

3.1 Literature Review

The following available resources were reviewed to assess the potential for jurisdictional waters: aerial photographs (Google Earth 2020; Historic Aerials 2020); the U.S. Geological Survey 7.5-minute topographic quadrangle (USGS 2020); a Natural Resources Conservation Service soil map (USDA 2020); U.S. Environmental Protection Agency Watershed Assessment, Tracking, and Environmental Results System (EPA 2020), which includes the National Hydrography Dataset; and the National Wetland Inventory (USFWS 2020).

3.2 Jurisdictional Delineation

Dudek conducted a formal jurisdictional waters delineation within the approximate 257.18-acre review area on May 7, June 19, and November 6, 2020. The review area was surveyed on foot where potential aquatic resources were observed, where accessible. The segments of the potential gen-tie line routes along Melissa Lane that are located on private property were not accessible by foot; therefore, potential jurisdictional waters were noted from the public right-of-way ("ROW"). The following types of features were surveyed:

- Waters of the state under the jurisdiction of the State Water Resources Control Board, pursuant to Section 401 of the federal Clean Water Act and the Porter-Cologne Water Quality Control Act, as wetlands or drainages
- Streambeds under the jurisdiction of the CDFW, pursuant to Section 1602 of the California Fish and Game Code

Waters of the state were mapped in accordance with the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State adopted April 2, 2019. As described in these procedures, wetland waters of the state were mapped based on the procedures in the ACOE's 1987 Wetlands Delineation Manual and the 2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (ACOE 1987, 2008a). Non-wetland waters were mapped at the OHWM based on the procedures defined in 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).

CDFW jurisdictional areas were mapped to include the bank of the stream/channel and outer dripline of adjacent riparian vegetation, as set forth under Section 1602 of the California Fish and Game Code.

To aid in the delineation and in conformance with the ACOE 2008 Field Guide, 21 OHWM datasheets (ODP-1 through ODP-25) were recorded at potential non-wetland waters within the review area to determine the OHWM indicators within those features. OHWM datasheets are included as Attachment B. The review area did not contain any

features that met the State Water Resources Control Board wetland criteria, and due to the lack of hydrophytic vegetation and hydric soils within the review area, wetland determination data forms were not completed.

Streambeds are typically delineated at the width of the channel or lake measured at the top of bank or the extent of associated riparian vegetation beyond the top of bank. For shallow drainages and washes that do not support riparian vegetation, the top-of-bank measurement may be the same as the OHWM measurement. To aid in the delineation, streambeds were delineated based on watercourse characteristics present in the field, which include surface flow, sediment transportation and sorting, physical indicators of channel forms, channel morphology, and riparian habitat associated with a streambed. These characteristics are based on the CDFW guidance document, *A Review of Stream Processes and Forms in Dryland Watersheds* (Vyverberg 2010) and the *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (CEC 2014).

To assist in the determination of isolated waters of the state and CDFW streambeds (collectively "aquatic resources"), and in conformance with the *Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (CEC 2014), data were collected using the Episodic Stream Indicator Data Sheet (Appendix G of CEC 2014) at seven features. These data collection points are referred to as Mesa Data Stations (MSD-1 through MSD-11). Episodic Stream Indicator Data Sheets are included as Attachment C. The review area was evaluated for evidence of fluvial indicators such as drainage swales, mud cracks, drift, wracking, vegetation-channel alignments, and hydrologic connectivity. The extent of any identified aquatic resources was determined by mapping the areas with fluvial characteristics and topography to the sampled locations. Photos of the aquatic resources were taken and are provided in Attachment D.

The limits of aquatic resources were collected in the field using a Trimble GeoXT GPS unit with sub-meter accuracy. The geographic extents were digitized in geographic information system based on the GPS data and data collected directly onto field maps into a Project-specific geographic information system using ArcGIS software.

4 Environmental Setting

4.1 Land Uses

The portion of the review area not including the gen-tie line is characterized as an active wind turbine farm with associated development (i.e., concrete pads, wind turbines, storage yard, and associated dirt roads), with the remaining portions containing native desert vegetation. This portion of the review area is bound by the SCE Devers Substation to the north, Indian Canyon Drive to the east, I-10 to the south, and State Route 62 to the west. Historic aerials depict vegetation clearing for development associated with the wind turbine farm sometime between 1972 and 1996 (Historic Aerials 2020). However, flows returned to the site and are evident in historic aerials from 2002 (Historic Aerials 2020), with large storm events occurring in 2004 as evident in Google Earth imagery (Google Earth 2020).

The portion of the review area including the potential gen-tie line routes are characterized by native desert vegetation, dirt roads (i.e., Diablo Road and associated SCE transmission alignment roads), Melissa Lane, and SCE's Devers Substation. This portion of the review area is bound by Diablo Road to the west, the Devers Substation to the north, and active wind turbine farms associated with development to the east and south. A portion of the SCE Devers Substation, located within the northwest portion of the review area, was already constructed in 1972 based on a review of historic

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aerials (Historic Aerials 2020). This development redirected flows and thereby cut off flows to the east. The CPV Sentinel Palm Springs Solar Energy development located to the east was constructed sometime between June 2011 and September 2011 (Google Earth 2020).

Existing adjacent land uses include a mix of associated wind turbine farms and vacant lands to the north, east, south, and west. Representative photographs of the Project Site are included in Attachment D.

4.2 Climate

The Coachella Valley, within which the review area is located, has an arid climate characterized by hot, dry summers with mild winters (RWQCB 2019). Average temperatures near Palm Springs range from approximately 57 °F to 89 °F; precipitation occurs primarily in the winter, with additional thunderstorms in the summer, and typically averages less than 5 inches per year (WRCC 2020; RWQCB 2019).

4.3 Soils

Two soil series are mapped within the review area: Carsitas fine sand, 0%–5% slopes, and Carsitas gravelly sand, 0%–9% slopes. Approximately 143.54 acres of Carsitas fine sand, 0%–5% slopes, and approximately 113.63 acres of Carsitas gravelly sand, 0%–9% slopes, are mapped within the review area. These soils are described in more detail below (USDA 2020) and the spatial distribution of these soils is depicted in Figure 3, Soils.

Carsitas Family Series consists of very deep, somewhat excessively drained soils that formed in alluvium derived from granitic and/or gneissic rocks. Carsitas soils are on alluvial fans, fan aprons, valley fills, and remnants of alluvial fans and in drainage ways at elevations of 220 feet below mean sea level to 2,625 feet above mean sea level. These soils have low runoff and high saturated hydraulic connectivity. Carsitas soils are distributed in southeastern California and support irrigated agricultural areas that include citrus and grapes, as well as watershed, wildlife habitat, and recreation. Vegetation in uncultivated areas includes creosote bush, burrobush (*Ambrosia dumosa*), barrel cactus (*Ferocactus* sp.), mesquite (*Prosopis* sp.), and blue palo verde (*Parkinsonia* sp.).

4.4 Vegetation

A total of four vegetation communities and land cover types occur within the review area based on general physiognomy and species composition. Two vegetation communities were mapped and include Sonoran creosote bush scrub and disturbed Sonoran creosote bush scrub, and two land covers (disturbed habitat and urban/developed) occur on site. Figure 4, Biological Resources, illustrates the distribution of vegetation communities land covers within the review area.

4.4.1 Sonoran Creosote Bush Scrub

Sonoran creosote bush scrub community includes creosote bush as the dominant shrub, forming an open community approximately 0.5 to 3 meters (2 to 10 feet) in height and occurring on well-drained soils (CVAG 2016). Burrobush is a common co-dominant shrub in the canopy, with various ephemeral herbs flowering late winter/early spring within the herbaceous layer (CVAG 2016).

Within the review area, Sonoran creosote bush scrub is dominated by an open cover of creosote bush. Associated species present within this community include burrobush, cheesebush (*Ambrosia salsola*), sweetbush (*Bebbia*

juncea), brittlebush (*Encelia farinosa*), and jojoba (*Simmondsia chinensis*). The herbaceous layer is composed of common Mediterranean grass (*Schismus barbatus*) and redstem stork's bill (*Erodium cicutarium*). Disturbed Sonoran creosote bush scrub is dominated by a lower cover of creosote bush and associated species as a result of past disking and disturbance. Sonoran creosote bush scrub was mapped within much of the review area, with disturbed Sonoran creosote bush mapped within portions of the site south of Dillon Road. These areas included evidence of past disturbance/grading with a lower cover of shrubs present.

4.4.2 Disturbed Habitat

The Coachella Valley Multiple Species Habitat Conservation Plan does not describe disturbed habitat; however, this land cover type refers to areas that have been permanently altered by previous human activity that has eliminated all future biological value of the land for most species. The native or naturalized vegetation is no longer present, and the land lacks habitat value for sensitive wildlife, including potential raptor foraging.

Disturbed land on site consists of dirt roads within the Project Site and potential gen-tie line routes and vacant areas (i.e., storage yards southeast of Dillon Road and Diablo intersection and north of Dillon Road) that have been previously graded and are primarily devoid of vegetation.

4.4.3 Urban/Developed Land

Urban/developed areas include areas that have been constructed upon or otherwise physically altered to an extent that native vegetation is no longer supported. Developed land is characterized by permanent or semi-permanent structures, pavement or hardscape, and landscaped areas that often require irrigation (Oberbauer et al. 2008).

Within the review area, developed areas include paved roads (e.g., Dillon Road and Melissa Road). SCE's Devers Substation within the northern portion of the study area.

4.5 Topography

The review area is located within the Colorado Desert, in the northwestern end of the Coachella Valley, which is generally bounded by the San Bernardino Mountains and Little San Bernardino Mountains to the north, the San Jacinto and Santa Rosa Mountains to the south, and the Salton Sea and Imperial Valley to the east. The review area is relatively flat; however, elevations gradually slope from northwest to southeast. Elevation within the review area ranges from approximately 1,100 feet above mean sea level in the northwest and gradually sloping to approximately 837 feet above mean sea level in the southeast corner of the review area.

4.6 Hydrology

The review area is located within the Whitewater Hydrologic Unit and Garnet Wash Subwatershed, in which the Whitewater River is the major surface water body (Figure 5, Hydrologic Units). According to the Water Quality Control Plan for the Colorado River Basin (RWQCB 2019), the runoff resulting from rains and snowmelt within the higher elevations are the major sources of groundwater replenishment and result in several perennial streams in the Coachella Valley Planning Area, with the Whitewater River being the major drainage course. The Whitewater River contains perennial flows in the mountains; however, because of diversions and percolation into the basin this river becomes dry further downstream. Further downstream to the east, the Whitewater River flows through an engineered extension known as the Coachella Valley Storm Water Channel that ultimately flows east until it terminates into the Salton Sea.

The nearest major waterbodies are Garnet Wash approximately 2,000 feet south of the review area and the Whitewater River approximately 1.1 miles south of the review area. The U.S. Geological Survey topographic quadrangle and National Hydrography Dataset (USGS 2020) depict two streams within the review area, one stream bisecting the southwestern corner and one bisecting the northwestern and southeastern portions of the review area (Figure 2 and Figure 5). The National Wetland Inventory (USFWS 2020) depicts the same riverine features and an additional riverine feature bisecting the review area north to south (Figure 2 and Figure 6, Hydrology).

The southwestern feature is an unnamed braided ephemeral feature (i.e., alluvial fan) that flows from the San Bernardino Mountains in the northwest, through the review area, and continues 3.3 miles southeast until its confluence with Garnet Wash, which flows 0.3 miles south under the I-10 through a series of box culverts, continuing 0.5 miles southeast until its confluence with the Whitewater River. The Whitewater River continues approximately 39 miles southeast, ultimately terminating into the Salton Sea.

The second stream that bisects the northwestern and southeastern portions of the review area is an unnamed, braided, ephemeral feature that flows northwest to southeast and originates outside of the review area to the northwest from Painted Hills. Flows continue southeast, flowing under State Route 62, and then continuing southeast approximately 1.73 miles where flows enter the northern portion of the review area, where flows are directed south due to development of SCE's Devers Substation. Flows continue south outside of the review area approximately 0.6 miles before crossing Dillon Road, continuing approximately 0.5 miles southeast through the review area before dissipating as sheetflow. Flows have been altered due to the development of Dillon Road, roads associated with the utility line easement that bisect the northeastern portion of the review area, and associated development with the active wind turbine farm. Historically, these flows continued 0.7 miles southeast until their confluence with Garnet Wash.

As depicted in Figure 6, the third unnamed feature historically flowed north to south through the review area; however, flows have been altered due to the development of SCE's Devers Substation in the north, development of Dillon Road to the south, and associated development with the active wind turbine farm; this appears to have altered and redirected these flows to the east.

Beneficial uses for unnamed washes (ephemeral streams) within the West Colorado River Basin, in which the review area is located, include freshwater replenishment, groundwater recharge, non-contact recreation, warm freshwater habitat, and wildlife habitat (RWQCB 2019).

5 Results of Survey

5.1 Jurisdictional Delineation

As further described below, the survey identified 15 jurisdictional features (NWW-1, NWW-2, NWW-3, NWW-3a, NWW-3b, NWW-4, NWW-5, NWW-6, NWW-6a, NWW-7, NWW-8, NWW-9, NWW-9a, NWW-10, and NWW-11) within the review area as waters of the state under the jurisdiction of RWQCB and jurisdictional streambeds under the jurisdiction of CDFW. In addition, the survey identified non-regulated features (erosional or roadside ditches) within the review area. The limits of jurisdictional waters are provided in Figures 7-1 through 7-3, Jurisdictional Delineation Results. OHWM datasheets are included as Attachment B and Episodic Stream Indicator Data Sheets are included as Attachment C. Photos of the jurisdictional features were taken and are provided in Attachment D.

5.1.1 Waters of the State/CDFW Streambeds

NWW-1

NWW-1 is an ephemeral wash that bisects the southwestern portion of the review area. This feature originates from rains and snowmelt within the higher elevation peaks to the northwest. This feature flows northwest to southeast through the southwestern portion of the review area. As discussed in Section 4.6, Hydrology, flows continue southeast until their confluence with Garnet Wash. The active floodplain, as defined by the ACOE 2008 Field Guide for determining the OHWM, was delineated based on OHWM indicators, which included a distinct change in average sediment texture as compared to adjacent uplands, change in vegetation cover, and sediment deposition (ODP-5 and ODP-6). The average width of the OHWM within the review area was approximately 360 feet in width at the upstream portion, 90 feet in width at the central portion, and 72 feet in width at the downstream portion.

This feature also contained defined banks with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of bank is the same as the OHWM measurement.

Based on the presence of an OHWM and a bed and bank, NWW-1 was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-2

NWW-2 is an unvegetated ephemeral drainage occurring within the central portion of the review area. This feature originates within the review area, immediately south of the dirt road that runs from east to west along the northern edge of the non-gen-tie line portion of the review area. This feature is consistently present within Google Earth imagery between 2004 and 2019, and was likely historically connected to NWW-3 to the north (Google Earth 2020). This feature flows south approximately 200 feet before flowing outside of the review area, continues south outside of the review area approximately 750 feet, and then re-enters the review area, continuing approximately 130 feet before dissipating as sheetflow. There was no downstream connectivity observed during the 2020 site visit; however, in 2004, based on Google Earth imagery, this feature continued off site ultimately flowing to Garnet Wash to the south, which continues to flow southeast until its confluence with the Whitewater River (Google Earth 2020). Based on Google Earth imagery, sometime between June and September 2011, a north–south trending dirt road was constructed within the eastern portion of the review area. In June 2012, additional grading occurred along the road associated with installation of turbines and these events disrupted the hydrology within the southeastern

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portion of the review area. An OHWM is evident and characterized by change in average sediment size, absence of vegetation, change in vegetation cover, and sediment deposition (ODP-12 and ODP-13). The OHWM averages 5 feet to 8 feet in width.

This feature also contained defined banks with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of banks is the same as the OHWM measurement.

Based on the presence of an OHWM and a defined bed and bank, NWW-2 was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-3

NWW-3 is an ephemeral wash bisecting the northwestern and southeastern portions of the review area. This feature originates outside of the review area to the northwest. This feature flows southeast through the northern portion of the review area for approximately 600 feet before continuing to flow southeast outside of the review area through an existing wind turbine farm for approximately 0.5 miles. Flows continue across Dillon Road and enter the review area, continuing to flow for approximately 946 feet, then exit the review area and continue approximately 790 feet south before dissipating as sheetflow. While there was no downstream connectivity observed during the 2020 site visit, this feature continued off site in 2004, based on Google Earth imagery, ultimately flowing to Garnet Wash to the south, which continues to flow southeast until its confluence with the Whitewater River. Based on Google Earth imagery, sometime between June and September 2011, a north-south trending dirt road was constructed within the southeastern portion of the review area. In June 2012, additional grading occurred along the road associated with installation of turbines and these events disrupted the hydrology within the southeastern portion of the review area. The upstream portion of NWW-3 within the northwestern portion of the review area historically contained compound flows as part of an alluvial floodplain; however, the development of SCE's Devers Substation sometime before 1972 altered hydrology, and flows are now directed through a culvert and are confined to a single-thread channel within this portion of the review area. The OHWM indicators within the upstream reach of NWW-3 included break in bank slope, change in vegetation cover and species, change in average sediment size, and sediment deposition. The active floodplain within the downstream portions of NWW-3 were delineated based on OHWM indicators, which included a distinct change in average sediment texture as compared to adjacent uplands, change in vegetation cover, and sediment deposition (ODP-14 and ODP-22). Within the northern portion of the review area, averages for the OHWM ranged from 21 feet to 140 feet. Within the southern portion of the review area, averages for the OHWM ranged from approximately 22 feet to 107 feet in width.

This feature also contained defined banks with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of banks is the same as the OHWM measurement.

Based on the presence of an OHWM and defined bed and bank, NWW-3 was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-3a (Tributary to NWW-3)

NWW-3a is an unvegetated ephemeral tributary to NWW-3 occurring within the northeastern portion of the review area. The feature originates within the review area immediately south of the dirt road. This feature flows south approximately 333 feet before its confluence with NWW-3. An OHWM is evident and characterized by change in average sediment size, absence of vegetation, change in vegetation cover, and sediment deposition (ODP-15). The OHWM averages 1 foot to 5 feet in width.

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This feature also contained defined banks, with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the banks was the same as the OHWM measurement.

Based on the presence of an OHWM, NWW-3a was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-3b (Tributary to NWW-3)

NWW-3b is an unvegetated ephemeral tributary to NWW-3 occurring within the northeastern portion of the review area. The feature originates within the review area immediately south of the dirt road. This feature flows south approximately 356 feet before its confluence with NWW-3. An OHWM is evident and characterized by change in average sediment size, absence of vegetation, change in vegetation cover, and sediment deposition (ODP-16). The OHWM averages 1 foot to 4 feet in width.

This feature also contained defined banks, with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of banks is the same as the OHWM measurement.

Based on the presence of an OHWM and a defined bed and bank, NWW-3b was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-4

NWW-4 is an unvegetated ephemeral channel within the northeastern portion of the review area. This feature originates within the review area immediately south of a dirt road. This feature flows south approximately 466 feet, then exits the review area and continues approximately 1,169 feet south before dissipating as sheetflow. While there was no downstream connectivity observed during the 2020 site visit, based on 2004 Google Earth imagery this feature continued off site ultimately flowing to Garnet Wash to the south, which continues to flow southeast until its confluence with the Whitewater River (Google Earth 2020). Based on Google Earth imagery, sometime between June and September 2011, a north–south trending dirt road was constructed within the eastern portion of the review area. In June 2012, additional grading occurred along the road associated with installation of turbines and these events disrupted the hydrology within the southeastern portion of the review area. An OHWM is evident and characterized by break in bank and slope, change in average sediment size, absence of vegetation, change in vegetation cover, and sediment deposition (ODP-17). Average widths for the OHWM ranged from approximately 1 foot to 3 feet.

This feature also contained defined banks, with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of banks is the same as the OHWM measurement.

Based on the presence of an OHWM, NWW-4 was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-5

NWW-5 is an unvegetated ephemeral channel within the northeastern portion of the review area. This feature originates within the review area immediately south of a dirt road. This feature flows south approximately 900 feet before dissipating as sheetflow. Flows appear to disperse along a previous graded area (i.e., old road). An OHWM is evident and

characterized by break in bank and slope, change in average sediment size, absence of vegetation, change in vegetation cover, and sediment deposition (ODP-17). Average widths for the OHWM ranged from approximately 1 foot to 3 feet.

This feature also contained defined banks, with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of banks is the same as the OHWM measurement.

Based on the presence of an OHWM and a defined bed and bank, NWW-5 was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-6

NWW-6 is an unvegetated ephemeral braided channel within the northern portion of the review area. This feature historically originated outside of the review to the northwest; however, development of SCE's Devers Substation that occurred sometime before 1972 (Historic Aerials 2020) has cut off flows. Currently flows originate just outside of the review area immediately east of the Devers Substation and continue to flow south approximately 1,083 feet before entering the northern portion of the review area. Flows continue south approximately 555 feet before exiting the review area and dispersing as sheetflow within the existing wind turbine farm to the south. An OHWM is evident and characterized by break in bank and slope, change in average sediment size, change in vegetation, change in vegetation cover, and sediment deposition (ODP-23). Average widths for the OHWM ranged from approximately 31 feet to 42 feet.

This feature also contained defined banks, with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of banks is the same as the OHWM measurement.

Based on the presence of an OHWM and a defined bed and bank, NWW-6 was delineated as non-wetland waters of the state under RWQCB jurisdiction and a streambed under CDFW jurisdiction.

NWW-6a (Tributary to NWW-6)

NWW-6a is an unvegetated ephemeral tributary to NWW-6 occurring within the northern portion of the review area. The feature originates outside of the review area to the north immediately east of SCE's Devers Substation. Historically, this feature was part of the alluvial fan system to the northwest; however, development of SCE's Devers Substation cut off flows and altered the hydrology in this area. This feature flows south approximately 415 feet before entering the review area and continues to flow through the review area approximately 548 feet before its confluence with NWW-6 outside of the review area to the south. An OHWM is evident and characterized by change in average sediment size. The OHWM averages 13 feet to 72 feet in width.

This feature also contained defined banks, with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the banks was the same as the OHWM measurement.

Based on the presence of an OHWM and defined bed and banks, NWW-6a was delineated as non-wetland waters of the state under RWQCB jurisdiction and a streambed under CDFW jurisdiction.

NWW-7

NWW-7 is an unvegetated ephemeral channel within the northeastern portion of the review area. This feature originates outside of the review area immediately south of the CPV Sentinel palm Springs Solar Energy Development. This feature flows southeast approximately 315 feet through the review area. Flows appear to continue along a dirt road, crossing Melissa Lane before continuing southeast, east of Melissa Lane. An OHWM is evident and characterized by break in bank and slope, change in average sediment size, absence of vegetation, change in vegetation cover, shelving, and sediment deposition (ODP-24). Average widths for the OHWM ranged from approximately 6 feet to 13 feet.

This feature also contained defined banks, with the limits of the streambed mapped at the top of bank. Due to the shallow nature of this feature, the width of the channel as measured at the top of banks is the same as the OHWM measurement.

Based on the presence of an OHWM and a defined bed and bank, NWW-7 was delineated as non-wetland waters of the state under RWQCB jurisdiction and a streambed under CDFW jurisdiction.

NWW-8

NWW-8 is an unvegetated ephemeral channel within the northeastern portion of the review area. Due to private properties east of Melissa Lane where this feature occurs, waters of the state under RWQCB jurisdiction or streambed under CDFW jurisdiction were mapped from the public ROW and based on aerial imagery. This feature originates outside of the review area to the northwest from Painted Hills. This feature flows south through the review area for approximately 223 feet, then continues to flow outside of the review area approximately 1.47 miles before its confluence with Garnet Wash. An OHWM is evident and characterized by break in bank and slope and absence of vegetation. Average widths for the OHWM were not collected as access was not granted to this area.

Based on observation from the existing ROW, this feature also contained defined banks.

Based on the presence of an OHWM and a defined bed and bank, NWW-8 was delineated as non-wetland waters of the state under RWQCB jurisdiction of RWQCB and a streambed under CDFW jurisdiction.

NWW-9

NWW-9 is an unvegetated ephemeral channel within the northeastern portion of the review area. Due to private properties east of Melissa Lane where this feature occurs, waters of the State under RWQCB jurisdiction or streambed under CDFW jurisdiction were mapped from the public ROW and based on aerial imagery. This feature originates within the review area immediately south of a dirt road. This feature historically was connected and originated to the Norwest from Painted Hills; however, developments to the northwest (i.e., SCE Devers Substation and CPV Sentinel Solar Energy) have altered the hydrology in this area. This feature flows south through the review area for approximately 441 feet, then continues to flow outside of the review area approximately 1.25 miles before its confluence with Garnet Wash. An OHWM is evident and characterized by break in bank and slope and absence of vegetation. Average widths for the OHWM were not collected as access was not granted to this area.

Based on observation from the existing ROW, this feature also contained defined banks.

Based on the presence of an OHWM and a defined bed and bank, NWW-9 was delineated as non-wetland waters of the state under RWQCB jurisdiction and a streambed under CDFW jurisdiction.

NWW-9a (Tributary to NWW-9)

NWW-9a is an unvegetated ephemeral tributary to NWW-9 occurring within the northeastern portion of the review area. Due to private properties east of Melissa Lane where this feature occurs, waters of the state under RWQCB jurisdiction or streambed under CDFW jurisdiction were mapped from the public ROW and based on aerial imagery. The feature originates within the review area immediately south of the dirt road. This feature flows south approximately 269 feet before its confluence with NWW-9. An OHWM is evident and characterized by change in average break in bank and slope and absence of vegetation. Average widths for the OHWM were not collected as access was not granted to this area.

Based on observation from the existing ROW, this feature also contained defined banks.

Based on the presence of an OHWM and a defined bed and bank, NWW-9a was delineated as non-wetland waters of the state under RWQCB jurisdiction and a streambed under the CDFW jurisdiction.

NWW-10

NWW-10 is an unvegetated ephemeral channel within the northeastern portion of the review area. Due to private properties east of Melissa Lane where this feature occurs, waters of the state under RWQCB jurisdiction or streambed under CDFW jurisdiction were mapped from the public ROW and based on aerial imagery. This feature originates within the review area immediately east of Melissa Lane. An inlet along the west side of Melissa Lane and outlet along the east side of Melissa Lane direct flows and runoff from the storage yard west of Melissa Lane. This feature historically was connected and originated to the Norwest from Painted Hills; however, developments to the northwest (i.e., SCE's Devers Substation and CPV Sentinel Solar Energy) have altered the hydrology in this area. This feature flows southeast through the review area for approximately 199 feet, then continues to flow outside of the review area approximately 1.22 miles before its confluence with Garnet Wash. An OHWM is evident and characterized by break in bank and slope and absence of vegetation. Average widths for the OHWM were not collected as access was not granted to this area.

Based on observation from the existing right-of-way, this feature also contained defined banks.

Based on the presence of an OHWM and a defined bed and bank, NWW-10 was delineated as non-wetland waters of the state under the jurisdiction of RWQCB and a streambed under the jurisdiction of CDFW.

NWW-11

NWW-11 is an unvegetated ephemeral channel within the eastern portion of the review area. Due to private properties west of Melissa Lane where this feature occurs, waters of the state under RWQCB jurisdiction or streambed under CDFW jurisdiction were mapped from the public ROW and based on aerial imagery. This feature originates within the review area immediately east of a dirt road. This feature historically was connected and originated to the northwest from Painted Hills; however, developments to the northwest (i.e., SCE's Devers Substation and CPV Sentinel Solar Energy) have altered the hydrology in this area. This feature flows southeast through the review area for approximately 247 feet,

then continues to flow south along Melissa Lane where it dissipates into erosional features associated with Dillon Road. An OHWM is evident and characterized by break in bank and slope and absence of vegetation. Average widths for the OHWM were not collected as access was not granted to this area.

Based on observation from the existing ROW, this feature also contained defined banks.

