APPENDIX N

IDENTIFICATION AND DELINEATION OF AREAS POTENTIALLY SUBJECT TO JURISDICTION UNDER THE CALIFORNIA DEPARYTMENT OF FISH AND WILDLIFE LAKE AND STREAMBED ALTERATION PROGRAM

Identification and Delineation of Areas Potentially Subject to Jurisdiction under the California Department of Fish and Wildlife Lake and Streambed Alteration Program Desert Quartzite Solar Farm Project Blythe, Riverside County, California

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March 2017

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This report should be cited as: Huffman-Broadway, Inc. 2017. *Identification and Delineation of Areas Potentially Subject to Jurisdiction Under the California Department of Fish and Wildlife Lake and Streambed Alteration Agreement Program, Desert Quartzite Solar Farm Project, Blythe, Riverside County, California*. Prepared for Desert Quartzite, LLC, San Francisco, CA. 19 pages plus Appendices A – F. March

1.0 INTRODUCTION

1.1 Purpose and Scope of Work

At the request of Desert Quartzite, LLC, a wholly owned subsidiary of First Solar Development, Inc. (First Solar), Huffman-Broadway Group, Inc. (HBG) investigated the potential presence of areas subject to California Department of Fish and Wildlife (CDFW) jurisdiction under the Department's Lake and Streambed Alteration Agreement Program (California Fish and Game Code (FGC) Sections 1600-1616). The investigation covered a contiguous Study Area (Study Area) in eastern Riverside County, California, where a proposed new photovoltaic solar power generation facility (Solar Farm) would be located.

1.2 General Site Description

The Study Area is an approximately 4,954.6-acre area in the Colorado Desert Section of the Sonoran Desert in an unincorporated part of Riverside County, California. The city of Blythe is about 6.5 miles to the east (Appendix A, Figure 1). The Study Area is approximately 0.46 mile south of Interstate I-10, and is northeast of the Mule Mountains, east of Milpitas Wash Road, and west of Palo Verde Valley and the Lower Colorado River (Appendix A, Figures 1 and 2). Approximate latitude and longitude coordinates for the center of the Study Area are 33.569620 / 114.760883 W.

1.3 Contact Information

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1.4 Environmental Setting

1.4.1 Topography

The Study Area is within portions of the Roosevelt Mine (1983) and Ripley (1952, rev.1975) USGS 7.5-minute quadrangles (Appendix A, Figure 2). The majority of the Study Area has relatively flat desert terrain. Elevations are shown in meters on the western approximately two-thirds of the map and in feet for the eastern third of the map. Elevations range from approximately 325 to 475 feet high (99.0 to 145.0 meters) above mean sea level.

1.4.2 Land Use

The Study Area is on largely vacant, undeveloped land within the Palo Verde Mesa in eastern Riverside County. Small areas of formerly cultivated lands also occur within the Study Area (Appendix A, Figure 7, Sheets 5, 6, 11, 12, and 13).

1.4.3 Geology

The site is in the east-northeastern Colorado Desert Geomorphic Province. The San Andreas Fault defines the southwestern boundary of the eastern Colorado Desert while the San Bernardino Mountains form a less-defined boundary to the north. Review of U.S. Department of Agriculture National Agriculture Imagery Program (NAIP) 2012 aerial imagery (Appendix A, Figure 7), onsite terrain reconnaissance survey photographs (Appendix E), and the NRCS Custom Soil Resources Report in Appendix B indicates that the area consists of active younger sediments within alluvial fan remnant and sand sheet landforms. The active younger sediments are of Holocene age and consist of fine to coarse sand interbedded with clay, silt, and gravel. Topography in these areas tends to be consistent, relatively flat with 0 to 2 percent slopes with shallow stream channels generally less than 0.5-foot-deep interspersed through upland areas consisting of fan remnants. Unless surface flows are cut off by natural processes (i.e., sand sheet) or by anthropogenic disturbance or influence (i.e., flow diversion or detention) shallow channels within the younger sediments exhibit frequent channel avulsion and lateral migration during high stormwater runoff periods.

Review of NAIP2012 aerial imagery (Appendix A, Figure 7), the Appendix B NRCS Custom Soil Resources Report (Appendix B), and survey photographs taken during onsite terrain reconnaissance (Appendix E) indicate that two significant geologic environments occur within the Study Area:

- Active younger sediments with no evidence of desert pavement
- Eolian sand sheets

Active Younger Sediments

The active younger sediments are of Holocene age and consist of fine to coarse sand interbedded with clay, silt and gravel. There is no evidence of desert pavement. Topography in these areas tends to be consistent. Stream channel and floodplain watercourses occur within these upland areas.

Eolian Sand Sheets

Aeolian sand sheets were described as follows by WorleyParsons (2010):

> Sand sheets (or plains) are flat or gently undulatory broad floors of tabular windblown sand deposits derived from accumulating sand ripple migration. The tabular deposits generally range in thickness from a few centimeters to a few meters. Some sand sheets, as in the southwestern U.S., are local deposits that extend only a few square kilometers in and around dune fields, where they are exposed on interdune floors and form the aprons or trailing margins of dune fields and along sand migration corridors. Sand sheet deposits are composed of gently inclined or nearly horizontal layers, each less than about a centimeter thick, of coarse silt and very fine to medium sand separated by layers, one grain thick, of coarse sand and granules. Unlike dune sand, the unconsolidated sand and granules are closely packed and firm under foot. The surface is protected by a wind abrasion lag, one grain thick, of the coarsest particles that can be shifted by the wind, ranging from coarse sand to pea-size gravel. In any one place, however, the sizes of the lag particles are remarkably uniform, and the lag may be so closely packed that it forms a miniature desert pavement. In the Chuckwalla Valley, the wind abrasion lag often contains small gravel that may have been derived from burrowing animals moving coarser grained alluvial

> deposits containing gravel to the surface in the past ([*citation*]). The existence of a wind abrasion lag containing gravel from underlying alluvial units suggests that the surface is a minimum of a few thousand years old in order to provide sufficient time for burrowing animals to mix the near surface units over a relatively large area. Sand sheets in themselves indicate little about wind direction regimes, but the particle size of sand and gravel lag on ripple surfaces seems dependent on the strength of the winds in any given locality. Inactive sand sheet deposits near and at the surface however do provide evidence of past wind sand migration corridors.

Stream channel and floodplain watercourses are not found within these upland areas.

1.4.4 Soils

Appendix B is an NRCS custom soil resources report for the Study Area. According to NRCS, the Study Area is within the Colorado Desert Area and Palo Verde Area NRCS soils mapping units. No soils data have been collected for the Colorado Desert Area, California (CA803), in the western 499.4 acres of the Study Area (USDA NRCS 2017). Although soils have not been mapped in this area, onsite observation of surface conditions and interpretation of aerial imagery and NRCS soils mapping for the Palo Verde Area portion indicate that the soils found in this unmapped area are the same as or similar to Palo Verde Area soils described below.

Seven soil types have been mapped within the Palo Verde Area, California (CA681), portion of the Study Area (4,455.3 acres [89%]) (USDA NRCS 2015). The soils and their parent materials and landforms are summarized below:

Soil type	Parent Material / Landform
Aco gravelly loamy sand (Ac)	Mixed alluvium / alluvial fan remnants landform
Aco sandy loam (Af)	Mixed alluvium / alluvial fan remnants landform
Orita fine sand (Oc)	Mixed alluvium / alluvial fan remnants landform
Orita gravelly fine sandy loam (Or)	Mixed alluvium / alluvial fan remnants landform
Rositas fine sand, 0 to 2 percent slopes (RoA)	Eolian sands / sand sheets landform
Rositas fine sand, 2 to 9 percent slopes (RoB)	Eolian sands / sand sheets landform
Rositas gravelly loamy sand, 0 to 2% slopes (RsA	Eolian sands over mixed alluvium parent material / sand sheets on stream terraces landform

The parent material / landform of more than 86% of these soils is mixed alluvium / alluvial fan remnants; the parent material / landform of about 14% of the soils is Eolian sands /sand sheets. Depth to water for all soils is greater than 80 inches. The NRCS soils report indicates that the four alluvial fan remnant soils (Ac, Af, Oc, Or) are well-drained and the three Rositas soils (RoA, RoB, and RsA) are “somewhat excessively drained.”

1.4.5 Vegetation

The Study Area vegetation was mapped as part of a study conducted by the 2013 has been mapped as part of the by Menke, et al. (2013) as part of their vegetation map development in support of the Desert Renewable Energy Conservation Plan funded by the California Department of Fish and Wildlife’s Renewable Energy Program and the California Energy

Commission (Appendix A, Figure 3). Dominant plant associations mapped within the Study Area included:

1. Paloverde (*Parkinsonia florida*) - Desert Ironwood (*Olneya tesota*)
2. Creosote Bush (*Larrea tridentata*)
3. Creosote Bush - Burro Bush (*Ambrosia dumosa*)
4. Big Galleta (*Pleuraphis rigida*) vegetation alliance

1.4.6 Climate

The Study Area has a desert climate with very hot, dry summers and mild winters based on review of WETS data (USDA Field Office Climate Data, http://agacis.rcc-acis.org/06065/wets/results) (Appendix C). HBG obtained climate data for the Blythe, California, AP WETS Station (CA158). This WETS station is on Hobsonway Road within approximately 2 miles of the Study Area (Appendix A, Figure 1). Average monthly temperatures (° F) for the period of record (1971 – 2000) are presented in Table 1:

Table 1. Average Monthly Temperatures, Blythe, CA

Month/ Temperature (°F)	Jan	Feb	March	April	May	June	July	Aug	Sept	Oct	Nov	Dec
Average	54.2	58.9	63.9	71.0	78.9	88.4	93.7	92.5	86.0	74.0	61.1	53.5
Average Daily Maximum	66.6	72.0	77.6	85.7	93.9	104.1	107.2	105.4	99.6	88.0	74.7	66.0
Average Daily Minimum	41.7	45.7	50.2	56.2	63.9	72.6	80.2	79.5	72.4	60.0	47.4	40.9

The downloaded WETS Precipitation Data Summary Table in Appendix C presents average monthly precipitation at the Blythe AP WETS Station for the period of record (1971 – 2000); the range of precipitation for the period of record considered to be normal (30 % chance precipitation will be < or > average). Average annual precipitation is 4.02 inches. Highest rainfall months with average precipitation ranging from 0.32 to 0.66 inches are December – March and July – September.

1.4.7 Hydrology

The Study Area primarily lies within the Imperial Reservoir 8-digit Hydrologic Unit Code (HUC) watershed, HUC 15030104, more specifically in the HUC 12 Cinnabar Wash-Palo Verde Valley (HUC 150301040804) watershed. The western tip of the Study Area, however, is in the South Mojave 8-digit HUC watershed (HUC 18100100), specifically in the Wileys Well 12-digit watershed (HUC 181001005201). See Appendix A, Figures 3 and 4. Figure 5 shows National Hydrography Dataset (NHD) flowlines and flow directions for the Study Area and its vicinity overlain on a Microsoft March 2011 aerial photograph. Most flow onto the Study Area is from the north-northwest, crossing the northernmost portion of the site (Appendix A, Figure 6).

Surface and channel flooding can occur within the Study Area any time of year; however, many years can pass between surface flow events. General winter and summer storms generate low amounts of precipitation that typically infiltrates the ground where it falls, with little or no surface flow generated. If flow does occur, it typically runs within small, localized areas before it infiltrates the soil. Flooding because of high intensity thunderstorms typically lasts only a few hours at most and typically occurs in localized areas.

1.4.8 FEMA Flood Zone

The Federal Emergency Management Agency (FEMA) has not conducted a flood hazard analysis of the Study Area; no FEMA flood zone designation exists.

1.5 Disclaimer

Huffman-Broadway Group, Inc., has conducted a thorough historical review and site investigation and made a good-faith effort herein to thoroughly describe and document the presence of potential factors that the CDFW may consider in determining jurisdiction under the Lake and Streambed Alteration Program; however, Desert Quartzite, LLC, reserves the right to challenge or seek revision to any areas over which the CDFW may assert jurisdiction.

2.0 REGULATORY FRAMEWORK

2.1 CDFW Lake and Streambed Alteration Program

Fish and Game Code (FGC) Section 1602 requires any person, state or local governmental agency, or public utility subject to FGC 1600 thru 1616 to notify CDFW of any proposed activity that may substantially divert or obstruct a river, stream, or lake. Section 1602(a) specifically provides that:

> An entity may not 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, or 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 unless all of the following occur:
>
> (1) The department receives written notification regarding the activity in the manner prescribed by the department. . .

The program developed by CDFW to implement this notification process is generally referred to as the Lake and Streambed Alteration Agreement Program. CDFW's regulations implementing the FGC (Title 14 California Code of Regulations or 14 CCR) define the relevant rivers, streams and lakes over which the agency has jurisdiction to constitute "all rivers, streams, lakes, and streambeds in the State of California, including all rivers, streams and streambeds which have intermittent flows of water." 14 CCR § 720. The regulations further define the terms "stream" and "lake" as follows:

> 14 CCR § 1.72. Stream (Includes Creeks and Rivers).
>
> A stream is a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation.
>
> 14 CCR § 1.56. Lake.
>
> Includes natural lakes or man-made reservoirs.

3.0 DELINEATION METHOD

3.1 Objective and Study Approach

The objective of this investigation was to identify and map areas within the Study Area potentially subject to jurisdiction under CDFW's Lake and Streambed Alteration Agreement Program (CDFW Jurisdiction). The approach taken by this study was to identify and map, using field indicators, the geographic extent of any areas meeting the definition of lake or stream as previously described in Section 2.0.

3.2 Preliminary Investigations

Preliminary investigations consisted of identifying landforms within the Study Area (Appendix A, Figure 2) where lakes or watercourses (stream channel and floodplain watercourses) may potentially occur. The investigations included reviewing the resource materials listed below and conducting an onsite terrain reconnaissance during March 2014.

1. USGS topographic mapping (Appendix A, Figure 2);
2. Vegetation mapping (Appendix A, Figure 3);
3. USGS National Hydrography Dataset (NHD) HUC 8 and HUC 12 mapping (Appendix A, Figures 4 and 5);
4. USGS NHD high-resolution mapping with flow arrows (Appendix A, Figure 6);
5. USDA NAIP 2012 aerial imagery (Appendix A, Figure 7); and
6. NRCS Custom Soil Resources Report (Appendix B).

For this jurisdictional delineation, the land surface was subdivided into the categories of uplands and fluvial watercourses. At this stage of the investigation, due to the lack of field indicator data for analysis, no determination was made regarding whether stream channels and floodplain watercourses observed were either hydrologically active, dormant, abandoned, or relict. These landform geomorphic features are summarized as follows:

Uplands	Fluvial Watercourses
Sand sheet deposits	Stream Channel
Fan Terraces	Floodplain

3.3 Detailed Field Investigations

Detailed field investigations to determine the presence or absence of stream channel and floodplain watercourses were conducted on foot within the Study Area during May 2014 thru November 2016 (Appendix A, Figure 2). Using NAIP 2012 aerial imagery as a base map the Study Area was divided into 0.3-mile grid squares using ESRI ArcGIS software. Each grid square was investigated first visually through photointerpretation then observed onsite by walking linear transects across each grid square. Transects were spaced between approximately 500 to 1000 feet apart. Follow-up photointerpretation of each grid was also conducted following field data collection. Field data collected along each transect included: (1) the presence or absence of geomorphic indicators of uplands and fluvial watercourses; (2) combined average width of channels and abutting floodplain watercourse to the extent of identifiable fluvial indicators; and (3) representative onsite photographs. Field data regarding the presence or absence of upland and fluvial areas were recorded on a field data form developed for this study (Appendix D). Field data collection locations or sample points were memorialized as point features using a hand-held, Trimble XT global positioning system (GPS) unit with sub-meter accuracy after geoprocessing. Data for stream channels encountered along the transect was collected walking both 100 feet above and 100 feet below each watercourse sample point. For channels, less than 200 feet the entire length of the channel was visually inspected for indicators.

The CDFW 1994 publication *A Field Guide to Lake and Streambed Alteration Agreements, Sections 1600-1607 California Fish and Game Code* was used for general guidance, however this publication lacks sufficient specificity for identifying fluvial watercourses in the field. The types of field indicators examined for in the field were similar to those used by the Corps of Engineers (Lichvar and McCooley 2008) to define ordinary high water marks, except they were adapted and used to define the geographical extent of fluvial watercourses. Field indicators of uplands and fluvial watercourses as described by Brady and Vyverberg (2013) were also used. Table 2 provides a list of these indicators.

Table 2. Geomorphic Indicators of Upland and Active Fluvial Watercourses		
Upland	**Fluvially Active Alluvial Fan Surface**	
ϒ Av Horizon	ϒ Bars: mud, sand & gravel	ϒ Ripples
ϒ Biotic Soil Crust	ϒ Beach ridges	ϒ Scour
ϒ Biotubation	ϒ Bifurcated flow	ϒ Secondary channels
ϒ Caliche: coatings, layers, rubble	ϒ Biotic crusts	ϒ Secondary channel bypassing obstruction
ϒ Carbonate etching	ϒ Drainage swales	ϒ Sediment sheets
ϒ Clast / rock weathering	ϒ Crusts: carbonate, salt, & soda	ϒ Sand filled channels
ϒ Coppice dunes: active & relict	ϒ Cut banks	ϒ Scour holes downstream of obstructions
ϒ Deflated surfaces	ϒ Desiccation Mud: cracks, curls / drapes	ϒ Sediment plastering
ϒ Desert pavement	ϒ Drift: organic	ϒ Sediment ramps
ϒ Over-turned rock	ϒ Exposed roots below intact soil layer	ϒ Sediment sorting
ϒ Relict bar & swale	ϒ Flow or streaming lineations	ϒ Sediment tails
ϒ Relict channel	ϒ Headcuts	ϒ Springs
ϒ Rock fracture in place	ϒ Imbricated gravel	ϒ Staining of rocks
ϒ Rock varnish	ϒ Knick Points	ϒ Stepped-bed morphology in gravel
ϒ Rock weathering	ϒ Levee Ridges: sand & gravel	ϒ Substrate staining
ϒ Rubified rock undersides	ϒ Observed inundation: flooding, ponding, or	ϒ Vegetation - channel alignment

Table 2. Geomorphic Indicators of Upland and Active Fluvial Watercourses		
Upland	**Fluvially Active Alluvial Fan Surface**	
	substrate saturation	
ϒ Soil development	ϒ Out of channel flow	ϒ Water-cut benches
ϒ Surface rounding of landform	ϒ Overturned rocks	ϒ Water level marks
ϒ Woody debris in place	ϒ Rills	ϒ Wrack: woody
* Adapted from: *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual* (Lichvar and McColley 2008); and *Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* (Brady and Vyverberg, 2013).		

Documentation of the presence of stream channel and floodplain watercourses as opposed to upland fan terraces using field indicators provided a technical basis for: (1) determining the presence or absence of fluvial watercourses and (2) determining if the watercourse is active, dormant, abandoned, or relict.

3.4 Rainfall (WETS) Analysis

A WETS analysis was conducted to assess whether rainfall periods during the period of study fall within the normal range of precipitation based on long-term records collected at the nearest appropriate NWS cooperative weather station. Climate data for the nearby Blythe WETS Station (No. CA158) were obtained from the Western Regional Climate Center Cooperative Observer Program (Appendix A, Figure 1; Appendix C). The rainfall analysis followed the Technical Standard for Water-Table Monitoring of Potential Wetland Sites (Corps 2005), by which the Corps determines what is a normal, below normal and above normal rainfall month for any given year of record. The purpose of this analysis was to aid in establishing whether surface hydrology indicators observed onsite were likely the result of the amount of rainfall received during the period of study. This was accomplished by comparing recorded precipitation data collected prior to HBG's May 2014 to November 2016 on-site investigations with WETS historical average monthly rainfall data (averaged for the years 1971 to 2000) (Appendix A, Figure 1; Appendix C).

3.5 Mapping

Once field data collection was completed, recorded GPS data were incorporated into a Geographic Information System (GIS) and georeferenced in overlay fashion onto a USGS topographic base map and 2012 NAIP aerial imagery. This imagery was orthorectified to the 1:25,000 USGS topographic base following national mapping standards. The GIS located field data sampling points were used to assist in the identification and heads-up digitization of the location and geographic extent of all stream channel and floodplain watercourses within the Study Area. Indicator data collected in the field was analyzed to determine if the mapped watercourses were active, dormant, abandoned, or relict. Discreet stream channels and their abutting out of bank flow areas were mapped as line features and larger floodplain watercourses were mapped as polygon features. Area calculations for channels was based on average width data taken in the field (which included the active channel and abutting watercourse to the geographical extent of identifiable fluvial indicators) and the mapped channel length.

4.0 TECHNICAL FINDINGS

The Study Area was found to consist of sand sheet and alluvial fan upland landforms shaped by eolian and fluvial geomorphological processes. Fluvial stream channels and floodplain watercourses were found within the upland fan landform. No lake landform was found within the Study Area. The following is a summary of the types of watercourses found.

Upland Landforms	Stream / Floodplain Watercourses Found Within Sand Sheet and Alluvial Fan Landforms
Sand sheet deposits	None
Alluvial fan surfaces	• ***Active***. Hydrologically active watercourse. • ***Dormant.*** A watercourse isolated from its principal water source by natural causes or human constructed features such as roads, but that retains its potential for hydrologic reactivation and stream / watercourse function. • ***Abandoned.*** A watercourse along which water flow demonstrably no longer occurs; for example, a channel isolated from its water source through faulting or stream capture, or by human constructed features such as levees, incised roadways, surface flow diversions. The presence of physical indicators of fluvial inactivity is necessary to demonstrate abandonment, and the cause of the abandonment (such as a levee or road berm) should be identified. With time and the absence of flow, an abandoned channel will become a relict landform. • ***Relict.*** Surface water flow demonstrably no longer occurs as demonstrated by the presence of physical indicators of antiquity which demonstrate that the channel is a relict landform.

The following sections describe the field indicators found within the Study Area that are indicative of stream channel and associated floodplain watercourse. As seen in the WETS Precipitation Data Summary in Appendix C, the months between December to March and July to September for the years 2014, 2015, and 2016 all had monthly average precipitation exceeding 0.4 of an inch. Observations of organic drift (organic flotsam) and desiccation mud cracks / curls associated with various active stream channels and floodplain watercourses situated along the northern, southern, eastern, and western boundaries of the site during 2014, 2015, and 2016 on-site investigations provide evidence that the amount of rainfall received within the Study Area prior to onsite indicator observations was enough to generate surface water flow or ponding conditions throughout the entire site. This information aided in determining if a watercourse was active or dormant versus abandoned or relict.

4.1 Uplands

4.1.1 Sand Sheet Deposits

Sand sheet deposits and coppice dunes were found at various locations within the Study Area. These areas consist of fine sands within 22 inches of the soil surface. No indicators of a stream channel or floodplain watercourse were found. The Appendix B NRCS Custom Soils Report shows the approximate location of these areas which are mapped as various Rositas Soil Types (RoA, RoB, and RsA). Dominant vegetation where vegetation was present was creosote bush and / or big galleta.

4.1.2 Alluvial Fan Deposits

Mixed alluvium deposits were found on remnant fan terraces over much of the Study Area. Both stream channel or floodplain watercourse were found within these upland areas. Coppice dunes were also found within many of these areas. The Appendix B NRCS Custom Soils Report shows the approximate location of these remnant fan areas which are mapped as Aco and Orita Soil Types (Ac, Af, Oc, and Or). Geomorphic upland field indicators found included deflated surfaces, coppice dunes, no flow or ponding indicators, and surface rounding of landform. Dominant vegetation was creosote bush.

4.2 Watercourses Identified

4.2.1 Active Watercourses

Active channels and out of channel flows were found on remnant fan terraces along the northern, southern, western, and eastern boundaries of the Study Area. The channels found along the northern boundary form part of the terminus of the Pallowalla Wash distributary stream system. This active stream system is captured by sand sheets and ends abruptly within the norther margin of the Study Area (Appendix A, Figure 7, Sheets 4 and 5 (FP1 & FP3)). Fine grained sediment deposited within the channels and abutting out of channel flow areas (floodplain) produced visible signatures that were observable using USDA NAIP 2012 aerial imagery. Dominant vegetation within the natural and excavated portions of the Pallowalla Wash channel (RR# 107, R54a, R54b, and R54c) was paloverde and creosote bush within the area around channel RR# 105.

Two active stream channels occur on the southeastern boundary of the Study Area (Appendix A, Figure 7, Sheets 13 and 17). Each of these channels direct surface water flows to hydrologically isolated playa lakes east of the Study Area. The source of water is from direct precipitation and overland surface flow from fan remnant areas to the west. Dominant vegetation within the area around the channels was creosote bush. Geomorphic fluvial field indicators found associated with the active channels included drift (organic), flow or streaming lineations. Review of aerial imagery provided indication of the channel and abutting floodplain in that areas with recent fine grained sediment deposits had a visible signature.

Sizeable watercourse floodplains were found at the end of the active channels along the northern Study Area boundary (Appendix A, Figure 7, Sheets 4 and 5, Watercourse #s FP1 and FP3). Here water flows spill from the terminus end of the channels and form surface water overflow areas against sand sheet areas within the floodplain. Dominant vegetation found within Watercourse # FP1 at the end of the Pallowalla Wash included creosote bush, big galleta, and paloverde. Creosote bush also dominated the area within Watercourse # FP3. Desiccation mud cracks and curls was the principal geomorphic fluvial field indicator found within each of these floodplain watercourses. Fine grained sediment deposited within the watercourse floodplain produced visible signatures that were observable using USDA NAIP 2012 aerial imagery.

An active watercourse was also found along the southwestern boundary of the Study Area (Appendix A, Figure 7, Sheet 10, Watercourse # FP2). At this location surface water from the

Mule Mountain distributary channel system is slowed down by a deeply incised dirt roadway to the west of the Study Area boundary and then abruptly stopped in a localized area by sand sheets resulting in the formation of a forming localized floodplain overflow area which episodically ponds. Desiccation mud cracks and curls was the principal geomorphic fluvial field indicator found. Fine grained sediment deposited within the watercourse floodplain produced visible signatures that were observable using USDA NAIP 2012 aerial imagery. Where vegetation was present creosote bush dominated the area within Watercourse.

4.2.2 Dormant Watercourses

Many channels were found which were hydrologically inactive, but have the potential for hydrologic reactivation and stream function (Appendix A, Figure 7, Sheets 5 and 10). Older flow or streaming lineations partially covered with sand were present within the channels, but organic drift material as found in the above described active channels was absent. Dominant vegetation within these dormant watercourse areas was creosote bush

4.2.3 Abandoned Watercourses

Abandoned channels were found throughout the Study Area (Appendix A, Figure 7, Sheets 1 - 6, 9, - 11, and 15, 16 - 17). Each of these channels was found to be hydrologically isolated or cut off from its principal up-slope or overland surface water flow source by either natural causes (sand sheet) and / or anthropogenic disturbance and / or influence to include: roads; earthen berms; and detention channels. In contrast to active and dormant channels, there was no evidence of flow to or from the abandoned channels due to interruption by natural and / or anthropogenic surface features. Field indicators of surface flow was typically not present or, if present, surface water flow would only be over a short distance within the channel before infiltrating into the soil.

Figure 8 of Appendix A provides mapping showing where off-site surface water flows directed toward the Study Area have been cut-off by natural and / or by human constructed features to include:

1. Natural Features (Appendix A, Figure 8; Appendix B):
    a. sheet sands and dune soils which intercept surface water flows along the north, east, south, southwest, and west perimeter of the Study Area.
2. Human Constructed Feature s (Appendix A, Figure 8):
    a. flood control features established along the north side of I-10 which direct surface water flows across the alluvial fan remnant directly to the Pallowalla Wash;
    b. gravel pits on the Southside of I-10 which trap surface flows;
    c. graded dirt roadways and pipeline routes which run perpendicular across the alluvial fan north of the Study Area and intercept surface water flows either capturing them within the roadway or redirecting them to larger channels;
    d. a graded roadway and sand sheets / dune soils which run along the southwestern and eastern borders of the Study Area;
    e. Dirt Roadways through the central and northeastern portion of the Study Area; and
    f. Cultivated lands within the central part of the Study Area.

Review of USDA NAIP 2012 aerial imagery found that although the abandoned channels had a visible channel signature they lacked strong visible signatures of an abutting floodplain which is typical of active and dormant channels and floodplain watercourses. This is believed to be because of the lack of fine grained sediment within the floodplain watercourse after flow was cut off and weathering has occurred due to eolian process and/or direct precipitation events without surface / out of bank flow. Dominant vegetation within the area around the channels was creosote bush.

The following table summarizes how each of the abandoned channels has become hydrologically or cut off from its principal water source.

Table 3. Summary of Observed Physical Indicators of Fluvial Inactivity Associated with Abandoned Water Courses Within the Study Area

Watercourse ID	Description of Hydrologic Disconnection	Physical Indicators of (fluvial inactivity)
RR1, RR2, & RR3	Small localized erosional features (rill erosion) associated with dirt access road through plowed farm field. Storm water flow contained within localized land feature. Plowed soils intercept surface water flow (Attachment A, Figure 7, Sheet 5).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR7 & RR8	Small localized erosional features (rill erosion) located on margins of graded dirt access road. Storm water flow contained within localized land feature. Roadway intercepts / cuts flow off. Roadway is actively maintained (Attachment A, Figure 7, Sheet 15).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR9, RR10, RR11, RR12, RR13, RR14, RR15, RR16, RR17, RR18, RR22, RR23, & RR40	Small localized erosional features (rill erosion) located on margins of an abandoned graded dirt access road. Storm water flow contained within localized land feature. Roadway intercepts / cuts surface water flow off (Attachment A, Figure 7, Sheet 11).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR6	Excavated ditch adjacent to abandoned cropland no longer irrigated from well-water source; Without irrigation, no excess irrigation runoff to ditch adjacent to constructed berm (Attachment A, Figure 7, Sheet 11).	Hydrologically isolated; no evidence of flow to or from the channel. No field indicators of flow found.
RR19, RR20a-f, RR21a-b, RR24a-e, RR25a-e, RR26, RR27a-b, RR28a-b, RR29, RR30a-b, RR31, RR32, RR33, RR34a-c, RR35, & RR36	Small localized erosional features (rill erosion) located on margins of an abandoned graded earthen levee surrounding a former irrigated cropland. Features result of levee construction (Attachment A, Figure 7, Sheet 11).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR37, RR38a, RR38b, & RR39	Storm water flow contained within localized land feature. Surface water flow cut-off upgradient by deeply incised dirt roadway maintained by periodic road grading; Roadway captures upslope surface water flows where they are absorbed into the soil. Roadway cut exposed underlying	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over

Table 3. Summary of Observed Physical Indicators of Fluvial Inactivity Associated with Abandoned Water Courses Within the Study Area		
Watercourse ID	**Description of Hydrologic Disconnection**	**Physical Indicators of (fluvial inactivity)**
	sand sheets / dune soils covered by alluvial fan deposits (see Appendix A, Figure 7, Sheets 10 & 15 and Figure 8). Hydrologically isolated with no flow to or from channels observed. Roadway is actively maintained.	a short distance within the channel before infiltrating into the soil.
RR47b, RR69, RR70, RR73, RR83, & RR85	Upgradient surface water flow cut-off from the west and northwest by sand sheet movement (see Appendix A, Figure 7, Sheet 10; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR90, RR91, RR92, RR93, RR94, RR95, RR96, RR97, RR98, RR99, RR 100, RR101, & RR 102,	Upgradient surface water flow cut-off by sand sheet movement and dune soils. Hydrologically isolated with no flow to or from channels observed (see Appendix A, Figure 8). (see Appendix A, Figure 7, Sheets 16 and 17; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR77 & RR80	Surface water flows from Pallowalla Wash/ channel diverted by earthen dike and intercepted by detention channel to protect solar farm project located to the northwest (see Appendix A, Figure 7, Sheet 6; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR66, RR67, RR68, RR81, & RR82, RR106	Sand sheet formation between discharge point and historical stream channels prevents surface water from reaching channels (see Appendix A, Figure 7, Sheets 2, 3, 5, & 6; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR42 – RR47a, RR48 - RR58, RR60, RR71, RR72, RR74 – RR76, RR84, RR86 - RR88, RR103, & RR104	Sand sheet formation and movement combined with maintained incised dirt roadway cuts-off surface water flow to historical stream channels preventing surface water from reaching channels (see Appendix A, Figure 7, Sheets 9 & 10; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.

4.2.4 Relict Watercourses

No relict channels were identified within Study Area as sand sheet appeared to mask episodic field indicators where these types of channels were likely to occur. There is some visual evidence based on vegetation alignment as seen on the of USDA NAIP 2012 aerial imagery along the western margin of Sheets 2 and 10 of Appendix A Figure 7 that there are potentially underlying relict channels. Dominant vegetation within the area around these likely relict channels was creosote bush.

5.0 AREAS POTENTIALLY SUBJECT TO CDFW JURISDICTION

This section presents the findings of this delineation with respect to the identification and geographic extent of areas found that could potentially be regulated by the CDFW under the 1600 Lake and Streambed Alteration Agreement Program.

No lakes were found within the Study Area, but areas were found that meet the Title 14 CCR Section 1.72 definition of a stream. These watercourses are potentially subject to jurisdiction under the CDFW's Lake and Streambed Alteration Agreement Program (FGC Sections 1600-1616). This finding is based on the presence of observed physical evidence that water had moved across the land surface within the confines of a streambed or where water had overflowed the confines of the streambed prior to infiltrating into the soils. Fluvially active and dormant watercourses were considered as potentially subject to CDFW jurisdiction. Fluvial channels hydrologically isolated or cut off from upgradient stream channel or floodplain watercourses were not considered to be potentially subject to CDFW jurisdiction. These types of watercourses were considered abandoned or relict based on field indicator data and review of aerial imagery.

Table 4 provides a summary of potential CDFW jurisdictional acreage within the Study Area. Potential jurisdictional acreage for individual delineated stream and floodplain watercourses was calculated using the total linear distance of the channel multiplied by the average width. As described in Section 3.0, above channel width was measured from where indicators of fluvial process were found within the watercourse either within the channel or to the extent surface water flow indicators (i.e., fine sediment deposition) was evident outside the channel bank. Potential jurisdictional acreage for floodplain watercourses was measured using an area calculation based on the perimeter of the watercourse ponding indicators (i.e., desiccation cracks) identified in the field. Appendix A, Figure 7 provides mapping stream / watercourse areas potentially subject to CDFW jurisdiction as well as hydrologically cut-off abandoned watercourses not considered to be jurisdictional. Table 5 provides a summary of watercourses not considered to be jurisdictional. Relict stream course features were not mapped given the difficulty in identification as the landform features were obscured by moving sand sheets. Appendix F provides computations for delineated areas shown in Appendix A, Figure 7.

Table 4. Summary of Linear Distance and Acreage of Fluvial Watercourse Found Within the Study Area Potentially Subject to CDFW Jurisdiction

Jurisdictional Watercourse	Linear Distance	Acres
• Active Channel	5,744	0.13
• Dormant Channel (retains its potential for hydrologic reactivation and stream function)	6,778	0.16
Active Watercourse (floodplain)	NA	66.98
Total	**12,522**	**67.27**

Table 5. Summary Linear Distance and Acreage of Watercourses Found Not to be Jurisdictional		
Non-Jurisdictional Watercourse	**Linear Distance**	**Acres**
• Abandoned Channel	45,189	1.04
Total	**45,189**	**1.04**

6.0 REFERENCES

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Appendix A

Figures

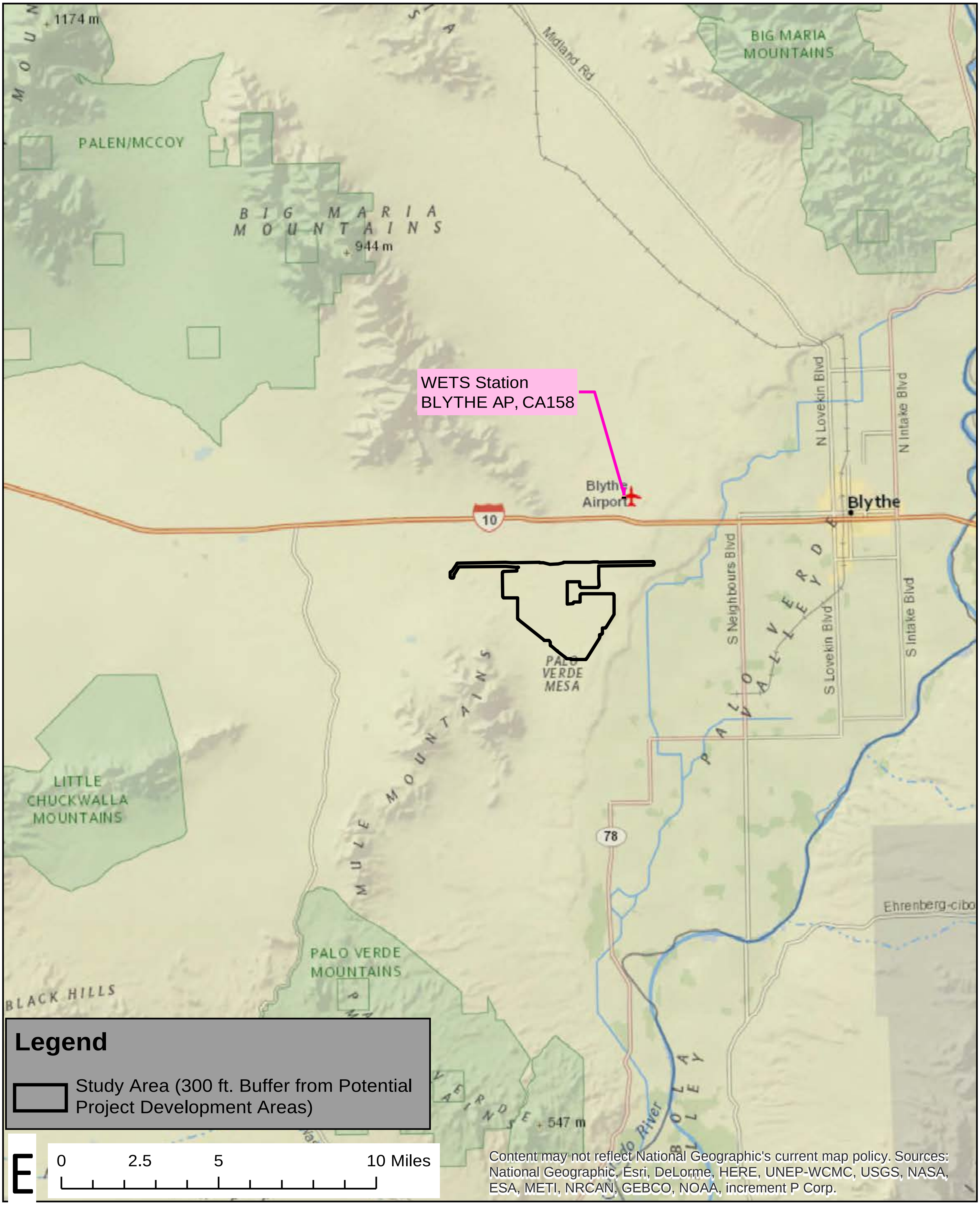

Figure 1. Regional Location Map

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California

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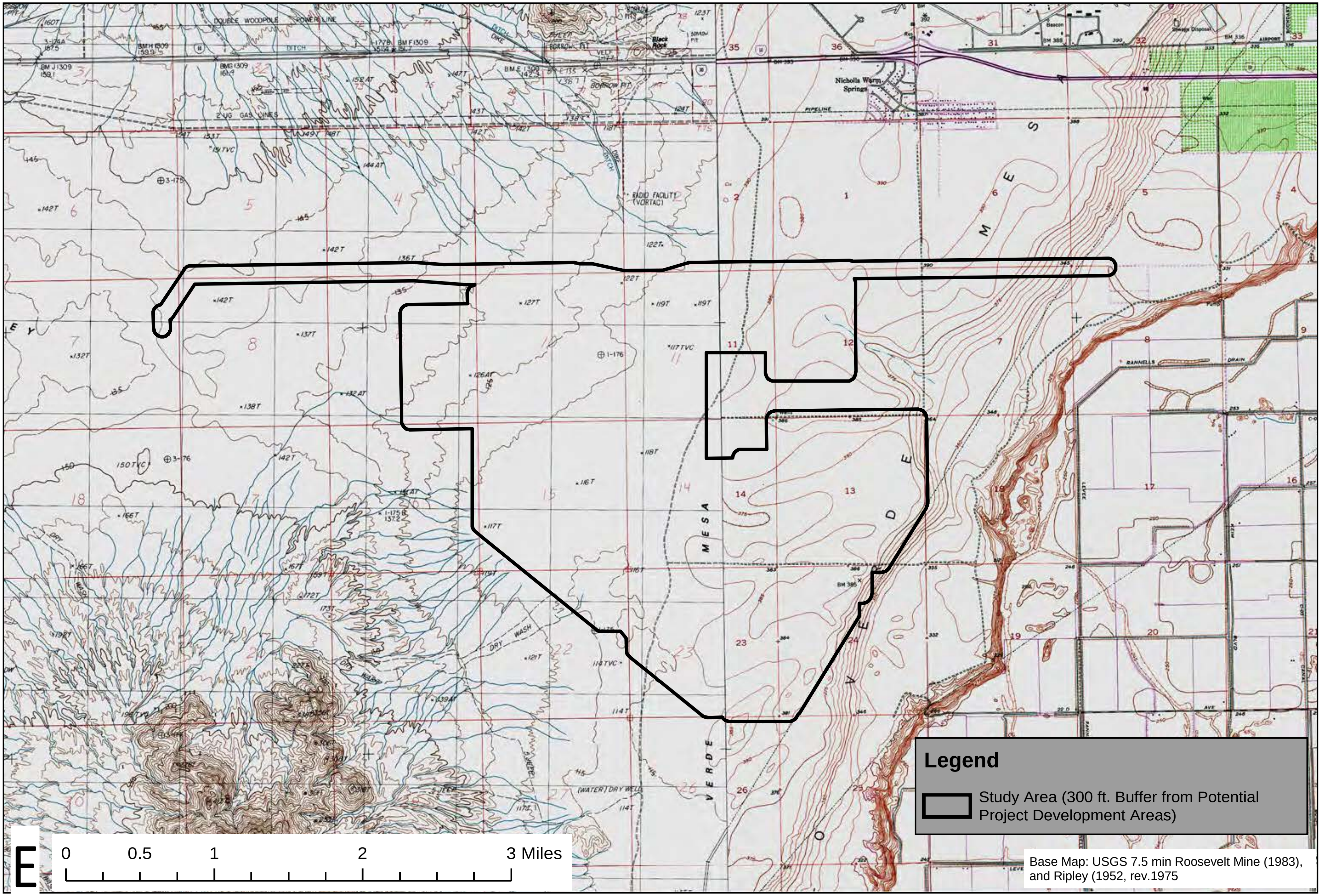

Figure 2. USGS Topographic Map of the Study Area

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

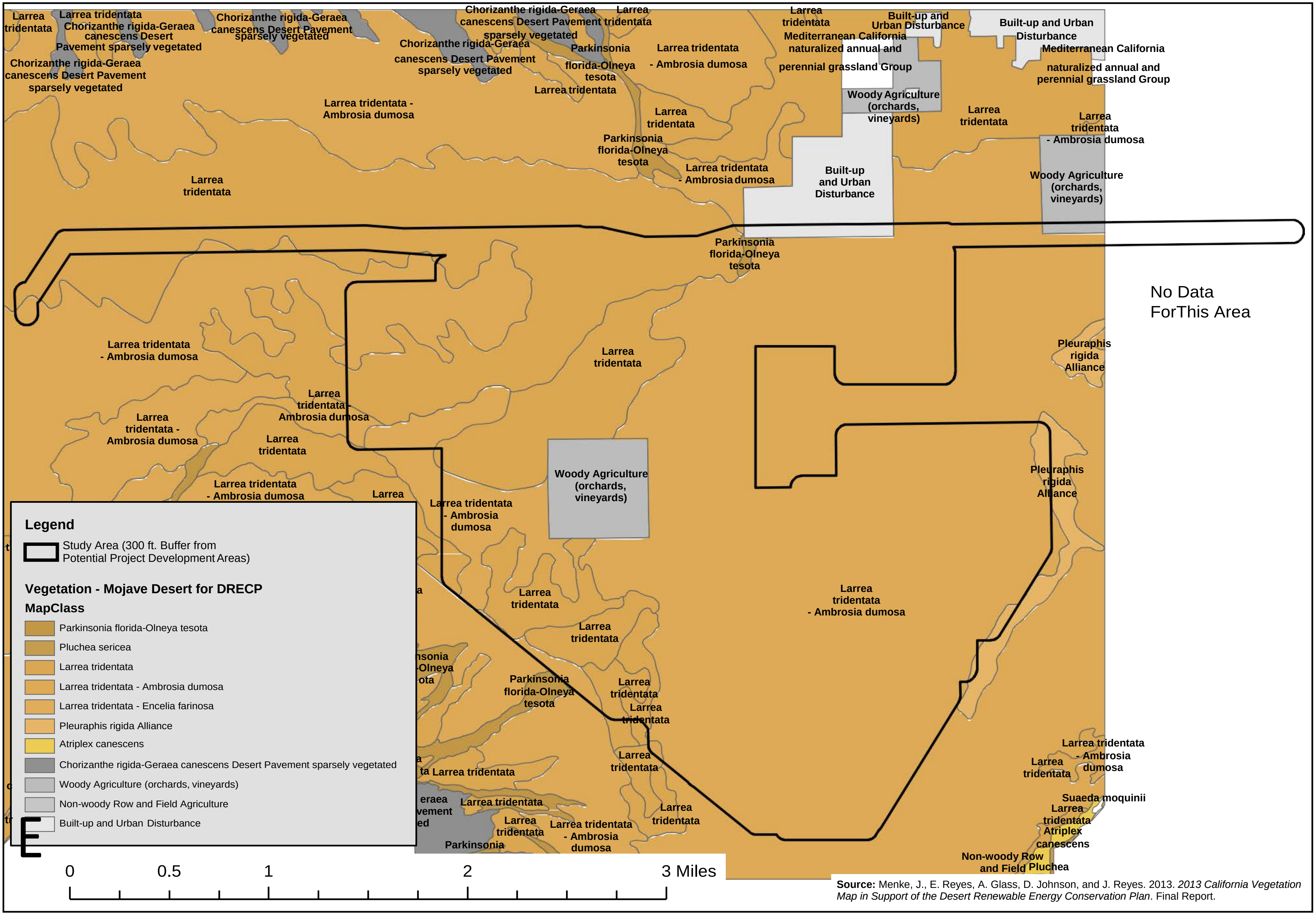

Figure 3. Vegetation Map of the Study Area

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

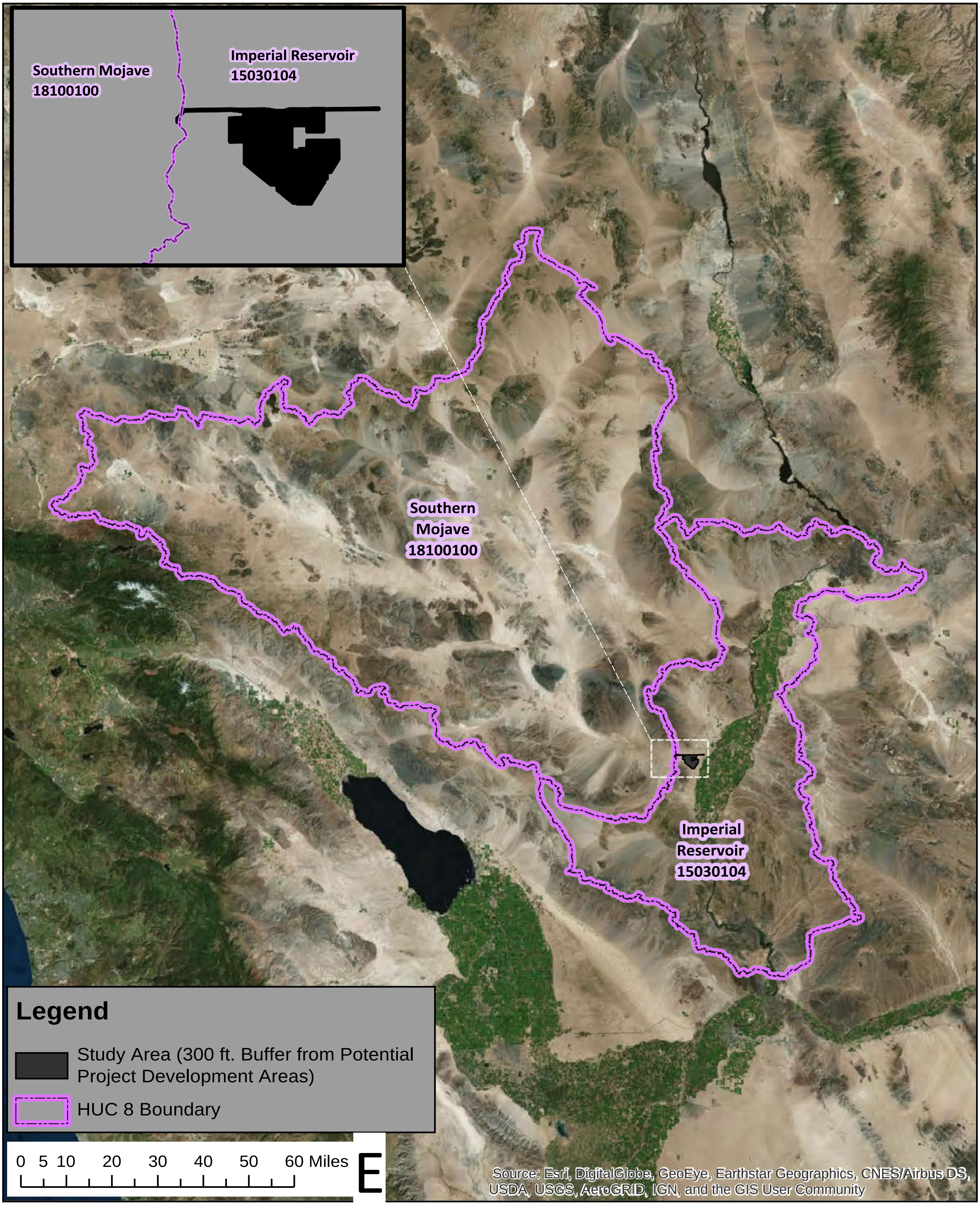

Figure 4. USGS NHD HUC 8 Watershed Mapping

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

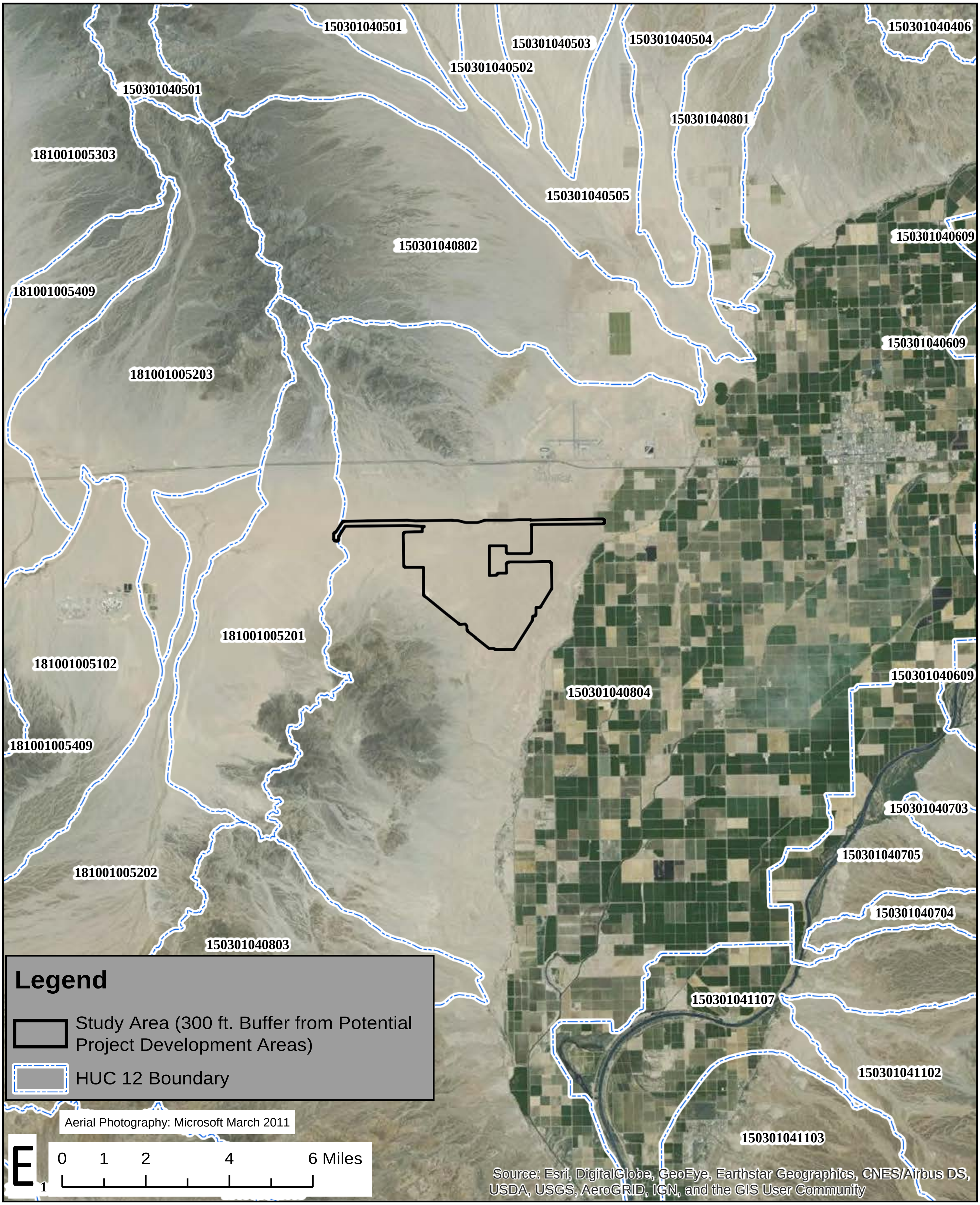

Figure 5. USGS NHD HUC 12 Watershed Mapping

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Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California

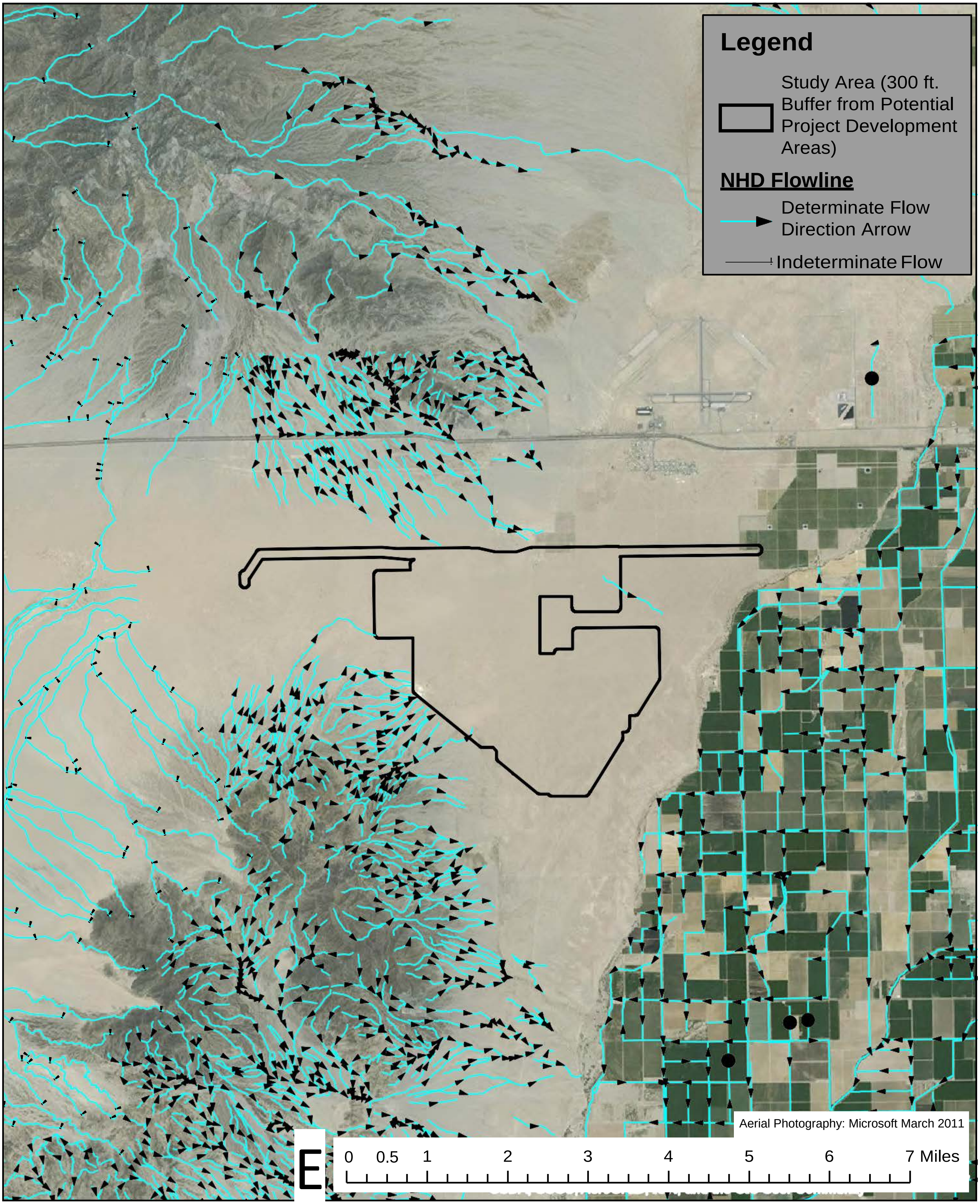

Figure 6. USGS NHD Mapping with Mapped Surface Water Flows Within and Adjacent to the Study Area