Based on the presence of an OHWM and a defined bed and bank, NWW-11 was delineated as non-wetland waters of the state under RWQCB jurisdiction and a streambed under CDFW jurisdiction.

5.1.2 Non-Regulated Features

Erosional Features

The review area contains numerous unvegetated erosional features associated with Dillon Road and Diablo Road (ODP-1 through ODP-4), one erosional feature immediately south of the storage yard southeast of the intersection of Dillon Road and Diablo Road (ODP-9), and a second erosional feature along a north–south trending gravel road within the southern portion of the review area south of Dillon Road. Additional erosional features associated with runoff from SCE's Devers Substation and CPV Palm Springs Sentinel Energy development within the northern portion of the review were also observed. Erosional features are a result of road runoff flowing across the natural topography of the site. These features range from approximately 1 foot wide to 4 feet wide and are incised with vertical shelves averaging 1 to 3 feet high. These features do not support beneficial uses or riparian resources; therefore, they were not considered waters of the state under RWQCB jurisdiction or streambeds under CDFW jurisdiction.

Sheetflow Features

Based on aerial imagery, the review area contains several locations where the aerial imagery has characteristics that appear to be consistent with potential aquatic features. These areas were inspected and no OHWM indicators were observed; however, these areas appear to be receiving some sheetflow associated with the natural topography of the site (ODP-7, ODP-8, ODP-10, ODP-11. ODP-18, OPD-19, ODP-20, and ODP-25). Due to lack of OHWM and lack of a defined bed and back, these areas were not considered waters of the state under RWQCB jurisdiction or streambed under CDFW jurisdiction.

5.2 Jurisdictional Delineation Conclusion

The results of the jurisdictional delineation concluded there are approximately 7.42 acres of non-wetland waters of the state under the jurisdiction of RWQCB and streambed under CDFW jurisdiction within the review area. However, access was not granted to private property parcels located east and west of the Melissa Lane public ROW; therefore, the jurisdictional extent of these features is not accounted for in the 7.42-acre total and if the selected gen-tie route was to traverse these areas, a formal jurisdictional delineation would need to be conducted in order to map jurisdiction on these currently inaccessible areas. Table 1 summarizes the total acreage of these features within the review area. The features are depicted on Figures 7-1 through 7-3.

Feature	Total Acres/ Linear Feet	OHWM Indicators	Dominant Vegetation	Latitude/Longitude
NWW-1	3.44/1,750	Change in sediment, change in vegetation species, change in vegetation cover, and sediment deposition	Creosote Bush within AFP and Non-Vegetated LFC	33.918348, -116.579412
NWW-2	0.48/1,137	Change in sediment, absence of vegetation, and sediment deposition	Non-Vegetated Channel	33.921045, -116.574632
NWW-3	2.20/2,568	Change in sediment, change in vegetation cover, and sediment deposition	Creosote Bush within AFP and Non-Vegetated LFC	33.923746, -116.575546
NWW-3a	0.03/351	Change in sediment, absence of vegetation, and sediment deposition	Non-Vegetated Channel	33.924285, -116.575601
NWW-3b	0.02/372	Change in sediment, absence of vegetation, and sediment deposition	Non-Vegetated Channel	33.924250, -116.575072
NWW-4	0.09/1,141	Defined bed and bank, change in sediment, absence of vegetation, and sediment deposition	Non-Vegetated Channel	33.924103, -116.574636
NWW-5	0.19/984	Defined bed and bank, change in sediment, absence of vegetation, and sediment deposition	Non-Vegetated Channel	33.923164, -116.572343
NWW-6	0.38/879	Defined bed and bank, change in sediment, absence of vegetation, and sediment deposition	Non-Vegetated Channel	33.932336, -116.574926
NWW-6a	0.53/485	Change in sediment size	Non-Vegetated Channel	33.932405, -116.575507
NWW-7	0.06/280	Defined bed and bank, change in sediment, absence of vegetation, and sediment deposition	Non-Vegetated Channel	33.933219, -116.571421
NWW-8	NA ¹ /229	Defined bed and bank, absence of vegetation	Non-Vegetated Channel	33.931637, -116.568494
NWW-9	NA ¹ /563	Defined bed and bank, absence of vegetation	Non-Vegetated Channel	33.931699, -116.570124
NWW-9a	NA ¹ /251	Defined bed and bank, absence of vegetation	Non-Vegetated Channel	33.930988, -116.570188
NWW-10	NA ¹ /206	Defined bed and bank, absence of vegetation	Non-Vegetated Channel	33.929107, -116.570093

Table 1. Non-Wetland Waters of the State (RWQCB) and JurisdictionalStreambed (CDFW) within the Review Area

Table 1. Non-Wetland Waters of the State (RWQCB) and Jurisdictional Streambed (CDFW) within the Review Area

Feature	Total Acres/ Linear Feet	OHWM Indicators	Dominant Vegetation	Latitude/Longitude
NWW-11	NA ¹ /201	Defined bed and bank, absence of vegetation	Non-Vegetated Channel	33.925374, -116.570891
Total ²	7.42 ¹ / 11,400			

Notes: RWQCB = Regional Water Quality Control Board; CDFW = California Department of Fish and Wildlife; OHWM = ordinary high water mark; AFP = active floodplain; LFC = low flow channel.

¹ Access was not granted to parcels east and west of Melissa Lane; therefore, the jurisdictional limits of these features were not mapped and the total acreage cannot be provided until access is granted.

² Acreage may not total due to rounding.

6 Impacts and Recommendations

Should impacts, modifications, or improvements to jurisdictional waters be required as part of Project construction, consultation should be undertaken with the applicable resource agencies to determine if permits and/or mitigation would be required. A Waste Discharge Requirement from the RWQCB would be required if waters of the state are impacted, as there is no federal action (such as a 404 permit) for the Project. A notification of a Streambed Alteration Agreement to CDFW would also be required prior to modification of jurisdictional streambeds. Applications for any of these permits would require demonstration of avoidance and minimization of aquatic resources to the maximum extent practicable and compensatory mitigation would be required for permanent loss of waters or functions and values of waters.

Should you have any questions regarding this report or require additional information, please do not hesitate to contact me at bstrittmater@dudek.com or 760.685.1231.

Sincerely,

Britney Strittmater Biologist

Att.: Attachment A, Figures Attachment B, Ordinary High Water Mark Forms Attachment C, Episodic Stream Indicator Data Sheets Attachment D, Photo Documentation

7 References

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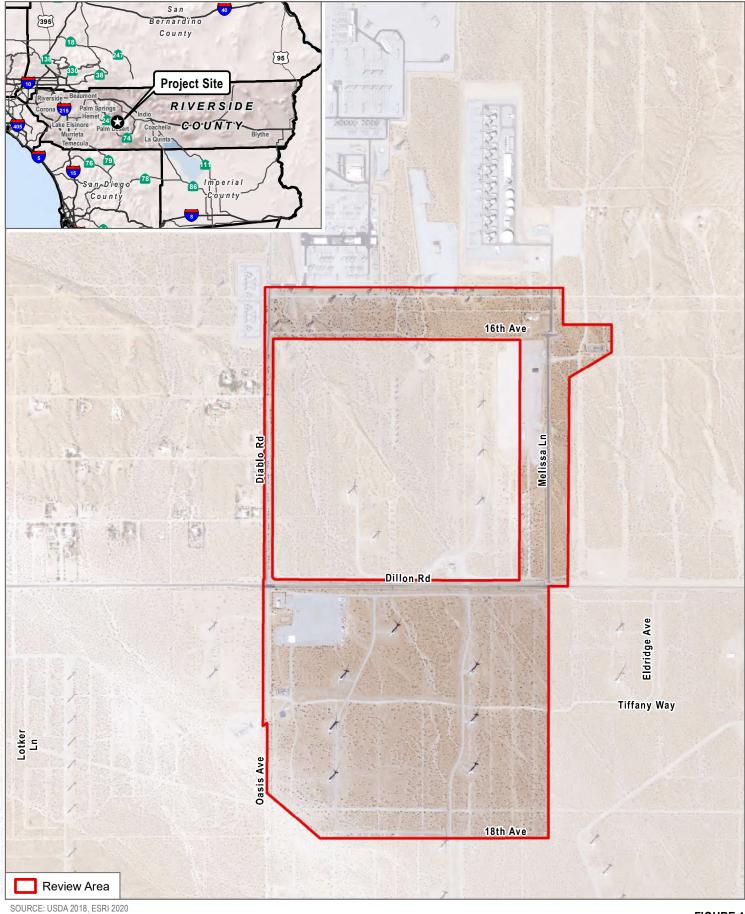
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Attachment A

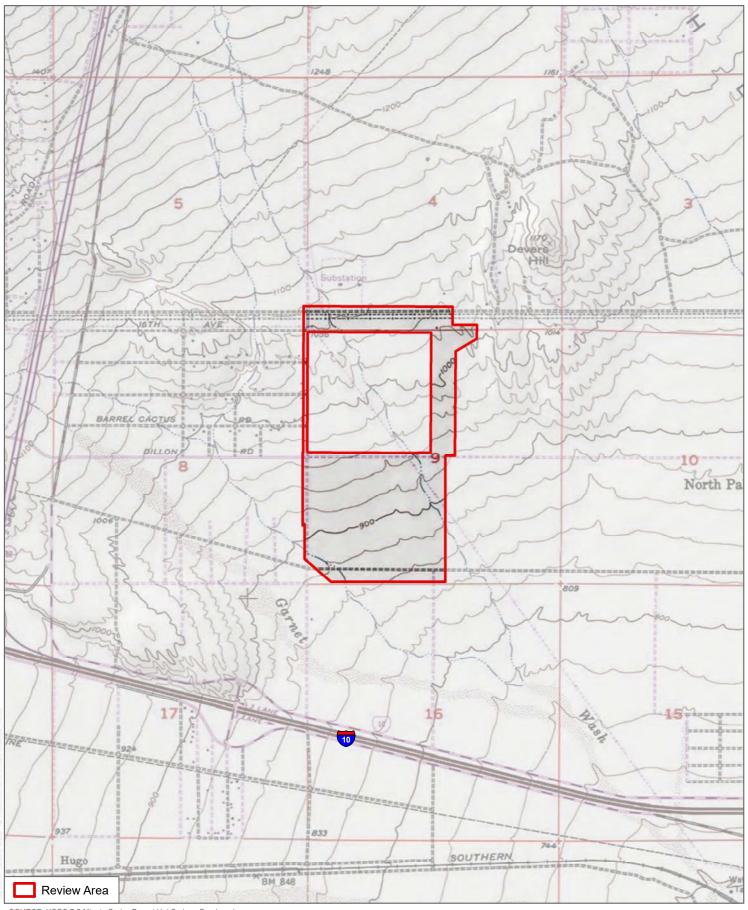
Figures



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FIGURE 1 Project Location Desert Peak Energy Center Project



SOURCE: USGS 7.5-Minute Series Desert Hot Springs Quadrangle

0

1,000

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FIGURE 2 USGS Topographic Map

Desert Peak Energy Center Project

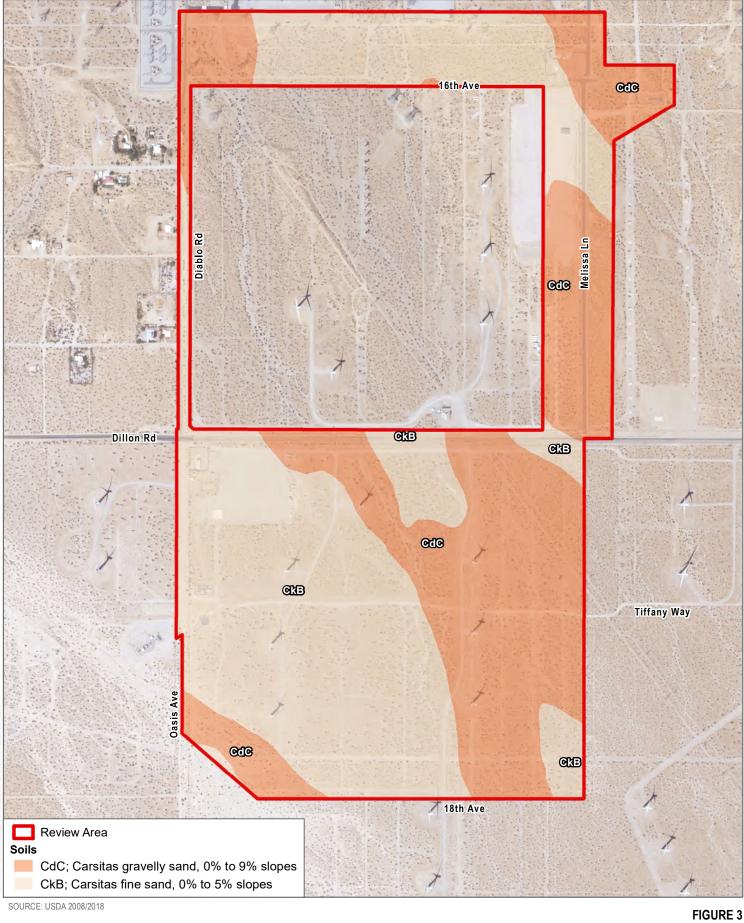


 FIGURE 3 Soils Desert Peak Energy Center Project

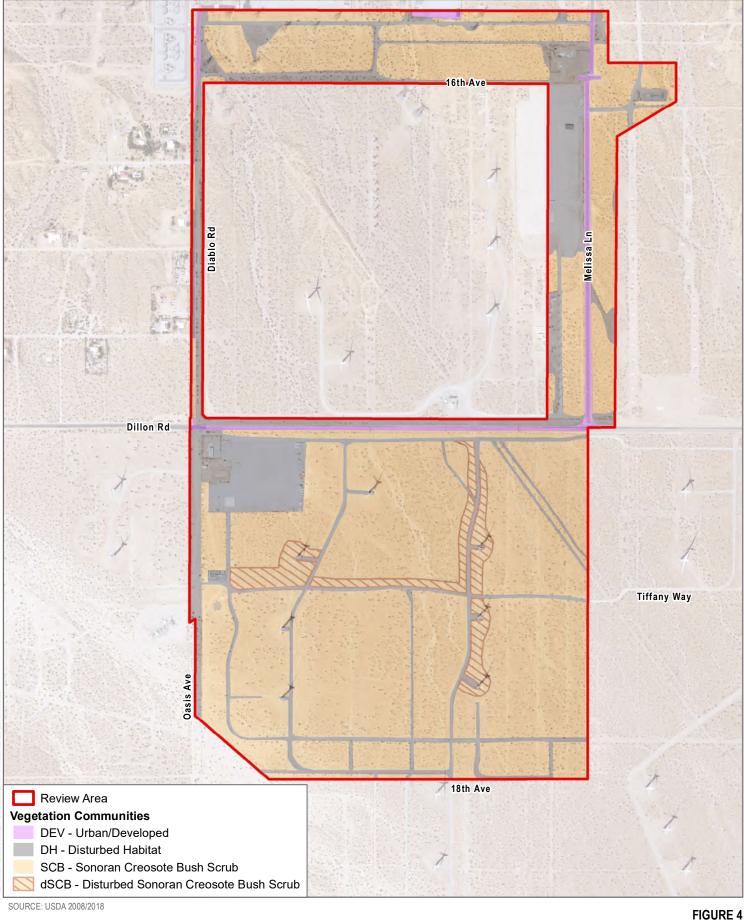
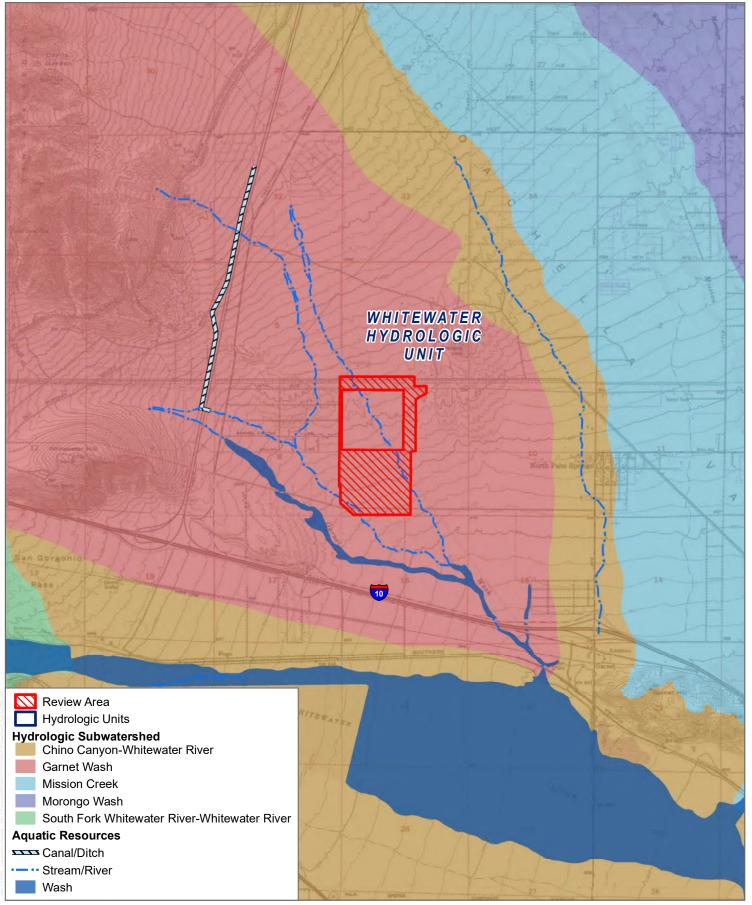


FIGURE 4 Biological Resources Desert Peak Energy Center Project

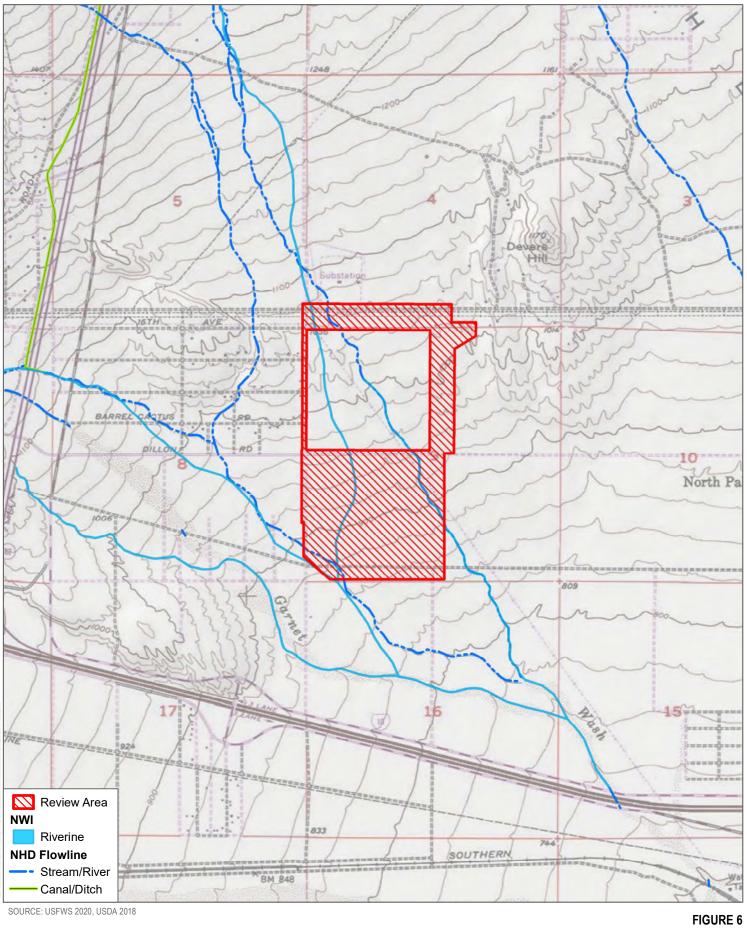


SOURCE: USGS 2018, USDA 2018

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2,000 4,000

FIGURE 5 Hydrologic Units Desert Peak Energy Center Project

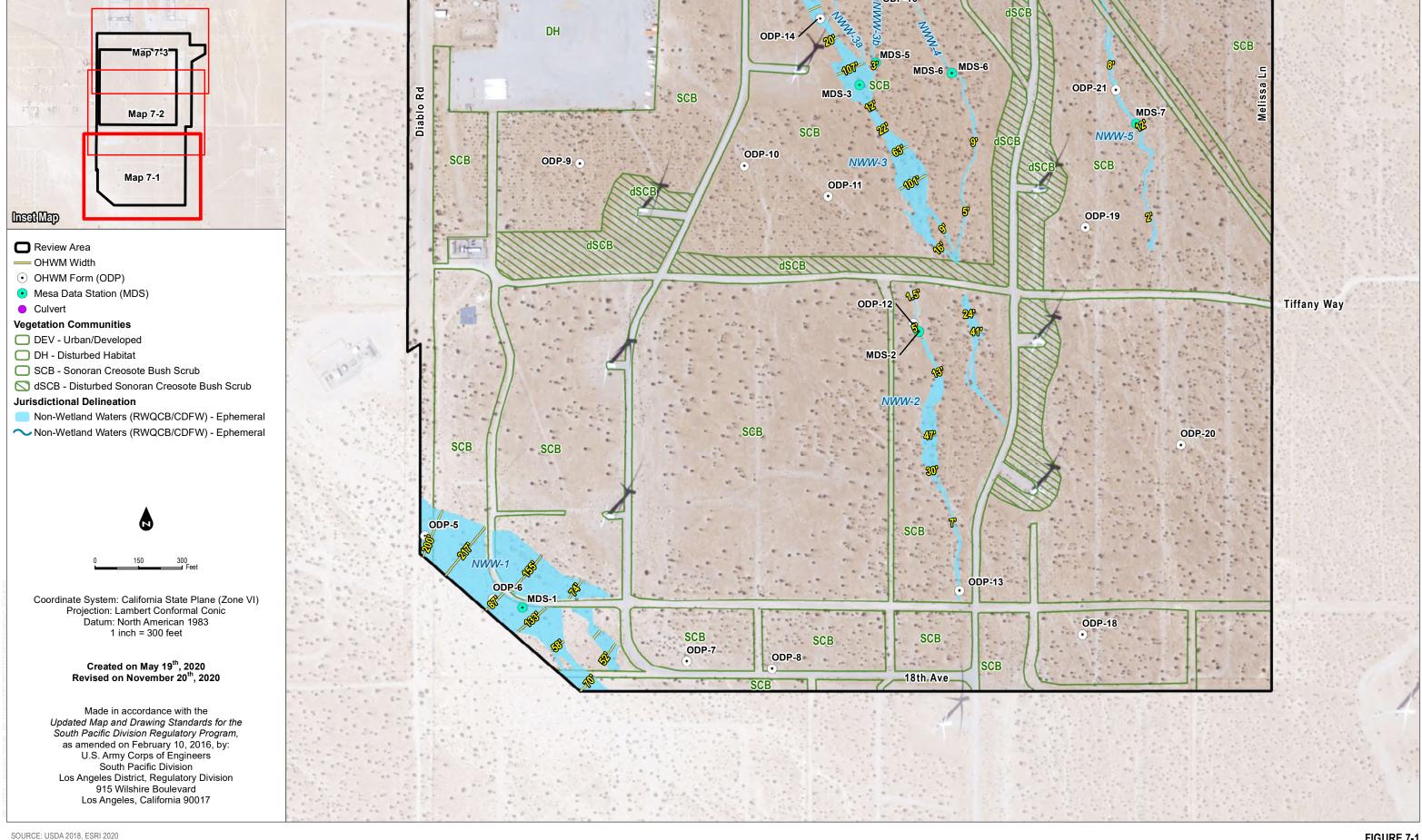


Hydrology Desert Peak Energy Center Project

1,000 2,000

0

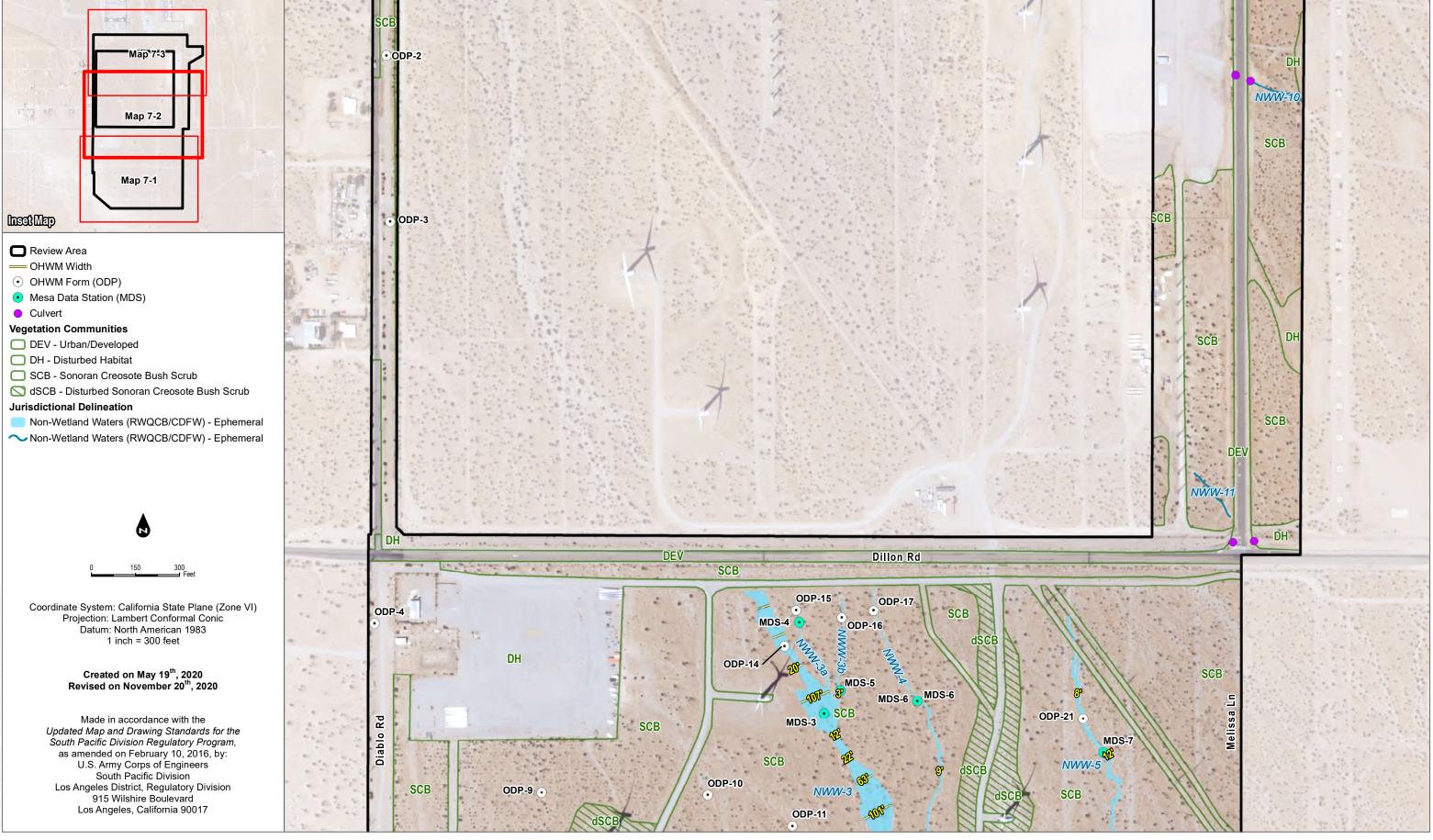
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FIGURE 7-1 Jurisdictional Delineation Results

Desert Peak Energy Center Project



SOURCE: USDA 2018, ESRI 2020

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FIGURE 7-2 Jurisdictional Delineation Results Desert Peak Energy Center Project



SOURCE: USDA 2018, ESRI 2020

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FIGURE 7-3 Jurisdictional Delineation Results Desert Peak Energy Center Project