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California

Huffman-Broadway Group, Inc.
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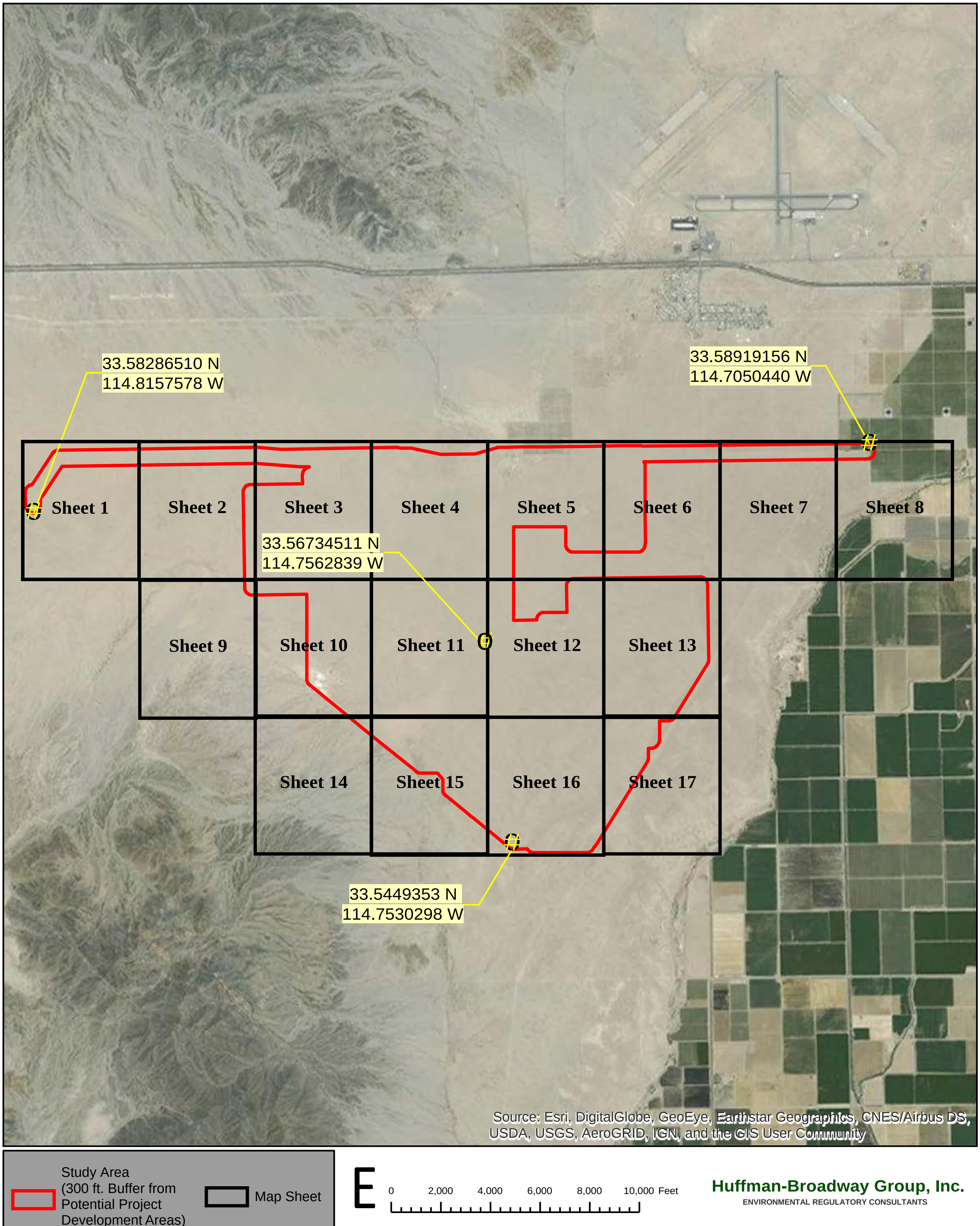

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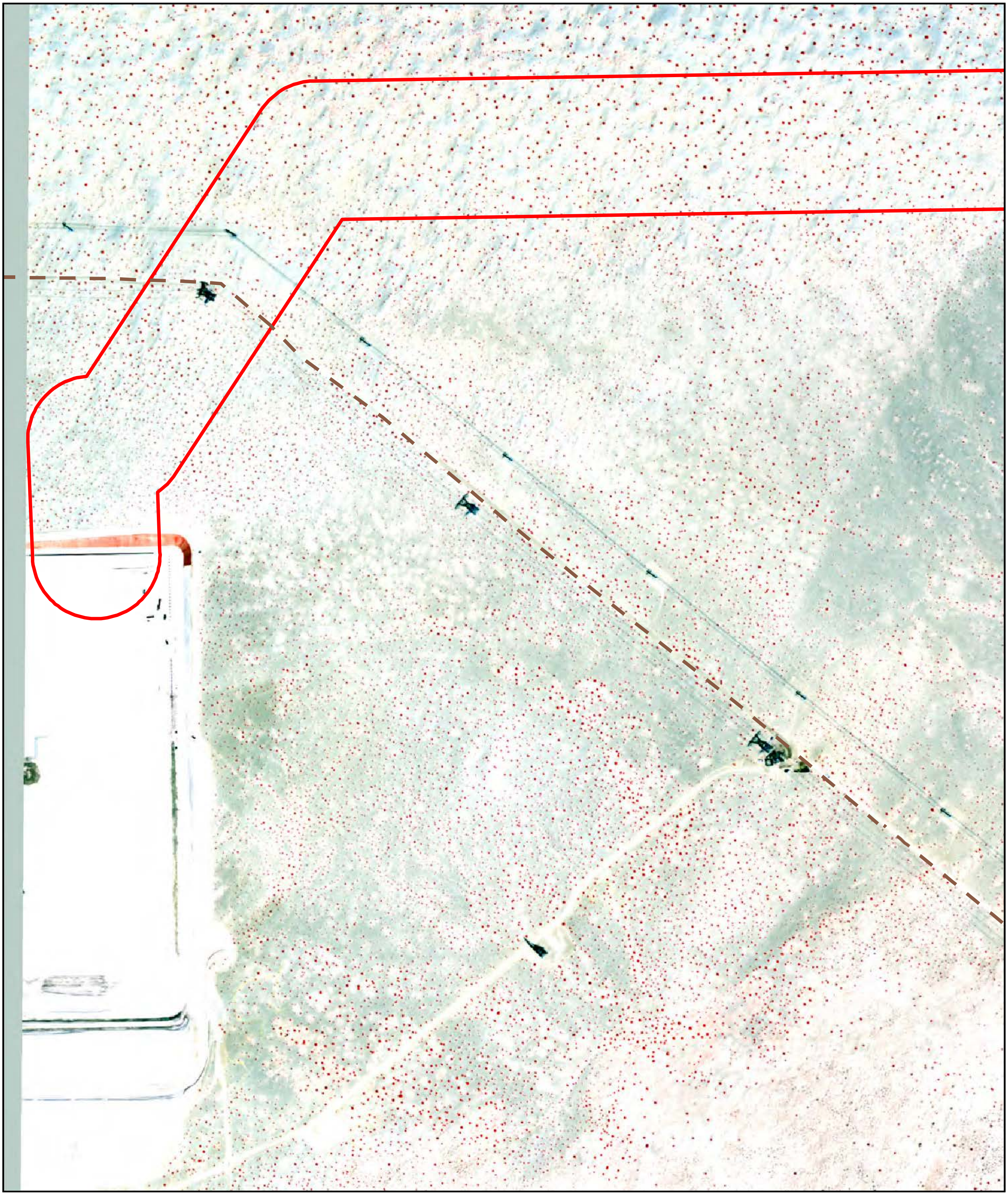
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Index Map

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

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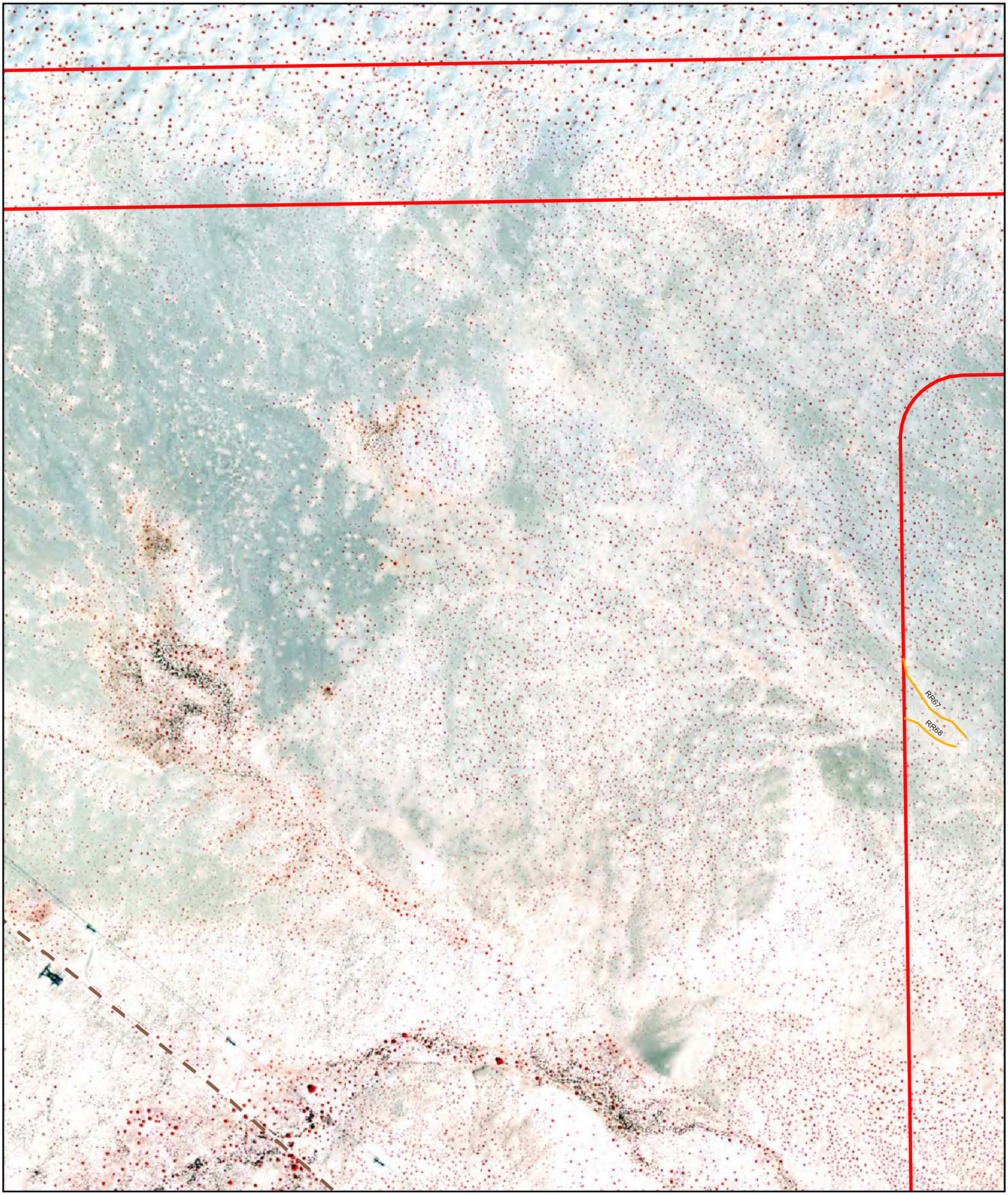
Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 1

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

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Huffman-Broadway Group, Inc.
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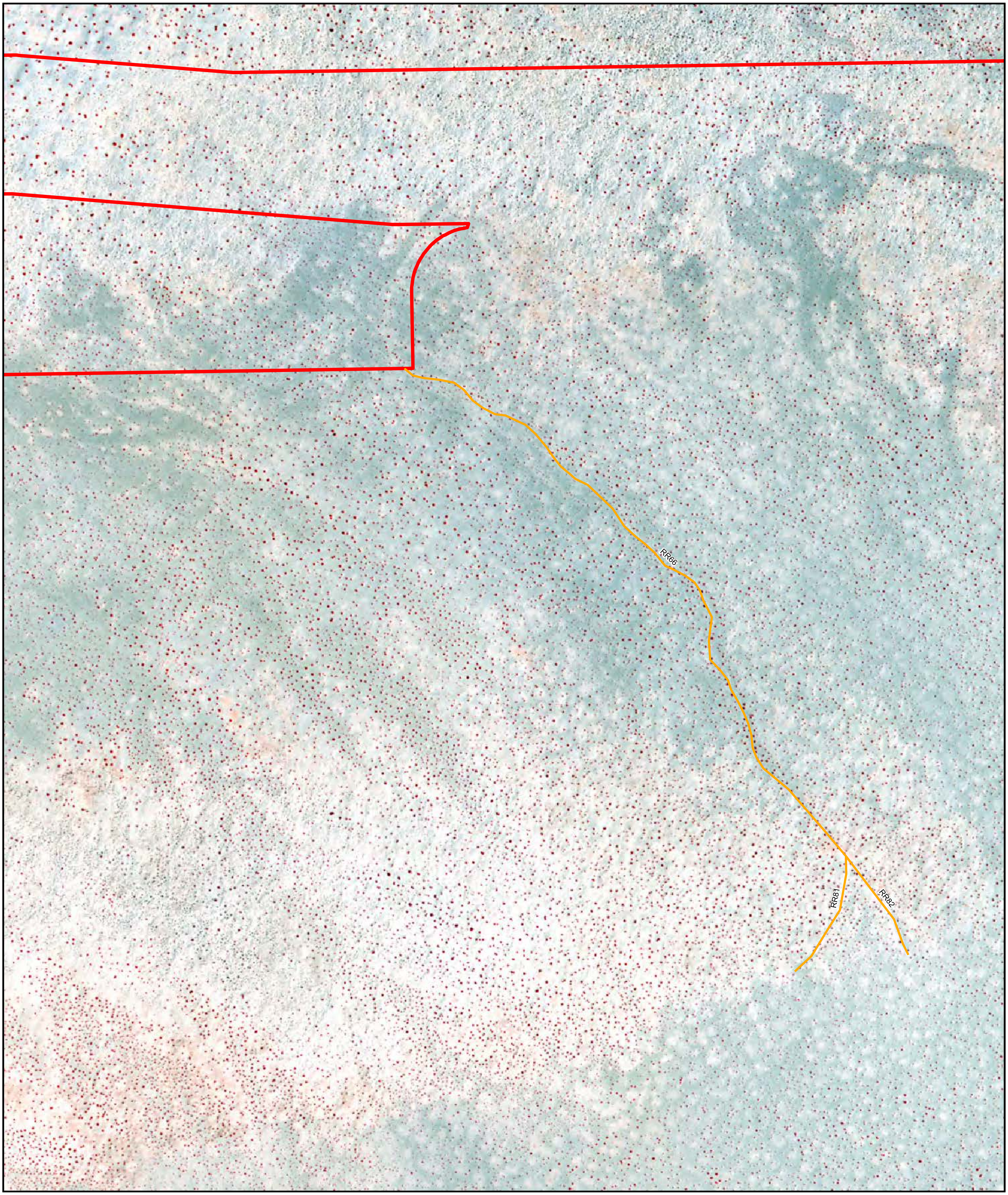
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 2
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

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Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 3

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

Aerial Photography: NAIP 2012

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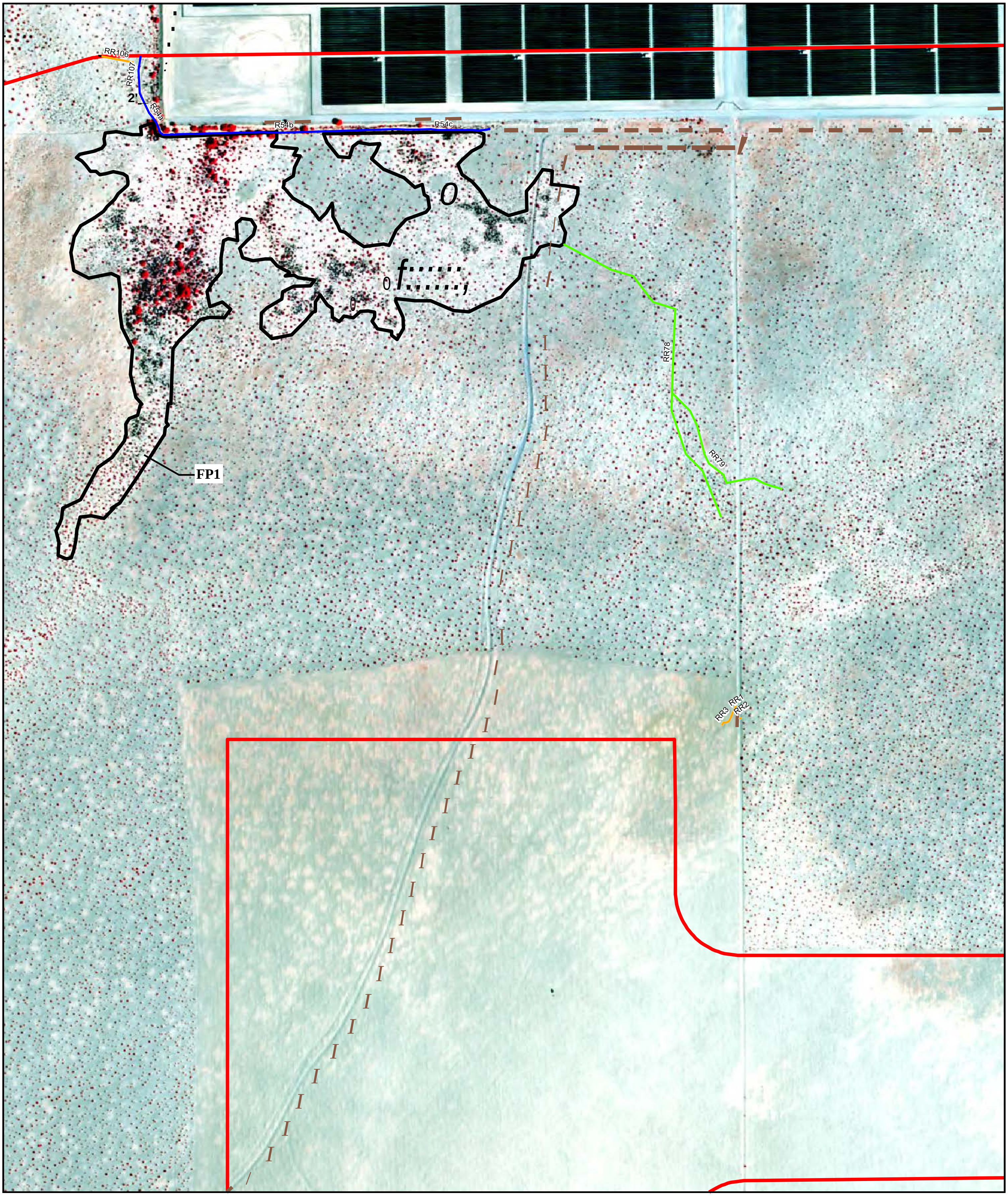
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 4
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)

Dirt Roadway (intercepts surface water flow)

Areas Potentially Subject to CDFW Regulation

Active Channel

Dormant Channel

Areas Potentially Not Subject to CDFW Regulation

Abandoned Channel (Hydrologically Disconnected)

0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
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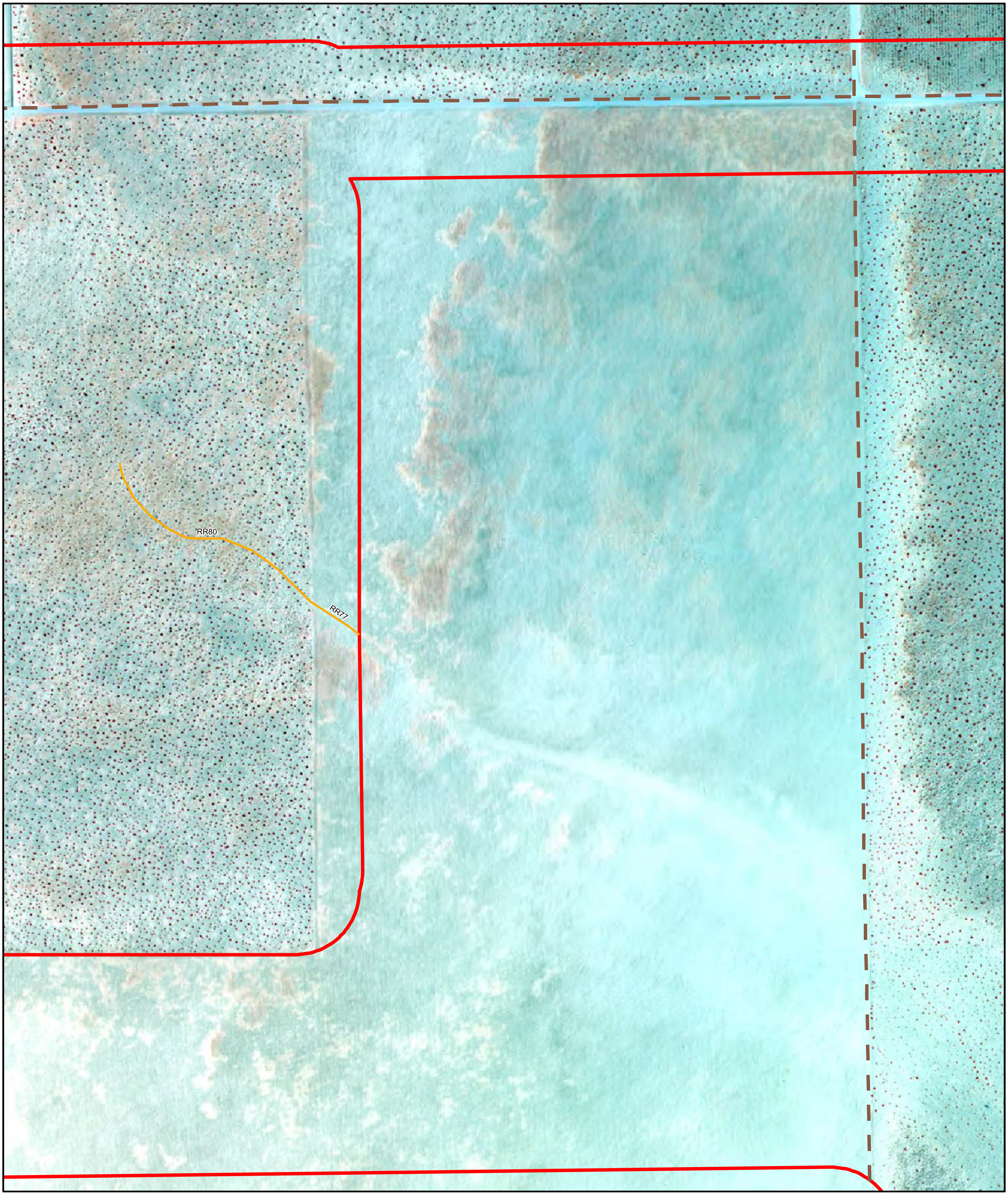
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 5

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

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0 100 200 300 400 500 600 700 Feet

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Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 6
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

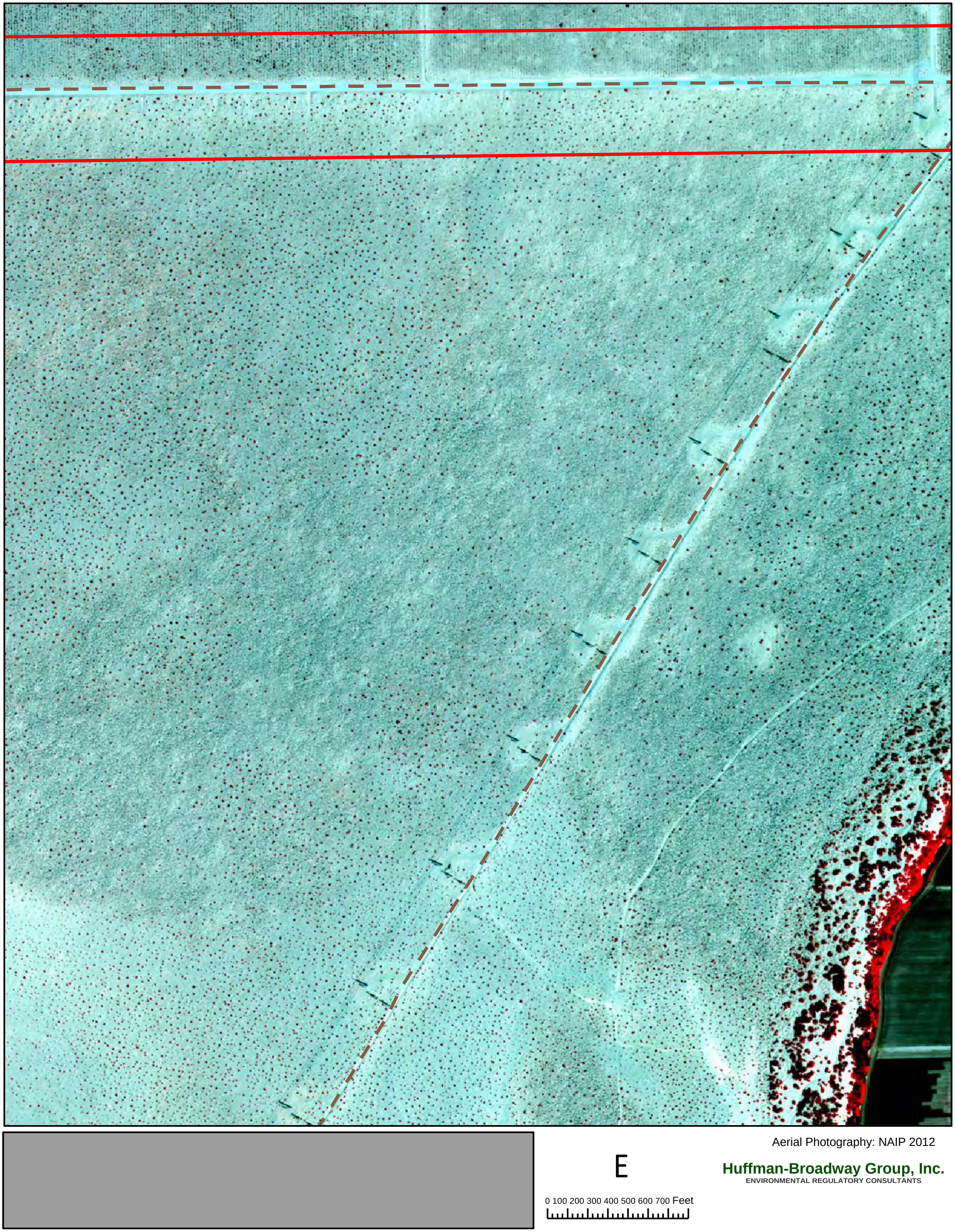
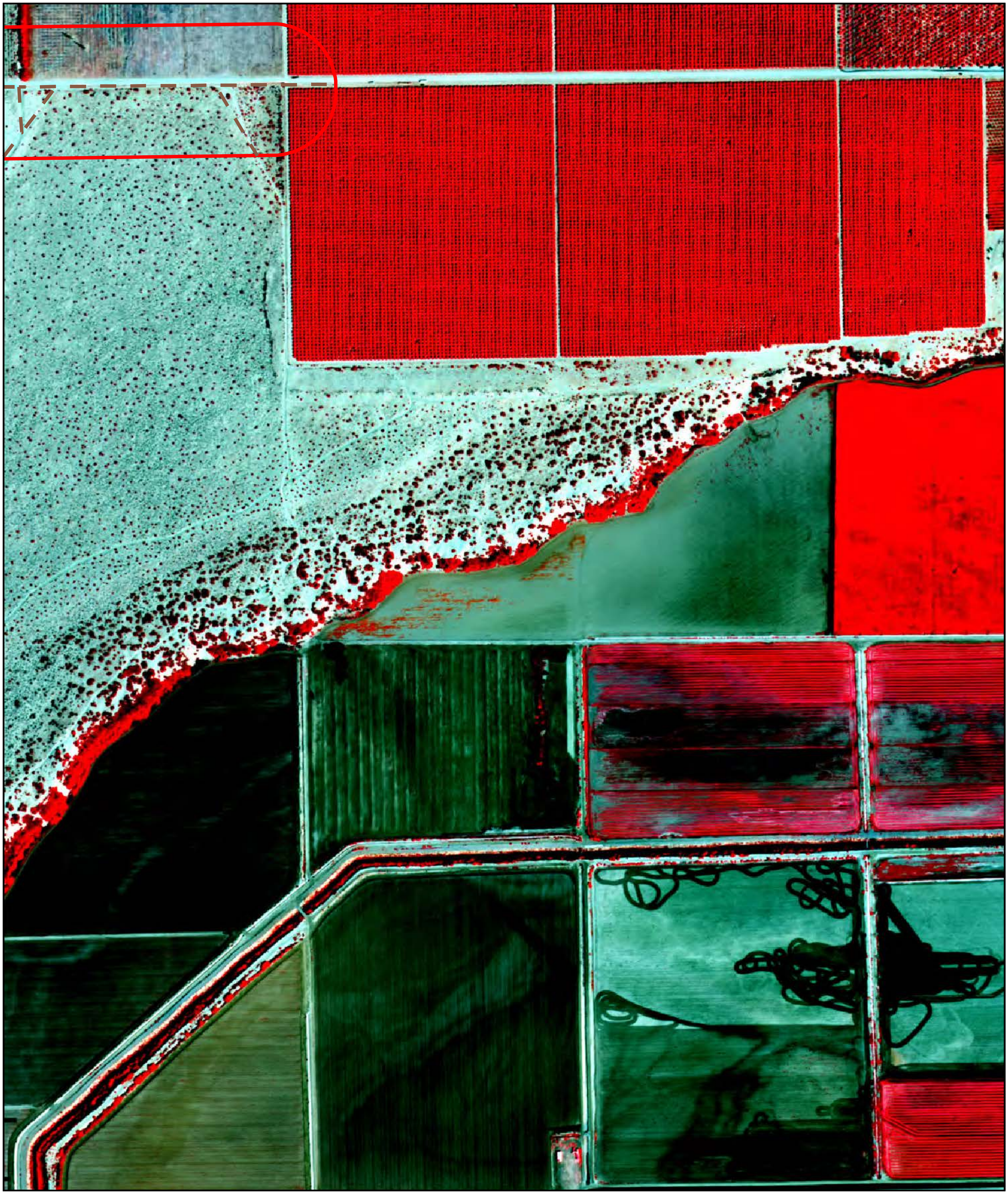


Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 7
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



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0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
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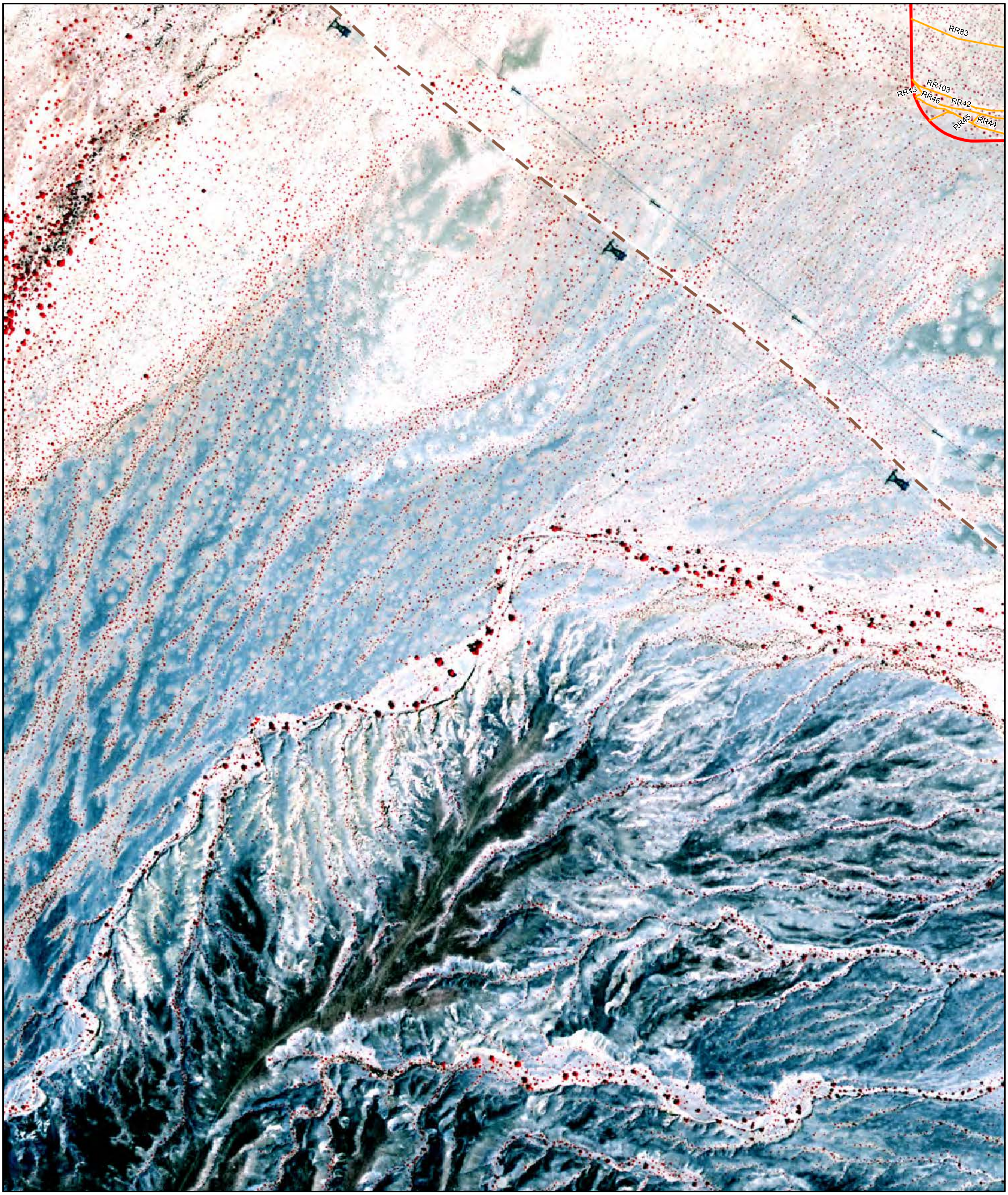
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 8
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

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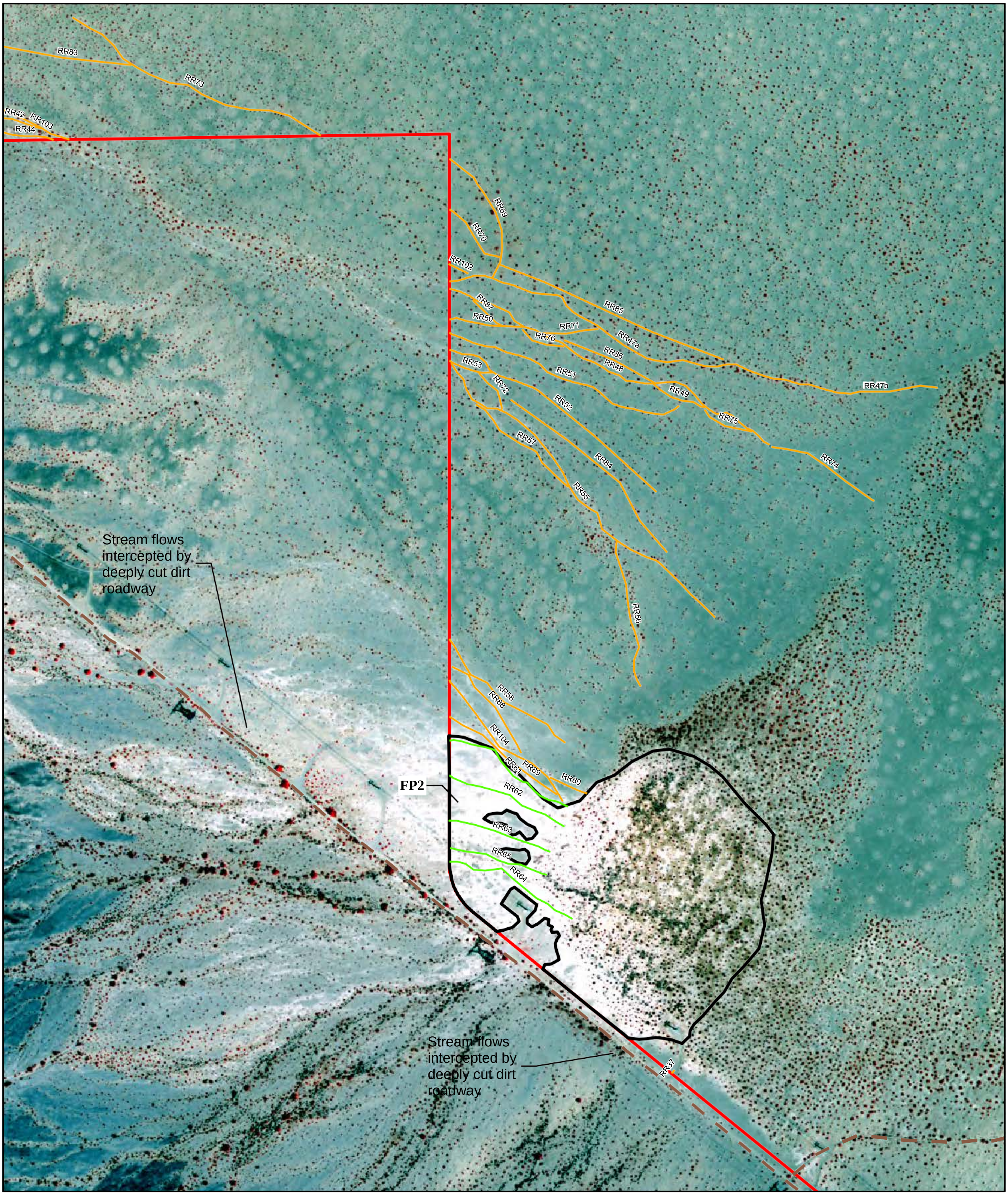
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 9
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

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0 100 200 300 400 500 600 700 Feet

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Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 10
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

Study Area (300 ft. Buffer from Potential Project Development Areas)
Dirt Roadway (intercepts surface water flow)
Earthen Levee

Areas Potentially Subject to CDFW Regulation
Active Channel
Dormant Channel
Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation
Abandoned Channel (Hydrologically Disconnected)

E

0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
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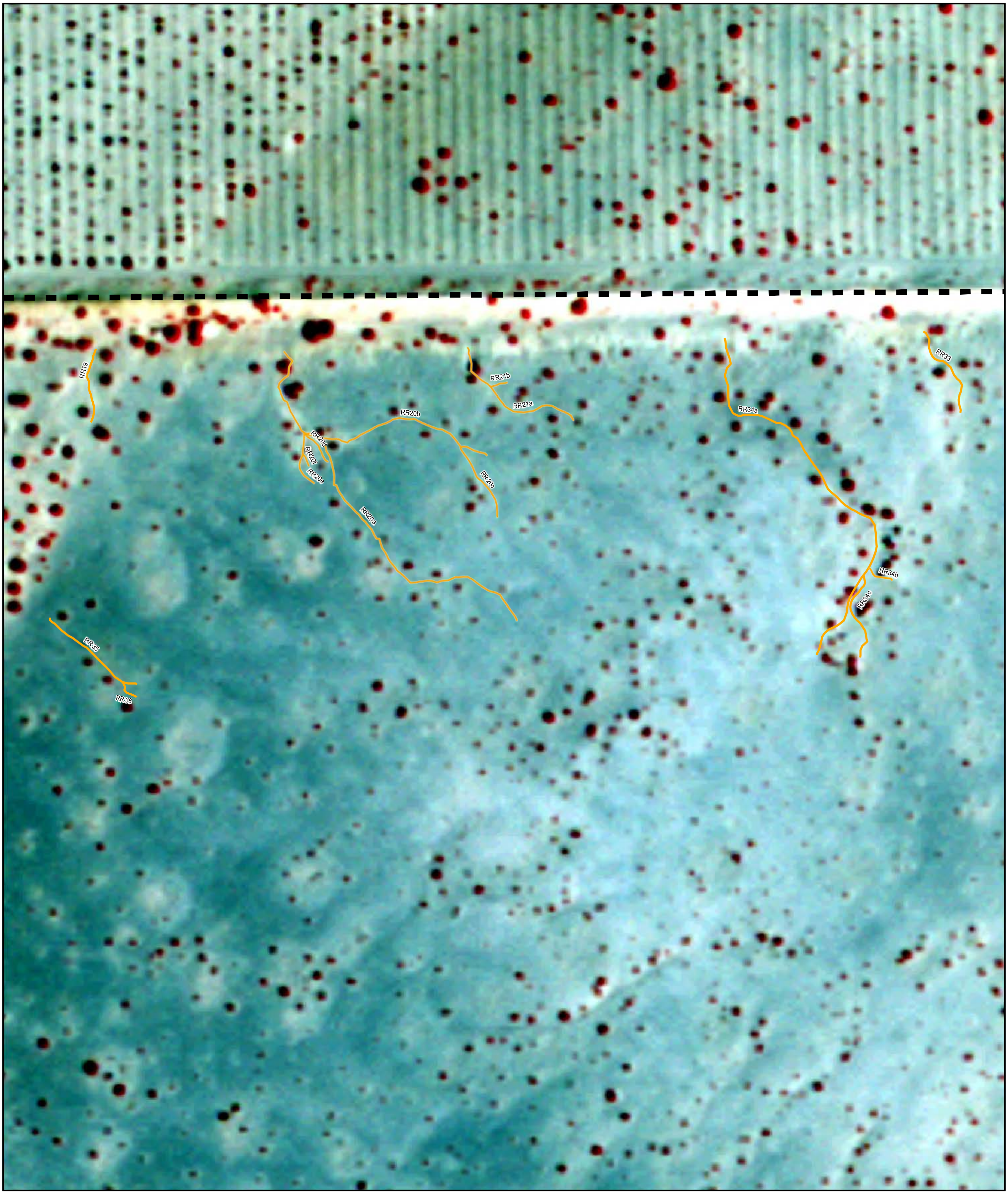
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 11
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)
Dirt Roadway (intercepts surface water flow)
Earthen Levee

Areas Potentially Subject to CDFW Regulation
Active Channel
Dormant Channel
Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation
Abandoned Channel (Hydrologically Disconnected)

E

0 50 100 150 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
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Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 11b
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

Study Area (300 ft. Buffer from Potential Project Development Areas)

Dirt Roadway (intercepts surface water flow)

Earthen Levee

Areas Potentially Subject to CDFW Regulation

Active Channel

Dormant Channel

Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation

Abandoned Channel (Hydrologically Disconnected)

E

0 50 100 150 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.

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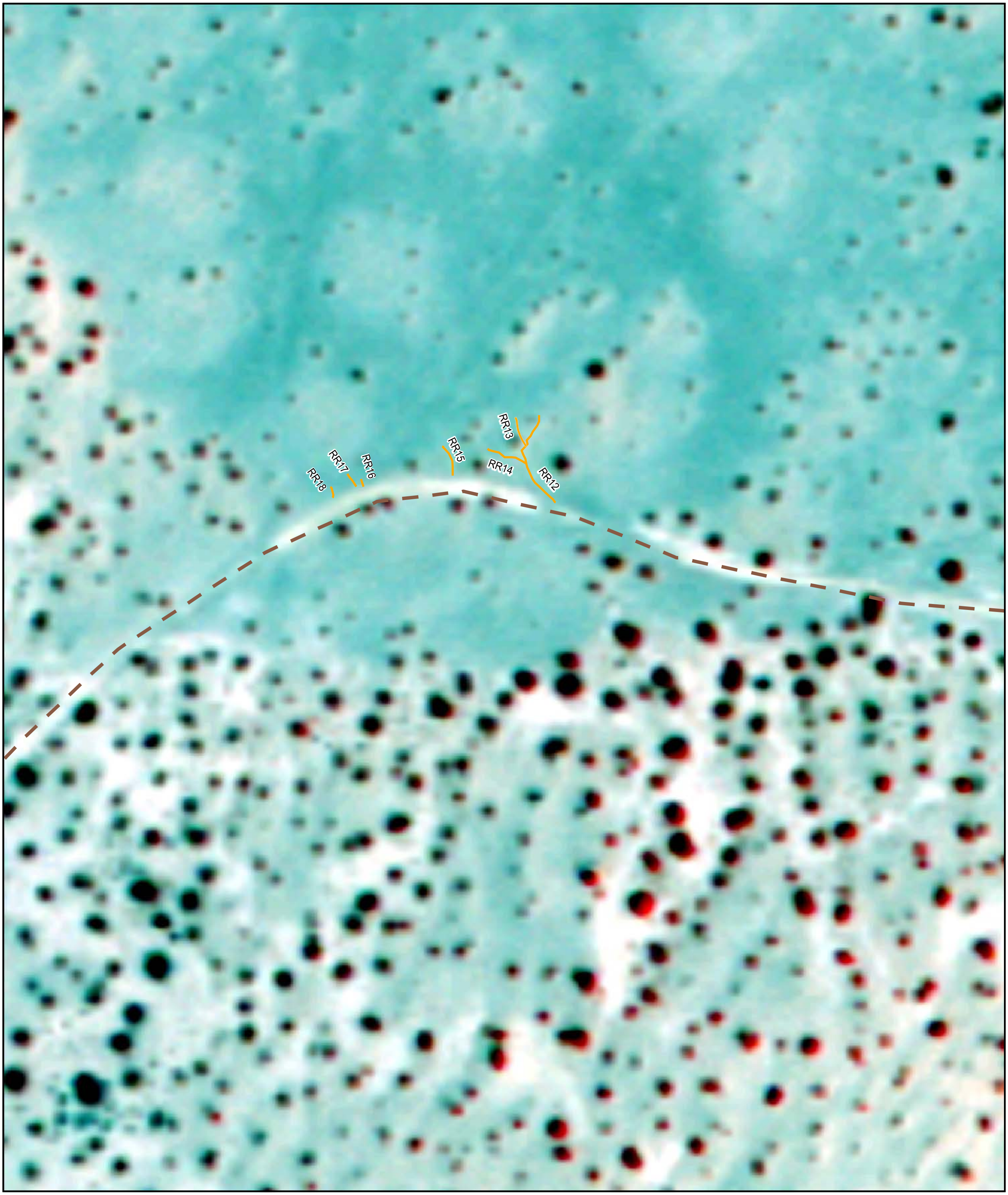
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 11c

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)

Dirt Roadway (intercepts surface water flow)

Earthen Levee

Areas Potentially Subject to CDFW Regulation

Active Channel

Dormant Channel

Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation

Abandoned Channel (Hydrologically Disconnected)

0 25 50 75 Feet

Aerial Photography: NAIP 2012

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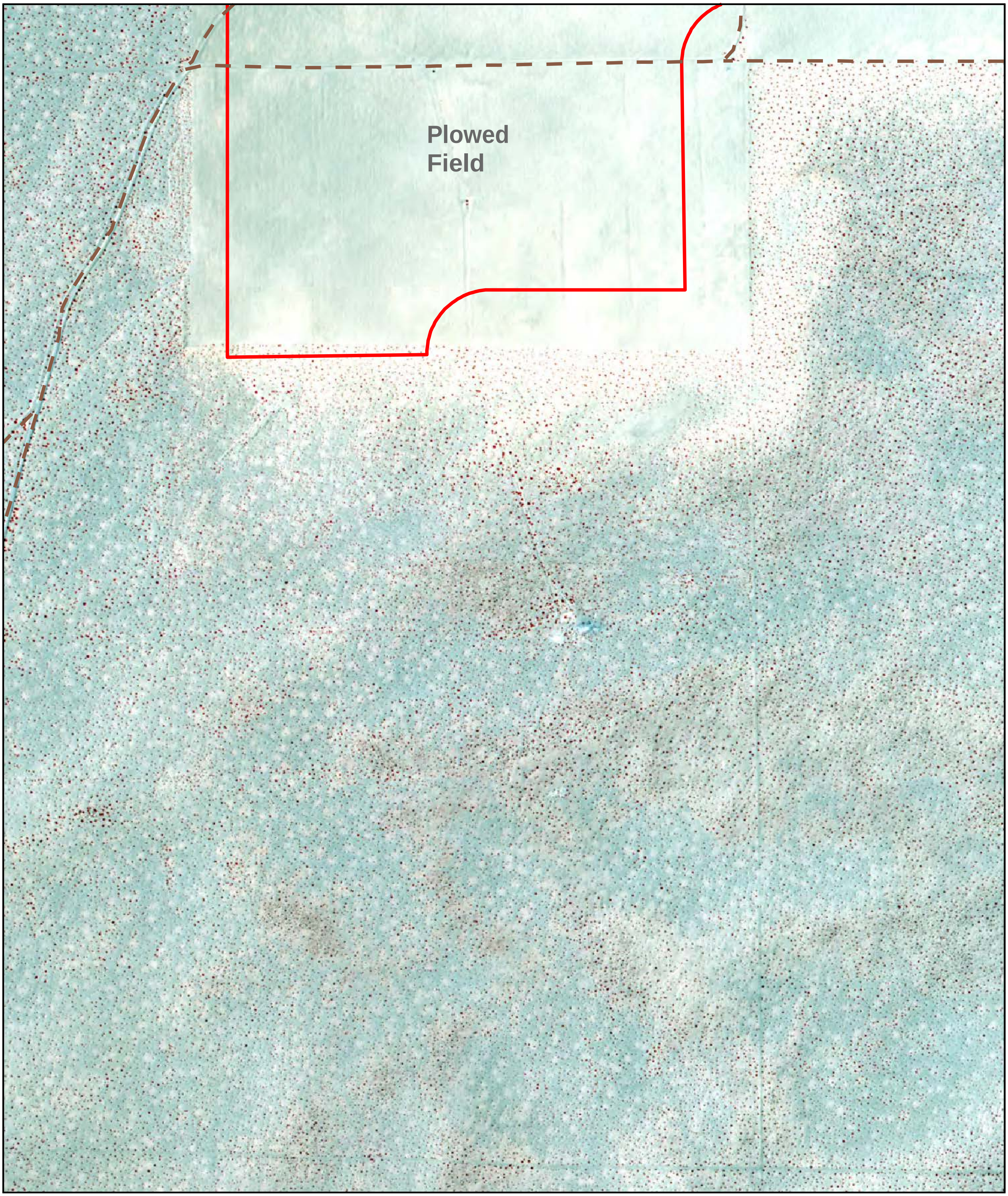
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 11d

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
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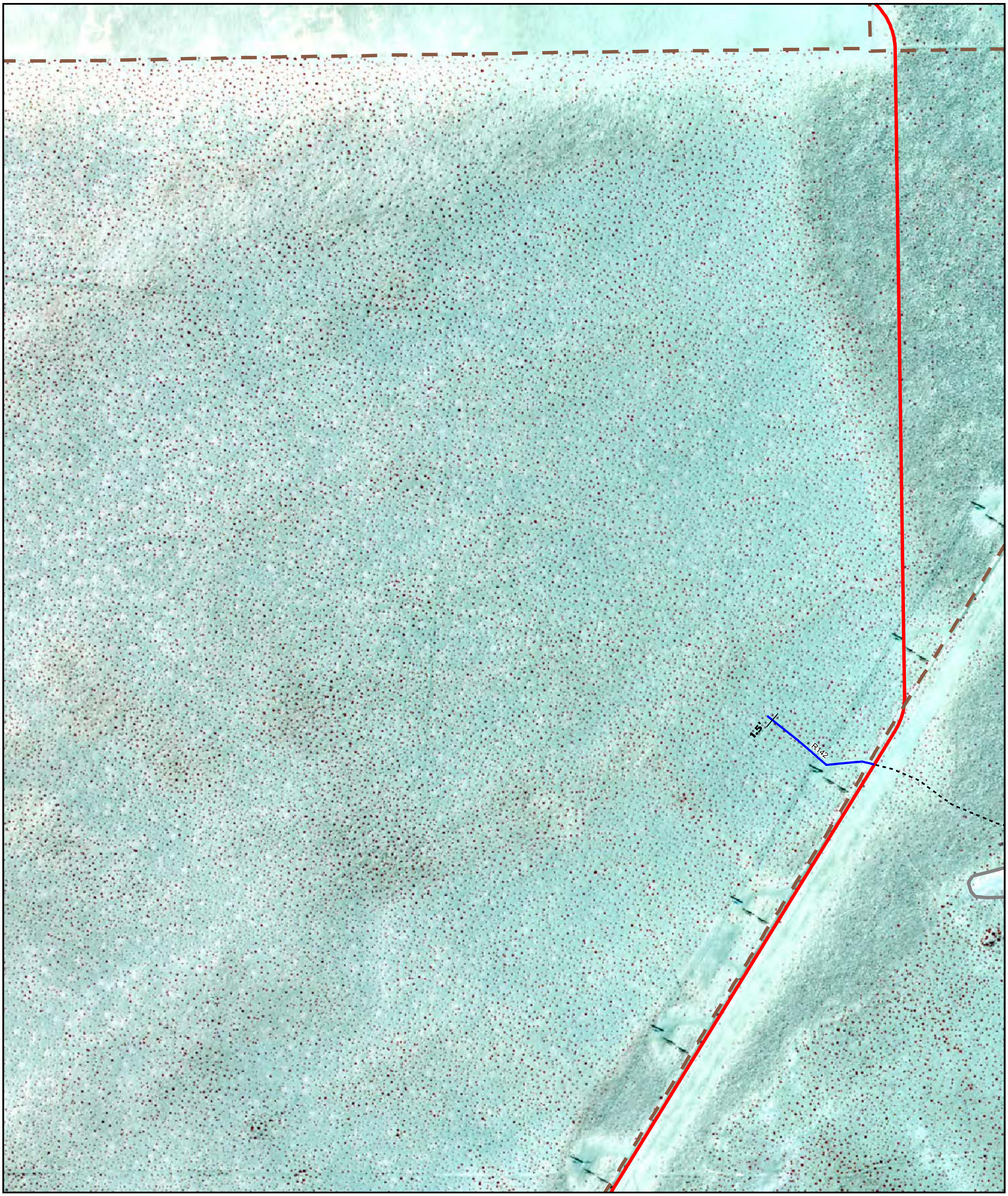
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 12
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