Attachment B

Ordinary High Water Mark Forms

Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
Investigator(s): B.Strittmater; E. McKinney	
Y 📕 / N 🗌 Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection:Datum:Coordinates: 33.931319°, -116.580083°
Potential anthropogenic influences on the channel syst	
Diablo Road; Development and v-ditch to northwest;	
Brief site description:	
Erosional feature originating as runoff from constructed	w ditch to the porthwest west of Diable Read
Erosional feature bisects a dirt road (SCE easement).	
creosote bush and non-native grasses).	vegetation comprised of upland species (e.g.,
Checklist of resources (if available):	
Aerial photography Stream gag	te data
Dates: 2018 Gage numb	
Topographic maps Period of r	
	y of recent effective discharges
	s of flood frequency analysis
	ecent shift-adjusted rating
	÷ €
	neights for 2-, 5-, 10-, and 25-year events and the
	recent event exceeding a 5-year event
 Global positioning system (GPS) Other studies 	
Hydrogeomorphic F	loodplain Units
Active Floodplain	, Low Terrace
4	
6 <u></u>	see the section of th
Low-Flow Channels	OHWM Paleo Channel
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:
1. Walk the channel and floodplain within the study area to vegetation present at the site.	to get an impression of the geomorphology and
2. Select a representative cross section across the channel.	Draw the cross section and label the floodplain units
3. Determine a point on the cross section that is characteri	
a) Record the floodplain unit and GPS position.	istic of one of the hydrogeomorphic hoodplain units.
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the
floodplain unit.	ciass size) and the vegetation characteristics of the
c) Identify any indicators present at the location.	
4. Repeat for other points in different hydrogeomorphic fl	loodulain units across the cross section
5. Identify the OHWM and record the indicators. Record	1
Mapping on aerial photograph	GPS
Digitized on computer	Other:

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -
Cross section drawing	<u>ng</u> :	
	N	C
<u>OHWM</u>		
GPS point: ODP-1		
Indicators:		
	rage sediment texture	Break in bank slope
	etation species	Other: Other:
Change in veg	etation cover	Other:
Comments:		the second second state of the second second state is the second se
Erosional feature capti	Iring flows from Diable Road v	vith vertical shelf average 1-foot high
Floodplain unit:	Low-Flow Channel	Active Floodplain Low Terrace
		Active Floodplain Low Terrace
GPS point:		
Characteristics of the f		
Average sediment textu	are:% Tree:% Shrub:	% Herb. %
Community succession		/0 11010/0
□ NĂ		Mid (herbaceous, shrubs, saplings)
Early (herbace	cous & seedlings)	Late (herbaceous, shrubs, mature trees)
Indicators:		
Muderacks		Soil development
	П	Surface relief
Drift and/or de	ebris	Other:
Presence of be	d and bank	Otner:
Benches		Other:
Comments:		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
Investigator(s): B.Strittmater; E. McKinney	
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°
Potential anthropogenic influences on the channel syst	
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up	
Checklist of resources (if available):	
Aerial photography Stream gag	
Dates: 2018 Gage numb	
Topographic maps Period of re	
	of recent effective discharges
	s of flood frequency analysis
<u> </u>	ecent shift-adjusted rating
	eights for 2-, 5-, 10-, and 25-year events and the ecent event exceeding a 5-year event
 Existing defineation(s) for site Global positioning system (GPS) 	ecent event exceeding a 5-year event
Other studies	
	la substation d'haite
Hydrogeomorphic F	loodplain Units
Active Floodplain	Low Terrace
Low-Flow Channels	OHWM Paleo Channel
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:
 Walk the channel and floodplain within the study area t vegetation present at the site. 	
2. Select a representative cross section across the channel. I	-
3. Determine a point on the cross section that is characteri	stic of one of the hydrogeomorphic floodplain units.
a) Record the floodplain unit and GPS position.	
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the
floodplain unit.	
c) Identify any indicators present at the location.	11
4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS
Mapping on aerial photograph	VEO

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04	Time: -
Cross section drawing	<u>1g</u> :		
	se puis	cy2	
OHWM			
GPS point: ODP-1			
Indicators:	rage sediment texture	Break in bank slope Other: Other:	
Comments: Erosional feature captu	ring flows from Diable Road	with vertical shelf average 1-	foot high
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
Community succession	rre:% Tree:% Shrub:%	% Herb:%] Mid (herbaceous, shrubs, sapl] Late (herbaceous, shrubs, mat	
Indicators: Mudcracks Ripples Drift and/or de Presence of be Benches		Soil development Surface relief Other: Other: Other:	
Comments:			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
Investigator(s): B.Strittmater; E. McKinney	
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°
Potential anthropogenic influences on the channel syst	
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up	
Checklist of resources (if available):	
Aerial photography Stream gag	
Dates: 2018 Gage numb	
Topographic maps Period of re	
	of recent effective discharges
	s of flood frequency analysis
<u> </u>	ecent shift-adjusted rating
	eights for 2-, 5-, 10-, and 25-year events and the ecent event exceeding a 5-year event
 Existing defineation(s) for site Global positioning system (GPS) 	ecent event exceeding a 5-year event
Other studies	
	la substation d'haite
Hydrogeomorphic F	loodplain Units
Active Floodplain	Low Terrace
Low-Flow Channels	OHWM Paleo Channel
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:
 Walk the channel and floodplain within the study area t vegetation present at the site. 	
2. Select a representative cross section across the channel. I	-
3. Determine a point on the cross section that is characteri	stic of one of the hydrogeomorphic floodplain units.
a) Record the floodplain unit and GPS position.	
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the
floodplain unit.	
c) Identify any indicators present at the location.	11
4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS
Mapping on aerial photograph	VEO

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -	
Cross section drawing	ng:		
	- walling Fulling		
	evosional vertin	al	
	Share	uf I' on serthern	
0			
<u>OHWM</u>			
GPS point: ODP-1			
Indicators:	rage sediment texture 🛛 Br	eak in bank slope	
		her:	
Change in veg	etation cover	her:	
Comments:			
Erosional feature capt	uring flows from Diable Road with	vertical shelf average 1-foot high	
Floodplain unit:	Low-Flow Channel	tive Floodplain 🗌 Low Terrace	
GPS point:			
Characteristics of the f	loodnlain unit:		
Average sediment text	-		
	_% Tree:% Shrub:	_% Herb:%	
Community succession	-	d (harks accuse should continue)	
		d (herbaceous, shrubs, saplings) te (herbaceous, shrubs, mature trees)	
Indicators:		· · · ·	
Mudcracks		il development rface relief	
Ripples Drift and/or de		her:	
Presence of be	ed and bank	her:	
Benches	Ot	her:	
Comments:			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?		
Y / N Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel syst		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain		
Low-Flow Channels OHWM Paleo Channel		
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.		
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.		
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.		
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.		
5. Identify the OHWM and record the indicators. Record the OHWM position via: Mapping on aerial photograph GPS		

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -	
Cross section drawi	<u>ng</u> :		
W DIPHERO e rosional impassion ditch			
<u>OHWM</u>			
GPS point: ODP-1			
	getation species Ot	eak in bank slope her: her:	
Comments: Erosional feature capturing flows from Diable Road with vertical shelf average 1-foot high			
<u>Floodplain unit</u> : GPS point:		etive Floodplain 🗌 Low Terrace	
Community succession	ure:% Tree:% Shrub: nal stage: M	_% Herb:% id (herbaceous, shrubs, saplings) te (herbaceous, shrubs, mature trees)	
Indicators: Mudcracks Ripples Drift and/or d Presence of be Benches	ebris Ot ed and bank Ot	il development rface relief her: her:	
Comments:			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?		
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel syst		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain		
Low-Flow Channels OHWM Paleo Channel		
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.		
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.		
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.		
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.		
5. Identify the OHWM and record the indicators. Record the OHWM position via: Mapping on aerial photograph GPS		

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -
Cross section drawi	<u>ng</u> :	
	LIF LF LF	y All
OHWM		
GPS point: ODP-1		
	getation species	Break in bank slope Other: Other:
Comments: Erosional feature capt	uring flows from Diable Road wit	h vertical shelf average 1-foot high
Floodplain unit:	Low-Flow Channel	Active Floodplain Low Terrace
GPS point:		
Community succession	ure:% Tree:% Shrub: al stage: N	_% Herb:% /id (herbaceous, shrubs, saplings) .ate (herbaceous, shrubs, mature trees)
Indicators: Mudcracks Ripples Drift and/or do Presence of be Benches	ebris S ed and bank C	oil development ourface relief Other: Other: Other:
Comments:		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?		
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel syst		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
<u> </u>	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain		
Low-Flow Channels OHWM Paleo Channel		
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.		
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.		
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.		
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.		
5. Identify the OHWM and record the indicators. Record the OHWM position via: Mapping on aerial photograph GPS		

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -
Cross section drawi	<u>ng</u> :	
	S esting AFP uFO	AFP N
<u>OHWM</u>		
GPS point: ODP-1		
	getation species O	reak in bank slope ther: ther:
Comments: Erosional feature capt	uring flows from Diable Road with	n vertical shelf average 1-foot high
Floodplain unit:	Low-Flow Channel	ctive Floodplain 🗌 Low Terrace
GPS point:		
Community succession	ure:% Tree:% Shrub: nal stage: N	_% Herb:% lid (herbaceous, shrubs, saplings) ate (herbaceous, shrubs, mature trees)
Indicators: Mudcracks Ripples Drift and/or d Presence of be Benches	ebrisSed and bankO	bil development urface relief ther: ther: ther:
Comments:		
1		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?		
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel syst		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain		
Low-Flow Channels OHWM Paleo Channel		
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.		
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.		
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.		
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.		
5. Identify the OHWM and record the indicators. Record the OHWM position via: Mapping on aerial photograph GPS		

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -
Cross section drawin	<u>19</u> :	
	creasely Britlebus	n 23 m
<u>OHWM</u>		
GPS point: ODP-1		
Indicators: Change in aver Change in veg Change in veg	etation species 🗌 Ot	reak in bank slope ther: ther:
Comments: Erosional feature captu	ring flows from Diable Road with	vertical shelf average 1-foot high
Floodplain unit: [GPS point:		ctive Floodplain 🗌 Low Terrace
Community succession	re:% Tree:% Shrub: al stage: M	_% Herb:% id (herbaceous, shrubs, saplings) ite (herbaceous, shrubs, mature trees)
Indicators: Mudcracks Ripples Drift and/or de Presence of be Benches	bris Diameter Diame Nature Diameter Dia	bil development urface relief ther:
Comments:		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?		
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel syst		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
<u> </u>	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain		
Low-Flow Channels OHWM Paleo Channel		
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.		
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.		
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.		
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.		
5. Identify the OHWM and record the indicators. Record the OHWM position via: Mapping on aerial photograph GPS		

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -
Cross section drawin	<u>lg</u> :	
	areasone	CREOSOR
	52	EZ
	un Summer	m2 5 m
<u>OHWM</u>		
GPS point: ODP-1		
Indicators:		
		eak in bank slope
Change in vege	tation species U Other	ner:
Comments:		
	ring flows from Diable Road with	vertical shelf average 1-foot high
Floodplain unit:	Low-Flow Channel Ac	tive Floodplain 🗌 Low Terrace
		-
GPS point:		
Characteristics of the fl	oodnlain unit:	
Average sediment textu	-	
Total veg cover:	% Tree:% Shrub:	_% Herb:%
Community successiona	-	
NA		d (herbaceous, shrubs, saplings) te (herbaceous, shrubs, mature trees)
		(herbaccous, sindos, mature rees)
Indicators:		
Muderacks		1 development
		rface relief
Drift and/or de Presence of bed	oris Uth	ner:
Benches		ner:
Comments:		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?		
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel syst		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain		
Low-Flow Channels OHWM Paleo Channel		
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:		
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.		
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.		
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.		
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.		
5. Identify the OHWM and record the indicators. Record the OHWM position via: Mapping on aerial photograph GPS		

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -
Cross section drawin	<u>lg</u> :	
	crebeate	
	2	creasats,
	2 3	S W
	< NULLAN MAL	w Sur
	2.4	
	erosional f	COTVIC
OHWM	<u> </u>	
GPS point: ODP-1		
Indicators:		
·	age sediment texture 🗌 Bro	eak in bank slope
Change in vege		her:
Change in vege		her:
Commentation		
Comments:		
Erosional feature captu	ring flows from Diable Road with	vertical shelf average 1-foot high
Floodplain unit:		
	Low-Flow Channel	tive Floodplain Low Terrace
CDS noint:		
GPS point:		
Characteristics of the flo	aadnlain unit.	
Average sediment textu	-	
	% Tree: % Shrub:	% Herb %
Community successiona		
		d (herbaceous, shrubs, saplings)
		te (herbaceous, shrubs, mature trees)
Indicators:		
Mudcracks		il development
Ripples		rface relief
Drift and/or del		her:
Presence of bed	l and bank 🗍 Otl	her:
Benches		her:
Comments:		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment	
Y / N Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel system:		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
<u> </u>	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	
Low-Flow Channels	OHWM Paleo Channel	
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:	
1. Walk the channel and floodplain within the study area t vegetation present at the site.		
2. Select a representative cross section across the channel. I	-	
3. Determine a point on the cross section that is characteri	stic of one of the hydrogeomorphic floodplain units.	
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic fl	-	
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS	

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -	
Cross section drawing	<u>ng</u> :		
	E Brithebith	CHEDEOTIC W	
<u>OHWM</u>			
GPS point: ODP-1			
	etation species	reak in bank slope ther: ther:	
Comments: Erosional feature captu	uring flows from Diable Road wit	n vertical shelf average 1-foot high	
Floodplain unit: [GPS point:		ctive Floodplain 🗌 Low Terrace	
Community succession	ure:% Tree:% Shrub: _% Tree:% Shrub: al stage: N	_% Herb:% Iid (herbaceous, shrubs, saplings) ate (herbaceous, shrubs, mature trees)	
Indicators: Mudcracks Ripples Drift and/or de Presence of be Benches	ebris S ed and bank C	oil development urface relief ther: ther: ther:	
Comments:			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment	
Y / N Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel system:		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
<u> </u>	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	
Low-Flow Channels	OHWM Paleo Channel	
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:	
1. Walk the channel and floodplain within the study area t vegetation present at the site.		
2. Select a representative cross section across the channel. I	-	
3. Determine a point on the cross section that is characteri	stic of one of the hydrogeomorphic floodplain units.	
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic fl	-	
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS	

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -
Cross section drawing		
	W L'ESSON	Buttlebush E
<u>OHWM</u>		
GPS point: ODP-1		
Indicators: Change in avera Change in veget Change in veget	tation species	reak in bank slope other: other:
Comments: Erosional feature captur	ing flows from Diable Road wit	h vertical shelf average 1-foot high
Floodplain unit: GPS point:		ctive Floodplain
Characteristics of the flo Average sediment textur Total veg cover: Community successiona NA Early (herbaceo	e:% Tree:% Shrub: l stage: N	_% Herb:% Iid (herbaceous, shrubs, saplings) ate (herbaceous, shrubs, mature trees)
Indicators: Mudcracks Ripples Drift and/or deb Presence of bed Benches	ris S and bank C	oil development urface relief other: other:
Comments:		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment	
Y / N Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel system:		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	
Low-Flow Channels	OHWM Paleo Channel	
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:	
1. Walk the channel and floodplain within the study area t vegetation present at the site.		
2. Select a representative cross section across the channel. I	-	
3. Determine a point on the cross section that is characteri	stic of one of the hydrogeomorphic floodplain units.	
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic fl	-	
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS	

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04	Time: -
Cross section drawing	ng:		
	0.00		
	W www.www.	9	
	- men une	mez	
		wallinger & 3 v	
	I UFC		
OHWM			
GPS point: ODP-1			
Indicators:			
	rage sediment texture	Break in bank slope	
	etation species	Other:	
Change in veg	etation cover	Other:	
Comments:	wing flavor frame Diable Daadw		fa a thai a b
Erosional feature capti	uring flows from Diable Road v	vith vertical shelf average 1-	root nign
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
GPS point:			
Characteristics of the fl Average sediment textu	-		
	_% Tree:% Shrub:	% Herb: %	
Community succession			
		Mid (herbaceous, shrubs, sapl	e /
Early (herbace	cous & seedlings)	Late (herbaceous, shrubs, mat	ure trees)
Indicators:			
Mudcracks		Soil development	
Ripples		Surface relief	
Drift and/or de Presence of be		Other:	
Benches		Other: Other:	
Comments:			
Comments.			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment	
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel system:		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
<u> </u>	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	
Low-Flow Channels	OHWM Paleo Channel	
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:	
1. Walk the channel and floodplain within the study area t vegetation present at the site.		
2. Select a representative cross section across the channel. I	-	
3. Determine a point on the cross section that is characteri	stic of one of the hydrogeomorphic floodplain units.	
a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic fl	-	
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS	

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04	Time: -
Cross section drawing	ng:		
	0.00		
	W www.www.	9	
	- men une	mez	
		wallinger & 3 v	
	I UFC		
OHWM			
GPS point: ODP-1			
Indicators:			
	rage sediment texture	Break in bank slope	
	etation species	Other:	
Change in veg	etation cover	Other:	
Comments:	wing flavor frame Diable Daadw		fa a thai a h
Erosional feature capti	uring flows from Diable Road v	vith vertical shelf average 1-	root nign
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
GPS point:			
Characteristics of the fl Average sediment textu	-		
	_% Tree:% Shrub:	% Herb: %	
Community succession			
		Mid (herbaceous, shrubs, sapl	e /
Early (herbace	cous & seedlings)	Late (herbaceous, shrubs, mat	ure trees)
Indicators:			
Mudcracks		Soil development	
Ripples		Surface relief	
Drift and/or de Presence of be		Other:	
Benches		Other: Other:	
Comments:			
Comments.			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment	
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel system:		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
<u> </u>	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	
Low-Flow Channels	OHWM Paleo Channel	
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a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic fl	-	
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS	

Project ID: 10589	Cross section ID: ODP	-1 Date: 2020-05-04	Time: -
Cross section drawi			
Cross	section drawing: Down Stream	portion	
E 	Actu Actu Actu Actu Actu	ATT ACHLET ACHLE LT ACHLE LT	W M
ΟΠΜΑ			
<u>OHWM</u>			
GPS point: ODP-1			
· ·			
	erage sediment texture getation species getation cover	 Break in bank slope Other: Other: 	
Comments:			
	uring flows from Diable Roa	d with vertical shelf average 1.	-foot high
			loot night
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
			Low Tellace
GPS point:			
Characteristics of the f			
Average sediment text	ure:		
	% Tree:% Shrub:	% Herb:%	
Community succession	lai stage.	Mid (herbaceous, shrubs, sap	lings)
	eous & seedlings)	Late (herbaceous, shrubs, ma	
	57		,
Indicators:			
Mudcracks		Soil development	
Ripples	1 .	Surface relief	
Drift and/or do		Other:	
Benches		Other: Other:	
Comments:			

	Low-Flow Channel	Active Floodplain Low Terrace
GPS point:		
Characteristics of th Average sediment to Total year cover:	exture: Fine sand	% Herb: _> %
Community success	ional stage: aceous & seedlings)	Mid (herbaceous, shrubs, saplings)
	accous a securings)	Late (herbaceous, shrubs, mature trees)
Indicators: Mudcracks Ripples Drift and/or Presence of Benches		Soil development Surface relief Other: Other: Other: Other:
Comments:		
Jome an		out generally sheet flow
	Low-Flow Channel	
Floodplain unit:		
Floodplain unit: GPS point: Characteristics of the Average sediment to Total veg cover:	Low-Flow Channel ne floodplain unit: exture: <u>Cobdes, pebb</u> % Tree: % S	Active Floodplain Low Terrace
Floodplain unit: GPS point: Characteristics of the Average sediment to Total veg cover: Community success NA	Low-Flow Channel ne floodplain unit: exture: <u>Cobdes, pebb</u> % Tree: % S	
Floodplain unit: GPS point: Characteristics of th Average sediment to Total veg cover: Community success NA NA Early (herb Indicators: Mudcracks Ripples Drift and/or	Low-Flow Channel	Active Floodplain Low Terrace

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Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet	
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a	
Project Number: 10589	Town: Palm Springs State: CA	
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3	
Investigator(s): B.Strittmater; E. McKinney		
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment	
Y / N Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°	
Potential anthropogenic influences on the channel system:		
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast	
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up		
Checklist of resources (if available):		
Aerial photography Stream gag	e data	
Dates: 2018 Gage numb		
Topographic maps Period of re		
	of recent effective discharges	
	s of flood frequency analysis	
<u> </u>	ecent shift-adjusted rating	
	eights for 2-, 5-, 10-, and 25-year events and the	
	ecent event exceeding a 5-year event	
Global positioning system (GPS)		
Other studies		
Hydrogeomorphic F	loodplain Units	
Active Floodplain	Low Terrace	
Low-Flow Channels	OHWM Paleo Channel	
Procedure for identifying and characterizing the flood	plain units to assist in identifying the OHWM:	
1. Walk the channel and floodplain within the study area t vegetation present at the site.		
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a) Record the floodplain unit and GPS position.		
b) Describe the sediment texture (using the Wentworth	class size) and the vegetation characteristics of the	
floodplain unit.		
c) Identify any indicators present at the location.	11. 4 4	
4. Repeat for other points in different hydrogeomorphic fl	-	
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS	

Project ID: 10589 Cross section ID: ODP-	1 Date: 2020-05-04 Time: -	
Cross section drawing:		
Creason	2	
6 53	WE3 W	
	HUMM	
a /	filmw /	
OHWM		
GPS point: ODP-1		
Indicators: Change in average sediment texture Change in vegetation species Change in vegetation cover	Break in bank slope Other: Other:	
Comments: Erosional feature capturing flows from Diable Road with vertical shelf average 1-foot high		
<u>Floodplain unit</u>: Low-Flow Channel	Active Floodplain Low Terrace	
GPS point:		
Characteristics of the floodplain unit: Average sediment texture: Total veg cover: % Tree: % Shrub: Community successional stage: NA Early (herbaceous & seedlings)	% Herb:%] Mid (herbaceous, shrubs, saplings)] Late (herbaceous, shrubs, mature trees)	
Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches Comments:	Soil development Surface relief Other: Other: Other:	

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
Investigator(s): B.Strittmater; E. McKinney	
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment
Y / N Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°
Potential anthropogenic influences on the channel syst	
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	of recent effective discharges
	s of flood frequency analysis
<u> </u>	ecent shift-adjusted rating
	eights for 2-, 5-, 10-, and 25-year events and the
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4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -	
Cross section drawing	<u>ng</u> :		
E Criteota 1 0HWM			
<u>OHWM</u>			
GPS point: ODP-1			
	rage sediment textureetation speciesetation cover	Break in bank slope Other: Other:	
Comments: Erosional feature capturing flows from Diable Road with vertical shelf average 1-foot high			
Floodplain unit:	Low-Flow Channel	Active Floodplain Low Terrace	
Community succession	ure:% Tree:% Shrub:	% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees)	
Indicators: Mudcracks Ripples Drift and/or de Presence of be Benches		Soil development Surface relief Other: Other: Other:	
Comments:	_		

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
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	of recent effective discharges
	s of flood frequency analysis
<u> </u>	ecent shift-adjusted rating
	eights for 2-, 5-, 10-, and 25-year events and the
	ecent event exceeding a 5-year event
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4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04	Time: -
<u>Cross section drawin</u>	N My Jothw	Unorther:	
<u>OHWM</u>			
GPS point: <u>ODP-1</u>			
Indicators: Change in aver Change in vege Change in vege		Break in bank slope Other: Other:	
Comments: Erosional feature capturing flows from Diable Road with vertical shelf average 1-foot high			
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
Community successiona	re:%%	% Herb:% Mid (herbaceous, shrubs, sapli Late (herbaceous, shrubs, mate	
Indicators: Mudcracks Ripples Drift and/or de Presence of bed Benches		Soil development Surface relief Other: Other: Other:	
Comments:			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
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Topographic maps Period of re	
	of recent effective discharges
	s of flood frequency analysis
<u> </u>	ecent shift-adjusted rating
	eights for 2-, 5-, 10-, and 25-year events and the
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Active Floodplain	Low Terrace
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4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04 Time: -	
Cross section drawi	ng:		
	W creasate	uneasota E	
<u>OHWM</u>			
GPS point: ODP-1			
	getation species Ot	reak in bank slope her: her:	
Comments: Erosional feature capturing flows from Diable Road with vertical shelf average 1-foot high			
		ctive Floodplain 🗌 Low Terrace	
Community succession	loodplain unit: ure:% Tree:% Shrub: al stage:M	_% Herb:% id (herbaceous, shrubs, saplings) ite (herbaceous, shrubs, mature trees)	
Indicators: Mudcracks Ripples Drift and/or de Presence of be Benches	ebris Ot ed and bank Ot	bil development urface relief her: her: her:	
Comments:			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
Investigator(s): B.Strittmater; E. McKinney	
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment
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Potential anthropogenic influences on the channel syst	
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast
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Topographic maps Period of re	
	of recent effective discharges
	s of flood frequency analysis
<u> </u>	ecent shift-adjusted rating
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Active Floodplain	Low Terrace
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4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS

Project ID: 10589 Cr	oss section ID: ODP-1	Date: 2020-05-04 Time: -	
Cross section drawing:			
U) my	when it's E	
<u>OHWM</u>			
GPS point: <u>ODP-1</u>			
Indicators: Change in average se Change in vegetation Change in vegetation	species	Break in bank slope Other: Other:	
Comments: Erosional feature capturing flows from Diable Road with vertical shelf average 1-foot high			
Floodplain unit: Low GPS point: Low <li< th=""><th>v-Flow Channel</th><th>Active Floodplain Low Terrace</th></li<>	v-Flow Channel	Active Floodplain Low Terrace	
Characteristics of the floodpla Average sediment texture: Total veg cover:% Community successional stage NA Early (herbaceous &	Tree:% Shrub: e:	% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees)	
Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and b Benches	oank	Soil development Surface relief Other: Other: Other: Other:	
Comments:			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
Investigator(s): B.Strittmater; E. McKinney	
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment
Y / N Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°
Potential anthropogenic influences on the channel syst	
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up	
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4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS

Project ID: 10589 Cross section ID: OI	DP-1 Date: 2020-05-04 Time: -
Cross section drawing:	u nsol
	cneasola E
w ma	my ung C
	All ship we with a su
r	- Ma
OHWM	
GPS point: ODP-1	
Indicators: Change in average sediment texture	Proof in bank slong
Change in vegetation species	Break in bank slope Other:
Change in vegetation cover	Other:
Comments:	
Erosional feature capturing flows from Diable Ro	oad with vertical shelf average 1-foot high
Floodplain unit: Low-Flow Channel	Active Floodplain Low Terrace
GPS point:	
Characteristics of the floodplain unit:	
Average sediment texture: Total veg cover: % Tree: %	0/10
Community successional stage:	uo:% nero:%
□ NA	Mid (herbaceous, shrubs, saplings)
Early (herbaceous & seedlings)	Late (herbaceous, shrubs, mature trees)
Indicators:	
Mudcracks Ripples	Soil development Surface relief
Drift and/or debris	Other:
Presence of bed and bank	
Comments:	Other:
Comments.	