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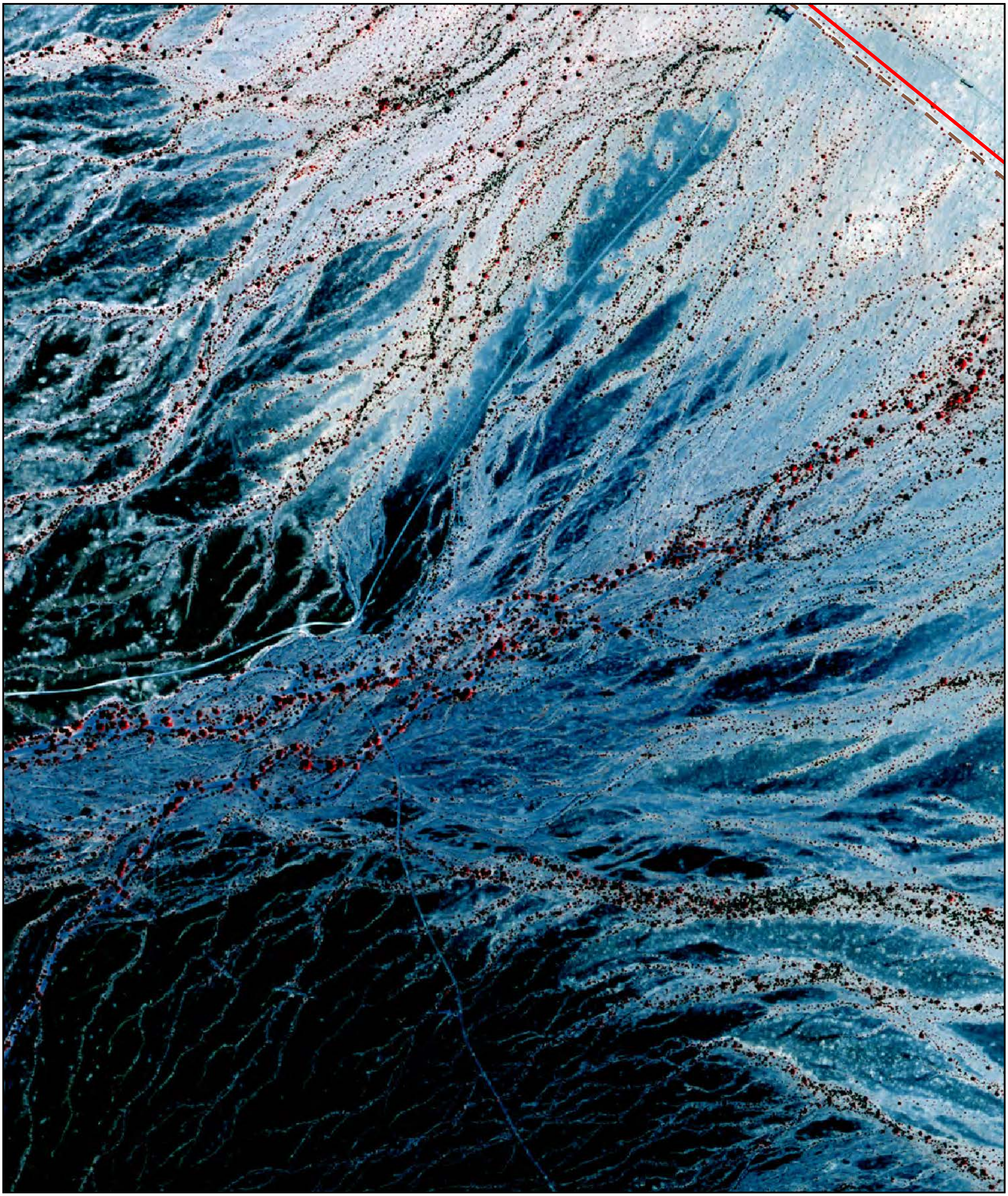
0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 13
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



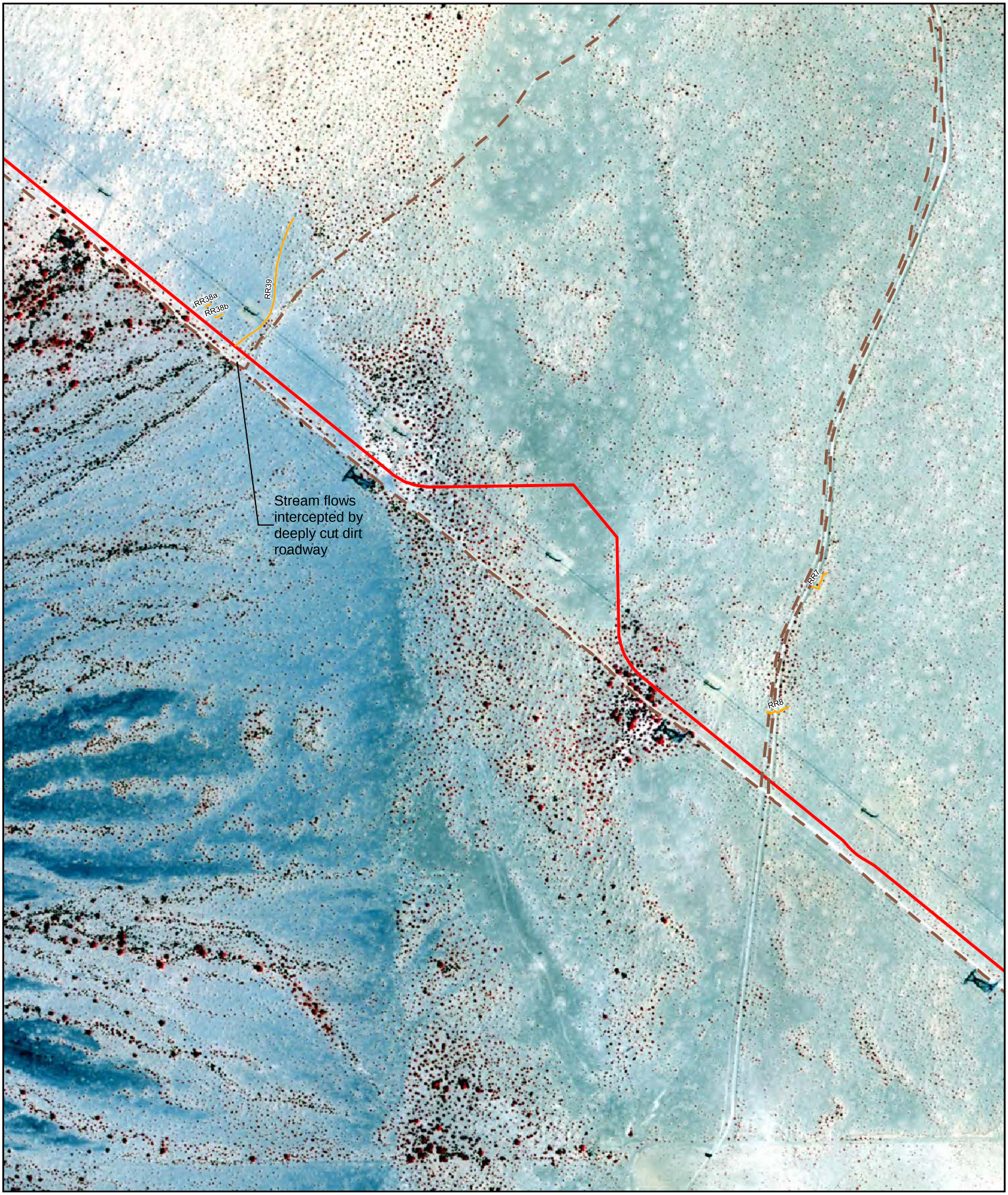
Aerial Photography: NAIP 2012

E

0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

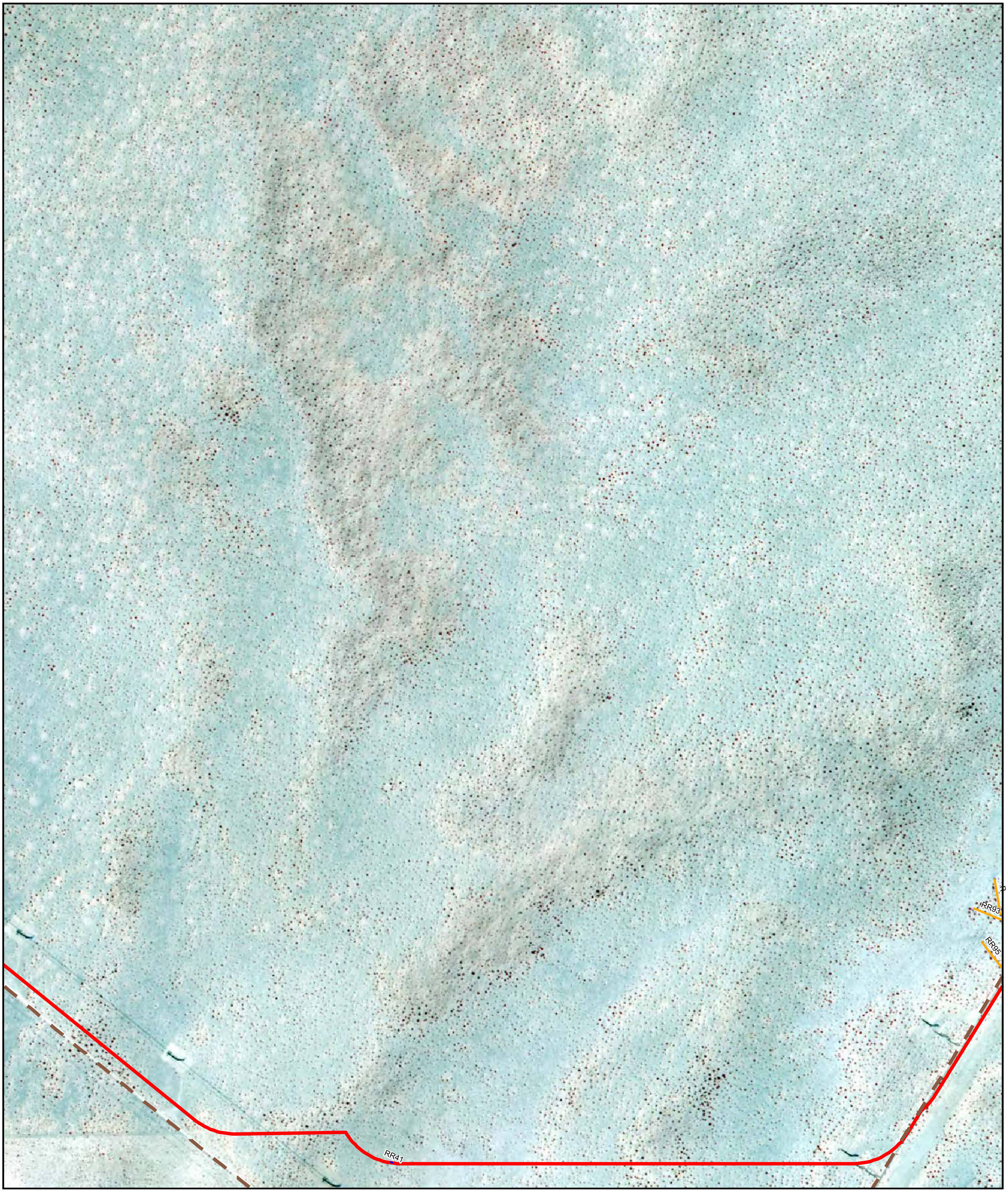
Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 14
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 15
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



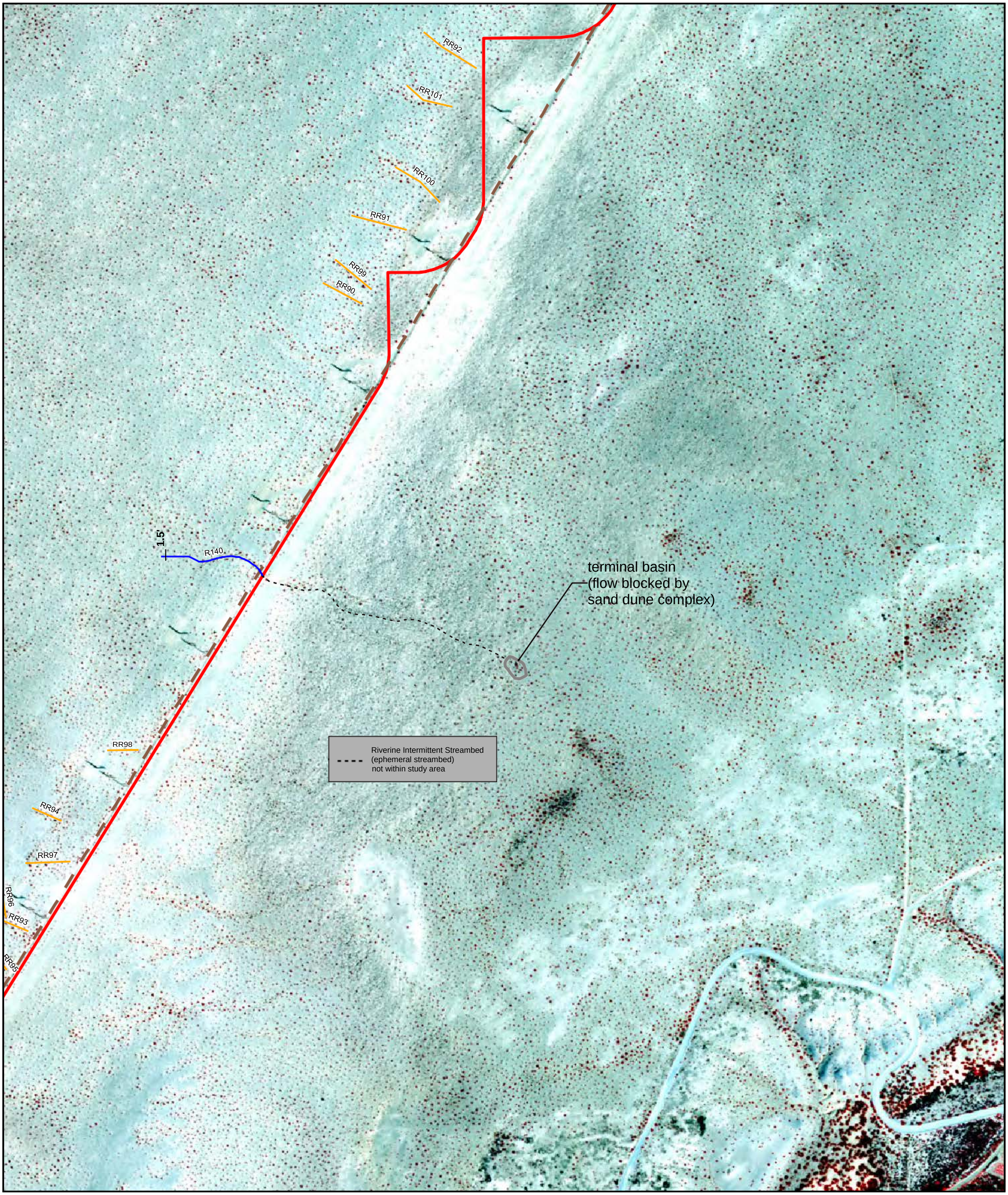
Aerial Photography: NAIP 2012

E

0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 16
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



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0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Figure 7. Stream Channels and Watercourses Potentially Subject to CDFW Jurisdiction, Sheet 17
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

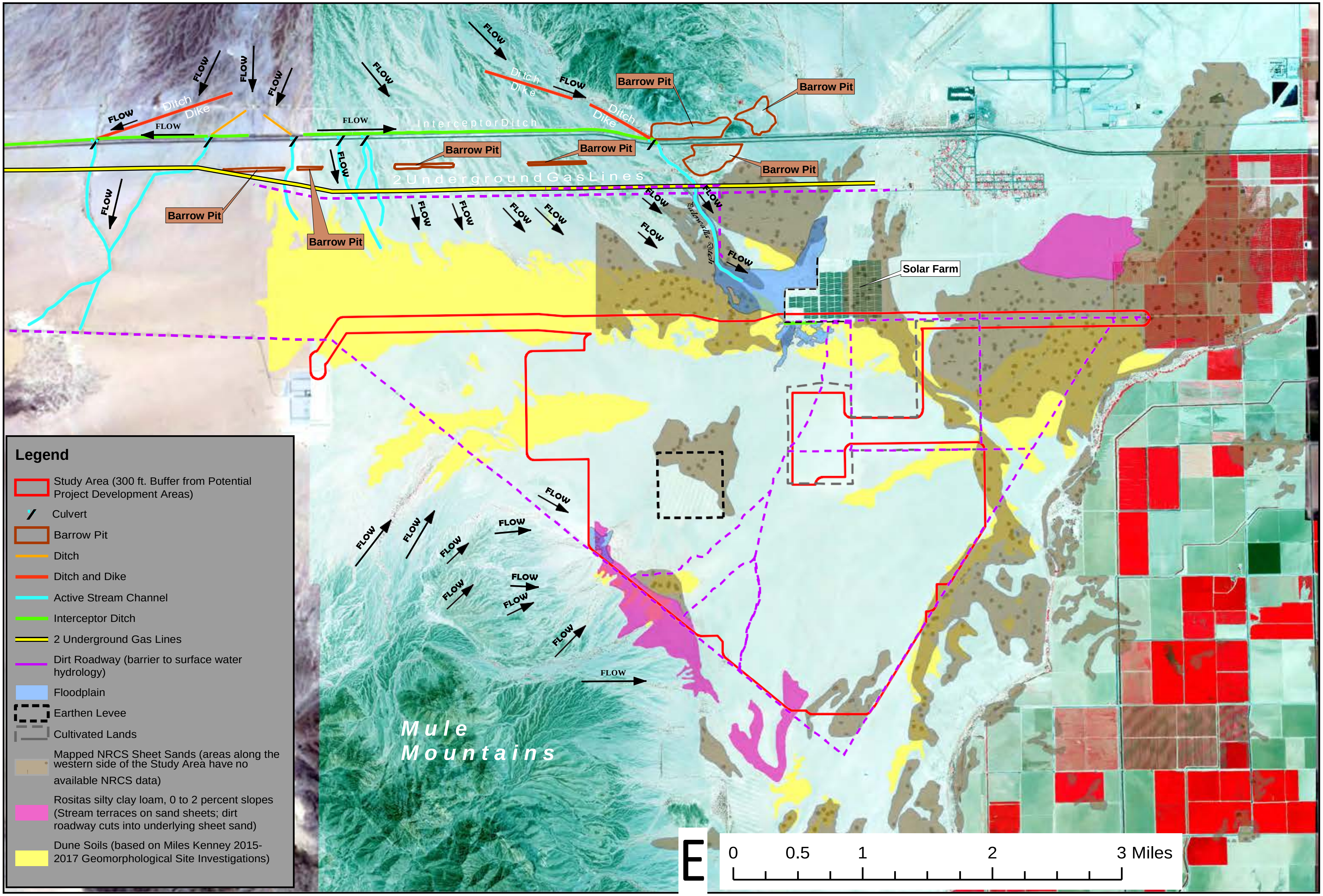


Figure 8. Mapping Showing Where Off-Site Surface Water Flows Directed Toward the Study Area Have Been Cut-Off by Natural and by Constructed Surface Features

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix B

NRCS Custom Soil Report

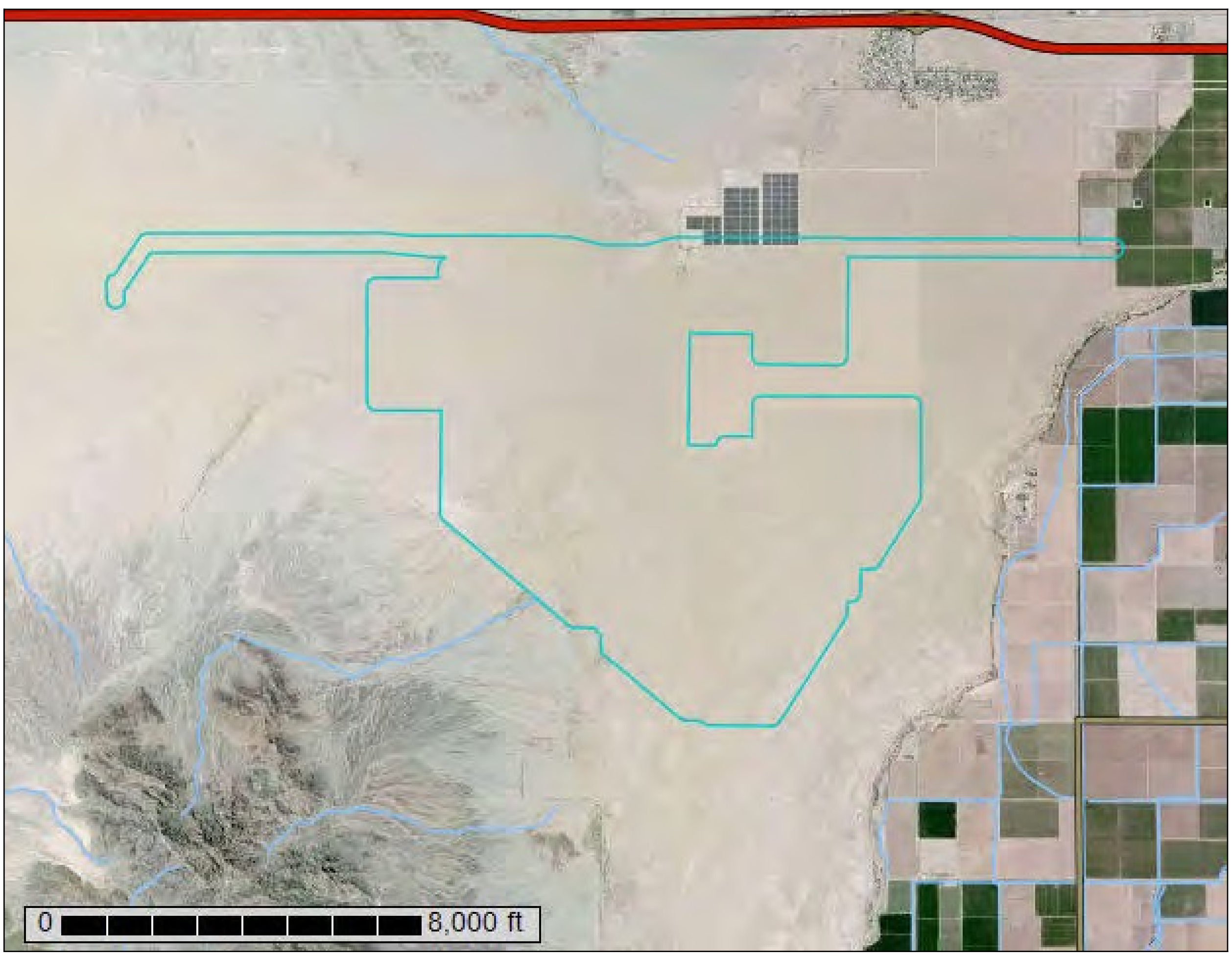
United States Department of Agriculture

Natural Resources Conservation Service

A product of the National Cooperative Soil Survey, a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local participants

Custom Soil Resource Report for Colorado Desert Area, California, and Palo Verde Area, California

FS Desert Quartzite



March 23, 2017

Preface

Soil surveys contain information that affects land use planning in survey areas. They highlight soil limitations that affect various land uses and provide information about the properties of the soils in the survey areas. Soil surveys are designed for many different users, including farmers, ranchers, foresters, agronomists, urban planners, community officials, engineers, developers, builders, and home buyers. Also, conservationists, teachers, students, and specialists in recreation, waste disposal, and pollution control can use the surveys to help them understand, protect, or enhance the environment.

Various land use regulations of Federal, State, and local governments may impose special restrictions on land use or land treatment. Soil surveys identify soil properties that are used in making various land use or land treatment decisions. The information is intended to help the land users identify and reduce the effects of soil limitations on various land uses. The landowner or user is responsible for identifying and complying with existing laws and regulations.

Although soil survey information can be used for general farm, local, and wider area planning, onsite investigation is needed to supplement this information in some cases. Examples include soil quality assessments (http://www.nrcs.usda.gov/wps/portal/nrcs/main/soils/health/) and certain conservation and engineering applications. For more detailed information, contact your local USDA Service Center (https://offices.sc.egov.usda.gov/locator/app?agency=nrcs) or your NRCS State Soil Scientist (http://www.nrcs.usda.gov/wps/portal/nrcs/detail/soils/contactus/?cid=nrcs142p2_053951).

Great differences in soil properties can occur within short distances. Some soils are seasonally wet or subject to flooding. Some are too unstable to be used as a foundation for buildings or roads. Clayey or wet soils are poorly suited to use as septic tank absorption fields. A high water table makes a soil poorly suited to basements or underground installations.

The National Cooperative Soil Survey is a joint effort of the United States Department of Agriculture and other Federal agencies, State agencies including the Agricultural Experiment Stations, and local agencies. The Natural Resources Conservation Service (NRCS) has leadership for the Federal part of the National Cooperative Soil Survey.

Information about soils is updated periodically. Updated information is available through the NRCS Web Soil Survey, the site for official soil survey information.

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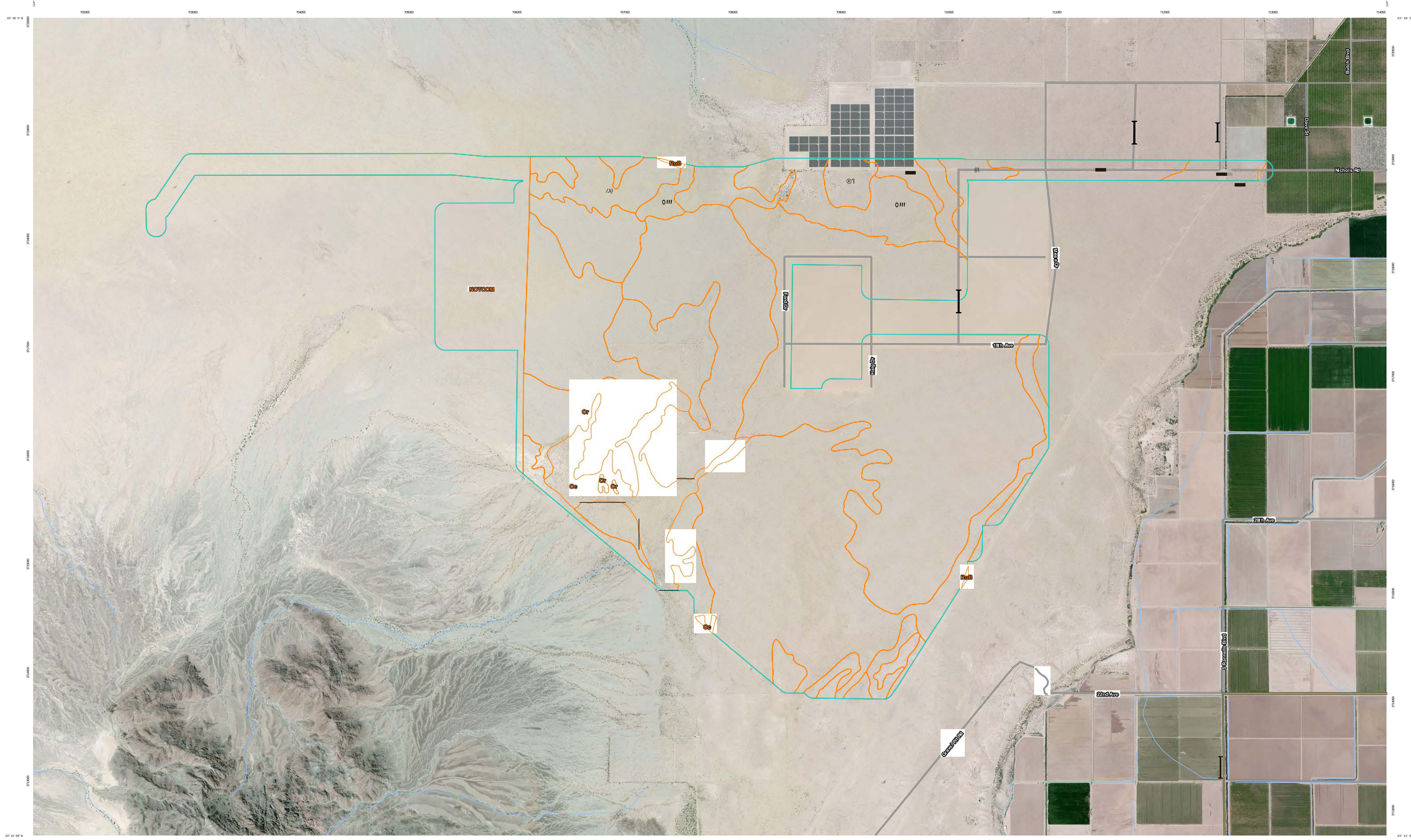
Contents

Soil Map

The soil map section includes the soil map for the defined area of interest, a list of soil map units on the map and extent of each map unit, and cartographic symbols displayed on the map. Also presented are various metadata about data used to produce the map, and a description of each soil map unit.

Soil Map



Map Scale: 1:15,600 if printed on D landscape (34" x 22") sheet.

N

Meters: 0 200 400 800 1200

Feet: 0 500 1000 2000 3000

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 11N WGS84

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Unit Polygons
- Soil Map Unit Lines
- Soil Map Unit Points

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other
- Special Line Features

Water Features

- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background

- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Colorado Desert Area, California
Survey Area Data: Version 5, Sep 13, 2016

Soil Survey Area: Palo Verde Area, California
Survey Area Data: Version 7, Sep 12, 2016

Your area of interest (AOI) includes more than one soil survey area. These survey areas may have been mapped at different scales, with a different land use in mind, at different times, or at different levels of detail. This may result in map unit symbols, soil properties, and interpretations that do not completely agree across soil survey area boundaries.

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Mar 13, 2011—Apr 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background

MAP LEGEND	MAP INFORMATION
	imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Colorado Desert Area, California (CA803)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
NOTCOM	No Digital Data Available	499.4	10.0%
Subtotals for Soil Survey Area		**499.4**	**10.0%**
Totals for Area of Interest		**4,971.7**	**100.0%**

Palo Verde Area, California (CA681)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
Ac	Aco gravelly loamy sand	1,093.4	22.0%
Af	Aco sandy loam	1,584.4	31.9%
Ce	Carrizo gravelly sand	0.0	0.0%
Oc	Orita fine sand	434.6	8.7%
Or	Orita gravelly fine sandy loam	730.6	14.7%
RoA	Rositas fine sand, 0 to 2 percent slopes	322.5	6.5%
RoB	Rositas fine sand, 2 to 9 percent slopes	241.2	4.9%
RsA	Rositas gravelly loamy sand, 0 to 2 percent slopes	65.6	1.3%
Subtotals for Soil Survey Area		**4,472.4**	**90.0%**
Totals for Area of Interest		**4,971.7**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Colorado Desert Area, California

NOTCOM—No Digital Data Available

Map Unit Composition

Notcom: 100 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Notcom

Properties and qualities

Palo Verde Area, California

Ac—Aco gravelly loamy sand

Map Unit Setting

National map unit symbol: hkwq
Elevation: 300 to 700 feet
Mean annual precipitation: 4 inches
Mean annual air temperature: 72 degrees F
Frost-free period: 290 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Aco and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Aco

Setting

Landform: Fan remnants
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 3 inches: gravelly loamy sand
H2 - 3 to 18 inches: coarse sandy loam
H3 - 18 to 46 inches: sandy loam
H4 - 46 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent
Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Available water storage in profile: Moderate (about 6.2 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Rositas, gravelly loamy sand

Percent of map unit: 8 percent
Hydric soil rating: No

Aco, sandy loam

Percent of map unit: 7 percent
Hydric soil rating: No

Af—Aco sandy loam

Map Unit Setting

National map unit symbol: hkwr
Elevation: 300 to 700 feet
Frost-free period: 290 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Aco and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Aco

Setting

Landform: Fan remnants
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 3 inches: sandy loam
H2 - 3 to 18 inches: coarse sandy loam
H3 - 18 to 46 inches: sandy loam
H4 - 46 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High (1.98 to 5.95 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 15 percent

Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Available water storage in profile: Moderate (about 6.3 inches)

Interpretive groups
Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 7e
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Rositas, fine sand
Percent of map unit: 8 percent
Hydric soil rating: No

Aco, gravelly loamy sand
Percent of map unit: 7 percent
Hydric soil rating: No

Ce—Carrizo gravelly sand

Map Unit Setting
National map unit symbol: hkwt
Elevation: 300 to 450 feet
Mean annual precipitation: 2 to 8 inches
Mean annual air temperature: 72 degrees F
Frost-free period: 290 to 310 days
Farmland classification: Not prime farmland

Map Unit Composition
Carrizo and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Carrizo

Setting
Landform: Arroyos
Landform position (two-dimensional): Toeslope
Down-slope shape: Linear
Across-slope shape: Concave
Parent material: Mixed sandy and gravelly alluvium

Typical profile
H1 - 0 to 37 inches: gravelly sand
H2 - 37 to 47 inches: very cobbly sandy loam
H3 - 47 to 60 inches: very cobbly sandy loam

Properties and qualities
Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches

Natural drainage class: Excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 1 percent
Salinity, maximum in profile: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)
Available water storage in profile: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 8s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Chuckawala

Percent of map unit: 5 percent
Hydric soil rating: No

Rositas

Percent of map unit: 5 percent
Hydric soil rating: No

Badland

Percent of map unit: 5 percent
Hydric soil rating: No

Oc—Orita fine sand

Map Unit Setting

National map unit symbol: hkxb
Elevation: 370 to 500 feet
Mean annual precipitation: 4 inches
Mean annual air temperature: 72 degrees F
Frost-free period: 290 days
Farmland classification: Prime farmland if irrigated and reclaimed of excess salts and sodium

Map Unit Composition

Orita and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orita

Setting

Landform: Fan remnants
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 12 inches: fine sand
H2 - 12 to 22 inches: fine sandy loam
H3 - 22 to 68 inches: gravelly clay loam
H4 - 68 to 80 inches: gravelly fine sandy loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Medium
Capacity of the most limiting layer to transmit water (Ksat): Moderately low to moderately high (0.06 to 0.20 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 6 percent
Salinity, maximum in profile: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)
Available water storage in profile: Moderate (about 8.3 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: C
Hydric soil rating: No

Minor Components

Orita, gravelly fine sandy loam

Percent of map unit: 8 percent
Hydric soil rating: No

Carrizo, gravelly sand

Percent of map unit: 7 percent
Hydric soil rating: No

Or—Orita gravelly fine sandy loam

Map Unit Setting

National map unit symbol: hkxd

Elevation: 370 to 500 feet
Mean annual precipitation: 4 inches
Mean annual air temperature: 72 degrees F
Frost-free period: 290 days
Farmland classification: Prime farmland if irrigated and reclaimed of excess salts and sodium

Map Unit Composition

Orita and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Orita

Setting

Landform: Fan remnants
Landform position (two-dimensional): Summit
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Mixed alluvium

Typical profile

H1 - 0 to 4 inches: Error
H2 - 4 to 10 inches: gravelly fine sandy loam
H3 - 10 to 22 inches: gravelly sand
H4 - 22 to 68 inches: gravelly fine sandy loam
H5 - 68 to 80 inches: gravelly clay loam

Properties and qualities

Slope: 0 to 1 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Well drained
Runoff class: Low
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.57 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 6 percent
Salinity, maximum in profile: Slightly saline to moderately saline (4.0 to 8.0 mmhos/cm)
Available water storage in profile: Moderate (about 6.6 inches)

Interpretive groups

Land capability classification (irrigated): 2s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: B
Hydric soil rating: No

Minor Components

Aco, gravelly loamy sand

Percent of map unit: 5 percent
Hydric soil rating: No

Carrizo, gravelly sand

Percent of map unit: 5 percent
Hydric soil rating: No

Orita, gravelly fine sandy loam

Percent of map unit: 5 percent
Hydric soil rating: No

RoA—Rositas fine sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hkxj
Elevation: 220 to 500 feet
Mean annual precipitation: 2 to 4 inches
Mean annual air temperature: 72 degrees F
Frost-free period: 290 to 310 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Rositas and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rositas

Setting

Landform: Sand sheets
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian sands

Typical profile

H1 - 0 to 3 inches: loamy fine sand
H2 - 3 to 60 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: Rare
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)

Available water storage in profile: Low (about 3.7 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Gilman, valley location

Percent of map unit: 3 percent
Hydric soil rating: No

Indio

Percent of map unit: 3 percent
Hydric soil rating: No

Gilman

Percent of map unit: 3 percent
Hydric soil rating: No

Aco

Percent of map unit: 3 percent
Hydric soil rating: No

Carrizo

Percent of map unit: 3 percent
Hydric soil rating: No

RoB—Rositas fine sand, 2 to 9 percent slopes

Map Unit Setting

National map unit symbol: hkxk
Elevation: 220 to 500 feet
Mean annual precipitation: 2 to 4 inches
Mean annual air temperature: 72 degrees F
Frost-free period: 290 to 310 days
Farmland classification: Prime farmland if irrigated

Map Unit Composition

Rositas and similar soils: 85 percent
Minor components: 15 percent
Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rositas

Setting

Landform: Sand sheets
Landform position (two-dimensional): Shoulder
Landform position (three-dimensional): Riser
Down-slope shape: Convex

Across-slope shape: Convex
Parent material: Eolian sands

Typical profile

H1 - 0 to 3 inches: fine sand
H2 - 3 to 72 inches: fine sand

Properties and qualities

Slope: 2 to 9 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Very low
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Available water storage in profile: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 3s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Unnamed, low dunes

Percent of map unit: 8 percent
Hydric soil rating: No

Unnamed, gravelly surface pavement

Percent of map unit: 7 percent
Hydric soil rating: No

RsA—Rositas gravelly loamy sand, 0 to 2 percent slopes

Map Unit Setting

National map unit symbol: hkxm
Elevation: 220 to 500 feet
Mean annual precipitation: 3 inches
Mean annual air temperature: 72 degrees F
Frost-free period: 290 to 310 days
Farmland classification: Farmland of statewide importance

Map Unit Composition

Rositas and similar soils: 85 percent
Minor components: 15 percent

Estimates are based on observations, descriptions, and transects of the mapunit.

Description of Rositas

Setting

Landform: Sand sheets on stream terraces
Landform position (two-dimensional): Toeslope
Landform position (three-dimensional): Tread
Down-slope shape: Linear
Across-slope shape: Linear
Parent material: Eolian sands over mixed alluvium

Typical profile

H1 - 0 to 10 inches: gravelly loamy sand
H2 - 10 to 72 inches: fine sand

Properties and qualities

Slope: 0 to 2 percent
Depth to restrictive feature: More than 80 inches
Natural drainage class: Somewhat excessively drained
Runoff class: Negligible
Capacity of the most limiting layer to transmit water (Ksat): High to very high (5.95 to 19.98 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Calcium carbonate, maximum in profile: 5 percent
Salinity, maximum in profile: Nonsaline to moderately saline (0.0 to 8.0 mmhos/cm)
Available water storage in profile: Low (about 3.6 inches)

Interpretive groups

Land capability classification (irrigated): 4s
Land capability classification (nonirrigated): 7s
Hydrologic Soil Group: A
Hydric soil rating: No

Minor Components

Unnamed, steeper slopes

Percent of map unit: 8 percent
Hydric soil rating: No

Aco

Percent of map unit: 7 percent
Hydric soil rating: No

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Appendix C

WETS Analysis

WETS Precipitation Data Summary

Month / Year	Total Precipitation (inches)	Average Precipitation*	30 % Chance Precipitation Will Be < or > Values Below*	Is Precipitation within Normal Range?
January 2013	0.77	0.46	0.03 – 0.51	> Normal
February 2013	0.01	0.55	0.04 – 0.61	< Normal
March 2013	0.03	0.45	0.03 – 0.52	Normal
April 2013	0.00	0.14	0.00 – 0.09	Normal
May 2013	0.00	0.03	0.00 – 0.03	Normal
June 2013	0.00	0.01	NA	Normal
July 2013	0.54	0.32	0.00 – 0.33	> Normal
August 2013	0.66	0.66	0.07 – 0.80	Normal
September 2013	0.57	0.50	0.00 – 0.50	> Normal
October 2013	0.01	0.23	0.00 – 0.19	Normal
November 2013	0.74	0.19	0.00 – 0.16	> Normal
December 2013	0.01	0.48	0.01 – 0.47	Normal
January 2014	0.00	0.46	0.03 – 0.51	< Normal
February 2014	0.07	0.55	0.04 – 0.61	Normal
March 2014	0.04	0.45	0.03 – 0.52	Normal
April 2014	0.00	0.14	0.00 – 0.09	Normal
May 2014	0.01	0.03	0.00 – 0.03	Normal
June 2014	0.00	0.01	NA	Normal
July 2014	0.00	0.32	0.00 – 0.33	Normal
August 2014	0.58	0.66	0.07 – 0.80	Normal
September 2014	0.11	0.50	0.00 – 0.50	Normal
October 2014	0.03	0.23	0.00 – 0.19	Normal
November 2014	0.00	0.19	0.00 – 0.16	Normal
December 2014	0.78	0.48	0.01 – 0.47	> Normal
January 2015	0.57	0.46	0.03 – 0.51	> Normal
February 2015	0.04	0.55	0.04 – 0.61	Normal
March 2015	1.02	0.45	0.03 – 0.52	> Normal
April 2015	0.00	0.14	0.00 -0.09	Normal
May 2015	0.35	0.03	0.00 – 0.03	> Normal
June 2015	0.04	0.01	NA	NA
July 2015	0.23	0.32	0.00 – 0.33	Normal
August 2015	0.00	0.66	0.07 – 0.80	< Normal
September 2015	0.04	0.50	0.00 – 0.50	Normal
October 2015	0.84	0.23	0.00 – 0.19	> Normal
November 2015	0.05	0.19	0.00 – 0.16	Normal
December 2015	0.00	0.48	0.01 – 0.47	< Normal
January 2016	0.56	0.46	0.03 – 0.51	> Normal
February 2016	0.00	0.55	0.04 – 0.61	< Normal
March 2016	0.00	0.45	0.03 – 0.52	< Normal
April 2016	0.14	0.14	0.00 – 0.09	> Normal
May 2016	0.00	0.03	0.00 – 0.03	Normal
June 2016	0.03	0.01	NA	Normal
July 2016	0.24	0.32	0.00 – 0.33	Normal
August 2016	0.14	0.66	0.07 – 0.80	Normal
September 2016	0.13	0.50	0.00 – 0.50	Normal
October 2016	0.14	0.23	0.00 – 0.19	Normal
November 2016 (to 11/14/2016)	0.00	0.19	0.00 – 0.16	Normal

* Data from WETS Station Blythe AP, CA158, reporting years 1970 – 2000.

WETS Station : BLYTHE AP, CA158 Creation Date: 10/09/2014
Latitude: 3337 Longitude: 11443 Elevation: 00395
State FIPS/County(FIPS): 06065 County Name: Riverside
Start yr. - 1971 End yr. - 2000

Month	Temperature (Degrees F.) avg daily max	avg daily min	avg	Precipitation (Inches) avg	30% chance will have less than	more than	avg # of days w/.1 or more	avg total snow fall
January	66.6	41.7	54.2	0.46	0.03	0.51	1	0.0
February	72.0	45.7	58.9	0.55	0.04	0.61	1	0.0
March	77.6	50.2	63.9	0.45	0.03	0.52	1	0.0
April	85.7	56.2	71.0	0.14	0.00	0.09	1	0.0
May	93.9	63.9	78.9	0.03	0.00	0.03	0	0.0
June	104.1	72.6	88.4	0.01	NA	NA	0	0.0
July	107.2	80.2	93.7	0.32	0.00	0.33	1	0.0
August	105.4	79.5	92.5	0.66	0.07	0.80	1	0.0
September	99.6	72.4	86.0	0.50	0.00	0.50	1	0.0
October	88.0	60.0	74.0	0.23	0.00	0.19	0	0.0
November	74.7	47.4	61.1	0.19	0.00	0.16	0	0.0
December	66.0	40.9	53.5	0.48	0.01	0.47	1	0.0
Annual	-----	-----	-----	------	2.87	4.74	--	----
Average	86.7	59.2	73.0	------	------	------	--	----
Average	-----	-----	-----	4.02	------	------	9	0.0

GROWING SEASON DATES

Probability	Temperature 24 F or higher	28 F or higher	32 F or higher
	Beginning and Ending Dates Growing Season Length		
50 percent *			
70 percent *			

* Percent chance of the growing season occurring between the Beginning and Ending dates.

total 1948-2014 prcp

Station : CA158, BLYTHE AP
------- Unit = inches

yr	jan	feb	mar	apr	may	jun	jul	aug	sep	oct	nov	dec	annl
48							0.05	0.90	0.49	1.33	0.00	0.24	3.01
49	2.48	0.00	0.01	0.02	0.00	0.00	0.00	0.18	0.00	0.23	0.00	0.07	2.99
50	0.00	0.05	0.00	0.00	0.00	0.00	0.24	0.00	0.02	0.00	0.00	0.00	0.31
51	0.54	0.00	0.00	0.73	0.07	0.00	0.19	5.92	0.00	0.41	0.69	0.13	8.68
52	0.40	0.18	0.59	0.65	0.00	0.91	0.25	0.05	0.10	0.00	0.33	1.42	4.88
53	0.00	0.10	0.10	0.00	0.00	0.00	0.07	0.06	0.00	0.00	0.00	0.26	0.59
54	0.70	0.00	0.76	0.01	0.00	0.00	0.14	0.46	0.20	0.16	0.00	0.00	2.43
55	1.05	0.00	0.00	0.02	0.00	0.00	0.04	1.14	0.00	0.00	0.01	0.00	2.26
56	0.00	0.07	0.00	0.00	0.00	0.00	1.03	0.00	0.01	0.00	0.00	0.00	1.11
57	0.97	0.03	0.00	0.13	0.00	0.00	0.32	0.48	0.00	1.53	0.05	0.13	3.64
58	0.12	1.35	0.60	0.25	0.02	0.00	0.02	0.57	0.01	0.09	0.03	0.00	3.06
59	0.07	0.36	0.00	0.00	0.00	0.01	0.07	1.30	0.07	0.38	0.00	1.95	4.21
60	0.42	0.17	0.21	0.03	0.00	0.00	0.12	0.09	1.03	0.02	0.25	0.00	2.34
61	0.13	0.00	0.00	0.00	0.00	0.00	0.04	0.50	0.00	0.00	0.12	0.75	1.54
62	0.79	0.26	0.09	0.00	0.00	0.00	0.02	0.48	0.00	0.00	0.00	0.57	2.21
63	0.55	0.23	0.20	0.00	0.00	0.00	0.00	1.05	1.03	1.17	0.41	0.00	4.64
64	0.00	0.22	0.33	0.08	0.00	0.00	0.08	0.00	0.00	0.00	0.30	0.12	1.13
65	0.14	0.09	0.23	3.00	0.01	0.00	0.00	0.35	0.00	0.00	0.81	1.44	6.07
66	1.08	0.02	0.15	0.03	0.00	0.00	0.61	0.13	0.18	1.09	0.02	0.19	3.50
67	0.26	0.00	0.22	0.00	0.00	0.00	0.00	1.16	1.04	0.00	0.70	0.87	4.25
68	0.00	0.12	0.25	0.06	0.00	0.00	0.38	0.05	0.00	0.32	0.03	0.11	1.32
69	1.00	0.01	0.03	0.00	0.00	0.00	1.05	0.17	0.60	0.17	0.47	0.05	3.55
70	0.11	0.66	1.11	0.01	0.00	0.00	0.00	0.73	0.00	0.00	0.00	0.03	2.65
71	0.00	0.00	0.00	0.05	0.00	0.00	0.01	1.07	0.97	0.06	0.00	0.08	2.24
72	0.00	0.00	0.00	0.00	0.00	0.10	0.21	0.30	0.01	1.89	0.38	0.03	2.92
73	0.07	0.96	1.12	0.00	0.00	0.00	0.00	0.38	0.00	0.00	0.05	0.00	2.58
74	0.71	0.00	0.19	0.00	0.00	0.00	0.12	0.11	0.00	0.89	0.00	0.70	2.72
75	0.05	0.11	0.07	0.32	0.00	0.00	0.76	0.00	0.56	0.00	0.01	0.04	1.92
76	0.00	1.78	0.00	0.91	0.00	0.00	0.14	0.00	2.14	0.05	0.02	0.18	5.22
77	0.16	0.01	0.12	0.01	0.09	0.01	0.17	1.10	0.70	0.06	0.00	0.40	2.83
78	1.73	1.07	0.22	0.10	0.04	0.00	0.06	0.99	0.00	1.42	0.43	0.89	6.95
79	1.44	0.06	0.81	0.00	0.12	0.00	0.36	2.09	0.52	0.06	0.00	0.18	5.64
80	0.84	1.57	0.65	0.24	0.00	0.00	0.10	0.72	0.18	0.03	0.00	0.02	4.35
81	0.05	0.19	1.01	0.00	0.07	0.04	0.00	1.77	0.03			0.00	3.16
82	0.13	0.26	0.87	0.00	0.12	0.00	0.49	1.25	0.51	0.00	0.28	1.26	5.17
83	0.13	0.37	1.75	0.00	0.00	0.00	0.00	2.07	0.88	0.00	0.03	0.73	5.96
84	0.06	0.00	0.00	0.00	0.02	0.00	2.44	0.11	0.00	0.00	0.10	3.33	6.06
85	0.27	0.29	0.03	0.06	0.00	0.00	0.00	0.00	1.61	0.90	1.84	0.07	5.07
86	0.07	0.40	0.19	0.02	0.00	0.00	0.11	0.05	0.90	0.50	0.69	0.75	3.68
87	0.00	0.03	0.00	0.05	0.00	0.03	1.40	0.00	0.01	0.42	0.71	M0.68	3.33
88	0.42	0.61	0.02	0.98	0.00	0.00	0.00	0.83	0.00	0.07	0.00	0.00	2.93
89	1.08	0.00	0.06	0.00	0.00	0.00	0.32	0.15	0.01	0.00	0.00	0.00	1.62
90	0.14	0.01	0.21	0.00	0.02	0.00	0.22	1.47	0.13	0.06	0.00		2.26
91		0.76	1.24	0.00	0.00	0.00	0.01	0.28	1.52	0.14	0.04	0.31	4.30
92	0.78	1.59	2.15	0.28	0.03	0.00	0.00	1.93	0.00	0.20	0.00	2.20	9.16
93	2.33	2.19	0.17	0.00	0.00	0.00	0.00	0.00	0.00	0.05	0.87	0.01	5.62
94	0.01	0.29	0.68	0.02	0.12	0.00	0.69	0.14	0.00	0.00	0.06	1.23	3.24
95	2.29	0.32	0.49	0.09		0.00	0.05	1.37	0.08	0.00	0.00	0.00	4.69
96	0.10	0.27	0.09	0.00	0.22	0.00	0.00	0.00	0.85	0.01	0.04	0.01	1.59
97	0.47	0.00	0.00	0.06	0.00	0.00	0.61	0.03	2.05	0.01	0.03	1.06	4.32
98	0.28	3.03	1.29	0.01	0.01	0.00	0.05	0.47	0.52	0.04	0.16	0.21	6.07
99	0.00	0.34	0.00	1.00	0.04	0.00	1.20	0.00	0.74	0.00	0.00	0.00	3.32
0	0.00	0.08	0.38	0.00	0.00	0.01	0.00	1.03	0.00	0.00	M0.00	0.00	1.50
1	0.81	0.67	1.55	0.01	0.00	0.00	0.00	M0.00	0.00	0.00	0.11	0.03	3.18
2	0.00	0.00	0.04	0.00	0.00	0.00	0.00	0.00	0.75	0.04	0.03	0.00	0.86
3	0.11	1.08	0.28	0.08	0.00	0.00	0.06	0.00	0.07	0.00	0.33	0.00	2.01

4	0.02	0.57	0.81	0.06	0.00	0.00	0.00	0.02	0.12	1.02	0.31	0.57	3.50
5	1.55	2.83	0.21	0.00	0.00	0.00	0.00	1.35	0.00	0.85	0.00	0.00	6.79
6	0.00	0.00	0.25	0.00	0.00	0.20	0.15	1.46	1.44	0.04	0.00	0.00	3.54
7	0.16	0.07	0.53	0.00	0.00	0.00	0.00	0.00	0.06	0.00	1.11	0.00	1.93
8	0.77	0.02	0.00	0.00	0.18	0.00	0.27	0.15	0.06	0.00	0.24	0.65	2.34
9	0.02	0.43	0.00	0.00	0.03	0.01	0.07	0.02	0.03	0.00	0.00	0.85	1.46
10	2.12	0.90	0.67	0.01	0.00	0.00	0.00	0.03	0.00	0.26	0.00	0.54	4.53
11	0.00	1.17	0.06	0.00	0.00	0.00	1.64	0.00	0.08	0.12	0.29	0.60	3.96
12	0.00	0.01	0.19	0.14	0.00	0.00	1.88	1.05	0.07	0.27	0.00	0.86	4.47
13	0.77	0.01	0.03	0.00	0.00	0.00	0.54	0.66	0.57	0.02	0.74	0.01	3.35
14	0.00	0.07	0.04	0.00	0.01	0.00	M0.00	0.49	0.11	M0.02			0.74

Blythe, CA

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Units: English | Metric

Table Graph Details

Actual Conditions For January 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month Year GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	56	32	44	66	41	53	-9	82	1981	24	1976	0.00	0.0	0	21	0
2	61	37	49	66	41	54	-5	80	1981	27	2015	0.00	0.0	0	16	0
3	63	39	51	66	41	54	-3	78	1997	21	1974	0.00	0.0	0	14	0
4	61	33	47	66	41	54	-7	80	1981	23	1950	0.00	0.0	0	18	0
5	62	29	46	66	41	54	-8	79	1981	22	1972	0.00	0.0	0	19	0
6	63	37	50	66	42	54	-4	80	1962	25	1950	0.00	0.0	0	15	0
7	66	39	53	67	42	54	-1	85	1962	24	1971	0.00	0.0	0	12	0
8	74	43	59	67	42	54	5	84	1962	20	1971	0.00	0.0	0	6	0
9	72	45	59	67	42	54	5	80	1962	25	1971	0.00	0.0	0	6	0
10	63	46	55	67	42	54	1	80	1962	26	1971	0.00	0.0	0	10	0
11	54	33	44	67	42	55	-11	80	1986	27	1950	0.00	0.0	0	21	0
12	53	35	44	67	42	55	-11	79	1983	26	1962	0.00	0.0	0	21	0
13	52	25	39	67	42	55	-16	78	1996	25	2013	0.00	0.0	0	26	0
14	48	32	40	68	42	55	-15	80	1983	25	2007	0.00	0.0	0	25	0
15	54	34	44	68	42	55	-11	78	2014*	28	1987	0.00	0.0	0	21	0
16	63	38	51	68	42	55	-4	83	1976	29	1964	0.00	0.0	0	14	0
17	69	38	54	68	42	55	-1	82	2011*	25	2007	0.00	0.0	0	11	0
18	70	41	56	68	43	55	1	85	1971	30	2002	0.00	0.0	0	9	0
19	71	40	56	68	43	55	1	84	1971	29	1990	0.00	0.0	0	9	0
20	73	39	56	68	43	55	1	83	1971	30	2008	0.00	0.0	0	9	0
21	75	41	58	68	43	56	2	80	2009	30	1973	0.00	0.0	0	7	0
22	76	40	58	69	43	56	2	79	1994	31	1987	0.00	0.0	0	7	0
23	73	45	59	69	43	56	3	82	1950	30	1972	0.00	0.0	0	6	0
24	71	56	64	69	43	56	8	82	1951	29	1996	0.00	0.0	0	1	0
25	71	57	64	69	43	56	8	89	1951	31	1972	0.32	0.0	0	1	0
26	64	57	61	69	43	56	5	81	2003	30	2002	0.45	0.0	0	4	0
27	70	51	61	69	43	56	5	79	2003	29	1972	0.00	0.0	0	4	0
28	60	44	52	69	43	56	-4	80	2014*	29	1972	0.00	0.0	0	13	0
29	63	41	52	69	43	56	-4	81	1953	30	1975	0.00	0.0	0	13	0
30	66	40	53	70	43	56	-3	83	2003	26	1949	0.00	0.0	0	12	0
31	70	43	57	70	44	57	0	86	2003	30	1972	0.00	0.0	0	8	0

M = Missing

Blythe, CA

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Units: English | Metric

Table Graph Details

Actual Conditions For February 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	73	41	57	70	44	57	0	84	2003	28	2002	0.00	0.0	0	8	0
2	75	49	62	70	44	57	5	85	1963	31	1951	0.00	0.0	0	3	0
3	74	56	65	70	44	57	8	84	1963	23	1972	0.00	0.0	0	0	0
4	76	50	63	70	44	57	6	84	1963	26	2011	0.00	0.0	0	2	0
5	75	48	62	70	44	57	5	87	1983	33	1956	0.00	0.0	0	3	0
6	74	51	63	70	44	57	6	88	1963	30	1989	0.00	0.0	0	2	0
7	74	45	60	71	44	57	3	89	1996	31	1989	0.00	0.0	0	5	0
8	65	48	57	71	44	58	-1	88	1963	35	2002	0.00	0.0	0	8	0
9	62	42	52	71	45	58	-6	86	1996	30	1949	0.00	0.0	0	13	0
10	62	37	50	71	45	58	-8	87	1951	32	1986	0.00	0.0	0	15	0
11	62	44	53	71	45	58	-5	90	1957	33	1986	0.00	0.0	0	12	0
12	62	37	50	71	45	58	-8	85	1971	29	1965	0.00	0.0	0	15	0
13	70	36	53	72	45	58	-5	90	1957	31	1972	0.00	0.0	0	12	0
14	77	40	59	72	45	59	0	87	2015	31	1966	0.00	0.0	0	6	0
15	77	51	64	72	46	59	5	86	2014*	26	1990	0.00	0.0	0	1	0
16	79	46	63	72	46	59	4	87	1981	22	1990	0.00	0.0	0	2	0
17	77	41	59	72	46	59	0	88	1981	31	1956	0.00	0.0	0	6	0
18	75	42	59	73	46	59	0	93	1981	35	1967	0.00	0.0	0	6	0
19	67	45	56	73	46	60	-4	90	1981	31	1956	0.00	0.0	0	9	0
20	57	41	49	73	47	60	-11	86	1981	32	1990	0.01	0.0	0	16	0
21	62	35	49	73	47	60	-11	92	1977	32	1953	0.00	0.0	0	16	0
22	65	36	51	73	47	60	-9	88	1982	32	1955	0.00	0.0	0	14	0
23	72	36	54	74	47	60	-6	87	2002	31	1953	0.00	0.0	0	11	0
24	65	44	55	74	47	61	-6	90	1986	34	1996	0.00	0.0	0	10	0
25	67	42	55	74	48	61	-6	93	1986	32	1960	0.00	0.0	0	10	0
26	70	36	53	74	48	61	-8	92	1986	35	1977	0.00	0.0	0	12	0
27	69	48	59	75	48	61	-2	93	1986	30	1996	0.00	0.0	0	6	0
28	76	45	61	75	48	61	0	93	1986	31	1962	0.00	0.0	0	4	0