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project	Date: 2019-05-04 Time: n/a
Project Number: 10589	Town: Palm Springs State: CA
Stream: ODP-1	Photo begin file#: PP-3 Photo end file#: PP-3
Investigator(s): B.Strittmater; E. McKinney	
Y I / N Do normal circumstances exist on the site?	Location Details: Northeast and Southeast of Diablo Road, within proposed Gen-tie alignment
$Y \square / N \blacksquare$ Is the site significantly disturbed?	Projection: Datum: Coordinates: 33.931319°, -116.580083°
Potential anthropogenic influences on the channel syst	
Diablo Road; Development and v-ditch to northwest;	Fencing to southeast
Brief site description: Erosional feature originating as runoff from constructed v-ditch to bisects a dirt road (SCE easement). Vegetation comprised of up	
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Aerial photography Stream gag	e data
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Other studies	
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Active Floodplain	Low Terrace
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c) Identify any indicators present at the location.	11. 4 4
4. Repeat for other points in different hydrogeomorphic fl	-
5. Identify the OHWM and record the indicators. Record t Mapping on aerial photograph	GPS

Project ID: 10589	Cross section ID: ODP-1	Date: 2020-05-04	Time: -
Cross section drawing	ng:		
	Was Williaman and	HNAS 1	
	0		
<u>OHWM</u>			
GPS point: ODP-1			
		Break in bank slope Other: Other:	
Comments: Erosional feature capt	uring flows from Diable Road w	ith vertical shelf average 1	-foot high
<u>Floodplain unit</u> : [GPS point:		Active Floodplain	Low Terrace
Community succession	ure:% Tree:% Shrub: al stage:	% Herb:% Mid (herbaceous, shrubs, sap Late (herbaceous, shrubs, ma	
Indicators: Mudcracks Ripples Drift and/or de Presence of be Benches	ebris	Soil development Surface relief Other: Other: Other:	
Comments:			

Arid West Ephemeral and Intermittent Streams OHWM DatasheetProject: $Dl Sert Peak$ Date: $110kl 20$ Time:Project Number: 10567 Date: $110kl 20$ Time:Stream: $0 DP - 22$ Date: $110kl 20$ Time:Investigator(s):B. Strittmatcr:A. CassadyPhoto begin file#:Photo end file#:Y $\square / N \square$ Do normal circumstances exist on the site?Location Details:Northern portion ofY $\square / N \square$ Is the site significantly disturbed?Projection:Datum:Potential anthropogenic influences on the channel system:SCE Devers Substation & North Diablo Ecold to westSCE Devers Substation & North Diablo Ecold to westMark South	
Project Number: 10552 DataStream: $0 DP - 22$ Town: Polm Springs State: UP Photo begin file#: Photo end file#:Investigator(s): B. Stuffmater: A. CassadyY \boxtimes / N \square Do normal circumstances exist on the site?Location Details: Northern Portion of $UQ: Stuff of Devers SubStateY \square / N \boxtimes Is the site significantly disturbed?Datum:Coordinates: 33,932-479, -114,57945$	
Stream: $0 \ DQ = 122$ Photo begin file#:Photo end me#.Investigator(s):B. Stattmatcr:A. (assadyY \square / N Do normal circumstances exist on the site?Location Details:Northern portion of $Devers SubStatY \square / NIs the site significantly disturbed?Projection:Datum:Coordinates: 33,932-479, -114,57945$	
Investigator(s):B. Striftmater:A. lassadyY \square / N \square Do normal circumstances exist on the site?Location Details:Northern portion of $\square \square \square \square \square \square \square \square$ Y \square / N \square Is the site significantly disturbed?Projection:Datum: Coordinates: 33.932-479, -114.57945	
Y \square / N \square Do normal circumstances exist on the site?Location Details. Not view SubStateY \square / N \blacksquare Is the site significantly disturbed?Projection:Datum:Coordinates: 33.932-479, -110, 5-7945	168 4 31 2
$Y \square / N \boxtimes$ Is the site significantly disturbed? Projection: Datum: Coordinates: 33.932479 , -116.57945	tion
Potential anthropogenic influences on the channel system:	
	,
SCE Devers Substation to North 1 David Curry of	
mellissa in to East, Barb-wire functing to south	
Brief site description:	
Ephenneral channel, single - thread upstream w/ flows	
dispersing a cross active Ploodplain to south	
Checklist of resources (if available):	
Aerial photography Stream gage data	
Dates: Gage number: Topographic maps Period of record:	
Topographic maps Period of record: Geologic maps History of recent effective discharges	
Vegetation maps Results of flood frequency analysis	
Soils maps Most recent shift-adjusted rating	
Rainfall/precipitation maps Gage heights for 2-, 5-, 10-, and 25-year events and t	he
Existing delineation(s) for site most recent event exceeding a 5-year event	
Global positioning system (GPS)	
Other studies	
Hydrogeomorphic Floodplain Units	
Active Floodplain , Low Terrace ,	
Low-Flow Channels OHWM Paleo Channel	
Procedure for identifying and characterizing the floodplain units to assist in identifying the OHW	M:
1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.	ł
2 Select a representative cross section across the channel. Draw the cross section and label the floodplain	units
The proving a point on the cross section that is characteristic of one of the hydrogeomorphic flood at the	unite
a) Record the floodplain unit and GPS position.	
b) Describe the sediment texture (using the wentworth class size) and the vegetation characteristics of	fthe
a delain unit	
A domtify any indicators present at the location.	
Consther points in different inverogeoinorphic floodplain units across the	
i - the the OH will and record the materiors. Record the OH will position via	
Mapping on actian photograph	
Digitized on computer Other:	

Inch	es (in)			Mil	limeters (m	m)	Wentworth size class
	10.08	_	_	-	256	_	Boulder
	2.56	-	_	-	64	-	Cobble
	0.157	-	-	-	4	_	Granule
	0.079	+		_	2.00	_	
	0.039	-	-	-	1.00	-	Very coarse sand Coarse sand
	0.020	-	_	_	0.50	_	p
1/2	0.0098	_	_	_	0.25	_	
1/4	0.005	-	-	-	0.125	_	Fine sand
1/8 -	0.0025	-			0.0625		Very fine sand
1/16	0.0012	_	-	-	0.031	-	Coarse silt
1/32	0.00061	-	-	-	0.0156	-	Medium silt
1/64	0.00031	-	-	-	0.0078	-	Fine silt
1/128 -	0.00015	5-	_	_	0.0039		
							Clay M

Wentworth Size Classes

oss section drawing:	ID: 00P-22 Date: 11/12 20 Time:
E sury	my puz w
VERTICE 1 OHW	I mu
HWM	
PS point: 77	
dicators:	
Change in average sediment textur Change in vegetation species Change in vegetation cover	e X Break in bank slope Other: Other:
unvegetated ephemi	eval channel
loodplain unit : 🔀 Low-Flow Chann	el 🗌 Active Floodplain 🗌 Low Terrace
	el 🗌 Active Floodplain 🗌 Low Terrace
Ioodplain unit: Iow-Flow Chann Characteristics of the floodplain unit: Average sediment texture: Coorse Total veg cover: 1 Verage: % Total veg cover: 1 NA NA X Early (herbaceous & seedlings)	-
Characteristics of the floodplain unit: Average sediment texture: <u>Coorse</u> Total veg cover: <u>21</u> % Tree: <u>%</u> % Community successional stage:	5 Shrub: 4 % Herb: 4 %
Characteristics of the floodplain unit: Average sediment texture: Coarse Total veg cover: 24 % Tree: Community successional stage: NA X Early (herbaceous & seedlings) ndicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	 Shrub: <u>4</u>% Herb: <u>4</u>% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief Other: <u>Sed deposition</u> Other: <u></u>
Characteristics of the floodplain unit: Average sediment texture: Coorse Total veg cover: 24 % Tree: Community successional stage: NA X Early (herbaceous & seedlings) ndicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	 Shrub: <u>4</u>% Herb: <u>4</u>% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief Other: <u>Sed deposition</u> Other: <u></u> Other: <u></u>

and the second second

roject ID:	Cross section ID:	Date:	Time:
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
GPS point:			
Characteristics of the	floodplain unit:		
Average sediment tex	sture:	rub:% Herb:%	
Total veg cover:	% Tree:% Sh	rub:% Herb:%	
Community successiv	anal stage:		
	ceous & seedlings)	Mid (herbaceous, shrub Late (herbaceous, shrub	
			,
Indicators:			
Ripples		Soil development	
Drift and/or		Other:	*.
	bed and bank	Other:	
Benches		Other:	
Comments:			
	· · · · · · · · · · · · · · · · · · ·		
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
GPS point:			
Characteristics of the	e floodplain unit:		
	xture:% Tree:% Sh	rub: % Herb: %	
Total veg cover: Community successi	% Tree% Shi		
NA		Mid (herbaceous, shrubs,	saplings)
Early (herba	aceous & seedlings)	Late (herbaceous, shrubs	, mature trees)
Indicators:			
Mudcracks		Soil development	
Ripples	dahris	Surface relief	
Drift and/or	bed and bank	Other: Other: Other:	
Benches		Other:	
Comments:			
			1
nan a ann agus an ann an ann ann ann ann ann ann ann			

Arid West Ephemeral and Intermit	tent Streams OHWM Datasheet
Project: Desert Peak Energy Project Number: Stream: OPP - 2.3 Investigator(s): B. Striftmater, A. (ass	Date: 111 C Springs State: OP Town: Polm Springs State: OP Photo begin file#: Photo end file#: adu
$Y \square / N \square$ Do normal circumstances exist on the site? $Y \square / N \square$ Is the site significantly disturbed?	Location Details: Not real Station Mai South & Substation Projection: Datum: Coordinates: 33.932336, -116.574926
Potential anthropogenic influences on the channel syst Dever's Substation, ourt road thansmisson whe Brief site description: uphemeral channel that i win dut road	is associated w/SCE
Image: Second give maps Image: Result Image: Vegetation maps Image: Result Image: Soils maps Image: Most Image: Soils maps Image: Gage	iber:
Hydrogeomorphic	Floodplain Units
Active Floodplain	OHWM Paleo Channel
the floor and the floor of the state of the	a to get an impression of the geomorphology and d. Draw the cross section and label the floodplain units. eristic of one of the hydrogeomorphic floodplain units. th class size) and the vegetation characteristics of the

S	Wentworth size clas	m)	neters (m	Milli			s (in)	Inche
-	Boulder		256	_	·	_	10.08	
Gravel	Cobble		64	_	_	_	2.56	
0	Pebble		4	-	_	_	0.157	
-	Granule		2.00	_	-	-	0.079	
	Very coarse sand		1.00	-	_	-	0.039	
Sand	Coarse sand		0.50	_	_	-	0.020	
Ű	Medium sand		0.25	-	_	-	0.0098	1/2
	Fine sand Very fine sand		0.125	-	-	-	0.005	1/4
	Coarse silt		0.0625	-	-	-	0.0025	1/8 —
	Medium silt		0.031	-	-	-	0.0012	1/16
Silt			0.0156	-	-	-	0.00061	1/32
	Very fine silt		0.0078	-	-	-	0.00031	1/64
Mud	Clay		0.0039	-		;	0.00015	1/128 —

Wentworth Size Classes

Poss	Cross section ID: C	DP-23 Da	te: 11 010 20 Time:
ross section drav	wing:		
		LAKTLI	
W	my	. 1.	0
	mel		- 8
	1'	5	
) other	1	
ОНWМ			
GPS point: ODP	- 2		
Indicators:			
Change in a	average sediment texture	Break in ban	k slope
Change in v	vegetation species	Other:	
Change in V	vegetation cover	Other:	
Comments:			
	Land Land		a l
unvege	ctaxed epheme	rai chun	
0			
Floodplain unit:	Low-Flow Channel	Active Flood	plain 🗌 Low Terrace
		Active Flood	plain 🗌 Low Terrace
GPS point:	- 2	Active Flood	plain 🗌 Low Terrace
GPS point:	<u>-2</u>		
GPS point:	<u>-2</u>		
GPS point: Characteristics of the Average sediment to Total veg cover: Community success	ne floodplain unit: exture: <u>Coarse San</u> % Tree: <u>%</u> Shu	d ub:Ø_% Hert	p: ∠1_%
GPS point: Characteristics of the Average sediment to Total veg cover: Community success	refloodplain unit: exture: <u>Coarse San</u> % Tree: <u>Ø</u> % Shu sional stage:	d ub:Ø_% Hert □ Mid (herbace	$\sim \frac{2}{9}$
GPS point: Characteristics of the Average sediment to Total veg cover: Community success	ne floodplain unit: exture: <u>Coarse San</u> % Tree: <u>%</u> Shu	d ub:Ø_% Hert □ Mid (herbace	
GPS point: Characteristics of the Average sediment to Total veg cover: Community success M NA Early (herb Indicators:	r 2 ne floodplain unit: exture: <u>Coarse San</u> % Tree: <u>Ø</u> % Shu sional stage: baceous & seedlings)	d ub:Ø_% Hert □ Mid (herbace	$\sim \frac{2}{9}$
GPS point: Characteristics of the Average sediment to Total veg cover: Community success MA NA NA Early (herb Indicators: Mudcracks	r 2 ne floodplain unit: exture: <u>Coarse San</u> % Tree: <u>Ø</u> % Shu sional stage: baceous & seedlings)	d ub:% Hert Mid (herbace Late (herbace Soil develop	b: <u>2</u> % cous, shrubs, saplings) cous, shrubs, mature trees)
GPS point: Characteristics of the Average sediment to Total veg cover: Community success NA NA Early (herb Indicators: Mudcracks Ripples	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops N Surface relie	b: <u>2</u> / <u>%</u> cous, shrubs, saplings) cous, shrubs, mature trees) ment
GPS point: Characteristics of the Average sediment to Total veg cover: Community success A NA B Early (herb Indicators: A Mudcracks B Ripples Drift and/o	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops N Surface relie	b: <u>2</u> / <u>%</u> cous, shrubs, saplings) cous, shrubs, mature trees) ment
GPS point: Characteristics of the Average sediment to Total veg cover: Community success A NA B Early (herb Indicators: A Mudcracks A Ripples Drift and/o	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops Surface relie Other: Other:	b: $\angle l_{\%}$ cous, shrubs, saplings) cous, shrubs, mature trees) ment f diment dep.
GPS point: Characteristics of the Average sediment to Total veg cover: Community success NA Early (herb Indicators: Mudcracks Drift and/o Presence o Benches	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops N Surface relie	b: $\angle l_{\%}$ cous, shrubs, saplings) cous, shrubs, mature trees) ment f diment dep.
GPS point: Characteristics of the Average sediment to Total veg cover: Community success A NA Bearly (herb Indicators: A Mudcracks B Drift and/o A Presence o	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops Surface relie Other: Other:	b: $\angle l_{\%}$ cous, shrubs, saplings) cous, shrubs, mature trees) ment f diment dep.
GPS point: Characteristics of the Average sediment to Total veg cover: Community success NA NA Early (herb Indicators: Mudcracks Ripples Drift and/o Presence o Benches	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops Surface relie Other: Other:	b: $\angle l_{\%}$ cous, shrubs, saplings) cous, shrubs, mature trees) ment f diment dep.
GPS point: Characteristics of the Average sediment to Total veg cover: Community success NA NA Early (herb Indicators: Mudcracks Ripples Drift and/o Presence o Benches	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops Surface relie Other: Other:	b: $\angle l_{\%}$ cous, shrubs, saplings) cous, shrubs, mature trees) ment f <u>diment</u> dep.
GPS point: Characteristics of the Average sediment to Total veg cover: Community success NA Early (herb Indicators: Mudcracks Drift and/o Presence o Benches	Production unit: exture: <u>Coarse Source</u> 	d ub:% Hert Mid (herbace Late (herbace Soil develops Surface relie Other: Other:	b: $\angle l_{\%}$ cous, shrubs, saplings) cous, shrubs, mature trees) ment f <u>diment</u> dep.

roject ID: Cross section ID:	Date: Time:
	Low Terrace
Low-Flow Channel	Active Ploodplan
GPS point:	
Characteristics of the floodplain unit:	
Average sediment texture: Total veg cover:% Tree:% Shr	when % Herb: %
Community successional stage:	
	Mid (herbaceous, shrubs, saplings)
Early (herbaceous & seedlings)	Late (herbaceous, shrubs, mature trees)
Indiantana /	
Indicators:	Soil development
Ripples	Surface relief
Drift and/or debris	Other:
Presence of bed and bank	Other:
Benches	Other:
Comments:	
(
Floodplain unit: Low-Flow Channel	Active Floodplain Low Terrace
	E Eow centace
GPS point:	
Characteristics of the floodplain unit:	
Average sediment texture: Total veg cover:% Tree:% Shr	rub:% Herb:%
Community successional stage:	Mid therbacons 1
Early (herbaceous & seedlings)	 Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees)
	(industrial sin dos, mature trees)
Indicators:	D Soll days
Mudcracks Ripples	Soil development
Drift and/or debris	Other:
Presence of bed and bank	Other: Other: Other:
Benches	Other:
Comments:	
	•

Arid West Ephemeral and Intermit	tont Streams OHWM Datasheet
Project: Descrit Deax Project Number: 10589 Stream: ODP-24	Date: 11/06/20 Time. Town: palm Springs State: CA Photo end file#:
investigator(s): B. Strittmatar, A. Cassa	idy an anotion of revie
$\sqrt{N \square}$ Do normal circumstances exist on the site?	Southeast of Devers Substar ion
$I \square / N \square$ Is the site significantly disturbed?	Projection: 73932219 -116.571421
Potential anthropogenic influences on the channel syst CPV sertinel Palm Springs Solar ene Dirt voods	ungy development to hor in
Ephenneral invegetated channe	4
Vegetation maps Result Soils maps Most r Rainfall/precipitation maps Gage h	ber:
Hydrogeomorphic F	Floodplain Units
Active Floodplain	Low Terrace
Low-Flow Channels	OHWM Paleo Channel
 Procedure for identifying and characterizing the flood Walk the channel and floodplain within the study area vegetation present at the site. Select a representative cross section across the channel. Determine a point on the cross section that is character a) Record the floodplain unit and GPS position. b) Describe the sediment texture (using the Wentworth floodplain unit. c) Identify any indicators present at the location. Repeat for other points in different hydrogeomorphic floodplain unit. Identify the OHWM and record the indicators. Record the indicators. 	to get an impression of the geomorphology and Draw the cross section and label the floodplain units. istic of one of the hydrogeomorphic floodplain units. class size) and the vegetation characteristics of the loodplain units across the cross section.
Digitized on computer	GPS Other:

Inche	es (in)			Mil	limeters (m	m)		Wentworth size c	lass
	10.08	-	_	-	256	_	-	Boulder	- 14
	2.56	-	-	-	64	-	+	Pebble	Gravel
	0.157	-	-	-	4	-	+	Granule	-
	0.079	+		-	2.00	-	+	Very coarse sand	
	0.039	-	-	-	1.00	-	+	Coarse sand	-
	0.020	-	-	-	0.50	-	+	Medium sand	Sand
1/2	8000.0	-	-	-	0.25	-	+	Fine sand	- 0
1/4	0.005	-	-	-	0.125	-	+	Very fine sand	-
1/8 —	0.0025	-		-	0.0625		+	Coarse silt	
1/16	0.0012	-	-	-	0.031	-	+	Medium silt	-
1/32	0.00061	-	-	-	0.0156	-	+	Fine silt	- #5
1/64	0.00031	-	-	-	0.0078	-	+	Very fine silt	-
1/128 —	0.00015	;		-	0.0039	-		Clay	Mud

Wentworth Size Classes

	OPP-24 Date: 11 local 20 Time:
	repsote
E Ny	ving W
- to	
1 other	Ĩ
HWM	
PS point: OPP-24	
dicators: Change in average sediment texture	Break in bank slope
Change in vegetation species	Other:
Change in vegetation cover	Other:
comments:	
Floodplain unit: 🛛 Low-Flow Channel	Active Floodplain Low Terrace
GPS point: DDP-24	
and a late multi	
Characteristics of the floodplain unit:	
Characteristics of the floodplain unit: Average sediment texture:	Shrub: 1 % Harbi ()
Total veg cover: 6 % Tree: 6%	Shrub: $f_{\%}$ Herb: $$
Total veg cover:% Tree:% S Community successional stage:	Shrub: $// %$ Herb: $$
Total veg cover: 6 % Tree: 6%	Shrub: $\cancel{9}$ % Herb: $\cancel{<1}$ % \square Mid (herbaceous, shrubs, saplings)
Total veg cover:% Tree:% Community successional stage: NA Kearly (herbaceous & seedlings)	Shrub: $// %$ Herb: $$
Total veg cover:% Tree:% S Community successional stage: NA Early (herbaceous & seedlings)	Shrub:
Total veg cover:% Tree:% S Community successional stage: NA Early (herbaceous & seedlings) Indicators: Mudcracks Rinples	 Shrub:
Total veg cover:% Tree:% S Community successional stage: NA KEarly (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris	Shrub:
Total veg cover:% Tree:% S Community successional stage: NA KEarly (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank	Shrub:
Total veg cover:% Tree:% S Community successional stage: NA KEarly (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris	 Shrub:
Total veg cover:% Tree:% S Community successional stage: NA KEarly (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	Shrub:
Total veg cover:% Tree:% S Community successional stage: NA KEarly (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank	Shrub:
Total veg cover:% Tree:% S Community successional stage: NA KEarly (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	Shrub:
Total veg cover:% Tree:% S Community successional stage: NA KEarly (herbaceous & seedlings) Indicators: Mudcracks Ripples Drift and/or debris Presence of bed and bank Benches	Shrub:

	Date:	Time:
roject ID: Cross section	ID:	Low Terrace
Cloodplain unit: Low-Flow Chan	nel 🗌 Active Floouplant	
PS point:		/
GPS point:		
Characteristics of the floodplain unit:		
Average sediment texture:	0%	
Average sediment texture: Total veg cover:% Tree:%	% Shrub:% Herb:%	
Community successional stage:	The state should shrubs	saplings)
	Late (herbaceous, shrubs,	mature trees)
Early (herbaceous & seedlings)		
Indicators:		
Mudcracks	Soil development	
Ripples	Surface relief	
Drift and/or debris	Other:	
Presence of bed and bank	Other:	
Benches	Other:	
Comments:	/	
	nnel Active Floodplain	Low Terrace
Floodplain unit: Low-Flow Char	Active Ploodplain	
GPS point:		
	_/	
Characteristics of the floodplain unit:	/	
Average sediment texture: Total veg cover:% Tree:	% Shrub: % Usets of	
Total veg cover:% Ifee:	76 Shiuo76 Herb:%	
Community successional stage:	Mid (herbaceous, shrubs,	conlines)
Early (herbaceous & seedlings)	Late (herbaceous, shrubs,	mature trees)
		, mature uces)
Indicators:		
Mudcracks	Soil development	
Ripples	Surface relief	
 Drift and/or debris Presence of bed and bank 	Other:	
Benches		
_ /	Other:	Ann and a stand
Comments:		
/		

Project: Desert Peak	Date: 11 Del 20 Time:
Project Number: 10589	Town: Palus prings State: A Photo begin file#: Photo end file#:
Stream: OPP-25	Photo begin file#: 1 note the
Investigator(s): B. Stattmater; A Cassade	Location Details: South of SCE Devers
$Y_{N} / N \square$ Do normal circumstances exist on the site	
Y / N K Is the site significantly disturbed?	Projection: Datum: Coordinates: 33,93,2396 ; -116,578,299
Potential anthropogenic influences on the channels SCE DEVENS SUBSTATION TO WISCE TRANSMISSON LINE	system: North, dirt roads associated
	plain however, sce Devers 2, substantially altered florals and the topographic pom
Checklist of resources (if available): Aerial photography Stream Dates: Gage n Topographic maps Period Geologic maps His Vegetation maps Re Soils maps Mod Rainfall/precipitation maps Gaa	gage data umber: of record: story of recent effective discharges sults of flood frequency analysis ost recent shift-adjusted rating ge heights for 2-, 5-, 10-, and 25-year events and the ost recent event exceeding a 5-year event
	hic Floodplain Units
Active Floodp	DHWM Paleo Channel
Broadure for identifying and characterizing the f	loodplain units to assist in identifying the OHWM:
1. Walk the channel and floodplain within the study a vegetation present at the site.	nel Draw the cross service
3. Determine a point on unit and GPS position.	nel. Draw the cross section and label the floodplain units. acteristic of one of the hydrogeomorphic floodplain units. Forth class size) and the vegetation characteristics of the
4. Repeat for other points in an and the indicators Da	and the Other across the cross section
5 Identify the OHWM and record the multators. Rec	ord the OHWM position via
4. Repeat for other PWM and record the indicators. Rec 5. Identify the OHWM and record the indicators. Rec Mapping on aerial photograph Digitized on computer	GPS Other:

Inche	Inches (in)			Millimeters (n			Wentworth size class
	10.08	-	_	-	256	_	Boulder
	2.56	-	-	-	64	-	Cobble
	0.157	-	-	-	4	-	Granule
	0.079 -	+	-	-	2.00		Very coarse sand
	0.039	-	-	-	1.00	-	Coarse sand
	0.020	-	-	-	0.50	-	Medium sand
1/2	0.0098	-	-	-	0.25	-	Fine sand
1/4	0.005	-	-	-	0.125	-	Very fine sand
1/8 —	0.0025				0.0625		Coarse silt
1/16	0.0012	-	-	-	0.031	-	Medium silt ±
1/32	0.00061		-	-	0.0156		Fine silt
1/64	0.00031		-	-	0.0078		Very fine silt
1/128 —	0.00015				0.0039		Clay

Wentworth Size Classes

ross section drawing:	ODP-25 Date: 11/04/20 Time:
Creasote	
W My	* My E
DHWM	
SPS point: ODP-25	
ndicators:	
Change in average sediment texture	Break in bank slope
 Change in vegetation species Change in vegetation cover 	Other:
Comments:	manor to la manipition
NO CLEAR OHWM. Area	appears to be recours
come shoetflours still a	associated w/ natural
toore	Mada, of the site.
	associated w/ natural prophy of the site.
Floodplain unit: Low-Flow Channel	Active Floodplain Low Terrace
Floodplain unit: Low-Flow Channel	
Floodplain unit: Low-Flow Channel GPS point:	
Floodplain unit: Low-Flow Channel GPS point: Characteristics of the floodplain unit:	
Floodplain unit: Low-Flow Channel GPS point: Characteristics of the floodplain unit: Average sediment texture: Total veg cover: % Tree: % Street 	
Floodplain unit: Low-Flow Channel GPS point: Characteristics of the floodplain unit: Average sediment texture: Total veg cover: % Tree: % Scommunity successional stage: 	Active Floodplain Low Terrace
Floodplain unit: Low-Flow Channel GPS point:	Active Floodplain Low Terrace
Floodplain unit: Low-Flow Channel GPS point:	Active Floodplain Low Terrace
Floodplain unit: Low-Flow Channel GPS point:	Active Floodplain Low Terrace
Floodplain unit: Low-Flow Channel GPS point:	 Active Floodplain Low Terrace Shrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief
Floodplain unit: Low-Flow Channel GPS point:	 Active Floodplain Low Terrace Shrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief
Floodplain unit: Low-Flow Channel GPS point:	 Active Floodplain Low Terrace Shrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief
Floodplain unit: Low-Flow Channel GPS point:	 □ Active Floodplain □ Low Terrace Shrub:% Herb:% □ Mid (herbaceous, shrubs, saplings) □ Late (herbaceous, shrubs, mature trees) □ Soil development
Floodplain unit: Low-Flow Channel GPS point:	 Active Floodplain Low Terrace Shrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief
Floodplain unit: Low-Flow Channel GPS point:	 Active Floodplain Low Terrace Shrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief
Floodplain unit: Low-Flow Channel GPS point:	 Active Floodplain Low Terrace Shrub:% Herb:% Mid (herbaceous, shrubs, saplings) Late (herbaceous, shrubs, mature trees) Soil development Surface relief

oject ID:	Cross section ID:	Date:	Time:
oodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
PS point:			
Characteristics of th	e floodplain unit:		
Average sediment te	exture:% Tree:% Shi	wh: % Herb:	%
Total veg cover:	% Tree:% Sill	uo/o	
Community success	ional stage.	Mid (herbaceous, shr	ubs, saplings)
	aceous & seedlings)	Late (herbaceous, shr	ubs, mature trees,
		/	
Indicators:		Soil development	
Mudcracks		Surface relief	
Ripples Drift and/o	r debris	Other:	
	f bed and bank	Other:	
Benches		Other:	
Comments:			
Comments.		/	
	,	/	
Floodplain unit:	Low-Flow Channel	Active Floodplain	Low Terrace
GPS point:			
Characteristics of th	he floodplain unit:		
Average sediment t			
Total veg cover:	% Tree:/ % SI	hrub:% Herb:	_%
Community success	sional stage:	_	
🗆 NA		Mid (herbaceous, sl	
Early (her	baceous & seedlings)	Late (herbaceous, s	hrubs, mature trees)
Indicators:			
Muderack	s /	Soil development	
Ripples	/	Surface relief	
Drift and/	or debris	Other:	
Presence	of bed and bank	Other:	
□ Benches		Other:	and the second
Comments:			
1			