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For March 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	81	48	65	75	48	62	3	90	1986	34	1962	0.00	0.0	0	0	0
2	84	47	66	75	48	62	4	89	2009*	36	1997	0.00	0.0	0	0	1
3	82	51	67	76	49	62	5	90	1986	31	1971	0.00	0.0	0	0	2
4	80	52	66	76	49	62	4	88	1986	31	2002	0.00	0.0	0	0	1
5	80	49	65	76	49	63	2	91	1986	33	2002	0.00	0.0	0	0	0
6	81	51	66	76	49	63	3	92	1986	36	1977	0.00	0.0	0	0	1
7	75	48	62	77	49	63	-1	90	1960	37	1982	0.00	0.0	0	3	0
8	66	52	59	77	49	63	-4	91	1957	35	1969	0.03	0.0	0	6	0
9	71	47	59	77	50	63	-4	92	2004	34	1964	0.00	0.0	0	6	0
10	75	48	62	77	50	64	-2	95	1997	41	2010*	0.00	0.0	0	3	0
11	81	47	64	78	50	64	0	93	1997	38	1969	0.00	0.0	0	1	0
12	87	47	67	78	50	64	3	92	2007*	37	1990	0.00	0.0	0	0	2
13	91	51	71	78	50	64	7	95	2007	30	1956	0.00	0.0	0	0	6
14	95	54	75	78	50	64	11	95	2013	38	1952	0.00	0.0	0	0	10
15	93	55	74	79	50	64	10	94	2004	34	1977	0.00	0.0	0	0	9
16	95	59	77	79	51	65	12	98	2007	36	1963	0.00	0.0	0	0	12
17	90	56	73	79	51	65	8	99	2007	36	2002	0.00	0.0	0	0	8
18	87	56	72	79	51	65	7	94	1997	37	1979	0.00	0.0	0	0	7
19	89	57	73	79	51	65	8	96	1997	39	1977	0.00	0.0	0	0	8
20	88	56	72	80	51	65	7	99	2004	41	2012	0.00	0.0	0	0	7
21	87	63	75	80	51	66	9	100	2004	40	1987	0.00	0.0	0	0	10
22	86	59	73	80	51	66	7	98	2004	39	2006*	0.00	0.0	0	0	8
23	76	58	67	80	51	66	1	95	1956	43	2011*	0.00	0.0	0	0	2
24	81	48	65	81	51	66	-1	95	1956	37	1995	0.00	0.0	0	0	0
25	85	47	66	81	52	66	0	96	1981	41	1964	0.00	0.0	0	0	1
26	90	57	74	81	52	66	8	96	1988	40	1995	0.00	0.0	0	0	9
27	89	58	74	81	52	67	7	100	1986	36	1975	0.00	0.0	0	0	9
28	86	55	71	82	52	67	4	95	1986	40	1972	0.00	0.0	0	0	6
29	88	57	73	82	52	67	6	95	1971	37	1972	0.00	0.0	0	0	8
30	91	68	80	82	52	67	13	100	1971	38	1998	0.00	0.0	0	0	15
31	89	58	74	82	53	67	7	100	2011	38	1972	0.00	0.0	0	0	9

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City | Go | My Locations | Add to My Locations

Units: English | Metric

Table Graph Details

Actual Conditions For April 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	83	53	68	83	53	68	0	99	2011*	44	2010*	0.00	0.0	0	0	3
2	87	58	73	83	53	68	5	98	1966	40	1975	0.00	0.0	0	0	8
3	92	57	75	83	53	68	7	101	1961	40	1975	0.00	0.0	0	0	10
4	92	59	76	83	53	68	8	106	1961	41	1977	0.00	0.0	0	0	11
5	90	59	75	84	53	69	6	100	1989	42	1983	0.00	0.0	0	0	10
6	91	58	75	84	54	69	6	103	1989	43	2006	0.00	0.0	0	0	10
7	89	63	76	84	54	69	7	105	1989	44	1964	0.00	0.0	0	0	11
8	78	64	71	84	54	69	2	107	1989	42	1999	0.00	0.0	0	0	6
9	79	58	69	85	54	70	-1	102	1989	42	2011	0.00	0.0	0	0	4
10	82	59	71	85	55	70	1	101	1960	38	1975	0.00	0.0	0	0	6
11	91	49	70	85	55	70	0	99	2014*	44	2001	0.00	0.0	0	0	5
12	90	56	73	86	55	70	3	100	1990	44	1967	0.00	0.0	0	0	8
13	95	59	77	86	55	71	6	103	1985	40	1983	0.00	0.0	0	0	12
14	90	61	76	86	56	71	5	104	2002	46	1983	0.00	0.0	0	0	11
15	83	59	71	86	56	71	0	104	1962	46	2012	0.00	0.0	0	0	6
16	76	54	65	87	56	71	-6	104	1984	41	2009	0.00	0.0	0	0	0
17	76	56	66	87	57	72	-6	103	1987	44	1976	0.00	0.0	0	0	1
18	77	56	67	87	57	72	-5	104	1954	41	1963	0.00	0.0	0	0	2
19	85	51	68	88	57	72	-4	106	1980	44	1968	0.00	0.0	0	0	3
20	93	53	73	88	58	73	0	103	1980	46	1995	0.00	0.0	0	0	8
21	96	56	76	88	58	73	3	105	2012	42	1967	0.00	0.0	0	0	11
22	97	62	80	89	58	73	7	106	2012	41	1970	0.00	0.0	0	0	15
23	90	63	77	89	58	74	3	106	1949	44	2010*	0.00	0.0	0	0	12
24	92	56	74	89	59	74	0	105	1996	46	1964	0.00	0.0	0	0	9
25	88	60	74	89	59	74	0	102	1987	46	1989	0.00	0.0	0	0	9
26	93	60	77	90	59	75	2	106	1996	48	1971	0.00	0.0	0	0	12
27	99	61	80	90	60	75	5	106	1987	45	1963	0.00	0.0	0	0	15
28	102	65	84	90	60	75	9	106	1992	44	1970	0.00	0.0	0	0	19
29	106	67	87	91	60	76	11	107	1992	45	1984	0.00	0.0	0	0	22
30	102	69	86	91	61	76	10	105	1992	46	1967	0.00	0.0	0	0	21

M = Missing

Blythe, CA

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Units: English | Metric

Table Graph Details

Actual Conditions For May 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	96	67	82	91	61	76	6	105	1985	49	1990	0.00	0.0	0	0	17
2	91	68	80	92	61	76	4	105	1966	48	1967	0.00	0.0	0	0	15
3	95	61	78	92	62	77	1	103	2014*	50	1991	0.00	0.0	0	0	13
4	98	61	80	92	62	77	3	105	2004	49	1999	0.00	0.0	0	0	15
5	88	66	77	93	62	77	0	105	1997	45	1964	0.00	0.0	0	0	12
6	84	62	73	93	62	78	-5	108	1987	47	1988	0.00	0.0	0	0	8
7	81	60	71	93	63	78	-7	108	1989	46	1988	0.00	0.0	0	0	6
8	84	55	70	93	63	78	-8	109	2001	49	1964	0.00	0.0	0	0	5
9	89	59	74	94	63	79	-5	108	2001	50	1982	0.00	0.0	0	0	9
10	96	66	81	94	64	79	2	109	1960	48	1977	0.00	0.0	0	0	16
11	100	67	84	94	64	79	5	113	1960	50	1982	0.00	0.0	0	0	19
12	103	69	86	95	64	79	7	112	1996	50	1980	0.00	0.0	0	0	21
13	106	69	88	95	64	80	8	108	1996	50	1962	0.00	0.0	0	0	23
14	107	74	91	95	64	80	11	107	2013*	50	1998	0.00	0.0	0	0	26
15	101	63	82	96	65	80	2	107	2012*	53	1962	0.00	0.0	0	0	17
16	102	68	85	96	65	80	5	109	1997	52	1953	0.00	0.0	0	0	20
17	95	67	81	96	65	81	0	110	1997	53	1977	0.00	0.0	0	0	16
18	95	62	79	96	65	81	-2	110	1970	54	1977	0.00	0.0	0	0	14
19	99	66	83	97	66	81	2	113	2008	49	2011	0.00	0.0	0	0	18
20	96	72	84	97	66	81	3	111	2008	51	1949	0.00	0.0	0	0	19
21	101	65	83	97	66	82	1	110	2005	47	1975	0.00	0.0	0	0	18
22	103	71	87	98	66	82	5	113	2000	45	1971	0.00	0.0	0	0	22
23	96	65	81	98	66	82	-1	110	2001	50	1971	0.00	0.0	0	0	16
24	96	61	79	98	67	82	-3	112	2001	51	2010	0.00	0.0	0	0	14
25	97	65	81	99	67	83	-2	113	1951	51	1980	0.00	0.0	0	0	16
26	97	65	81	99	67	83	-2	112	1974	52	1996	0.00	0.0	0	0	16
27	95	68	82	99	67	83	-1	114	1951	50	1962	0.00	0.0	0	0	17
28	97	68	83	99	67	83	0	114	1983	52	1971	0.00	0.0	0	0	18
29	102	73	88	100	68	84	4	114	2000	43	1971	0.00	0.0	0	0	23
30	99	73	86	100	68	84	2	113	1984	56	1988	0.00	0.0	0	0	21
31	101	74	88	100	68	84	4	112	2012*	55	1991	0.00	0.0	0	0	23

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locations Add to My Locations

Units: English | Metric

Table Graph Details

Actual Conditions For June 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	109	74	92	101	68	84	8	114	2012	46	1980	0.00	0.0	0	0	27
2	109	74	92	101	68	85	7	112	1960	56	1983	0.00	0.0	0	0	27
3	104	73	89	101	69	85	4	113	1996	55	1971	0.00	0.0	0	0	24
4	104	73	89	102	69	85	4	114	1996	56	1998	0.00	0.0	0	0	24
5	107	72	90	102	69	85	5	116	1957	55	1999	0.00	0.0	0	0	25
6	112	74	93	102	69	86	7	114	2002	59	1993	0.00	0.0	0	0	28
7	114	77	96	102	70	86	10	117	1985	52	1993	0.00	0.0	0	0	31
8	108	84	96	103	70	86	10	118	1955	58	1998	0.00	0.0	0	0	31
9	107	73	90	103	70	87	3	118	1955	57	1995	0.00	0.0	0	0	25
10	110	73	92	103	70	87	5	116	1994	60	1969	0.00	0.0	0	0	27
11	106	77	92	104	71	87	5	114	1956	56	1976	0.00	0.0	0	0	27
12	108	77	93	104	71	87	6	116	1956	62	1998	0.00	0.0	0	0	28
13	108	77	93	104	71	88	5	115	1979	56	1998	0.00	0.0	0	0	28
14	106	78	92	104	72	88	4	117	1966	59	1997	0.00	0.0	0	0	27
15	107	77	92	105	72	88	4	117	2000	54	1962	0.00	0.0	0	0	27
16	107	74	91	105	72	89	2	116	1971	58	1990	0.00	0.0	0	0	26
17	108	73	91	105	73	89	2	116	1981	57	1995	0.00	0.0	0	0	26
18	108	74	91	106	73	89	2	118	1981	60	1995	0.00	0.0	0	0	26
19	104	73	89	106	73	90	-1	117	1961	61	1975	0.00	0.0	0	0	24
20	105	73	89	106	74	90	-1	118	1981	58	1975	0.00	0.0	0	0	24
21	106	74	90	106	74	90	0	116	2008*	64	1975	0.00	0.0	0	0	25
22	107	72	90	106	74	90	0	119	1960	65	2010*	0.00	0.0	0	0	25
23	105	76	91	107	75	91	0	118	1961	63	1998	0.00	0.0	0	0	26
24	102	74	88	107	75	91	-3	118	1994	63	1998	0.00	0.0	0	0	23
25	103	72	88	107	75	91	-3	122	1970	66	1991	0.00	0.0	0	0	23
26	107	79	93	107	76	92	1	122	1990	61	1965	0.00	0.0	0	0	28
27	110	78	94	107	76	92	2	121	1973	62	1996	0.00	0.0	0	0	29
28	120	83	102	108	76	92	10	123	1994	67	1991	0.00	0.0	0	0	37
29	119	90	105	108	77	92	13	121	1994	67	1997	0.00	0.0	0	0	40
30	115	86	101	108	77	92	9	119	1972	68	1997	0.00	0.0	0	0	36

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locations Add to My Locations

Units: English | Metric

Table Graph Details

Actual Conditions For July 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	115	90	103	108	77	93	10	118	1972	62	1982	0.00	0.0	0	0	38
2	112	87	100	108	78	93	7	119	2001	66	1995	0.00	0.0	0	0	35
3	116	89	103	108	78	93	10	119	1985	67	1979	0.00	0.0	0	0	38
4	110	86	98	108	78	93	5	121	1989	67	1956	0.00	0.0	0	0	33
5	104	86	95	108	79	93	2	118	1981	69	1987	0.00	0.0	0	0	30
6	109	82	96	108	79	94	2	117	1965	67	1994	0.00	0.0	0	0	31
7	114	85	100	108	79	94	6	117	1985	70	2005	0.00	0.0	0	0	35
8	115	86	101	109	79	94	7	119	1985	73	1949	0.00	0.0	0	0	36
9	107	86	97	109	80	94	3	118	1958	70	1987	0.00	0.0	0	0	32
10	103	83	93	109	80	94	-1	118	1973	72	1986	0.00	0.0	0	0	28
11	95	75	85	109	80	94	-9	118	1958	69	1974	0.21	0.0	0	0	20
12	104	78	91	109	80	94	-3	118	1985	71	2000	0.00	0.0	0	0	26
13	108	82	95	109	80	94	1	119	2005	66	1962	0.00	0.0	0	0	30
14	111	86	99	109	81	95	4	118	2003	73	2011*	0.00	0.0	0	0	34
15	113	87	100	109	81	95	5	117	2006*	71	2001	0.00	0.0	0	0	35
16	110	86	98	108	81	95	3	119	1960	69	1993	0.00	0.0	0	0	33
17	109	81	95	108	81	95	0	121	2005	64	1983	0.00	0.0	0	0	30
18	112	83	98	108	81	95	3	118	2005	67	1987	0.00	0.0	0	0	33
19	103	87	95	108	81	95	0	119	1961	62	1987	0.00	0.0	0	0	30
20	99	77	88	108	81	95	-7	118	1978	70	1993	0.09	0.0	0	0	23
21	89	76	83	108	81	95	-12	118	2006	69	1973	0.24	0.0	0	0	18
22	100	78	89	108	81	95	-6	120	2006	69	1995	0.00	0.0	0	0	24
23	103	82	93	108	81	95	-2	117	1981	69	1987	0.00	0.0	0	0	28
24	108	85	97	108	81	95	2	117	1980	73	1995	0.00	0.0	0	0	32
25	100	87	94	108	82	95	-1	117	2000	71	1993	0.00	0.0	0	0	29
26	104	87	96	108	82	95	1	118	1995	71	1986	0.00	0.0	0	0	31
27	109	87	98	108	82	95	3	120	1998	72	1993	0.00	0.0	0	0	33
28	110	84	97	108	82	95	2	123	1995	68	1987	0.00	0.0	0	0	32
29	108	76	92	108	82	95	-3	116	1972	64	1987	0.00	0.0	0	0	27
30	108	81	95	108	82	95	0	117	1995	73	1948	0.00	0.0	0	0	30
31	111	80	96	108	81	95	1	120	1972	72	2001	0.00	0.0	0	0	31

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For August 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	111	84	98	108	81	95	3	120	1972	70	1959	0.00	0.0	0	0	33
2	107	77	92	108	81	94	-2	118	1995	70	1976	0.00	0.0	0	0	27
3	108	76	92	107	81	94	-2	118	1998	68	1976	0.00	0.0	0	0	27
4	108	78	93	107	81	94	-1	118	1969	67	1976	0.00	0.0	0	0	28
5	103	78	91	107	81	94	-3	118	2000	70	1976	0.00	0.0	0	0	26
6	106	84	95	107	81	94	1	118	1995	66	1976	0.00	0.0	0	0	30
7	107	80	94	107	81	94	0	117	1980	68	1988	0.00	0.0	0	0	29
8	108	74	91	107	81	94	-3	119	1980	69	1999	0.00	0.0	0	0	26
9	107	73	90	107	81	94	-4	115	1995	68	2009	0.00	0.0	0	0	25
10	104	73	89	107	81	94	-5	116	2003	67	1949	0.00	0.0	0	0	24
11	105	72	89	107	81	94	-5	116	1962	70	1999	0.00	0.0	0	0	24
12	108	71	90	107	81	94	-4	116	1962	69	1949	0.00	0.0	0	0	25
13	107	74	91	107	81	94	-3	119	1960	66	1993	0.00	0.0	0	0	26
14	109	76	93	107	81	94	-1	117	1962	65	1968	0.00	0.0	0	0	28
15	111	86	99	107	80	94	5	115	1962	64	1993	0.00	0.0	0	0	34
16	114	85	100	107	80	94	6	116	1992	67	1980	0.00	0.0	0	0	35
17	113	85	99	107	80	94	5	116	1992	67	1980	0.00	0.0	0	0	34
18	110	88	99	107	80	93	6	115	1992	64	1976	0.00	0.0	0	0	34
19	108	88	98	107	80	93	5	114	1973	66	1976	0.00	0.0	0	0	33
20	112	83	98	107	80	93	5	113	1992	68	1980	0.00	0.0	0	0	33
21	110	85	98	107	80	93	5	116	1969	69	2014	0.00	0.0	0	0	33
22	105	81	93	107	79	93	0	116	1972	68	2014*	0.02	0.0	0	0	28
23	105	81	93	107	79	93	0	116	2011*	64	1968	0.00	0.0	0	0	28
24	100	76	88	106	79	93	-5	119	1985	66	1968	0.30	0.0	0	0	23
25	86	77	82	106	79	93	-11	115	1985	68	1973	0.02	0.0	0	0	17
26	93	72	83	106	79	93	-10	115	2011	66	1951	0.27	0.0	0	0	18
27	101	78	90	106	79	92	-2	115	2005	67	1973	0.00	0.0	0	0	25
28	106	83	95	106	78	92	3	118	1998	65	1973	0.00	0.0	0	0	30
29	99	83	91	106	78	92	-1	118	1948	66	1975	0.05	0.0	0	0	26
30	98	81	90	106	78	92	-2	116	1998	62	1957	0.00	0.0	0	0	25
31	103	83	93	106	78	92	1	119	1950	62	1992	0.00	0.0	0	0	28

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For September 2013

Choose another month / year: Month ▼ Year ▼ GO

Reports from: BLYTHE, CA [BLH]

Choose another location: Postal Code or City GO

(Lat: 33.62 Lon:-114.72)

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	105	83	94	105	78	91	3	121	1950	64	1966	0.00	0.0	0	0	29
2	108	80	94	105	77	91	3	118	1948	64	2000	0.01	0.0	0	0	29
3	106	78	92	105	77	91	1	118	1948	65	1964	0.00	0.0	0	0	27
4	100	81	91	105	77	91	0	115	1948	61	1985	0.12	0.0	0	0	26
5	109	78	94	105	76	91	3	113	1955	59	1976	0.00	0.0	0	0	29
6	109	79	94	104	76	90	4	114	1955	66	1992	0.01	0.0	0	0	29
7	95	78	87	104	76	90	-3	112	1994	60	1985	0.00	0.0	0	0	22
8	97	76	87	104	75	90	-3	116	1979	65	2010	0.25	0.0	0	0	22
9	100	75	88	104	75	89	-1	114	1993	62	1961	0.18	0.0	0	0	23
10	89	74	82	103	75	89	-7	114	1990	63	2005	0.00	0.0	0	0	17
11	96	73	85	103	74	89	-4	115	1990	61	1985	0.00	0.0	0	0	20
12	100	77	89	103	74	88	1	113	1971	59	1985	0.00	0.0	0	0	24
13	103	77	90	102	74	88	2	112	1971	58	1985	0.00	0.0	0	0	25
14	106	76	91	102	73	88	3	113	1971	60	2005	0.00	0.0	0	0	26
15	108	78	93	102	73	87	6	113	2000	61	2005	0.00	0.0	0	0	28
16	108	79	94	101	73	87	7	110	1962	61	1970	0.00	0.0	0	0	29
17	109	79	94	101	72	87	7	112	1962	61	1977	0.00	0.0	0	0	29
18	101	75	88	101	72	86	2	111	1980	57	1985	0.00	0.0	0	0	23
19	102	68	85	100	71	86	-1	113	1962	56	1985	0.00	0.0	0	0	20
20	103	68	86	100	71	85	1	108	1962	53	1971	0.00	0.0	0	0	21
21	102	73	88	99	70	85	3	108	2009*	59	1986	0.00	0.0	0	0	23
22	89	69	79	99	70	84	-5	110	1966	55	1988	0.00	0.0	0	0	14
23	96	66	81	99	70	84	-3	111	1966	56	2007	0.00	0.0	0	0	16
24	99	63	81	98	69	84	-3	109	2002	54	1986	0.00	0.0	0	0	16
25	98	70	84	98	69	83	1	110	1963	59	1993	0.00	0.0	0	0	19
26	86	64	75	97	68	83	-8	110	2010	53	1971	0.00	0.0	0	0	10
27	86	61	74	97	68	82	-8	110	2010	54	1971	0.00	0.0	0	0	9
28	91	60	76	96	67	82	-6	108	2009	55	1982	0.00	0.0	0	0	11
29	94	56	75	96	67	81	-6	110	1980	56	2013	0.00	0.0	0	0	10
30	96	59	78	96	66	81	-3	109	1980	51	2005	0.00	0.0	0	0	13

M = Missing

Actual Conditions For October 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	95	62	79	95	66	81	-2	111	1980	53	1971	0.00	0.0	0	0	14
2	94	63	79	95	66	80	-1	111	1980	52	1971	0.00	0.0	0	0	14
3	92	67	80	94	65	80	0	107	1987	49	2002	0.00	0.0	0	0	15
4	85	67	76	94	65	79	-3	107	1987	53	2002	0.00	0.0	0	0	11
5	85	65	75	93	64	79	-4	108	1987	52	2009	0.00	0.0	0	0	10
6	91	58	75	93	64	78	-3	110	1987	49	2009	0.00	0.0	0	0	10
7	89	56	73	93	63	78	-5	108	1987	49	2009	0.00	0.0	0	0	8
8	93	56	75	92	63	78	-3	106	1996	51	2011	0.00	0.0	0	0	10
9	76	59	68	92	63	77	-9	106	1996	46	1949	0.00	0.0	0	0	3
10	75	54	65	91	62	77	-12	107	1991	48	1949	0.01	0.0	0	0	0
11	82	50	66	91	62	76	-10	105	1965	M	M	0.00	0.0	0	0	1
12	84	53	69	91	61	76	-7	105	1999	50	2000	0.00	0.0	0	0	4
13	86	54	70	90	61	76	-6	106	1950	47	1969	0.00	0.0	0	0	5
14	85	60	73	90	61	75	-2	103	1961	50	1994	0.00	0.0	0	0	8
15	86	55	71	89	60	75	-4	103	1950	52	1986	0.00	0.0	0	0	6
16	83	59	71	89	60	74	-3	102	1958	49	1980	0.00	0.0	0	0	6
17	84	50	67	89	59	74	-7	M	M	46	1994	0.00	0.0	0	0	2
18	89	52	71	88	59	74	-3	104	2003	41	1971	0.00	0.0	0	0	6
19	89	51	70	88	59	73	-3	104	2003	41	1971	0.00	0.0	0	0	5
20	89	53	71	87	58	73	-2	103	2003	42	1949	0.00	0.0	0	0	6
21	91	52	72	87	58	73	-1	104	2003	44	1949	0.00	0.0	0	0	7
22	92	53	73	87	58	72	1	104	2003	44	1996	0.00	0.0	0	0	8
23	91	57	74	86	57	72	2	101	2003	39	1996	0.00	0.0	0	0	9
24	89	56	73	86	57	71	2	102	1959	42	1996	0.00	0.0	0	0	8
25	89	54	72	86	57	71	1	98	1965	44	1975	0.00	0.0	0	0	7
26	93	56	75	85	56	71	4	98	1965	41	1971	0.00	0.0	0	0	10
27	91	56	74	85	56	70	4	M	M	45	1971	0.00	0.0	0	0	9
28	79	61	70	84	55	70	0	98	1965	44	1996	0.00	0.0	0	0	5
29	73	50	62	84	55	69	-7	97	1965	33	1971	0.00	0.0	0	3	0
30	75	51	63	84	55	69	-6	95	1966	27	1971	0.00	0.0	0	2	0
31	78	46	62	83	54	69	-7	97	1966	29	1971	0.00	0.0	0	3	0

M = Missing

Actual Conditions For November 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	81	49	65	83	54	68	-3	95	1997	42	1972	0.00	0.0	0	0	0
2	82	49	66	82	53	68	-2	93	1997	38	1971	0.00	0.0	0	0	1
3	83	50	67	82	53	67	0	M	M	40	1979	0.00	0.0	0	0	2
4	78	47	63	81	53	67	-4	M	M	38	1956	0.00	0.0	0	2	0
5	73	52	63	81	52	67	-4	94	1980	43	1994	0.00	0.0	0	2	0
6	77	46	62	80	52	66	-4	94	1988	M	M	0.00	0.0	0	3	0
7	84	50	67	80	52	66	1	M	M	41	1993	0.00	0.0	0	0	2
8	83	46	65	80	51	65	0	92	1991	M	M	0.00	0.0	0	0	0
9	82	49	66	79	51	65	1	89	1995	41	2000	0.00	0.0	0	0	1
10	84	49	67	79	50	64	3	89	1980	M	M	0.00	0.0	0	0	2
11	88	52	70	78	50	64	6	M	M	36	1950	0.00	0.0	0	0	5
12	90	55	73	78	49	64	9	91	1999	32	1950	0.00	0.0	0	0	8
13	88	62	75	77	49	63	12	93	1999	35	1985	0.00	0.0	0	0	10
14	83	52	68	77	49	63	5	91	1999	32	2000	0.00	0.0	0	0	3
15	85	57	71	76	48	62	9	90	1999	39	1994	0.00	0.0	0	0	6
16	74	48	61	76	48	62	-1	88	1995	35	2000	0.00	0.0	0	4	0
17	73	47	60	75	47	61	-1	89	1995	35	1958	0.00	0.0	0	5	0
18	78	50	64	75	47	61	3	M	M	34	1958	0.00	0.0	0	1	0
19	75	49	62	74	47	60	2	M	M	35	1958	0.00	0.0	0	3	0
20	75	53	64	74	46	60	4	87	2006	27	1994	0.00	0.0	0	1	0
21	72	53	63	73	46	60	3	87	1950	33	1994	0.19	0.0	0	2	0
22	58	50	54	73	45	59	-5	88	1950	35	1992	0.52	0.0	0	11	0
23	59	50	55	72	45	59	-4	86	1949	M	M	0.03	0.0	0	10	0
24	64	49	57	72	45	58	-1	87	1995	34	1971	0.00	0.0	0	8	0
25	69	46	58	71	44	58	0	87	1950	32	1952	0.00	0.0	0	7	0
26	71	47	59	71	44	58	1	87	1995	M	M	0.00	0.0	0	6	0
27	71	51	61	71	44	57	4	86	1954	M	M	0.00	0.0	0	4	0
28	71	46	59	70	43	57	2	83	1949	30	1994	0.00	0.0	0	6	0
29	72	46	59	70	43	56	3	83	1953	33	1976	0.00	0.0	0	6	0
30	73	49	61	69	43	56	5	M	M	32	1975	0.00	0.0	0	4	0