Attachment C

Episodic Stream Indicator Data Sheets

Epis	odic Stream Indica	itor Data Sheet	page 1 of 4
Site ID: Desert Peak Energy Project	Stream ID: Mesa D	Data Station 1 (MSD-1)	Date: 05/04/20
Nearest Town: Palm Springs		County: Riverside	
Investigators: Britney Strittmater; Eri	n McKinney		
	В	ase Map	
Aerial Photo #: Date:		c Map Name:	Date:
		PS Data	
GPS Name: Datum:	Transect El		PS Error: ± ft / m
GPS co-ords start of transect:		GPS co-ords end of transect:	
Geomorphic Province (✓one)	Mojave X	Sonoran/Colorado Great Basin	Other:
	Landform	(✓ all that apply)	
Headwater Upper fan	Middle fan	Lower fan X Alluvial plain Ax	kial valley Playa
	Channe	l Form (✓ one)	
Single thread × Braided	Compound	Distributary Discontinuous	Other:
	Transect	was selected to:	
x Document fluvial activity & bou	ndaries	Document channel elevations & bo	oundaries
Document habitat associations		Document a change in watercours	e morphology
Other:			
Date of most recent runoff event (if known):		
Date of most recent runon event (II KHOWH).		
southeast through the southwestern po Summary Site Description and Co	rtion of the Review Area ross-section Sketch: (s), banks, islands, int	View across the channel from watercou erfluves, floodplains, terraces, and uplan	urse-edge to
Left	Junz	34 Ethere	Right
1-A	FP 14FCI	- APP-1	

Note presence or absence of each indicator within a <u>minimum</u> distance of 50 feet upstream and 50 feet downstream of the representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (–) for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.									
			UPLAND						
Те	Terrestrial Indicators Substrate Particle Size								
	Av soil horizon	Estimated percentages							
	Biotic soil crusts		Rock fractured in place		% Bedrock / Cemented substr				
Х	Bioturbation		Rock varnish		% Boulder	≥ 256 mm			
	Caliche: coatings / layers / rubble		Rock weathering	X	% Cobble	≥ 64 – 256mm			
	Carbonate etching		Rubified rock undersides	Х	% Pebble	≥ 4 – 64 mm			
	Coppice dunes: active / relict		Soil development	Х	% Granule	≥ 2 – 4 mm			
Х	Deflated surface		Surface rounding of landform	Х	% Sand	≤ 2 mm			
	Pavement		Woody debris in place		% Silt/Clay	Fines			
	Other:					1			
Fl	uvial Indicators								
	Bars: sand / gravel		Mud: cracks / curls / drapes		Sediment tails: s	sand / gravel			
	Cut banks		Organic drift		Vegetation-channel alignment				
	Drainage swales		Overturned rocks		Water-cut benches				
	Exposed roots		Scour		Wrack				
	First-order streams		Sediment ramps: sand / gravel		Wrinkle marks				
	Flow lineations		Sediment sorting						
	Other: N/A								
			Vegetation						
	stimated % total vegetative cover erennial & shrub species combined):	(if	ominant and co-dominant species known) and % of total vegetative over of each:		epresentative height and width of ominant and co-dominant species:				
	Upland ~8%		Larrea tridentat: ~5% Ambrosia dumosa: ~2% Encelia farinosa ~1%		~1'-6' tall ~1'-5' width				
	fferences in total shrub/perennial densit atercourse complex? (describe and qua			en u	pland & fluvially ac	tive units or			
	Shrubs and annual grasses in uplands.	Her	bs and sandy bottoms in watercourse cor	nple	x				
wa In	Are there plant species that are present in (or absent from) the uplands when compared to fluvially active units or the watercourse complex? (describe differences): In watercourse complex shrubs are absent in LFC and there is a higher cover of herbaceous (annual and perennial speices) in AFP as compared to adjacent uplands								
	e there plant species that are more abu its or the watercourse complex? (descr			whe	n compared to the	fluvially active			
	More grasses present in adjacent uplands watercourse complex.	s as	compared to watercourse complex. High	ner d	iversity of annuals/pe	erennials in the			
MF	MESA: October 2014 5-6								

Stream ID: Mesa Data Station 1 (MSD-1)

Site ID: Desert Peak Energy Project

page 2 of 4

Site ID: Desert Peak Energy Project Stream ID: Mesa Data Station 1 (MSD-1) page 3 of 4							
Note presence or absence of each indicator within a <u>minimum</u> distance of 50 feet upstream and 50 feet downstream of a representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (–) for those not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.							
		COURSE or WATERCOURSE COMP	ĽΕ	X Substrate Pai	rtiala Siza		
Transportation, Deposition & Flow Tra X Bar forms: sand / gravel	ans	Secondary channels					
X Bar forms: sand / gravel Secondary channels Estimated percentages X Bifurcated flow Sediment plastering % Bedrock / Cemented substrate							
Drainage swales		Sediment ramps: sand / gravel		% Boulder	≥ 256 mm		
X Flow lineations		Sediment sheets: sand / gravel	Х	% Cobble	≥ 64 – 256 mm		
Imbricated gravel	Х	Sediment sorting	X	% Pebble	$\geq 4 - 64 \text{ mm}$		
	~	Sediment tails: sand / gravel	X	% Granule	≥ 2 – 4 mm		
X Levee ridges: sand / gravel Mud: cracks / curls / drapes		Vegetation-channel alignments	X		≤ 2 mm		
Organic drift		Wrack	X		Fines		
Overturned rocks		Wrinkle marks	~		1 11163		
Out-of-channel flow: Lateral flow	odn						
Ripples	-						
Other:							
Erosion Indicators							
X Cut banks		Rills	X	Water-cut benches	S		
Exposed roots	Х	Scour		Water level mark			
Headcuts		Secondary channels					
Other:							
		Vegetation	-				
Estimated % total vegetative cover		Dominant and co-dominant species		epresentative heigh			
(perennial & shrub species combined):	1 1	if known) and % of total vegetative	dc	ominant and co-dom	ninant species:		
AFP: ~13%		over of each: Larrea tridentata: ~3%		AFP: ~0.5-2' tal	I		
LFC: <1%		Bebbia juncea: ~5%		LFC: <0.5'			
		Ambrosia salsola: ~5%					
Differences in total shrub/perennial density (total #shrubs/perennial plants) between the low-flow channel(s) and the adjacent floodplain? (describe and qualify the differences):							
Annual herbs <1% in LFC and shurbs with	Annual herbs <1% in LFC and shurbs within AFP ~5-8%						
Are there plant species that are present in (or absent from) the low-flow channel(s) when compared to the adjacent floodplain? (describe differences):							
Shrubs are absent in LFC. Lower cover o	of he	erbaceous (annual and perennial speices)	in A	FP as compared to a	djacent uplands		
Are there plant species that are more abu (describe and qualify differences)	und	ant (or less abundant) on the low-flow	cha	annel(s) and the adj	jacent floodplain?		
More grasses present in adjacent uplands as compared to AFP. Higer diversity of annuals/perennials in the herbaceous layer in AFP.							

Site ID			Stream ID		page 4 of 4
1	DICATORS of PONDING	G & EVAPORAT	ION and EOLIAN TRAN	SPORT & D	EPOSITION
Algal crusts		Sand-filled c	hannels		
Beach ridges		Springs			
Coppice dune	es: active / relict	Substrate st	aining		
	onate / salt / soda	Vegetation-I	andscape alignments		
	s / curls / polygons				
Other:					
		Additional Di	agrams and Notes		
summarized in t	he vegetation subsections	s under "Upland"	and "Watercourse Com	plex".	
		Pho	tographs		
Photograp	hs should document the re	epresentative la	tographs ndscape units, vegetatio ative stream indicators.	n, and the pre	esence or absence of
Photo ID #	Descripti	epresentative la representa	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18	Descripti Downstream - LFC and	epresentative la representa	ndscape units, vegetatio	GPS loca	
Photo ID # PP-18 PP-19	Descripti Downstream - LFC and Downstream - LFC	epresentative la representa ion AFP	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F	epresentative la representa ion AFP	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream	epresentative la representa ion AFP	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP	epresentative la representa ion AFP Review Area	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and	epresentative la representa ion AFP Review Area	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A	epresentative la representa ion AFP Review Area	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP	epresentative la representa ion AFP Review Area	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of	epresentative la representa ion AFP Review Area	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - LFC	epresentative la representa ion AFP Review Area	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and A Downstream - LFC and A Downstream - AFP Cross-section view of Downstream - LFC Upstream - AFP	epresentative la representa ion AFP Review Area	ndscape units, vegetatio ative stream indicators.	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - LFC Upstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29 PP-30	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Upstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29 PP-30 PP-31	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Downstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29 PP-30 PP-31 PP-32	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Upstream - AFP Downstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29 PP-30 PP-31 PP-32	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Upstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29 PP-30 PP-31 PP-32	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Upstream - AFP Downstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29 PP-30 PP-31 PP-32	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Upstream - AFP Downstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
Photo ID # PP-18 PP-19 PP-20 PP-21 PP-22 PP-23 PP-24 PP-25 PP-26 PP-27 PP-28 PP-29 PP-30 PP-31 PP-32	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Upstream - AFP Downstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	
	Descripti Downstream - LFC and Downstream - LFC Upstream - outside of F Downstream Downstream - AFP Downstream - LFC and Upstream - LFC and A Downstream - AFP Cross-section view of Downstream - AFP Upstream - AFP Downstream - AFP Downstream - AFP	epresentative la representa ion AFP Review Area	Attachment D for P	GPS loca	

Epis	odic Stream Indica	itor Data Sheet	page 1 of 4				
Site ID: Desert Peak Energy Project	Stream ID: Mesa D	Pata Station 2 (MSD-2)	Date: 05/04/20				
Nearest Town: Palm Springs		County: Riverside					
Investigators: Britney Strittmater; Er	in McKinney						
Base Map							
Aerial Photo #: Date:		c Map_Name:	Date:				
		PS Data					
GPS Name: Datum:	Transect El		PS Error: ± ft / m				
GPS co-ords start of transect:		GPS co-ords end of transect:					
Geomorphic Province (✓one)	Mojave X	Sonoran/Colorado Great Basin	Other:				
		(✓ all that apply)					
Headwater Upper fan	Middle fan	Lower fan Alluvial plain Ax	ial valley Playa				
		Form (✓ one)					
X Single thread Braided	Compound		Other:				
	Transect	was selected to:					
X Document fluvial activity & bou	Indaries	Document channel elevations & bo	oundaries				
Document habitat associations	6	Document a change in watercours	e morphology				
Other:							
Date of most recent runoff event	(if known) [.]						
	, , , , , , , , , , , , , , , , , , ,	s and surficial materials and conditions, i					
Ephemeral, single-thread chann	el						
Summary Site Description and Cross-section Sketch: View across the channel from watercourse-edge to watercourse-edge. Identify channel(s), banks, islands, interfluves, floodplains, terraces, and uplands where present. Note approximate width and elevation differences between features indicated.							
5	Zame I	FC I VS'					

Si	Site ID: Desert Peak Energy Project Stream ID: Mesa Data Station 2 (MSD-2) page 2 of 4							
Note presence or absence of each indicator within a minimum distance of 50 feet upstream and 50 feet downstream of								
the representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (–)								
for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.								
	UPLAND							
Τε	errestrial Indicators	1			Substrate Pa			
	Av soil horizon		Relict bars & swales		Estimated pe			
	Biotic soil crusts		Rock fractured in place		% Bedrock / Cemented substrate			
X	Bioturbation		Rock varnish		% Boulder	≥ 256 mm		
	Caliche: coatings / layers / rubble		Rock weathering	Х	% Cobble	≥ 64 – 256mm		
	Carbonate etching		Rubified rock undersides	X	% Pebble	≥ 4 – 64 mm		
	Coppice dunes: active / relict		Soil development	X	% Granule	≥ 2 – 4 mm		
	Deflated surface		Surface rounding of landform	X	% Sand	≤ 2 mm		
	Pavement	X	Woody debris in place		% Silt/Clay	Fines		
	Other:							
FI	uvial Indicators				Codimontatilo	and / graval		
	Bars: sand / gravel Cut banks		Mud: cracks / curls / drapes		Sediment tails:			
			Organic drift		Vegetation-chann Water-cut benche			
	Drainage swales		Overturned rocks		Wrack			
	Exposed roots First-order streams		Scour		Wrinkle marks			
	Flow lineations		Sediment ramps: sand / gravel Sediment sorting					
	Other:		Sediment solting					
	N/A							
			Vegetation					
	stimated % total vegetative cover		ominant and co-dominant species		epresentative heigh			
(p	erennial & shrub species combined):		known) and % of total vegetative	dc	minant and co-dor	ninant species:		
	Upland ~8%		over of each:		41 (0) 4-11			
	Opialid - 070		Larrea tridentat: ~5% Ambrosia dumosa: ~3%		~1'-6' tall ~1'-5' width			
Di	fferences in total shrub/perennial densit	ty (te	otal #shrubs/perennial plants) betwee	n u	pland & fluvially ac	tive units or		
	atercourse complex? (describe and qua							
	Shrubs and annual grasses in uplands.	Mair	aly unvegetated watercourse complex					
	·		· · · ·					
	e there plant species that are present in			pare	ed to fluvially active	e units or the		
	atercourse complex? (describe difference			1		ta contanata		
In	watercourse complex shrubs and herbs are	e ab	sent. Higher cover of herbaceous (annua	ii an	d perenniai speices)	in uplands		
A	a those alout exercise that are more ab-		unt (an loss shundowt) in the unlonder			fluidelly a ative		
	e there plant species that are more abu			wne	n compared to the	nuvially active		
un	its or the watercourse complex? (descr	ine	and quality unterences)					
	More vegetation cover in uplands as com	pare	d to watercourse complex.					
1								

S	Site ID: Desert Peak Energy Project Stream ID: Mesa Data Station 2 (MSD-2) page 3 of 4						
Note presence or absence of each indicator within a <u>minimum</u> distance of 50 feet upstream and 50 feet downstream of a representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (–) for those not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.							
	WATE	RC	OURSE or WATERCOURSE COMP	PLEX	ĸ		
Transportation, Deposition & Flow Transition Indicators Substrate Particle Size							
	Bar forms: sand / gravel Secondary channels Estimated percentages						
Bifurcated flow Sediment plastering % Bedrock / Cemente					ented substrate		
Х	Drainage swales		Sediment ramps: sand / gravel		% Boulder	≥ 256 mm	
	Flow lineations		Sediment sheets: sand / gravel	X	% Cobble	≥ 64 – 256 mm	
	Imbricated gravel	Х	3	X	% Pebble	≥ 4 – 64 mm	
	Levee ridges: sand / gravel		Sediment tails: sand / gravel	X	% Granule	≥ 2 – 4 mm	
	Mud: cracks / curls / drapes		Vegetation-channel alignments	X	% Sand	≤ 2 mm	
	Organic drift		Wrack	X	% Silt/Clay	Fines	
	Overturned rocks		Wrinkle marks				
	Out-of-channel flow: Lateral floo	odp	lain / Terminal floodplain				
	Ripples						
	Other:						
E	rosion Indicators			_			
	Cut banks		Rills		Water-cut benches	6	
	Exposed roots		Scour		Water level mark		
	Headcuts		Secondary channels				
	Other:						
			Vegetation				
	stimated % total vegetative cover perennial & shrub species combined):	(i	ominant and co-dominant species f known) and % of total vegetative over of each:		presentative heigh minant and co-dom		
	LFC: <1%		annual grasses <1%		1-6"		
Differences in total shrub/perennial density (total #shrubs/perennial plants) between the low-flow channel(s) and the adjacent floodplain? (describe and qualify the differences):							
	Annual herbs <1% in LFC and shrubs within uplands ~5% and ~50-75% annual grasses						
	Are there plant species that are present in (or absent from) the low-flow channel(s) when compared to the adjacent floodplain? (describe differences):						
	Shrubs and annuals are absent in LFC.						
	re there plant species that are more abu lescribe and qualify differences)	ind	ant (or less abundant) on the low-flow	[,] cha	nnel(s) and the adj	acent floodplain?	
	More grasses present in adjacent uplands as compared to LFC.						

Site ID Desert			Stream ID Mesa Da		page 4 of 4
	NDICATORS of PONDIN	NG & EVAPORA	TION and EOLIAN TR	RANSPORT & DEPOS	SITION
Algal crusts		Sand-filled	channels		
Beach ridges		Springs			
	es: active / relict	Substrate			
	onate / salt / soda s / curls / polygons	Vegetation	-landscape alignments	j	
Other:					
			Diagrams and Notes		
diagram of geon	ss-section diagram: Dr norphic units (see page he vegetation subsection	1 of data sheet) ns under "Uplan	where there are chang d" and "Watercourse C	es in vegetation chara omplex".	
		upland upland	upland Transect		
Distance			otographs		
Photograp	hs should document the	e representative			e or absence of
Photograp	hs should document the Descrip	e representative represer	andscape units, vegeta		ce or absence of
Photo ID #		e representative represer	andscape units, vegeta	s. GPS location	ce or absence of
Photo ID # PP-53	Descrip	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54	Descrip Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	e or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	e or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of
Photo ID # PP-53 PP-54 PP-55	Descrip Upstream Downstream Upstream	e representative represer	andscape units, vegeta ntative stream indicator	s. GPS location	ce or absence of

Epis	odic Stream Indica	ator Data Sheet	page 1 of 4
Site ID: Desert Peak Energy Project	Stream ID: Mesa D	Data Station 1 (MSD-3)	Date: 05/04/20
Nearest Town: Palm Springs		County: Riverside	
Investigators: Britney Strittmater; Eri	n McKinney	· · · ·	
		ase Map	
Aerial Photo #: Date:		c Map Name:	Date:
		PS Data	•
GPS Name: Datum:	Transect El		Error: ± ft / m
GPS co-ords start of transect:		GPS co-ords end of transect:	
Geomorphic Province (√one)	Mojave X	Sonoran/Colorado Great Basin (Other:
	Landform	(✓ all that apply)	
Headwater Upper fan	Middle fan	Lower fan X Alluvial plain Axial	valley Playa
		I Form (✓ one)	
Single thread X Braided	Compound	Distributary Discontinuous Oth	er.
		was selected to:	
X Document fluvial activity & bou		Document channel elevations & bound	
Document habitat associations		Document a change in watercourse m	orphology
Other:			
Date of most recent runoff event (if known):		
disturbance relative to an intact dryl function: Ephemeral Channel with active floodpl flow southeast through the eastern por	and stream ecosyster ain and various low flow tion of the Review Area.		channel form and
	(s), banks, islands, int ferences between fea		
trants to Low Pros	T AFF Active LT	AFP Actility Actil LT Actil LT T T Actil LT Actil LT T T T	

Sit	Site ID: Desert Peak Energy ProjectStream ID: Mesa Data Station 3 (MSD-3)page 2 of 4					
the	Note presence or absence of each indicator within a <u>minimum</u> distance of 50 feet upstream and 50 feet downstream of the representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (–) for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.					
			UPLAND			
Тο	rrestrial Indicators		UPLAND		Substrate Pa	rticle Size
	Av soil horizon	ГТ	Relict bars & swales		Estimated per	
	Biotic soil crusts		Rock fractured in place		% Bedrock / Cem	
Х	Bioturbation		Rock varnish		% Boulder	≥ 256 mm
^	Caliche: coatings / layers / rubble		Rock weathering	X	% Cobble	≥ 64 – 256mm
	Carbonate etching		Rubified rock undersides	X	% Pebble	$\geq 4 - 64 \text{ mm}$
	Coppice dunes: active / relict		Soil development	X	% Granule	$\geq 2 - 4 \text{ mm}$
Х	Deflated surface		Surface rounding of landform	X	% Sand	≤ 2 mm
^	Pavement		Woody debris in place	~	% Silt/Clay	Fines
	Other:					1 11103
Flu	uvial Indicators					
	Bars: sand / gravel		Mud: cracks / curls / drapes		Sediment tails: s	
	Cut banks		Organic drift		Vegetation-chann	¥
	Drainage swales		Overturned rocks		Water-cut benche	S
	Exposed roots First-order streams		Scour		Wrack	
	Flow lineations		Sediment ramps: sand / gravel Sediment sorting		Wrinkle marks	
	Other:		Sediment solting			
	N/A					
		1	Vegetation	1		
	timated % total vegetative cover erennial & shrub species combined):	(if l	minant and co-dominant species <nown) %="" and="" of="" total="" vegetative<br="">ver of each:</nown)>		presentative heigh minant and co-don	
	Upland ~5-8%		Larrea tridentat: ~5% Ambrosia dumosa: ~2% Encelia farinosa <1%		~2'-6' tall ~2'-5' width	
	ferences in total shrub/perennial densit tercourse complex? (describe and qua	lify th	ne differences):		-	ive units or
	Shrubs and annual grasses in uplands.	Fewe	er annual grasses within watercourse co	mple	X	
wa	e there plant species that are present ir itercourse complex? (describe differenc watercourse complex shrubs are absent in	es):	, ,		-	
	e there plant species that are more abu its or the watercourse complex? (descr More grasses present in adjacent uplands	ibe a	and qualify differences)	whe	n compared to the	fluvially active

re	ote presence or absence of each indica presentative channel cross section. Ma ose not observed. For examples see th	ark	each box with a plus (+) for those indi	icato	rs observed, and a	
			OURSE or WATERCOURSE COMP	LEX	ζ	
Tr	ansportation, Deposition & Flow Tra	ans			Substrate Pa	rticle Size
X	Bar forms: sand / gravel		Secondary channels		Estimated per	rcentages
Х	Bifurcated flow		Sediment plastering		% Bedrock / Cem	ented substrate
	Drainage swales		Sediment ramps: sand / gravel		% Boulder	≥ 256 mm
Х	Flow lineations		Sediment sheets: sand / gravel	X	% Cobble	≥ 64 – 256 mm
	Imbricated gravel	X	Sediment sorting	X	% Pebble	≥ 4 – 64 mm
x	Levee ridges: sand / gravel		Sediment tails: sand / gravel	X	% Granule	≥ 2 – 4 mm
	Mud: cracks / curls / drapes		Vegetation-channel alignments	X	% Sand	≤ 2 mm
	Organic drift		Wrack	X	% Silt/Clay	Fines
	Overturned rocks		Wrinkle marks			
	Out-of-channel flow: Lateral flow	odp	lain / Terminal floodplain			
	Ripples					
	Other:					
Fr	osion Indicators					
	Cut banks		Rills		Water-cut benches	3
	Exposed roots		Scour		Water level mark	
	Headcuts		Secondary channels			
	Other:					
			Vegetation			
	stimated % total vegetative cover erennial & shrub species combined): AFP: ~5% LFC: <1%	(i	ominant and co-dominant species f known) and % of total vegetative over of each: Encelia farinosa: ~3% Bebbia juncea: ~2%		presentative heigh ninant and co-dom AFP: ~0.5-2' ta LFC: ~6" tall	ninant species:
	fferences in total shrub/perennial densi		Ambrosia salsola: <1% total #shrubs/perennial plants) betwee	en the		(s) and the
ac	ljacent floodplain? (describe and qualify	/ th	e differences):			
<u> </u>	Annual herbs <1% in LFC and shurbs wit) wh	an compared to the	adiagont
	e there plant species that are present i odplain? (describe differences):					
۸			erbaceous (annual and perennial speices)			
	e there plant species that are more abu escribe and qualify differences)	und	ant (or less abundant) on the low-flow	cna	nnei(s) and the adj	acent floodplain?
	More grasses present in adjacent uplands	s as	compared to AFP.			

Stream ID: Mesa Data Station 3 (MSD-3)

Site ID: Desert Peak Energy Project

page 3 of 4

Site ID Dese	ert Peak Energy Project		Stream ID	Mesa Da	ta Station	3 (1050-3)	page 4 of 4
11	NDICATORS of PONDIN			AN TRAN	SPORT &	& DEPOSIT	ION
Algal crusts		Sand-filled of	channels				
Beach ridges		Springs					
	es: active / relict	Substrate st	<u>v</u>				
	onate / salt / soda	Vegetation-	landscape aligr	iments			
	s / curls / polygons						
Other:							
		Additional D	iagrams and	Notes			
	norphic units (see page he vegetation subsection		and "Watercon"	urse Comp	lex".		
	hs should document the	representative la represent	o tographs indscape units, ative stream ind				or absence of
Photo ID #	Descrip	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65	Descrip Cross-section	representative la represent	indscape units,	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65	Descrip	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67	Descrip Cross-section	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67	Descrip Cross-section Upstream Upstream Downstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of
	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	
Photo ID # PP-65 PP-66 PP-67 PP-68 PP-69	Descrip Cross-section Upstream Upstream Downstream Upstream	representative la represent	ndscape units, ative stream inc	dicators.	GPS lo	ocation	or absence of

Epis	odic Stream Indica	tor Data Sheet	page 1 of 4
Site ID: Desert Peak Energy Project	Stream ID: Mesa D	ata Station 4 (MSD-4)	Date: 05/04/20
Nearest Town: Palm Springs	I	County: Riverside	
Investigators: Britney Strittmater; Erir	n McKinney		
	Ba	ase Map	
Aerial Photo #: Date:		c Map_Name:	Date:
		PS Data	
GPS Name: Datum:	Transect Ele		Error: ± ft / m
GPS co-ords start of transect:		GPS co-ords end of transect:	
Geomorphic Province (✓one)	Mojave X		Other:
		(✓ all that apply)	
Headwater Upper fan	Middle fan	Lower fan Alluvial plain Axial	valley Playa
		Form (✓ one)	
X Single thread Braided	Compound		ther:
	Transect	was selected to:	
X Document fluvial activity & bou	ndaries	Document channel elevations & bour	ndaries
Document habitat associations		Document a change in watercourse r	norphology
Other:			
Date of most recent runoff event (i	f known):		
	•	s and surficial materials and conditions, inc	
Ephemeral, single-thread channe	1		
	s), banks, islands, inte	View across the channel from watercourse erfluves, floodplains, terraces, and uplands tures indicated.	
E	Ureosota Misan ur I ottumi	W B W	

Si	te ID: Desert Peak Energy Project		Stream ID: Mesa Data Station 4 (MSE	0-4)	page 2 of 4
	to processo or observes of each indian	tory	within a minimum diatance of EQ fact		troom and EO fact	lownotroom of
	ote presence or absence of each indica e representative channel cross section.					
	r indicators not observed. For example					
		3 30		9 -		
			UPLAND	-		
Te	errestrial Indicators				Substrate Pa	
	Av soil horizon		Relict bars & swales		Estimated pe	rcentages
	Biotic soil crusts		Rock fractured in place		% Bedrock / Cerr	ented substrate
X	Bioturbation		Rock varnish		% Boulder	≥ 256 mm
	Caliche: coatings / layers / rubble		Rock weathering	X	% Cobble	≥ 64 – 256mm
	Carbonate etching		Rubified rock undersides	X	% Pebble	≥ 4 – 64 mm
	Coppice dunes: active / relict		Soil development	X	% Granule	≥ 2 – 4 mm
	Deflated surface		Surface rounding of landform	X	% Sand	≤ 2 mm
	Pavement	X	Woody debris in place		% Silt/Clay	Fines
	Other:					I
		-		-		
FI	uvial Indicators					
	Bars: sand / gravel		Mud: cracks / curls / drapes		Sediment tails:	sand / gravel
	Cut banks		Organic drift		Vegetation-chanr	
	Drainage swales		Overturned rocks		Water-cut benche	
	Exposed roots		Scour		Wrack	
	First-order streams		Sediment ramps: sand / gravel		Wrinkle marks	
	Flow lineations		Sediment sorting			
	Other:	<u> </u>				
	N/A					
			Vegetation			
	stimated % total vegetative cover		ominant and co-dominant species		epresentative heigh	
(p	erennial & shrub species combined):		known) and % of total vegetative	dc	minant and co-dor	ninant species:
	Lipland ~5%		over of each:			
	Upland ~5%		Larrea tridentat: ~5% Ambrosia dumosa: <1%		~2'-6' tall ~1'-5' width	
			Ambrosia dumosa. <176		-J -J WIGUI	
Di	fferences in total shrub/perennial densi	tv (t	otal #shrubs/perennial plants) betwee	en u	pland & fluvially ac	tive units or
	atercourse complex? (describe and qua				, ,	
		•	,			
	Shrubs and annual grasses in uplands.	Mai	nly unvegetated watercourse complex			
Ar	e there plant species that are present in	ר (o	absent from) the uplands when com	pare	ed to fluvially active	e units or the
	atercourse complex? (describe differend					
In	watercourse complex shrubs and herbs are	e ab	sent. Higher cover of herbaceous (annua	al an	d shrub speices) in u	plands
	e there plant species that are more abu			whe	n compared to the	fluvially active
un	its or the watercourse complex? (descr	ibe	and qualify differences)			
	More vegetation cover in uplands as com	pare	d to watercourse complex			
		pare				
1						

re	ote presence or absence of each indica presentative channel cross section. Ma ose not observed. For examples see th	ark	each box with a plus (+) for those ind	icato	rs observed, and a	
			OURSE or WATERCOURSE COMP	PLE)	(
Tr	ansportation, Deposition & Flow Tra	ans	ition Indicators		Substrate Par	rticle Size
	Bar forms: sand / gravel		Secondary channels		Estimated per	rcentages
	Bifurcated flow		Sediment plastering		% Bedrock / Cem	ented substrate
X	Drainage swales		Sediment ramps: sand / gravel		% Boulder	≥ 256 mm
	Flow lineations		Sediment sheets: sand / gravel	X	% Cobble	≥ 64 – 256 mm
	Imbricated gravel	Х	Sediment sorting	Х	% Pebble	≥ 4 – 64 mm
	Levee ridges: sand / gravel		Sediment tails: sand / gravel	Х	% Granule	≥ 2 – 4 mm
	Mud: cracks / curls / drapes		Vegetation-channel alignments	Х	% Sand	≤ 2 mm
	Organic drift		Wrack	Х	% Silt/Clay	Fines
	Overturned rocks		Wrinkle marks	I		
	Out-of-channel flow: Lateral flow	odp				
	Ripples					
	Other:					
_						
E	rosion Indicators		D'II-			-
_	Cut banks		Rills		Water-cut benches	\$
	Exposed roots		Scour		Water level mark	
	Headcuts Other:		Secondary channels			
			Vegetation			
	stimated % total vegetative cover		ominant and co-dominant species		presentative heigh	
(p	erennial & shrub species combined):		f known) and % of total vegetative over of each:	do	minant and co-dom	ninant species:
	LFC: <1%		annual grasses <1%		1-4" tall 1-2" wide	
	fferences in total shrub/perennial densi ljacent floodplain? (describe and qualify			en th	e low-flow channel	(s) and the
	Annual herbs <1% in LFC and shrubs wit	hin	uplands ~5% and ~50-75% annual grasse	es		
	re there plant species that are present i odplain? (describe differences):	n (c	or absent from) the low-flow channel(s) wh	en compared to the	e adjacent
	Shrubs and annuals are absent in LFC.					
	e there plant species that are more abu escribe and qualify differences)	und	ant (or less abundant) on the low-flow	cha	nnel(s) and the adj	acent floodplain?
	More grasses present in adjacent uplands	s as	compared to LFC.			

Stream ID: Mesa Data Station 4 (MSD-4)

Site ID: Desert Peak Energy Project

page 3 of 4

Site ID Desert	Peak Energy Project		Stream ID Mesa D	oata Station 4 (MSD-4) page 4 of 4
IN	IDICATORS of PONDIN	NG & EVAPORA	ATION and EOLIAN T	RANSPORT & DE	POSITION
Algal crusts		Sand-filled	l channels		
Beach ridges		Springs			
	es: active / relict	Substrate	<u> </u>		
	onate / salt / soda	Vegetation	n-landscape alignment	ts	
	/ curls / polygons				
Other:			Diagrams and Note		
diagram of geom	norphic units (see page he vegetation subsection	1 of data sheet) ns under "Uplan	where there are chan d" and "Watercourse (ges in vegetation cl Complex"	ns along the transect or haracteristics, as
		upland	upland Transect		
		Dł	otographs		
Photograp	as should document the		notographs	tation and the pres	sence or absence of
Photograp	hs should document the	representative			sence or absence of
Photograp	hs should document the Descrip	representative represer	landscape units, vege		
Photo ID #		representative represer	landscape units, vege ntative stream indicato	ors.	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	
Photo ID #	Descrip	representative represer	landscape units, vege ntative stream indicato	GPS location	

Episodic Stream Indica	tor Data Sheet page 1 of 4
Site ID: Desert Peak Energy Project Stream ID: Mesa D	Data Station 5 (MSD-5) Date: 05/04/20
Nearest Town: Palm Springs	County: Riverside
Investigators: Britney Strittmater; Erin McKinney	
Ba	ase Map
	c Map Name: Date:
	PS Data
GPS Name: Datum: Transect Ele	
GPS co-ords start of transect:	GPS co-ords end of transect:
Geomorphic Province (✓one) Mojave X	Sonoran/Colorado Great Basin Other:
	(✓ all that apply)
Headwater Upper fan Middle fan	Lower fan Alluvial plain Axial valley Playa
	Form (✓ one)
x Single thread Braided Compound	Distributary Discontinuous Other:
Transect v	was selected to:
X Document fluvial activity & boundaries	Document channel elevations & boundaries
Document habitat associations	Document a change in watercourse morphology
Other:	
Date of most recent runoff event (if known):	
Ephemeral, single-thread channel Summary Site Description and Cross-section Sketch: watercourse-edge. Identify channel(s), banks, islands, inte approximate width and elevation differences between feat	erfluves, floodplains, terraces, and uplands where present. Note
LeftEE	Right

page 2 of 4
stream of
minus (–)
rs.
e Size
tages
d substrate
56 mm
4 – 256mm
– 64 mm
– 4 mm
mm
es
/ gravel
lignment
d width of
d width of nt species:
nt species:
nt species:
nt species:
nt species: units or
units or
nt species: units or
nt species: units or ts or the
units or
nt species: units or ts or the
nt species: units or ts or the

Note presence or absence of each indicat representative channel cross section. Ma those not observed. For examples see th	ırk	each box with a plus (+) for those indi	icato	rs observed, and a			
		OURSE or WATERCOURSE COMP	PLE)	(
Transportation, Deposition & Flow Tra	Transportation, Deposition & Flow Transition Indicators Substrate Particle Size						
Bar forms: sand / gravel		Secondary channels		Estimated per	rcentages		
Bifurcated flow		Sediment plastering		% Bedrock / Cem			
X Drainage swales		Sediment ramps: sand / gravel		% Boulder	≥ 256 mm		
Flow lineations		Sediment sheets: sand / gravel	X	% Cobble	≥ 64 – 256 mm		
Imbricated gravel	Х	Sediment sorting	Х	% Pebble	≥ 4 – 64 mm		
Levee ridges: sand / gravel		Sediment tails: sand / gravel	Х	% Granule	≥ 2 – 4 mm		
Mud: cracks / curls / drapes		Vegetation-channel alignments	Х	% Sand	≤ 2 mm		
Organic drift		Wrack	X	% Silt/Clay	Fines		
Overturned rocks		Wrinkle marks					
Out-of-channel flow: Lateral floo	dp						
Ripples							
Other:							
Erosion Indicators		Dille		\A/atan aut hanahar			
Cut banks		Rills		Water-cut benches	8		
Exposed roots		Scour		Water level mark			
Headcuts Other:		Secondary channels					
		Vegetation					
Estimated % total vegetative cover		ominant and co-dominant species		presentative heigh			
(perennial & shrub species combined):		f known) and % of total vegetative over of each:	do	minant and co-dom	ninant species:		
LFC: <1%		annual grasses <1%		1-2" tall 1" wide			
Differences in total shrub/perennial densit adjacent floodplain? (describe and qualify			en th	e low-flow channel	(s) and the		
Annual herbs <1% in LFC and shrubs with							
Are there plant species that are present in floodplain? (describe differences):	ו (C	or absent from) the low-flow channel(s) wh	en compared to the	e adjacent		
Shrubs and annuals are absent in LFC.							
Are there plant species that are more abu (describe and qualify differences)	nd	ant (or less abundant) on the low-flow	cha	nnel(s) and the adj	acent floodplain?		
More grasses present in adjacent uplands	as	compared to LFC.					

Stream ID: Mesa Data Station 4 (MSD-4)

Site ID: Desert Peak Energy Project

page 3 of 4

Site ID Desert	Peak Energy Project		Stream ID Mesa Data	a Station 5 (MSD-5)	page 4 of 4
IN	NDICATORS of PONDIN	IG & EVAPORA	TION and EOLIAN TRA	ANSPORT & DEPO	SITION
Algal crusts		Sand-filled	channels		
Beach ridges		Springs			
	es: active / relict	Substrate s			
	onate / salt / soda	Vegetation-	-landscape alignments		
	s / curls / polygons				
Other:			Diagrams and Notes		
diagram of geon	ss-section diagram: Dra norphic units (see page 1 he vegetation subsection	1 of data sheet) v ns under "Uplanc	where there are changes and "Watercourse Cor	s in vegetation char	
		upland e	Transect		
Photograp	hs should document the		otographs	ion, and the presen	ce or absence of
	hs should document the	representative la represen		•	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
		representative la represen	andscape units, vegetati	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	
Photo ID #	Descrip	representative la represen	andscape units, vegetati tative stream indicators.	GPS location	ce or absence of

Episodic Stream India	ator Data Sheet	page 1 of 4				
Site ID: Desert Peak Energy Project Stream ID: Mesa	Data Station 6 (MSD-6)	Date: 05/04/20				
Nearest Town: Palm Springs	County: Riverside					
Investigators: Britney Strittmater; Erin McKinney						
Base Map						
	ic Map_Name:	Date:				
	GPS Data	-				
GPS Name: Datum: Transect E		Error: ± ft / m				
GPS co-ords start of transect:	GPS co-ords end of transect:	0.1				
Geomorphic Province (✓one) Mojave X	Sonoran/Colorado Great Basin	Other:				
	n (✓ all that apply)					
Headwater Upper fan Middle fan		l valley Playa				
	el Form (✓ one)					
x Single thread Braided Compound		ther:				
Transec	was selected to:					
X Document fluvial activity & boundaries	Document channel elevations & bou	ndaries				
Document habitat associations	Document a change in watercourse	morphology				
Other:						
Date of most recent runoff event (if known):						
Physical Setting: Briefly describe geomorphic process						
function: Ephemeral, single-thread channel						
Summary Site Description and Cross-section Sketch: View across the channel from watercourse-edge to watercourse-edge. Identify channel(s), banks, islands, interfluves, floodplains, terraces, and uplands where present. Note approximate width and elevation differences between features indicated. Left Right						
W WY Lottw N	Unassin E					

Si	Site ID: Desert Peak Energy Project Stream ID: Mesa Data Station 6 (MSD-6) page 2 of 4							
Note presence or absence of each indicator within a <u>minimum</u> distance of 50 feet upstream and 50 feet downstream of								
the representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (–) for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.								
for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.								
			UPLAND					
Te	errestrial Indicators		1		Substrate Pa			
	Av soil horizon Relict bars & swales Estimated percentages							
	Biotic soil crusts		Rock fractured in place		% Bedrock / Cem			
X	Bioturbation		Rock varnish		% Boulder		256 mm	
	Caliche: coatings / layers / rubble		Rock weathering	X	% Cobble		64 – 256mm	
	Carbonate etching		Rubified rock undersides	X	% Pebble		1 – 64 mm	
	Coppice dunes: active / relict		Soil development	X	% Granule		2 – 4 mm	
	Deflated surface		Surface rounding of landform	X	% Sand		2 mm	
	Pavement	X	Woody debris in place		% Silt/Clay	Fir	nes	
<u> </u>	Other:							
FI		_						
	Bars: sand / gravel Cut banks	-	Mud: cracks / curls / drapes		Sediment tails: s		<u> </u>	
			Organic drift Overturned rocks		Vegetation-chann		lignment	
<u> </u>	Drainage swales Exposed roots	-	Scour		Wrack	:5		
	First-order streams		Sediment ramps: sand / gravel		Wrinkle marks			
	Flow lineations		Sediment sorting		VVIIIIRIC IIIdirks			
	Other:	1						
	N/A							
_			Vegetation					
	stimated % total vegetative cover		ominant and co-dominant species		epresentative heigh			
(p	erennial & shrub species combined):	1 1	known) and % of total vegetative over of each:	ac	minant and co-don	nina	nt species:	
	Upland ~5%		Larrea tridentat: ~5%		~1'-6' tall			
			Ambrosia dumosa: <1%		~1'-6' width			
	fforonooo in total abruh/norannial danai	 	atal #ahruha/narannial planta) hatua		nland ⁰ fluvially an	tive	unite er	
	fferences in total shrub/perennial densit atercourse complex? (describe and qua			en u	pland & fluvially ac	live	units or	
***			,					
	Shrubs and annual grasses in uplands.	Mai	nly unvegetated sandy bottom watercours	se co	omplex			
Ar	e there plant species that are present ir	ו (o	r absent from) the uplands when com	pare	ed to fluvially active	e uni	its or the	
wa	atercourse complex? (describe difference	ces)	:					
Ir	watercourse complex shrubs and herbs are	e ab	sent. Higher cover of herbaceous (annua	al an	d shrub speices) in u	plan	ds	
L_					·	-		
	e there plant species that are more abu			whe	n compared to the	fluvi	ally active	
ur	its or the watercourse complex? (descr	ge	and quality differences)					
	More vegetation cover in uplands as com	pare	ed to watercourse complex.					
1								

re	ote presence or absence of each indica presentative channel cross section. Ma ose not observed. For examples see th	ark	each box with a plus (+) for those ind	icato	ors observed, and a			
	WATE	ERC	COURSE or WATERCOURSE COM	PLEX	K			
Т	Transportation, Deposition & Flow Transition Indicators Substrate Particle Size							
	Bar forms: sand / gravel Secondary channels Estimated percentages							
	Bifurcated flow Sediment plastering % Bedrock / Cemented substrate							
X	Drainage swales		Sediment ramps: sand / gravel		% Boulder	≥ 256 mm		
	Flow lineations		Sediment sheets: sand / gravel	X	% Cobble	≥ 64 – 256 mm		
	Imbricated gravel	Х	Sediment sorting	X	% Pebble	≥ 4 – 64 mm		
	Levee ridges: sand / gravel		Sediment tails: sand / gravel	X	% Granule	≥ 2 – 4 mm		
	Mud: cracks / curls / drapes		Vegetation-channel alignments	X	% Sand	≤ 2 mm		
	Organic drift		Wrack	Х	% Silt/Clay	Fines		
	Overturned rocks		Wrinkle marks		•			
	Out-of-channel flow: Lateral flow	odp	lain / Terminal floodplain					
	Ripples							
	Other:							
F	osion Indicators							
_	Cut banks		Rills		Water-cut benche	c		
X	Exposed roots	Х	Scour		Water level mark	5		
	Headcuts	~	Secondary channels					
	Other:		Secondary channels					
			Vegetation					
	stimated % total vegetative cover erennial & shrub species combined):	(i	Dominant and co-dominant species if known) and % of total vegetative over of each:		presentative heigh minant and co-don			
	LFC: <1%		annual grasses <1%		1-2" tall 1" wide			
	fferences in total shrub/perennial densi ljacent floodplain? (describe and qualify			en th	e low-flow channel	(s) and the		
	Annual herbs <1% in LFC and shrubs wit	thin	uplands ~5% and ~50-75% annual grasse	es				
	e there plant species that are present in odplain? (describe differences):	n (c	or absent from) the low-flow channel(s) wh	en compared to the	e adjacent		
	Shrubs and annuals are absent in LFC.							
	e there plant species that are more abu escribe and qualify differences)	und	ant (or less abundant) on the low-flow	' cha	nnel(s) and the ad	jacent floodplain?		
	More grasses present in adjacent uplands as compared to LFC.							

Stream ID: Mesa Data Station 6 (MSD-6)

Site ID: Desert Peak Energy Project

page 3 of 4

Site ID Desert			Stream ID Mesa Da	, ,	page 4 of 4
	NDICATORS of PONDING			RANSPORT & DEPOS	SITION
Algal crusts		Sand-filled	channels		
Beach ridges		Springs	<u>,</u>		
	es: active / relict	Substrate s			
	onate / salt / soda	Vegetation	-landscape alignments	5	
Other:	s / curls / polygons				
Other.			Diagrams and Notes	_	
diagram of geor	ss-section diagram: Dra norphic units (see page 1 he vegetation subsections	of data sheet) s under "Upland	where there are chang	es in vegetation chara omplex".	
			(
Photograp	hs should document the r	representative I			e or absence of
		representative I represen		S.	e or absence of
Photo ID #	hs should document the r Descript Upstream	representative I represen	andscape units, vegeta	GPS location	e or absence of
Photo ID # P-76	Descript	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 P-77	Descript Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78	Descript Upstream Downstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # P-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	ce or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	ce or absence of
Photo ID # PP-76 PP-77 PP-78 PP-79	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of
	Descript Upstream Downstream Upstream Upstream	representative I represen	andscape units, vegeta tative stream indicator	GPS location	e or absence of

Episo	odic Stream Indica	itor Data Sheet		page 1 of 4		
Site ID: Desert Peak Energy Project	Stream ID [.] Mesa	Data Station 7 (MSD-7)	Dat	e: 06/19/20		
Nearest Town: Palm Springs	etrourn ib.	County: Riverside				
Investigators: Britney Strittmater						
Base Map						
Aerial Photo #: Date:		c Map Name:		Date:		
	G	PS Data				
GPS Name: Datum:	Transect El			∵± ft/m		
GPS co-ords start of transect:		GPS co-ords end of transe				
Geomorphic Province (√one)	Mojave X	Sonoran/Colorado Great	Basin Other	r:		
	Landform	(✓ all that apply)				
Headwater Upper fan	Middle fan	Lower fan Alluvial plain	Axial valley	y Playa		
	Channe	l Form (✓ one)				
X Single thread Braided	Compound	Distributary Discontinuo	ous Other:			
	Transect	was selected to:				
X Document fluvial activity & boun	daries	Document channel elevation	s & boundarie	S		
Document habitat associations		Document a change in water	course morph	ology		
Other:						
Date of most recent runoff event (if	known):					
Ephemeral, single-thread channel						
Summary Site Description and Crowstercourse-edge. Identify channel(s approximate width and elevation different Left	s), banks, islands, int	erfluves, floodplains, terraces, and				
In William	I DEM	IM 1				

Si	Site ID: Desert Peak Energy Project Stream ID: Mesa Data Station 7 (MSD-7) page 2 of 4						
Note presence or absence of each indicator within a <u>minimum</u> distance of 50 feet upstream and 50 feet downstream of							
the representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (-)							
	for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.						
			••	9 –		louit	
-			UPLAND				
	errestrial Indicators	, ,	Delicthere 0 such -		Substrate Pa		
	Av soil horizon		Relict bars & swales		Estimated pe		-
	Biotic soil crusts		Rock fractured in place		% Bedrock / Cem		
X	Bioturbation		Rock varnish		% Boulder		256 mm
	Caliche: coatings / layers / rubble		Rock weathering	X	% Cobble		64 – 256mm
	Carbonate etching		Rubified rock undersides	X	% Pebble		4 – 64 mm
	Coppice dunes: active / relict		Soil development	X	% Granule	≥ 2	2 – 4 mm
	Deflated surface		Surface rounding of landform	X	% Sand	≤ 2	2 mm
	Pavement		Woody debris in place		% Silt/Clay	Fi	nes
	Other:						
FI	uvial Indicators			_			
	Bars: sand / gravel		Mud: cracks / curls / drapes		Sediment tails: s	sand	1 / gravel
	Cut banks		Organic drift		Vegetation-chanr		alignment
	Drainage swales		Overturned rocks		Water-cut benche	es	
	Exposed roots		Scour		Wrack		
	First-order streams		Sediment ramps: sand / gravel		Wrinkle marks		
	Flow lineations		Sediment sorting				
	Other:						
	N/A						
			Vegetation				
	stimated % total vegetative cover		minant and co-dominant species		epresentative heigh		
(p	erennial & shrub species combined):		known) and % of total vegetative	dc	minant and co-dor	nına	int species:
	Upland ~5-8%		ver of each: Larrea tridentat: ~5%		~1'-5' tall		
			Ambrosia salsola 1%		~1'-4' width		
			Ambrosia dumosa 1%				
	fferences in total shrub/perennial densit			en u	pland & fluvially ac	tive	units or
wa	atercourse complex? (describe and qua	lify t	he differences):				
	Shrubs and annual grasses in uplands.	Mair	ly unvegetated sandy bottom watercours	se co	omolex		
	·		· · ·		-		
	e there plant species that are present in			pare	ed to fluvially active	e un	its or the
Wa	atercourse complex? (describe difference watercourse complex shrubs and herbs are	ces):	ant Higher cover of herboscous (appus		d abrub apoiooo) in u	nlon	do
"	watercourse complex shrubs and herbs are	e abs	ent. Figher cover of herbaceous (annua	an ann	u siliub speices) ili u	pian	us
<u>۸</u> .	to those plant encourse that are more the	Inde	nt (or loss obundant) in the unlarder	wha	n compared to the	flux	
	e there plant species that are more abu its or the watercourse complex? (descr			wne	in compared to the	nuv	any active
	into or the watercourse complex? (desci	106 0	and quality unletences				
	More vegetation cover in uplands as com	pare	d to watercourse complex.				
1							

S	ite ID: Desert Peak Energy Project		Stream ID: Mesa Data Station 7 (MSE	D-7)	page 3 of 4	
re	ote presence or absence of each indica presentative channel cross section. Ma lose not observed. For examples see th	ark	each box with a plus (+) for those ind	icato	ors observed, and a		
WATERCOURSE or WATERCOURSE COMPLEX							
T	ransportation, Deposition & Flow Tra				Substrate Par	ticle Size	
	Bar forms: sand / gravel		Secondary channels		Estimated per	rcentages	
	Bifurcated flow		Sediment plastering		% Bedrock / Cem	ented substrate	
Х	Drainage swales		Sediment ramps: sand / gravel		% Boulder	≥ 256 mm	
	Flow lineations		Sediment sheets: sand / gravel	X	% Cobble	≥ 64 – 256 mm	
	Imbricated gravel	Χ	Sediment sorting	Х	% Pebble	≥ 4 – 64 mm	
	Levee ridges: sand / gravel		Sediment tails: sand / gravel	X	% Granule	≥ 2 – 4 mm	
	Mud: cracks / curls / drapes		Vegetation-channel alignments	X	% Sand	≤ 2 mm	
	Organic drift		Wrack	X	% Silt/Clay	Fines	
	Overturned rocks		Wrinkle marks				
	Out-of-channel flow: Lateral floo	odp	lain / Terminal floodplain				
	Ripples						
	Other:						
E	rosion Indicators						
	Cut banks		Rills		Water-cut benches	3	
	Exposed roots		Scour		Water level mark		
	Headcuts		Secondary channels				
	Other:						
			Vegetation				
Е	stimated % total vegetative cover		Dominant and co-dominant species	Re	presentative heigh	t and width of	
(p	perennial & shrub species combined):		f known) and % of total vegetative over of each:	do	minant and co-don	ninant species:	
	LFC: <1%		annual grasses <1%		1-2" tall 1" wide		
	ifferences in total shrub/perennial densi djacent floodplain? (describe and qualify			en th	e low-flow channel	(s) and the	
	Annual herbs <1% in LFC and shrubs wit	hin	uplands ~5-8% and ~50-75% annual gras	ses			
	re there plant species that are present in podplain? (describe differences):	n (c	or absent from) the low-flow channel(s) wh	en compared to the	e adjacent	
	Shrubs and annuals are absent in LFC.						
	re there plant species that are more abu lescribe and qualify differences)	und	ant (or less abundant) on the low-flow	' cha	nnel(s) and the adj	acent floodplain?	
	More grasses present in adjacent uplands as compared to LFC.						

	Peak Energy Project		Stream ID Mesa Data	. ,	page 4 of 4
	NDICATORS of PONDIN			ANSPORT & DEPOS	ITION
Algal crusts		Sand-filled	channels		
Beach ridges		Springs			
	es: active / relict	Substrate			
	onate / salt / soda	Vegetation	-landscape alignments		
Other:	s / curls / polygons				
Other.			Diagrams and Notes		
diagram of geor	ss-section diagram: Dr norphic units (see page he vegetation subsection	1 of data sheet) ns under "Upland	where there are change d" and "Watercourse Co	s in vegetation charac	
		upland	ipland Transect		
		Ph	otographs		
Photograp	hs should document the	representative l	andscape units, vegetat		e or absence of
		representative l represer		•	e or absence of
Photo ID #	Descrip	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93	Descrip Downstream	representative l represer	andscape units, vegetat	GPS location	e or absence of
Photo ID # PP-93 PP-94	Descrip	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream Downstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream Downstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream Downstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream Downstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream Downstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream Downstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
Photo ID # PP-93 PP-94 PP-95	Descrip Downstream Upstream Downstream	representative l represer	andscape units, vegetat itative stream indicators.	GPS location	e or absence of
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	Epis	odic Stream	Indicator Data	Sheet	ized as a strategy		e 1 of 4
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Investigators: B	Stattmater	; A. Cas	the second se				and see the
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Geomorphic Pro	ovince (√one)	Mojave				asin Other:	
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Headwater	Upper fan	Middle fan	Lower fai		Alluvial plain	Axial valley	Playa
Cingle throad	Braided	Compou	nd Distrik	the second se	Discontinuou	s Other:	
✓ Single thread	Dialueu		nsect was sele			o o uion	
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•	pitat associations		and the second s			ourse morphology	
Other:					g		
Date of most rec	ent runoff event	(if known):					
			ocesses and sur	icial mate	erials and conditio	ns, including the d	earee of
disturbance relativ	ve to an intact dry	land stream ec	osystem, and any	anthrop	ogenic influences	on the channel for	m and
function:			1	al ciu	al. There	ad and	
Ept	remeral	channer	Careas	05 511	ngue invite	ad and Hove pla	rin
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Summary Site D	escription and C	ross-section S	Sketch: View ac	ross the o	channel from wate	ercourse-edge to	ant Note
approximate width	e. Identify channel	(s), banks, isla fferences betw	nds, interfluves, f	loodplain	s, terraces, and u	plands where prese	ent. Note
approximate width		nerences betw		Juliou.			
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Site ID: Desert Peak page 2 of 4 Stream ID: MSD - 8 Note presence or absence of each indicator within a minimum distance of 50 feet upstream and 50 feet downstream of the representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (-) for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators. UPLAND **Terrestrial Indicators** Substrate Particle Size Av soil horizon Relict bars & swales Estimated percentages Biotic soil crusts Rock fractured in place % Bedrock / Cemented substrate Bioturbation Rock varnish % Boulder ≥ 256 mm Caliche: coatings / layers / rubble Rock weathering % Cobble ≥ 64 – 256mm Carbonate etching Rubified rock undersides % Pebble ≥ 4 – 64 mm 50 Coppice dunes: active / relict Soil development % Granule $\geq 2 - 4 \text{ mm}$ Deflated surface Surface rounding of landform 4 % Sand ≤2 mm Pavement Woody debris in place % Silt/Clay Fines Other: middens whin shrulps, numerous vodent burrows Fluvial Indicators sand / gravel Bars: Mud: cracks / curls / drapes Sediment tails: sand / gravel Cut banks Organic drift Vegetation-channel alignment Drainage swales Overturned rocks Water-cut benches Exposed roots Scour Wrack First-order streams Sediment ramps: sand / gravel Wrinkle marks Flow lineations Sediment sorting Other: NIA Vegetation Estimated % total vegetative cover Dominant and co-dominant species Representative height and width of (perennial & shrub species combined): (if known) and % of total vegetative dominant and co-dominant species: LAR TRI (0)- AMB DUN 3 / 5-le' height 15 % 2-4. width ENC FAR 21. Differences in total shrub/perennial density (total #shrubs/perennial plants) between upland & fluvially active units or watercourse complex? (describe and qualify the differences): Higher cover of shrubs in uplands Are there plant species that are present in (or absent from) the uplands when compared to fluvially active units or the watercourse complex? (describe differences): Chelosote present in up and - absent in fluvially adhive Are there plant species that are more abundant (or less abundant) in the uplands when compared to the fluvially active units or the watercourse complex? (describe and qualify differences) total veg cover nighter in uplands

MESA: October 2014

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page 3 of 4 site ID: Descrit Peak Stream ID: MSD- 8 Note presence or absence of each indicator within a minimum distance of 50 feet upstream and 50 feet downstream of a representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (-) for those not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators. WATERCOURSE or WATERCOURSE COMPLEX Substrate Particle Size Transportation, Deposition & Flow Transition Indicators Estimated percentages sand Secondary channels Bar forms: gravel 1 % Bedrock / Cemented substrate **Bifurcated flow** Sediment plastering ≥ 256 mm % Boulder sand / gravel Sediment ramps: Drainage swales ≥ 64 - 256 mm % Cobble sand / gravel 40 Flow lineations Sediment sheets: % Pebble $\geq 4 - 64 \text{ mm}$ Sediment sorting 10 Imbricated gravel $\geq 2 - 4 \text{ mm}$ % Granule sand / gravel 28 Sediment tails: sand / gravel Levee ridges: 10 % Sand ≤ 2 mm Vegetation-channel alignments Mud: cracks / curls / drapes % Silt/Clay Fines Organic drift Wrack 2 Wrinkle marks Overturned rocks Lateral floodplain / Terminal floodplain Out-of-channel flow: Ripples Other: Historically AFP may have extended further east nowever due to disturbances **Erosion Indicators** Water-cut benches Cut banks Rills Exposed roots Water level mark Scour Headcuts Secondary channels Other: Vegetation Estimated % total vegetative cover Representative height and width of Dominant and co-dominant species (perennial & shrub species combined): dominant and co-dominant species: (if known) and % of total vegetative cover of each: 41 AMB SAL Differences in total shrub/perennial density (total #shrubs/perennial plants) between the low-flow channel(s) and the adjacent floodplain? (describe and qualify the differences): Absence of veg in LFC w/1-51, cover in AFP downstream Are there plant species that are present in (or absent from) the low-flow channel(s) when compared to the adjacent floodplain? (describe differences): Are there plant species that are more abundant (or less abundant) on the low-flow channel(s) and the adjacent floodplain? (describe and qualify differences)

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Site ID	Desev	TPEak		Stream ID Inc	50-B	page 4 of 4
	and the second se		ING & EVAPORA	TION and EOLIAN		EPOSITION
- Algal	crusts		Sand-filled			
COLUMN TWO IS NOT	ch ridges		Springs			
- Cop	pice dunes:	active / relict	C Substrate s	taining		
Crus	sts: carbon	ate / salt / soda		landscape alignmen	ts	Salar and the second second
		curls / polygons				
Othe	er:					
			Additional D	iagrams and Note	es	
diagra	m of geomo	orphic units (see pag	e 1 of data sheet)	on that identifies the where there are chan I" and "Watercourse (iges in vegetation of	ons along the transect or characteristics, as
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	Photograp	hs should document		otographs andscape units, vege	tation, and the pres	sence or absence of
DI			represen	tative stream indicato	ors.	
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Physical Setting: Brief disturbance relative to a function:	fly describe geor in intact dryland	morphic p stream ec				
disturbance relative to a function:	in intact dryland	stream ed				
Summary Site Descrip watercourse-edge. Ident approximate width and e	itify channel(s), b	banks, isla	ands, interfl	uves, floodplair	channel from watero s, terraces, and upl	course-edge to lands where present. Not
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presentative channel cross section. I dicators not observed. For examples	UPLAND	1		Particle Size
estrial Indicators				percentages
v soil horizon	Relict bars & swales			emented substra
Biotic soil crusts	Rock fractured in place	-		≥ 256 mm
Bioturbation	Rock varnish	2.5	% Boulder % Cobble	≥ 230 mm
Caliche: coatings / layers / rubble	Rock weathering	30	% Pebble	$\geq 4 - 64 \text{ mm}$
Carbonate etching	Rubified rock undersides	30		$\geq 2 - 4 \text{ mm}$
Coppice dunes: active / relict	Soil development	30	% Granule	≤2 mm
Deflated surface	Surface rounding of landform	10	% Sand	Fines
Pavement	Woody debris in place	-	% Silt/Clay	Filles
luvial Indicators				sand / grave
Bars: sand / gravel	Mud: cracks / curls / drapes		Sediment tails	annel alignment
Cut banks	Organic drift		Water-cut ben	
Drainage swales	Overturned rocks Scour		Wrack	Grico
Exposed roots			vvrinkie marks	and the second sec
Exposed roots First-order streams	Sediment ramps: sand / grave	1	Wrinkle marks	
Exposed roots		1	WINKIE Marks	
Exposed roots First-order streams Flow lineations	Sediment ramps: sand / grave	1		
Exposed roots First-order streams Flow lineations Other:	Sediment ramps: sand / grave Sediment sorting			
Exposed roots First-order streams Flow lineations	Sediment ramps: sand / grave Sediment sorting Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each:		epresentative he	eight and width of dominant species
Exposed roots First-order streams Flow lineations Other: Estimated % total vegetative cover (perennial & shrub species combined):	Sediment ramps: sand / grave Sediment sorting Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: LAR TR-I AMB DV sity (total #shrubs/perennial plants) betw	Rd	epresentative he ominant and co-	eight and width of dominant species
Exposed roots First-order streams Flow lineations Other: Estimated % total vegetative cover (perennial & shrub species combined): \5 - 2.6 Differences in total shrub/perennial dens watercourse complex? (describe and que	Sediment ramps: sand / grave Sediment sorting Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: LAR TR-I AMB DV sity (total #shrubs/perennial plants) betw	Rd	epresentative he ominant and co- upland & fluvially	eight and width of dominant species active units or

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THE WITCH BUT BUT LARD	Stream ID: MSD-9		page 3 of 4
D: Desert Peak e presence or absence of each indicato		pstream and 50 feet	downstream of a
resentative channel cross section. Mark	c each box with a plus (+) for those indic	cators observed, and	a minus (-) for
se not observed. For examples see the	Photo Atlas in MESA ~ Mapping Episod	dic Stream Indicators	
WATER	COURSE or WATERCOURSE COMP	LEX	
ansportation, Deposition & Flow Tran	sition Indicators	Substrate Pa	article Size
Bar forms: sand / gravel	Secondary channels	Estimated p	
Bifurcated flow	Sediment plastering		mented substrate
Drainage swales	Sediment ramps: sand / gravel	% Boulder	≥ 256 mm
Flow lineations	Sediment sheets: sand / gravel	% Cobble	≥ 64 – 256 mm
Imbricated gravel	Sediment sorting	% Pebble	$\geq 4 - 64 \text{ mm}$ $\geq 2 - 4 \text{ mm}$
Levee ridges: sand / gravel	Sediment tails: sand / gravel	% Granule	≤ 2 mm
Mud: cracks / curls / drapes	Vegetation-channel alignments	% Sand	Fines
Organic drift	Wrack	% Silt/Clay	Filles
Overturned rocks	Wrinkle marks		
Out-of-channel flow: Lateral floo	dplain / Terminal floodplain		
Ripples			
Other:			
	NK		
	011-		
Erosion Indicators			
Cut banks	Rills	Water-cut bench	
	0	Mater level mar	
Exposed roots	Scour	Water level man	N
Exposed roots Headcuts	Secondary channels	vvater level man	
Headcuts		Water level man	~
		Water level man	N.
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Headcuts	Secondary channels	vvater level man	Λ
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Headcuts	Secondary channels	vvater level man	Λ
Headcuts	Secondary channels	vvater level man	Α
Headcuts	Secondary channels		
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Headcuts Other: Estimated % total vegetative cover	Secondary channels	Representative hei	ght and width of
Headcuts Other: Estimated % total vegetative cover (perennial & shrub species combined):	Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each:	Representative heig dominant and co-do	ght and width of ominant species:
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Headcuts Other: Estimated % total vegetative cover (perennial & shrub species combined): Differences in total shrub/perennial dens adjacent floodplain? (describe and qualif Are there plant species that are present	Secondary channels $N \mid A$ $\frac{Vegetation}{Dominant and co-dominant species} (if known) and % of total vegetative cover of each: \frac{V}{A} in (or absent from) the low-flow channel(species) is the low-flow channel (species) is the low-flow chann$	Representative heig dominant and co-do en the low-flow chann	ght and width of ominant species: rel(s) and the
Headcuts Other: Estimated % total vegetative cover (perennial & shrub species combined): Differences in total shrub/perennial dens adjacent floodplain? (describe and qualif	Secondary channels $N \mid A$ $\frac{Vegetation}{Dominant and co-dominant species} (if known) and % of total vegetative cover of each: \frac{V}{A} in (or absent from) the low-flow channel(species) is the low-flow channel (species) is the low-flow chann$	Representative heig dominant and co-do en the low-flow chann	ght and width of ominant species: rel(s) and the
Headcuts Other: Estimated % total vegetative cover (perennial & shrub species combined): Differences in total shrub/perennial dens adjacent floodplain? (describe and qualif Are there plant species that are present floodplain? (describe differences):	Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: ity (total #shrubs/perennial plants) betwee y the differences): \mathcal{N}/\mathcal{A} in (or absent from) the low-flow channel(stress):	Representative heig dominant and co-do en the low-flow chann s) when compared to t	ght and width of ominant species: rel(s) and the the adjacent
Headcuts Other: Estimated % total vegetative cover (perennial & shrub species combined): Differences in total shrub/perennial dens adjacent floodplain? (describe and qualif Are there plant species that are present floodplain? (describe differences): Are there plant species that are more at	Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: ity (total #shrubs/perennial plants) betwee y the differences): \mathcal{N}/\mathcal{A} in (or absent from) the low-flow channel(stress):	Representative heig dominant and co-do en the low-flow chann s) when compared to t	ght and width of ominant species: rel(s) and the the adjacent
Headcuts Other: Estimated % total vegetative cover (perennial & shrub species combined): Differences in total shrub/perennial dens adjacent floodplain? (describe and qualif Are there plant species that are present floodplain? (describe differences):	Secondary channels $N \mid A$ $\frac{Vegetation}{Dominant and co-dominant species} (if known) and % of total vegetative cover of each: \frac{V}{A} in (or absent from) the low-flow channel(species) is the low-flow channel (species) is the low-flow chann$	Representative heig dominant and co-do en the low-flow chann s) when compared to t	ght and width of ominant species: rel(s) and the the adjacent
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I ID D A LAT DATI	Stream ID MSD-9	page 4 of 4
ite ID Desert Pearl	G & EVAPORATION and EOLIAN TRANSPORT &	DEPOSITION
INDICATORS of PONDIN	G & EVAPORATION and EOEIAN THOUSE	
Algal crusts	Sand-filled channels	The second second second
Beach ridges	Springs	All and a second se
Coppice dunes: active / relict	Substrate staining	
Crusts: carbonate / salt / soda	Vegetation-landscape alignments	and the second second second second
Mud: cracks / curls / polygons		
Other:		
	Additional Diagrams and Notes	

Vegetation cross-section diagram: Draw a cross-section that identifies the approximate locations along the transect or diagram of geomorphic units (see page 1 of data sheet) where there are changes in vegetation characteristics, as summarized in the vegetation subsections under "Upland" and "Watercourse Complex".

NA

Photographs

Photographs should document the representative landscape units, vegetation, and the presence or absence of

	representative str	GPS location
hoto ID #	Description	GFS IOCALION
	(w)	
		5

Episodic Stream Indicator Data Sheet page 1 of 4 Stream ID: MSD- 10 Site ID: Desert Peak Date: 11 10171 Nearest Town: Palm Sonnas County: Investigators: R. Stritmater, A. Cassady **Base Map** Topographic Map Name: Date: Aerial Photo #: Date: **GPS** Data Zone 10 / 11 | GPS Error: ± ft/m GPS Name: Datum: Transect Elevation: GPS co-ords end of transect: GPS co-ords start of transect: Great Basin Other: Mojave Sonoran/Colorado Geomorphic Province (< one) Landform (\checkmark all that apply) Axial valley Alluvial plain Playa Lower fan Headwater Upper fan Middle fan Channel Form (✓ one) Discontinuous Other: Single thread Braided Compound Distributary Transect was selected to: Document channel elevations & boundaries Document fluvial activity & boundaries Document a change in watercourse morphology Document habitat associations Other: Date of most recent runoff event (if known): Physical Setting: Briefly describe geomorphic processes and surficial materials and conditions, including the degree of disturbance relative to an intact dryland stream ecosystem, and any anthropogenic influences on the channel form and function: + Suphemural channel * Anthropogenic infl: Devers substation to NW/NE and whereves roads / truers Summary Site Description and Cross-section Sketch: View across the channel from watercourse-edge to watercourse-edge. Identify channel(s), banks, islands, interfluves, floodplains, terraces, and uplands where present. Note approximate width and elevation differences between features indicated. Right Left _ W ny abandoned F1 mod waan OHNM 5-5

Site ID: Desert Peak Stream ID: MDS-10 page 2 of 4

Note presence or absence of each indicator within a <u>minimum</u> distance of 50 feet upstream and 50 feet downstream of the representative channel cross section. Mark each box with a plus (+) for those indicators observed, and a minus (-) for indicators not observed. For examples see the Photo Atlas in MESA ~ Mapping Episodic Stream Indicators.

rrestrial Indicators	UPLAND	Substa	te Particle Size
Av soil horizon	Relict bars & swales	and the second s	ed percentages
Biotic soil crusts	Rock fractured in place		Cemented substrat
Bioturbation	Rock varnish	6 % Boulder	≥ 256 mm
Caliche: coatings / layers / rubble	Rock weathering	ID % Cobble	≥ 256 mm ≥ 64 – 256mr
Carbonate etching	Rubified rock undersides	20 % Pebble	$\geq 4 - 64 \text{ mm}$
Coppice dunes: active / relict	Soil development	3D % Granule	$\geq 2 - 4 \text{ mm}$
Deflated surface	Surface rounding of landform		≤ 2 mm
Pavement	V Woody debris in place	- % Silt/Clay	Fines
Other:	To record debits in place	- /o One Oldy	1 1100
Fluvial Indicators Bars: sand / gravel Cut banks Drainage swales	Mud: cracks / curls / drap Organic drift Overturned rocks	Vegetation- Water-cut b	ils: sand / grave channel alignment enches
Exposed roots	Scour	Wrack	
First-order streams		avel Wrinkle ma	KS
Flow lineations Other:	Sediment sorting		
	Vegetation		
the second s			height and width Of
0	Dominant and co-dominant spec		height and width of
0	Dominant and co-dominant spec (if known) and % of total vegetati	ve dominant and c	o-dominant species.
(perennial & shrub species combined):	Dominant and co-dominant spec (if known) and % of total vegetati cover of each:	ve dominant and c	o-dominant species.
(perennial & shrub species combined): 10 - 15'/.	Dominant and co-dominant spec (if known) and % of total vegetati cover of each: LAQTYLI	ve dominant and c 3-4' H 2-3' W	o-dominant species.
perennial & shrub species combined): 10 - 15'/. Differences in total shrub/perennial dense watercourse complex? (describe and que	Dominant and co-dominant spec (if known) and % of total vegetati cover of each: (AQTK-1 AMB DUM sity (total #shrubs/perennial plants) to alify the differences):	ve dominant and c 3-4' H 2-3' W petween upland & fluvia	o-dominant species. Ily active units or
(perennial & shrub species combined): 10 - 15 '/. Differences in total shrub/perennial dense watercourse complex? (describe and que Are there plant species that are present watercourse complex? (describe difference)	Dominant and co-dominant spec (if known) and % of total vegetati cover of each: (AQTK-1 AMB DUM sity (total #shrubs/perennial plants) to alify the differences): OF VEG IN WOLCO in (or absent from) the uplands whe	ve dominant and c 3-4' H 2-3' W petween upland & fluvia VSC n compared to fluvially a	o-dominant species. Ily active units or
Differences in total shrub/perennial dens watercourse complex? (describe and que Are there plant species that are present watercourse complex? (describe differe	Dominant and co-dominant spec (if known) and % of total vegetati cover of each: (AQTK-1 AMB DUM sity (total #shrubs/perennial plants) to alify the differences): OF VEG IN WOLCOO in (or absent from) the uplands when nces):	ve dominant and c 3-4' H 2-3' W petween upland & fluvia VSC n compared to fluvially a	o-dominant species. Ily active units or active units or the
(perennial & shrub species combined): 10 - 15 '/. Differences in total shrub/perennial dens watercourse complex? (describe and que Are there plant species that are present watercourse complex? (describe differe UAR TRI Are there plant species that are more all Are there plant species that are more all	Dominant and co-dominant spec (if known) and % of total vegetati cover of each: (AQTK-1 AMB DUM sity (total #shrubs/perennial plants) to alify the differences): OF VEG IN WOTCO in (or absent from) the uplands when nees): AMB DUM (SCH BAV oundant (or less abundant) in the upl cribe and gualify differences)	ve dominant and c 3-4' H 2-3' W petween upland & fluvia VSC n compared to fluvially a ands when compared to	o-dominant species. Ily active units or active units or the
(perennial & shrub species combined): 10 - 15 '/. Differences in total shrub/perennial dens watercourse complex? (describe and que Are there plant species that are present watercourse complex? (describe differe	Dominant and co-dominant spec (if known) and % of total vegetati cover of each: LAQTK-1 AMB DUM sity (total #shrubs/perennial plants) to alify the differences): OF VEG IN WATCO in (or absent from) the uplands when nces): AMB DUM (SCH BMA pundant (or less abundant) in the uplands	ve dominant and c 3-4' H 2-3' W petween upland & fluvia VSC n compared to fluvially a ands when compared to	o-dominant species. Ily active units or active units or the

	Stream ID: MDS-10		page 3 o
recentative channel cross section	ator within a <u>minimum</u> distance of 50 fe	et upstream and	a, and a miner (/
use not observed. For examples see	the Photo Atlas in MESA ~ Mapping Ep	isodic Stream Ind	icators.
	ERCOURSE or WATERCOURSE CO		
		Subst	rate Particle Size
ansportation, Deposition & Flow T Bar forms: sand / gravel	Secondary channels	Estim	ated percentages
Bar forms: sand / gravel Bifurcated flow	Sediment plastering	- % Bedroo	ck / Cemented substra
	Sediment ramps: sand / grave	I - % Boulde	
Drainage swales	Sediment sheets: sand / grave	I – % Cobble	≥ 64 - 256 m
Imbricated gravel	Sediment sorting	~ % Pebble	
Levee ridges: sand / gravel	Sediment tails: sand / grave	I 10 % Granul	
Mud: cracks / curls / drapes	Vegetation-channel alignments	9D % Sand	≤ 2 mm
Organic drift	Wrack	% Silt/Cla	ay Fines
Overturned rocks	Wrinkle marks		
Out-of-channel flow: Lateral f	loodplain / Terminal floodplain		
Ripples			
Other:			
in fate	chound - sandy bo	Ama	
unvegences	a since - sandy he	TUN	
•	CALCOLL.		
Erosion Indicators		10/10	hanahaa
	Dilla		
Cut banks	Rills	Colored Statements and an other statements and	benches
Exposed roots	Scour	Water-cut Water leve	The second se
Exposed roots Headcuts		Colored Statements and an other statements and	The second s
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Exposed roots Headcuts Other:	Scour	Water leve	el mark
Exposed roots Headcuts Other: Estimated % total vegetative cover	Scour Secondary channels Vegetation Dominant and co-dominant species	Representativ	el mark
Exposed roots Headcuts Other:	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative	Representativ	el mark
Exposed roots Headcuts Other: Estimated % total vegetative cover	Scour Secondary channels Vegetation Dominant and co-dominant species	Representativ	el mark
Exposed roots Headcuts Other: Estimated % total vegetative cover	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative	Representativ	el mark
Estimated % total vegetative cover (perennial & shrub species combined)	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each:	Representatin dominant and	el mark ve height and width of l co-dominant species:
Estimated % total vegetative cover (perennial & shrub species combined)	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each:	Representatin dominant and	el mark ve height and width of l co-dominant species:
Estimated % total vegetative cover (perennial & shrub species combined)	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: ensity (total #shrubs/perennial plants) bet valify the differences):	Representatin dominant and	el mark ve height and width of l co-dominant species:
Estimated % total vegetative cover (perennial & shrub species combined)	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: ensity (total #shrubs/perennial plants) bet ralify the differences):	Representative dominant and	ve height and width of I co-dominant species:
Exposed roots Headcuts Other: Estimated % total vegetative cover (perennial & shrub species combined) Differences in total shrub/perennial de adjacent floodplain? (describe and que Are there plant species that are prese	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: ensity (total #shrubs/perennial plants) bet ralify the differences):	Representative dominant and	ve height and width of I co-dominant species:
Estimated % total vegetative cover (perennial & shrub species combined)	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: Ensity (total #shrubs/perennial plants) bet Pailify the differences): M (A ent in (or absent from) the low-flow channel	Representative dominant and	ve height and width of I co-dominant species:
Estimated % total vegetative cover (perennial & shrub species combined) Differences in total shrub/perennial de adjacent floodplain? (describe and que Are there plant species that are prese floodplain? (describe differences):	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: ensity (total #shrubs/perennial plants) bet valify the differences): N (A ent in (or absent from) the low-flow channel N / N	Representative dominant and ween the low-flow	ve height and width of I co-dominant species: channel(s) and the ed to the adjacent
Estimated % total vegetative cover (perennial & shrub species combined) Differences in total shrub/perennial de adjacent floodplain? (describe and que Are there plant species that are prese floodplain? (describe differences):	Scour Secondary channels Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: ensity (total #shrubs/perennial plants) bet valify the differences): N (A ent in (or absent from) the low-flow channel N / N	Representative dominant and ween the low-flow	ve height and width of I co-dominant species:
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Site ID Descur Peak	Stream I	D MDS-	- VD .	page 4 of 4
INDICATORS of PONDIN	G & EVAPORATION and E			N
Algal crusts	Sand-filled channels			
Beach ridges	Springs	Contraction of the second		
Coppice dunes: active / relict	Substrate staining			
Crusts: carbonate / salt / soda	Vegetation-landscape	alignments		
Mud: cracks / curls / polygons				TANK STATES
Other:	Additional Diagrams	nd Notes		
Vegetation cross-section diagram: Dra diagram of geomorphic units (see page summarized in the vegetation subsection	1 of data sheet) where there	tifies the approximare changes in v	egetation characteris	the transect or tics, as
W apardaned	Anatom Conner	tra	nseet	4
Photographs should document the	Photographs representative landscape un representative stream	nits, vegetation, a	nd the presence or a	bsence of
Photo ID # Descrip			GPS location	
PP-98 Upstream - no				

ang Chaife ang sa	Epis	odic Stream Indica	itor Data She	et	page 1 of 4
ite ID: Desert	Peak	Stream ID: MSIO)- 11		Date: 1 10.20
learest Town: Po	alm Sor	ings	The strength of the	County: RIVER	SICH
nvestigators: B	stittmat			and the second	
	the second second		ase Map		Date:
Aerial Photo #:	Date:	Topographi	C Map Name: PS Data		
CDC Normal	Detum	Transect El		Zone 10 / 11	1 GPS Error: ± ft / m
GPS Name: GPS co-ords start	Datum:	Transcot L	GPS co-	ords end of transe	
Geomorphic Prov	and the second second	Mojave	Sonoran/Col	orado Great	Basin Other:
Geomorphic Prov	mice (* one)		(√ all that ap	ply)	
Llandurator	Upper fan	Middle fan	Lower fan	Alluvial plain	Axial valley Playa
Headwater	Upper lan		el Form (√ on	e)	
Single thread	Braided	Compound	Distributar		ous Other:
J Single thread	Draided		was selected	to:	
Document fluvi	al activity & ho		Documen	t channel elevation	ns & boundaries
and the second se					rcourse morphology
Document habi	tat association	5	Decument		
Other:					
Date of most rece	nt runoff event	(if known):			itions, including the degree of
Ephenne Anthro Ir Flows, d	vflu: e	inergy dure	elophe	nt to not	vth has cut off
watercourse-edge.	Identify channe and elevation d	Cross-section Sketch el(s), banks, islands, in ifferences between fe	nterfluves, flood	plains, terraces, an	vatercourse-edge to d uplands where present. Note Right
<i>w</i>	M	NZ da 1 0440	UMI	My	E

Site ID: DESCIPT PEAK	Stream ID: M80 - 11		page 2 of 4
		1504.11	
Note presence or absence of each indicat the representative channel cross section. for indicators not obsenced. For example	Mark each box with a stud (1) for the	upstream and 50 feet dow	nstream of
for indicators not observed. For examples	S see the Photo Atlas in MESA ~ Mappin	a Episodic Stream Indicat	a minus (-)
		g Episodic Stream Indicat	015.
Terrestrial Indicators	UPLAND	Substate Destin	
Av soil horizon	Relict bars & swales	Substrate Partic Estimated percer	
Biotic soil crusts	Rock fractured in place	% Bedrock / Cemente	
Bioturbation	Rock varnish		256 mm
Caliche: coatings / layers / rubble	Rock weathering	-	64 – 256mm
Carbonate etching	Rubified rock undersides		4 – 64 mm
Coppice dunes: active / relict			2 – 4 mm
Deflated surface			2 mm
Pavement	Woody debris in place		nes
Other:			
Fluvial Indicators Bars: sand / gravel	Mud: cracks / curls / drapes	Sediment tails: sand	/ gravel
Cut banks	Organic drift	Vegetation-channel al	lignment
Drainage swales Exposed roots	Overturned rocks	Water-cut benches	
First-order streams	Scour	Wrack	
Flow lineations	Sediment ramps: sand / gravel Sediment sorting	Wrinkle marks	
Other:	econnent certing		
	NIA		
	Vegetation		
Estimated % total vegetative cover	Deminant - 1 1 1	Representative height and	width of
(perennial & shrub species combined):	(If known) and % of total vegetative	dominant and co-dominant	
8.1	cover of each.		
01-	varrea tridenter 5%		
Differences in total shrub/perennial density watercourse complex? (describe and gue)	MINIMOSIA DUMOSA 3 1-	3-4'W	
watercourse complex? (describe and quality	(total #shrubs/perennial plants) between	upland & fluvially active un	nits or
+HOLOGIC ADARIA	Ty the differences):	d	
Are there plant	of utilities in uplan	10	
watercourse complex? (describe difference	(or absent from) the uplands when compares):	ared to fluvially active units	or the
LAR TRI	absent in watch	rcomples	
units or the watercourse complex? (describ	dant (or less abundant) in the uplands where and qualify differences)	en compared to the fluvially	
LATE TOI MIG	ner and set bite	gross highe	V
MESA. October 2014		- L	5-6

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	Stream ID: MSD-1			page 3 of 4
epresentative channel cross section. M	ator within a <u>minimum</u> distance of 50 feet ark each box with a plus (+) for those inc he Photo Atlas in MESA ~ Mapping Epis	licato	rs observed, and	a minus (-) ioi
WAT	ERCOURSE or WATERCOURSE COM	PLE)	(
ransportation, Deposition & Flow Tr	ansition Indicators	1	Substrate F	Particle Size
Bar forms: sand / gravel	Secondary channels			percentages
Bifurcated flow	Sediment plastering	1		emented substrate
Drainage swales	Sediment ramps: sand / gravel	1	% Boulder	≥ 256 mm
Flow lineations	Sediment sheets: sand / gravel	5	% Cobble	≥ 64 – 256 mm
Imbricated gravel	Sediment sorting	ID	% Pebble	≥ 4 – 64 mm
Levee ridges: sand / gravel	Sediment tails: sand / gravel		% Granule	≥ 2 – 4 mm
Mud: cracks / curls / drapes	Vegetation-channel alignments	35		≤ 2 mm
Organic drift	Wrack	1	% Silt/Clay	Fines
Overturned rocks	Wrinkle marks			
Out-of-channel flow: Lateral flo	oodplain / Terminal floodplain			
Ripples				
Other:				
Cut banks Exposed roots	Rills Scour		Water-cut bend Water level ma	
•			Water level ma	ark
Headcuts	Secondary channels		all and and	North The Idea of
Other:				
Current		_		
Estimated % total vegetative cover (perennial & shrub species combined): \mathcal{L}	Vegetation Dominant and co-dominant species (if known) and % of total vegetative cover of each: SCH BAK U1,	d	ominant and co- -5	
Estimated % total vegetative cover (perennial & shrub species combined): \mathcal{L}'	Dominant and co-dominant species (if known) and % of total vegetative cover of each: SCH BAK U1, sity (total #shrubs/perennial plants) betw	d	ominant and co- -5	dominant species. ()
Estimated % total vegetative cover (perennial & shrub species combined): \mathcal{L}' . Differences in total shrub/perennial dens adjacent floodplain? (describe and quali	Dominant and co-dominant species (if known) and % of total vegetative cover of each: SCH BAK U1, sity (total #shrubs/perennial plants) betw fy the differences): DK 14Pg IN UFC	een t	ominant and co- L 5 the low-flow char	dominant species: () nnel(s) and the
Estimated % total vegetative cover (perennial & shrub species combined): \mathcal{L}'' . Differences in total shrub/perennial dens adjacent floodplain? (describe and quali $\mathcal{H}\mathcal{H}\mathcal{H}\mathcal{H}\mathcal{H}\mathcal{H}$ Are there plant species that are present floodplain? (describe differences):	Dominant and co-dominant species (if known) and % of total vegetative cover of each: SCH BAK U'1, sity (total #shrubs/perennial plants) betw fy the differences): DF UEG IN UFC in (or absent from) the low-flow channel	een t	ominant and co- L 5 the low-flow char hen compared to	dominant species: // nnel(s) and the o the adjacent
Estimated % total vegetative cover (perennial & shrub species combined): Differences in total shrub/perennial dens adjacent floodplain? (describe and quali Are there plant species that are present floodplain? (describe differences):	Dominant and co-dominant species (if known) and % of total vegetative cover of each: SCH BAK U1, sity (total #shrubs/perennial plants) betw fy the differences): DK 14Pg IN UFC	een t	ominant and co- L 5 the low-flow char hen compared to	dominant species: // nnel(s) and the o the adjacent

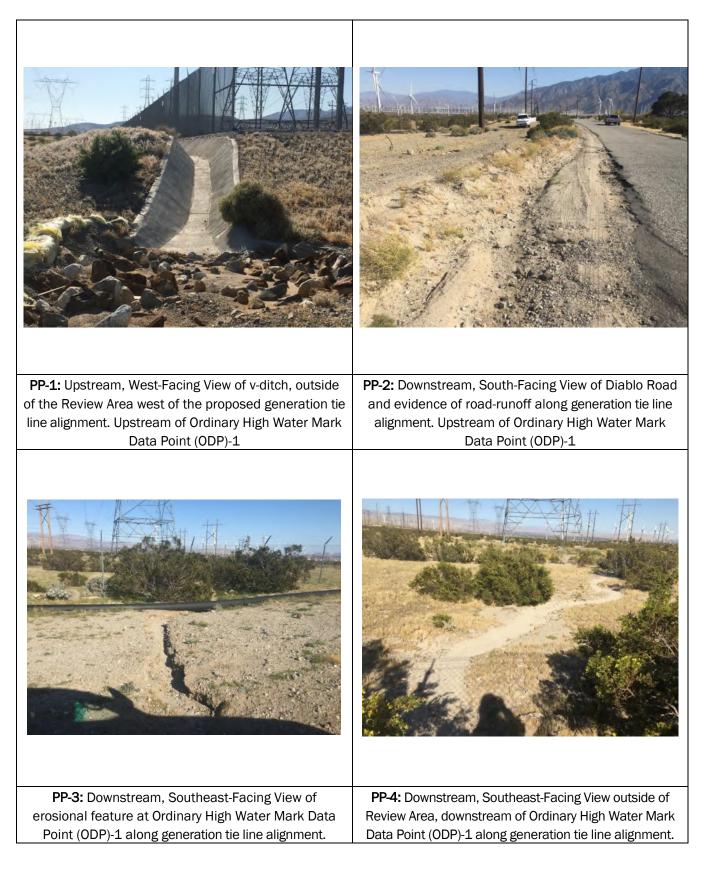
ite ID Descrit Peak	Stream ID MSD-11	page 4 of 4
INDICATORS of PONDIN	G & EVAPORATION and EOLIAN TRANSPORT & D	DEPOSITION
Algal crusts	Sand-filled channels	
Beach ridges	Springs	Alexandra Standard
Coppice dunes: active / relict	Substrate staining	
Crusts: carbonate / salt / soda	Vegetation-landscape alignments	
Mud: cracks / curls / polygons		
Other:		
	Additional Diagrams and Notes	

Vegetation cross-section diagram: Draw a cross-section that identifies the approximate locations along the transect or diagram of geomorphic units (see page 1 of data sheet) where there are changes in vegetation characteristics, as summarized in the vegetation subsections under "Upland" and "Watercourse Complex".

June under 14 transect Photographs Photographs should document the representative landscape units, vegetation, and the presence or absence of representative stream indicators. **GPS** location Description Photo ID # Oownstream - South PP-100

Attachment D

Photo Documentation



	<image/>
PP-5: Downstream, Southeast-Facing View of roadside ditch collecting runoff from Diablo Road along generation tie line alignment. Near Ordinary High Water Mark Data Point (ODP)-2	PP-6: Downstream, Southeast-Facing View of roadside ditch collecting runoff from Diablo Road along generation tie line alignment Near Ordinary High Water Mark Data Point (ODP)-3
PP-7: Upstream, North-Facing View of Diablo Road and no signs of flow along generation tie line alignmentUpstream of Ordinary High Water Mark Data Point (ODP)-3	PP-8: Upstream, West-Facing View of roadside ditch outside of Review Area. Upstream of Ordinary High Water Mark Data Point (ODP)-4

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PP-9: Upstream, North-Facing View of roadside ditch outside of Review Area. Upstream of Ordinary High Water Mark Data Point (ODP)-4	PP-10: Downstream, South-Facing View of roadside ditch that dissipates to runoff/sheetflow along generation tie line alignment. Upstream of Ordinary High Water Mark Data Point (ODP)-4
PP-11: Downstream, South-Facing View of roadside ditch near Ordinary High Water Mark Data Point (ODP)-4 along generation tie line alignment.	PP-12: Upstream, North-Facing View of roadside ditch south of Ordinary High Water Mark Data Point (ODP)-4 along generation tie line alignment.

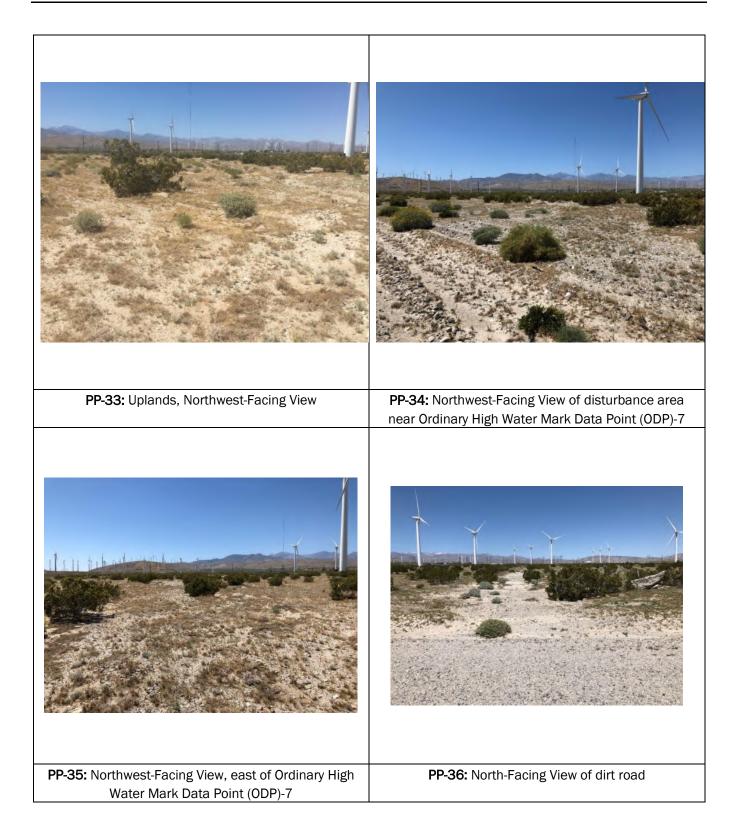
PP-13: Downstream, South-Facing View of roadside ditch south of Ordinary High Water Mark Data Point (ODP)-4 along generation tie line alignment.	PP-14: Downstream, South-Facing View of where flows from roadside ditch dissipate to runoff/sheetflow, South of Ordinary High Water Mark Data Point (ODP)-4
PP-15: Downstream, South-Facing View of roadside ditch south of Ordinary High Water Mark Data Point (ODP)-4 along generation tie line alignment.	PP-16: Downstream, South-Facing View of roadside ditch where flows dissipates to runoff/sheetflow south of Ordinary High Water Mark Data Point (ODP)-4 along generation tie line alignment.

PP-17: Downstream, South-Facing View of roadside	PF-18: Downstream, South-Facing View of NWW-1
ditch where flows dissipates to runoff/sheetflow	(alluvial fan) Near Ordinary High Water Mark Data Point
south of Ordinary High Water Mark Data Point	(ODP)-5 along generation tie line alignment.
(ODP)-4 along generation tie line alignment.	PP 20: Unctroom Northward Easing View, outside of Deview
PP-19: Downstream, Southeast-Facing View of NWW-1	PP-20: Upstream, Northwest-Facing View, outside of Review
(alluvial fan) Near Ordinary High Water Mark Data	Area, of NWW-1 (alluvial fan) Near Ordinary High Water Mark
Point (ODP)-5 along generation tie line alignment.	Data Point (ODP)-5 along generation tie line alignment.

PP-21: Downstream, Southeast-Facing View,	PP-22: Downstream, Southeast-Facing View, outside
outside of Review Area. NWW-1 (alluvial fan) south	of Review Area. NWW-1 (alluvial fan) south of
of Ordinary High Water Mark Data Point (ODP)-5	Ordinary High Water Mark Data Point (ODP)-5 along
along generation tie line alignment.	generation tie line alignment.
PP-23: Downstream, Southeast-Facing View NWW-1	PP-24: Upstream, Northwest-View of NWW-1 (low flow
(low flow channel within alluvial fan) Near Ordinary	channel within alluvial fan) Near Ordinary High Water
High Water Mark Data Point (ODP)-6	Mark Data Point (ODP)-6

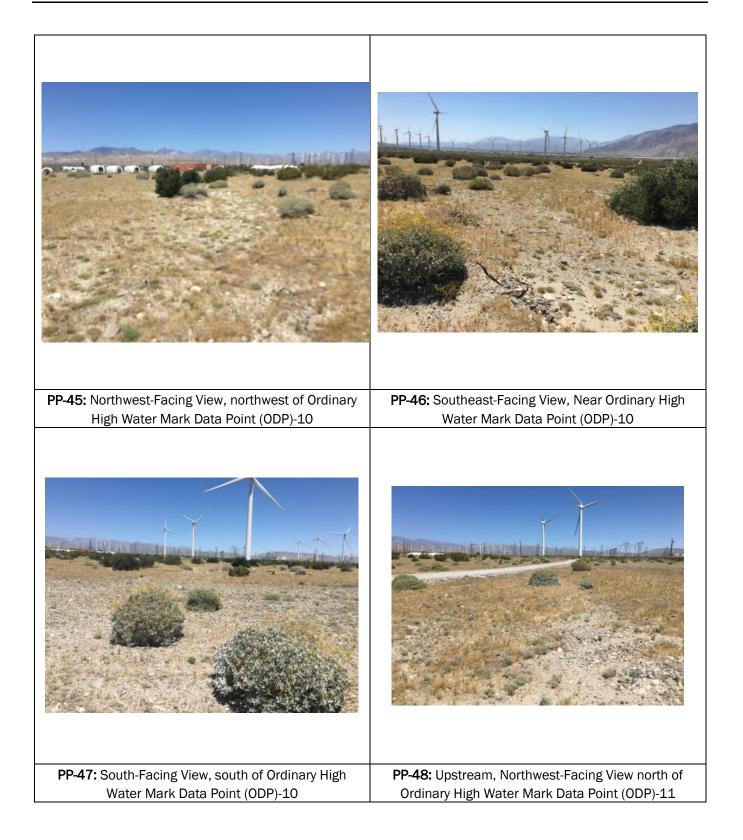
PP-25: Downstream, Southeast-Facing View of NWW- 1 (alluvial fan) southeast of Ordinary High Water Mark Data Point (ODP)-6	PP-26: West-Facing View of NWW-1 (alluvial fan) southeast of Ordinary High Water Mark Data Point (ODP)-6
PP-27: Downstream, Southeast-Facing View of NWW- 1 (alluvial fan) southeast of Ordinary High Water Mark Data Point (ODP)-6	PP-28: Upstream, Northwest-Facing View of NWW-1 (alluvial fan) southeast of Ordinary High Water Mark Data Point (ODP)-6

PP-29: Downstream, South-Facing View of NWW-1 (alluvial fan) southeast of Ordinary High Water Mark Data Point (ODP)-6	PP-30: Downstream, East-Facing View of dirt road and NWW-1 (alluvial fan) southeast of Ordinary High Water Mark Data Point (ODP)-6
PP-31: Upstream, Northwest-Facing View of NWW-1 (alluvial fan) north of Ordinary High Water Mark Data Point (ODP)-6	PP-32: Downstream, Southeast-Facing View of NWW-1 (alluvial fan) northwest of Ordinary High Water Mark Data Point (ODP)-6



PP-37: Upstream, North-Facing View of sheeflow area, near Ordinary High Water Mark Data Point (ODP)-8	PP-38: Downstream, South-Facing View shetflow outside of Review Area south of Ordinary High Water Mark Data Point (ODP)-8
PP-39: Northwest-Facing View of disturbance area	PP-40: North-Facing View of dirt road

PP-41: North-Facing View of Storage Yard, north of Ordinary High Water Mark Data Point (ODP)-9	PP-42: Upstream, North-Facing View of erosional feature near Ordinary High Water Mark Data Point (ODP)-9
PP-43: Downstream, South-Facing View of erosional feature near Ordinary High Water Mark Data Point (ODP)-9	PP-44: North-Facing View of uplands where erosional flows dissipate to sheeflow, south of Ordinary High Water Mark Data Point (ODP)-9



PP-49: Downstream, Southeast-Facing View north of Ordinary High Water Mark Data Point (ODP)-11	PP-50: Upstream, Northwest-Facing View near Ordinary High Water Mark Data Point (ODP)-11
PP-51: Downstream, Southeast-Facing View south of Ordinary High Water Mark Data Point (ODP)-11	PP-52: Downstream, South-Facing View south of Ordinary High Water Mark Data Point (ODP)-11

DD E2: Unstroom Northwest Essing View of NWW 2	PD E 41 Doursetrage: Cauthoast Equing View of NIMM 2
PP-53: Upstream, Northwest-Facing View of NWW-2 near Ordinary High Water Mark Data Point (ODP)-12	PP-54: Downstream, Southeast-Facing View of NWW-2 near Ordinary High Water Mark Data Point (ODP)-12
PP-55: Upstream, Northwest-Facing View of NWW-2 south of Ordinary High Water Mark Data Point (ODP)-12	PP-56: Downstream, South-Facing View outside of Review Area of NWW-2 south of Ordinary High Water Mark Data Point (ODP)-12

PP-57: Downstream, South-Facing View of NWW-2 near Ordinary High Water Mark Data Point (ODP)-13	PP-58: Upstream, North-Facing View of NWW-2 near Ordinary High Water Mark Data Point (ODP)-13
PP-59: Downstream, South-Facing View where flows dissipate as sheetflow, south of Ordinary High Water Mark Data Point (ODP)-13	PP-60: Upstream, North-Facing View of NWW-2 south of Ordinary High Water Mark Data Point (ODP)-13

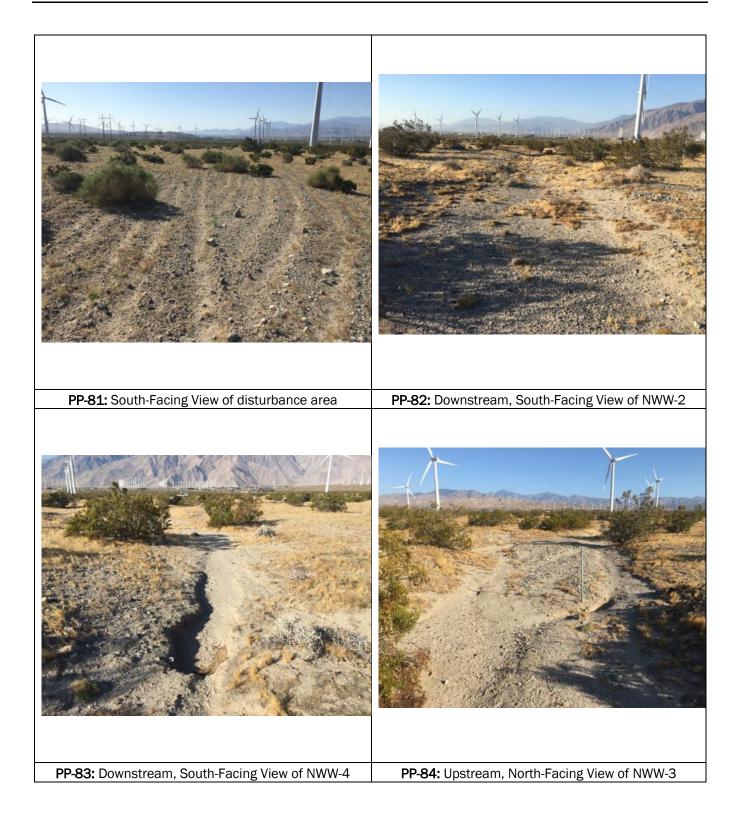
PP-61: South-Facing View, no evidence of hydrology or connectivity of NWW-2. South of Ordinary High Water	PP-62: Upstream, North-Facing View, no evidence of hydrology or connectivity of NWW-2, South of Ordinary
<image/>	<image/>
PP-63: East-Facing View, north of Dillon Road.	PP-64: North-Facing View of dirt road and berm/fencing

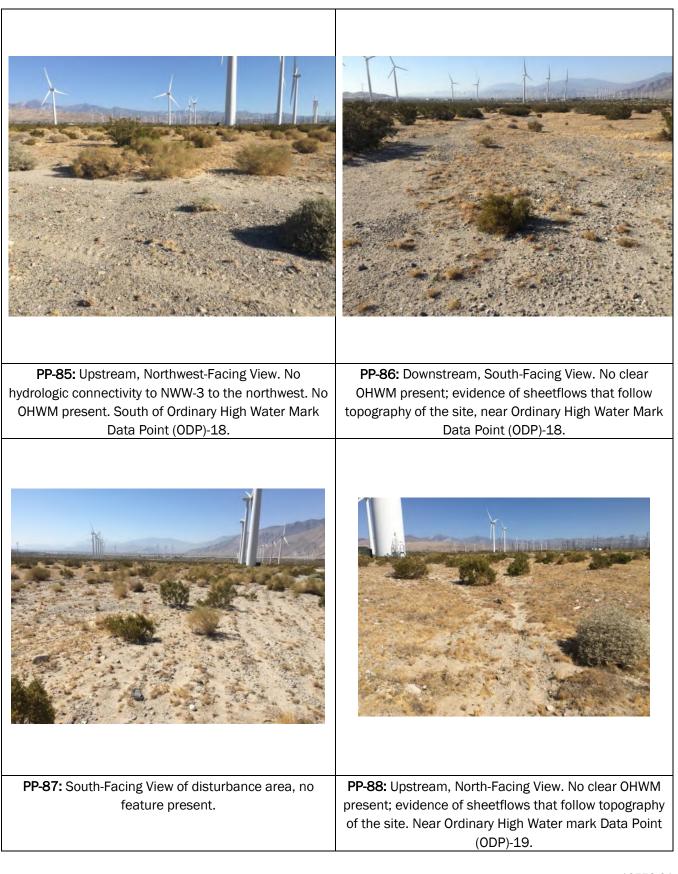
PP-65: West-Facing View of NWW-3 (alluvial fan), near Ordinary High Water Mark Data Point (ODP)-14	PP-66: Upstream, North-Facing View of NWW-3 (alluvial fan) near Ordinary High Water Mark Data Point (ODP)-14
PP-67: Upstream, North-Facing View of NWW-3 (alluvial fan) south Ordinary High Water Mark Data Point (ODP)-14	PP-68: Downstream, Southeast-Facing View of NWW-3 (alluvial fan) south of Ordinary High Water Mark Data Point (ODP)-14

PP-69: Upstream, North-Facing View of NWW-3	PP-70: Upstream, North-Facing View of NWW-3
(alluvial fan) south Ordinary High Water Mark Data	outside of Review Area, south of Ordinary High Water
Point (ODP)-14	Mark Data Point (ODP)-14
PP-71: Downstream, Southeast-Facing View of NWW-3	PP-72: Downstream, South-Facing View of NWW-3
outside of Review Area, south of Ordinary High Water	outside of Review Area, south of Ordinary High Water
Mark Data Point (ODP)-14	Mark Data Point (ODP)-14

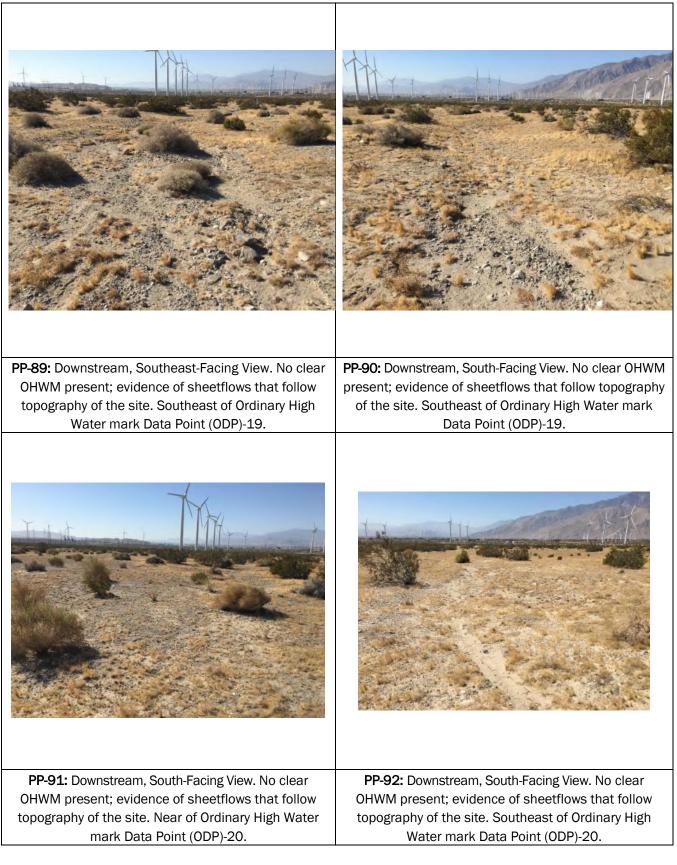
PP-73: Downstream, South-Facing View of NWW-3 outside of Review Area, south of Ordinary High Water Mark Data Point (ODP)-14	PP-74: Downstream, South-Facing View of tributary NWW-3a, near Ordinary High Water Mark Data Point (ODP)-15
PP-75: Downstream, South-Facing View of tributary NWW-3b, near Ordinary High Water Mark Data Point (ODP)-16	PP-76: Upstream, North-Facing View NWW-4 near Ordinary High Water Mark Data Point (ODP)-17

PP-77: Downstream, Southeast-Facing View of NWW-4 near Ordinary High Water Mark Data Point (ODP)-17	PP-78: Upstream, Northwest-Facing View of NWW-4 south of Ordinary High Water Mark Data Point (ODP)-17
PP-79: Upstream, Northwest-Facing View of NWW-4 outside of the Review Area, south of Ordinary High Water Mark Data Point (ODP)-17	 PP-80: Downstream, Southwest-Facing View of NWW-4 outside of the Review Area, south of Ordinary High Water Mark Data Point (ODP)-17

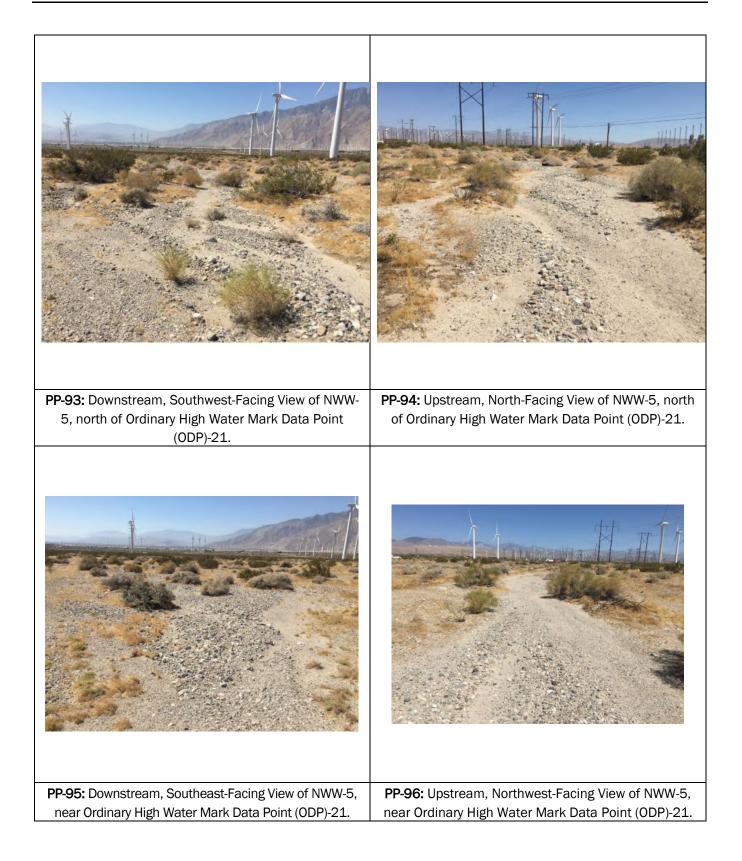




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PP-97: Upstream, Northwest-Facing View of NWW-3 in northern portion of review area, north of Ordinary High Water Mark Data Point (ODP)-22.	PP-98: Upstream, North-Facing View of NWW-6, south of Ordinary High Water Mark Data Point (ODP)-23.
PP-100: Downstream, South-Facing View of NWW-7, near Ordinary High Water Mark Data Point (ODP)-24.	

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