M = Missing

Actual Conditions For December 2013

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	74	49	62	69	43	56	6	M	M	33	1952	0.00	0.0	0	3	0
2	68	44	56	69	42	55	1	82	1959	30	1991	0.00	0.0	0	9	0
3	78	45	62	68	42	55	7	83	1958	32	1991	0.00	0.0	0	3	0
4	64	44	54	68	42	55	-1	M	M	M	M	0.00	0.0	0	11	0
5	56	37	47	68	42	55	-8	80	1962	M	M	0.00	0.0	0	18	0
6	57	33	45	67	41	54	-9	81	1966	32	1972	0.00	0.0	0	20	0
7	63	35	49	67	41	54	-5	79	1995	M	M	0.00	0.0	0	16	0
8	55	39	47	67	41	54	-7	78	1996	29	1978	0.00	0.0	0	18	0
9	52	34	43	66	41	54	-11	80	1962	26	1978	0.00	0.0	0	22	0
10	56	32	44	66	41	54	-10	82	1950	25	1971	0.00	0.0	0	21	0
11	62	34	48	66	41	53	-5	81	1958	31	1994	0.00	0.0	0	17	0
12	71	42	57	66	41	53	4	M	M	24	1971	0.00	0.0	0	8	0
13	67	43	55	66	40	53	2	80	1995	30	1985	0.00	0.0	0	10	0
14	69	45	57	66	40	53	4	78	1952	29	2001	0.00	0.0	0	8	0
15	71	43	57	65	40	53	4	81	1977	24	1971	0.00	0.0	0	8	0
16	76	47	62	65	40	53	9	85	1980	26	2005	0.00	0.0	0	3	0
17	72	47	60	65	40	53	7	82	1998	29	2005	0.00	0.0	0	5	0
18	70	49	60	65	40	53	7	77	1950	30	1968	0.00	0.0	0	5	0
19	68	51	60	65	40	53	7	76	1999	25	1968	0.00	0.0	0	5	0
20	67	47	57	65	40	53	4	79	1950	29	2006*	0.01	0.0	0	8	0
21	67	41	54	65	40	53	1	76	1950	29	1968	0.00	0.0	0	11	0
22	67	38	53	65	40	53	0	77	1955	24	1968	0.00	0.0	0	12	0
23	69	43	56	65	40	53	3	82	1955	27	1968	0.00	0.0	0	9	0
24	73	44	59	65	40	53	6	81	2005	30	1968	0.00	0.0	0	6	0
25	73	50	62	65	41	53	9	77	1980	30	1953	0.00	0.0	0	3	0
26	72	42	57	65	41	53	4	79	1980	30	2002	0.00	0.0	0	8	0
27	71	39	55	65	41	53	2	80	1980	25	1987	0.00	0.0	0	10	0
28	64	39	52	65	41	53	-1	80	1980	27	1988	0.00	0.0	0	13	0
29	69	40	55	65	41	53	2	87	1980	28	2003	0.00	0.0	0	10	0
30	67	37	52	66	41	53	-1	83	1980	27	1988	0.00	0.0	0	13	0
31	68	34	51	66	41	53	-2	79	1980	26	1988	0.00	0.0	0	14	0

M = Missing

Actual Conditions For January 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	70	35	53	66	41	53	0	82	1981	24	1976	0.00	0.0	0	12	0
2	73	41	57	66	41	54	3	80	1981	28	1979	0.00	0.0	0	8	0
3	71	39	55	66	41	54	1	78	1997	21	1974	0.00	0.0	0	10	0
4	69	43	56	66	41	54	2	80	1981	23	1950	0.00	0.0	0	9	0
5	69	49	59	66	41	54	5	79	1981	22	1972	0.00	0.0	0	6	0
6	67	40	54	66	42	54	0	80	1962	25	1950	0.00	0.0	0	11	0
7	65	37	51	67	42	54	-3	85	1962	24	1971	0.00	0.0	0	14	0
8	67	38	53	67	42	54	-1	84	1962	20	1971	0.00	0.0	0	12	0
9	68	38	53	67	42	54	-1	80	1962	25	1971	0.00	0.0	0	12	0
10	69	39	54	67	42	54	0	80	1962	26	1971	0.00	0.0	0	11	0
11	71	40	56	67	42	55	1	80	1986	27	1950	0.00	0.0	0	9	0
12	75	44	60	67	42	55	5	79	1983	26	1962	0.00	0.0	0	5	0
13	74	48	61	67	42	55	6	78	1996	M	M	0.00	0.0	0	4	0
14	78	49	64	68	42	55	9	80	1983	M	M	0.00	0.0	0	1	0
15	78	48	63	68	42	55	8	M	M	28	1987	0.00	0.0	0	2	0
16	80	47	64	68	42	55	9	83	1976	29	1964	0.00	0.0	0	1	0
17	79	46	63	68	42	55	8	M	M	M	M	0.00	0.0	0	2	0
18	75	44	60	68	43	55	5	85	1971	30	2002	0.00	0.0	0	5	0
19	71	41	56	68	43	55	1	84	1971	29	1990	0.00	0.0	0	9	0
20	74	38	56	68	43	55	1	83	1971	M	M	0.00	0.0	0	9	0
21	78	43	61	68	43	56	5	M	M	30	1973	0.00	0.0	0	4	0
22	76	48	62	69	43	56	6	79	1994	31	1987	0.00	0.0	0	3	0
23	75	41	58	69	43	56	2	82	1950	30	1972	0.00	0.0	0	7	0
24	72	51	62	69	43	56	6	82	1951	29	1996	0.00	0.0	0	3	0
25	76	52	64	69	43	56	8	89	1951	31	1972	0.00	0.0	0	1	0
26	75	46	61	69	43	56	5	81	2003	30	2002	0.00	0.0	0	4	0
27	78	53	66	69	43	56	10	79	2003	29	1972	0.00	0.0	0	0	1
28	80	44	62	69	43	56	6	M	M	29	1972	0.00	0.0	0	3	0
29	78	47	63	69	43	56	7	81	1953	30	1975	0.00	0.0	0	2	0
30	82	53	68	70	43	56	12	83	2003	26	1949	0.00	0.0	0	0	3
31	71	54	63	70	44	57	6	86	2003	30	1972	0.00	0.0	0	2	0

M = Missing

Actual Conditions For February 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	64	43	54	70	44	57	-3	84	2003	28	2002	0.00	0.0	0	11	0
2	62	37	50	70	44	57	-7	85	1963	31	1951	0.00	0.0	0	15	0
3	65	44	55	70	44	57	-2	84	1963	23	1972	0.00	0.0	0	10	0
4	64	39	52	70	44	57	-5	84	1963	M	M	0.00	0.0	0	13	0
5	68	49	59	70	44	57	2	87	1983	33	1956	0.00	0.0	0	6	0
6	70	46	58	70	44	57	1	88	1963	30	1989	0.00	0.0	0	7	0
7	70	45	58	71	44	57	1	89	1996	31	1989	0.00	0.0	0	7	0
8	74	47	61	71	44	58	3	88	1963	35	2002	0.00	0.0	0	4	0
9	80	46	63	71	45	58	5	86	1996	30	1949	0.00	0.0	0	2	0
10	82	50	66	71	45	58	8	87	1951	32	1986	0.00	0.0	0	0	1
11	80	56	68	71	45	58	10	90	1957	33	1986	0.00	0.0	0	0	3
12	81	49	65	71	45	58	7	85	1971	29	1965	0.00	0.0	0	0	0
13	82	47	65	72	45	58	7	90	1957	31	1972	0.00	0.0	0	0	0
14	84	46	65	72	45	59	6	86	1957	31	1966	0.00	0.0	0	0	0
15	86	47	67	72	46	59	8	M	M	26	1990	0.00	0.0	0	0	2
16	81	53	67	72	46	59	8	87	1981	22	1990	0.00	0.0	0	0	2
17	85	46	66	72	46	59	7	88	1981	31	1956	0.00	0.0	0	0	1
18	84	50	67	73	46	59	8	93	1981	35	1967	0.00	0.0	0	0	2
19	84	50	67	73	46	60	7	90	1981	31	1956	0.00	0.0	0	0	2
20	77	54	66	73	47	60	6	86	1981	32	1990	0.00	0.0	0	0	1
21	77	51	64	73	47	60	4	92	1977	32	1953	0.00	0.0	0	1	0
22	77	45	61	73	47	60	1	88	1982	32	1955	0.00	0.0	0	4	0
23	82	46	64	74	47	60	4	87	2002	31	1953	0.00	0.0	0	1	0
24	81	47	64	74	47	61	3	90	1986	34	1996	0.00	0.0	0	1	0
25	79	48	64	74	48	61	3	93	1986	32	1960	0.00	0.0	0	1	0
26	80	50	65	74	48	61	4	92	1986	35	1977	0.00	0.0	0	0	0
27	82	52	67	75	48	61	6	93	1986	30	1996	0.00	0.0	0	0	2
28	82	61	72	75	48	61	11	93	1986	31	1962	0.07	0.0	0	0	7

M = Missing

Actual Conditions For March 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	70	54	62	75	48	62	0	90	1986	34	1962	0.04	0.0	0	3	0
2	71	45	58	75	48	62	-4	M	M	36	1997	0.00	0.0	0	7	0
3	77	48	63	76	49	62	1	90	1986	31	1971	0.00	0.0	0	2	0
4	80	56	68	76	49	62	6	88	1986	31	2002	0.00	0.0	0	0	3
5	83	55	69	76	49	63	6	91	1986	33	2002	0.00	0.0	0	0	4
6	86	59	73	76	49	63	10	92	1986	36	1977	0.00	0.0	0	0	8
7	84	58	71	77	49	63	8	90	1960	37	1982	0.00	0.0	0	0	6
8	82	62	72	77	49	63	9	91	1957	35	1969	0.00	0.0	0	0	7
9	83	55	69	77	50	63	6	92	2004	34	1964	0.00	0.0	0	0	4
10	86	47	67	77	50	64	3	95	1997	M	M	0.00	0.0	0	0	2
11	79	54	67	78	50	64	3	93	1997	38	1969	0.00	0.0	0	0	2
12	79	53	66	78	50	64	2	M	M	37	1990	0.00	0.0	0	0	1
13	81	52	67	78	50	64	3	M	M	30	1956	0.00	0.0	0	0	2
14	86	55	71	78	50	64	7	M	M	38	1952	0.00	0.0	0	0	6
15	88	55	72	79	50	64	8	94	2004	34	1977	0.00	0.0	0	0	7
16	86	59	73	79	51	65	8	M	M	36	1963	0.00	0.0	0	0	8
17	93	51	72	79	51	65	7	M	M	36	2002	0.00	0.0	0	0	7
18	77	56	67	79	51	65	2	94	1997	37	1979	0.00	0.0	0	0	2
19	81	50	66	79	51	65	1	96	1997	39	1977	0.00	0.0	0	0	1
20	81	46	64	80	51	65	-1	99	2004	M	M	0.00	0.0	0	1	0
21	86	47	67	80	51	66	1	100	2004	40	1987	0.00	0.0	0	0	2
22	84	52	68	80	51	66	2	98	2004	39	2006*	0.00	0.0	0	0	3
23	86	53	70	80	51	66	4	95	1956	M	M	0.00	0.0	0	0	5
24	91	54	73	81	51	66	7	95	1956	37	1995	0.00	0.0	0	0	8
25	91	54	73	81	52	66	7	96	1981	41	1964	0.00	0.0	0	0	8
26	79	59	69	81	52	66	3	96	1988	40	1995	0.00	0.0	0	0	4
27	76	49	63	81	52	67	-4	100	1986	36	1975	0.00	0.0	0	2	0
28	82	50	66	82	52	67	-1	95	1986	40	1972	0.00	0.0	0	0	1
29	88	51	70	82	52	67	3	95	1971	37	1972	0.00	0.0	0	0	5
30	83	60	72	82	52	67	5	100	1971	38	1998	0.00	0.0	0	0	7
31	84	52	68	82	53	67	1	M	M	38	1972	0.00	0.0	0	0	3

M = Missing

Actual Conditions For April 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	77	54	66	83	53	68	-2	M	M	M	M	0.00	0.0	0	0	1
2	71	50	61	83	53	68	-7	98	1966	40	1975	0.00	0.0	0	4	0
3	76	48	62	83	53	68	-6	101	1961	40	1975	0.00	0.0	0	3	0
4	81	46	64	83	53	68	-4	106	1961	41	1977	0.00	0.0	0	1	0
5	79	51	65	84	53	69	-4	100	1989	42	1983	0.00	0.0	0	0	0
6	86	58	72	84	54	69	3	103	1989	43	2006	0.00	0.0	0	0	7
7	90	53	72	84	54	69	3	105	1989	44	1964	0.00	0.0	0	0	7
8	95	56	76	84	54	69	7	107	1989	42	1999	0.00	0.0	0	0	11
9	98	59	79	85	54	70	9	102	1989	M	M	0.00	0.0	0	0	14
10	99	62	81	85	55	70	11	101	1960	38	1975	0.00	0.0	0	0	16
11	99	67	83	85	55	70	13	M	M	44	2001	0.00	0.0	0	0	18
12	91	58	75	86	55	70	5	100	1990	44	1967	0.00	0.0	0	0	10
13	92	58	75	86	55	71	4	103	1985	40	1983	0.00	0.0	0	0	10
14	87	63	75	86	56	71	4	104	2002	46	1983	0.00	0.0	0	0	10
15	91	54	73	86	56	71	2	104	1962	M	M	0.00	0.0	0	0	8
16	95	61	78	87	56	71	7	104	1984	M	M	0.00	0.0	0	0	13
17	92	60	76	87	57	72	4	103	1987	44	1976	0.00	0.0	0	0	11
18	85	65	75	87	57	72	3	104	1954	41	1963	0.00	0.0	0	0	10
19	89	66	78	88	57	72	6	106	1980	44	1968	0.00	0.0	0	0	13
20	94	67	81	88	58	73	8	103	1980	46	1995	0.00	0.0	0	0	16
21	99	65	82	88	58	73	9	M	M	42	1967	0.00	0.0	0	0	17
22	93	65	79	89	58	73	6	M	M	41	1970	0.00	0.0	0	0	14
23	88	58	73	89	58	74	-1	106	1949	M	M	0.00	0.0	0	0	8
24	91	58	75	89	59	74	1	105	1996	46	1964	0.00	0.0	0	0	10
25	91	65	78	89	59	74	4	102	1987	46	1989	0.00	0.0	0	0	13
26	77	58	68	90	59	75	-7	106	1996	48	1971	0.00	0.0	0	0	3
27	83	50	67	90	60	75	-8	106	1987	45	1963	0.00	0.0	0	0	2
28	90	56	73	90	60	75	-2	106	1992	44	1970	0.00	0.0	0	0	8
29	87	70	79	91	60	76	3	107	1992	45	1984	0.00	0.0	0	0	14
30	88	68	78	91	61	76	2	105	1992	46	1967	0.00	0.0	0	0	13

M = Missing

Actual Conditions For May 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	93	66	80	91	61	76	4	105	1985	49	1990	0.00	0.0	0	0	15
2	99	60	80	92	61	76	4	105	1966	48	1967	0.00	0.0	0	0	15
3	103	63	83	92	62	77	6	M	M	50	1991	0.00	0.0	0	0	18
4	103	66	85	92	62	77	8	105	2004	49	1999	0.00	0.0	0	0	20
5	98	65	82	93	62	77	5	105	1997	45	1964	0.00	0.0	0	0	17
6	80	61	71	93	62	78	-7	108	1987	47	1988	0.00	0.0	0	0	6
7	84	52	68	93	63	78	-10	108	1989	46	1988	0.00	0.0	0	0	3
8	87	57	72	93	63	78	-6	109	2001	49	1964	0.00	0.0	0	0	7
9	93	61	77	94	63	79	-2	108	2001	50	1982	0.00	0.0	0	0	12
10	94	63	79	94	64	79	0	109	1960	48	1977	0.00	0.0	0	0	14
11	83	65	74	94	64	79	-5	113	1960	50	1982	0.00	0.0	0	0	9
12	91	60	76	95	64	79	-3	112	1996	50	1980	0.00	0.0	0	0	11
13	92	70	81	95	64	80	1	108	1996	50	1962	0.00	0.0	0	0	16
14	95	69	82	95	64	80	2	M	M	50	1998	0.00	0.0	0	0	17
15	101	62	82	96	65	80	2	M	M	53	1962	0.00	0.0	0	0	17
16	106	66	86	96	65	80	6	109	1997	52	1953	0.00	0.0	0	0	21
17	107	70	89	96	65	81	8	110	1997	53	1977	0.00	0.0	0	0	24
18	104	71	88	96	65	81	7	110	1970	54	1977	0.00	0.0	0	0	23
19	98	69	84	97	66	81	3	M	M	M	M	0.00	0.0	0	0	19
20	89	63	76	97	66	81	-5	M	M	51	1949	0.00	0.0	0	0	11
21	86	54	70	97	66	82	-12	110	2005	47	1975	0.00	0.0	0	0	5
22	88	63	76	98	66	82	-6	113	2000	45	1971	0.00	0.0	0	0	11
23	91	67	79	98	66	82	-3	110	2001	50	1971	0.01	0.0	0	0	14
24	94	63	79	98	67	82	-3	112	2001	M	M	0.00	0.0	0	0	14
25	100	68	84	99	67	83	1	113	1951	51	1980	0.00	0.0	0	0	19
26	106	73	90	99	67	83	7	112	1974	52	1996	0.00	0.0	0	0	25
27	107	74	91	99	67	83	8	114	1951	50	1962	0.00	0.0	0	0	26
28	107	74	91	99	67	83	8	114	1983	52	1971	0.00	0.0	0	0	26
29	104	74	89	100	68	84	5	114	2000	43	1971	0.00	0.0	0	0	24
30	106	72	89	100	68	84	5	113	1984	56	1988	0.00	0.0	0	0	24
31	108	75	92	100	68	84	8	M	M	55	1991	0.00	0.0	0	0	27

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For June 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	103	74	89	101	68	84	5	114	2012	46	1980	0.00	0.0	0	0	24
2	110	71	91	101	68	85	6	112	1960	56	1983	0.00	0.0	0	0	26
3	102	70	86	101	69	85	1	113	1996	55	1971	0.00	0.0	0	0	21
4	105	72	89	102	69	85	4	114	1996	56	1998	0.00	0.0	0	0	24
5	106	68	87	102	69	85	2	116	1957	55	1999	0.00	0.0	0	0	22
6	108	68	88	102	69	86	2	114	2002	59	1993	0.00	0.0	0	0	23
7	103	69	86	102	70	86	0	117	1985	52	1993	0.00	0.0	0	0	21
8	108	72	90	103	70	86	4	118	1955	58	1998	0.00	0.0	0	0	25
9	110	75	93	103	70	87	6	118	1955	57	1995	0.00	0.0	0	0	28
10	105	82	94	103	70	87	7	116	1994	60	1969	0.00	0.0	0	0	29
11	107	74	91	104	71	87	4	114	1956	56	1976	0.00	0.0	0	0	26
12	109	73	91	104	71	87	4	116	1956	62	1998	0.00	0.0	0	0	26
13	109	75	92	104	71	88	4	115	1979	56	1998	0.00	0.0	0	0	27
14	102	70	86	104	72	88	-2	117	1966	59	1997	0.00	0.0	0	0	21
15	103	71	87	105	72	88	-1	117	2000	54	1962	0.00	0.0	0	0	22
16	105	74	90	105	72	89	1	116	1971	58	1990	0.00	0.0	0	0	25
17	102	76	89	105	73	89	0	116	1981	57	1995	0.00	0.0	0	0	24
18	98	68	83	106	73	89	-6	118	1981	60	1995	0.00	0.0	0	0	18
19	104	70	87	106	73	90	-3	117	1961	61	1975	0.00	0.0	0	0	22
20	109	73	91	106	74	90	1	118	1981	58	1975	0.00	0.0	0	0	26
21	109	79	94	106	74	90	4	116	2008*	64	1975	0.00	0.0	0	0	29
22	108	77	93	106	74	90	3	119	1960	65	2010*	0.00	0.0	0	0	28
23	106	70	88	107	75	91	-3	118	1961	63	1998	0.00	0.0	0	0	23
24	107	77	92	107	75	91	1	118	1994	63	1998	0.00	0.0	0	0	27
25	107	73	90	107	75	91	-1	122	1970	66	1991	0.00	0.0	0	0	25
26	106	79	93	107	76	92	1	122	1990	61	1965	0.00	0.0	0	0	28
27	103	74	89	107	76	92	-3	121	1973	62	1996	0.00	0.0	0	0	24
28	106	76	91	108	76	92	-1	123	1994	67	1991	0.00	0.0	0	0	26
29	107	81	94	108	77	92	2	121	1994	67	1997	0.00	0.0	0	0	29
30	109	81	95	108	77	92	3	119	1972	68	1997	0.00	0.0	0	0	30

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locations Add to My Locations

Units: English | Metric

Table Graph Details

Actual Conditions For July 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	109	85	97	108	77	93	4	118	1972	62	1982	0.00	0.0	0	0	32
2	108	81	95	108	78	93	2	119	2001	66	1995	0.00	0.0	0	0	30
3	108	86	97	108	78	93	4	119	1985	67	1979	0.00	0.0	0	0	32
4	103	86	95	108	78	93	2	121	1989	67	1956	0.00	0.0	0	0	30
5	106	86	96	108	79	93	3	118	1981	69	1987	0.00	0.0	0	0	31
6	109	83	96	108	79	94	2	117	1965	67	1994	0.00	0.0	0	0	31
7	111	82	97	108	79	94	3	117	1985	70	2005	0.00	0.0	0	0	32
8	110	87	99	109	79	94	5	119	1985	73	1949	0.00	0.0	0	0	34
9	103	84	94	109	80	94	0	118	1958	70	1987	0.00	0.0	0	0	29
10	109	84	97	109	80	94	3	118	1973	72	1986	0.00	0.0	0	0	32
11	107	78	93	109	80	94	-1	118	1958	69	1974	0.00	0.0	0	0	28
12	109	77	93	109	80	94	-1	118	1985	71	2000	0.00	0.0	0	0	28
13	112	86	99	109	80	94	5	119	2005	66	1962	0.00	0.0	0	0	34
14	104	86	95	109	81	95	0	118	2003	73	2011*	0.00	0.0	0	0	30
15	106	80	93	109	81	95	-2	117	2006*	71	2001	0.00	0.0	0	0	28
16	110	82	96	108	81	95	1	119	1960	69	1993	0.00	0.0	0	0	31
17	108	77	93	108	81	95	-2	121	2005	64	1983	0.00	0.0	0	0	28
18	105	80	93	108	81	95	-2	118	2005	67	1987	0.00	0.0	0	0	28
19	106	82	94	108	81	95	-1	119	1961	62	1987	0.00	0.0	0	0	29
20	105	77	91	108	81	95	-4	118	1978	70	1993	0.00	0.0	0	0	26
21	109	75	92	108	81	95	-3	118	2006	69	1973	0.00	0.0	0	0	27
22	112	75	94	108	81	95	-1	120	2006	69	1995	0.00	0.0	0	0	29
23	116	86	101	108	81	95	6	117	1981	69	1987	0.00	0.0	0	0	36
24	116	87	102	108	81	95	7	117	1980	73	1995	0.00	0.0	0	0	37
25	111	91	101	108	82	95	6	117	2000	71	1993	0.00	0.0	0	0	36
26	109	89	99	108	82	95	4	118	1995	71	1986	0.00	0.0	0	0	34
27	101	84	93	108	82	95	-2	120	1998	72	1993	0.00	0.0	0	0	28
28	108	84	96	108	82	95	1	123	1995	68	1987	0.00	0.0	0	0	31
29	109	84	97	108	82	95	2	116	1972	64	1987	0.00	0.0	0	0	32
30	113	87	100	108	82	95	5	117	1995	73	1948	0.00	0.0	0	0	35
31	114	89	102	108	81	95	7	120	1972	72	2001	0.00	0.0	0	0	37

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

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Table Graph Details

Actual Conditions For August 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	110	87	99	108	81	95	4	120	1972	70	1959	0.00	0.0	0	0	34
2	96	79	88	108	81	94	-6	118	1995	70	1976	0.00	0.0	0	0	23
3	98	76	87	107	81	94	-7	118	1998	68	1976	0.00	0.0	0	0	22
4	97	71	84	107	81	94	-10	118	1969	67	1976	0.00	0.0	0	0	19
5	107	71	89	107	81	94	-5	118	2000	70	1976	0.00	0.0	0	0	24
6	106	75	91	107	81	94	-3	118	1995	66	1976	0.00	0.0	0	0	26
7	105	72	89	107	81	94	-5	117	1980	68	1988	0.00	0.0	0	0	24
8	104	74	89	107	81	94	-5	119	1980	69	1999	0.00	0.0	0	0	24
9	105	78	92	107	81	94	-2	115	1995	68	2009	0.00	0.0	0	0	27
10	107	83	95	107	81	94	1	116	2003	67	1949	0.00	0.0	0	0	30
11	109	86	98	107	81	94	4	116	1962	70	1999	0.00	0.0	0	0	33
12	101	82	92	107	81	94	-2	116	1962	69	1949	0.02	0.0	0	0	27
13	99	75	87	107	81	94	-7	119	1960	66	1993	0.06	0.0	0	0	22
14	105	83	94	107	81	94	0	117	1962	65	1968	0.00	0.0	0	0	29
15	107	82	95	107	80	94	1	115	1962	64	1993	0.00	0.0	0	0	30
16	108	85	97	107	80	94	3	116	1992	67	1980	0.00	0.0	0	0	32
17	111	88	100	107	80	94	6	116	1992	67	1980	0.00	0.0	0	0	35
18	98	82	90	107	80	93	-3	115	1992	64	1976	0.03	0.0	0	0	25
19	106	82	94	107	80	93	1	114	1973	66	1976	0.00	0.0	0	0	29
20	101	80	91	107	80	93	-2	113	1992	68	1980	0.15	0.0	0	0	26
21	99	69	84	107	80	93	-9	116	1969	69	2014	0.32	0.0	0	0	19
22	92	68	80	107	79	93	-13	116	1972	68	2014*	0.00	0.0	0	0	15
23	100	74	87	107	79	93	-6	116	2011*	64	1968	0.00	0.0	0	0	22
24	103	72	88	106	79	93	-5	119	1985	66	1968	0.00	0.0	0	0	23
25	104	81	93	106	79	93	0	115	1985	68	1973	0.00	0.0	0	0	28
26	103	83	93	106	79	93	0	115	2011	66	1951	0.00	0.0	0	0	28
27	104	79	92	106	79	92	0	115	2005	67	1973	0.00	0.0	0	0	27
28	109	79	94	106	78	92	2	118	1998	65	1973	0.00	0.0	0	0	29
29	111	76	94	106	78	92	2	118	1948	66	1975	0.00	0.0	0	0	29
30	112	76	94	106	78	92	2	116	1998	62	1957	0.00	0.0	0	0	29
31	111	80	96	106	78	92	4	119	1950	62	1992	0.00	0.0	0	0	31

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City | Go | My Locati ons | Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For September 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	108	80	94	105	78	91	3	121	1950	64	1966	0.00	0.0	0	0	29
2	110	77	94	105	77	91	3	118	1948	64	2000	0.00	0.0	0	0	29
3	109	77	93	105	77	91	2	118	1948	65	1964	0.00	0.0	0	0	28
4	107	80	94	105	77	91	3	115	1948	61	1985	0.00	0.0	0	0	29
5	102	83	93	105	76	91	2	113	1955	59	1976	0.00	0.0	0	0	28
6	103	83	93	104	76	90	3	114	1955	66	1992	0.00	0.0	0	0	28
7	100	83	92	104	76	90	2	112	1994	60	1985	0.00	0.0	0	0	27
8	98	79	89	104	75	90	-1	116	1979	65	2010	0.01	0.0	0	0	24
9	91	76	84	104	75	89	-5	114	1993	62	1961	0.03	0.0	0	0	19
10	100	77	89	103	75	89	0	114	1990	63	2005	0.00	0.0	0	0	24
11	104	75	90	103	74	89	1	115	1990	61	1985	0.00	0.0	0	0	25
12	107	74	91	103	74	88	3	113	1971	59	1985	0.00	0.0	0	0	26
13	107	75	91	102	74	88	3	112	1971	58	1985	0.00	0.0	0	0	26
14	107	83	95	102	73	88	7	113	1971	60	2005	0.00	0.0	0	0	30
15	110	83	97	102	73	87	10	113	2000	61	2005	0.00	0.0	0	0	32
16	101	80	91	101	73	87	4	110	1962	61	1970	0.02	0.0	0	0	26
17	98	80	89	101	72	87	2	112	1962	61	1977	0.00	0.0	0	0	24
18	103	80	92	101	72	86	6	111	1980	57	1985	0.00	0.0	0	0	27
19	99	74	87	100	71	86	1	113	1962	56	1985	0.00	0.0	0	0	22
20	102	77	90	100	71	85	5	108	1962	53	1971	0.00	0.0	0	0	25
21	101	75	88	99	70	85	3	108	2009*	59	1986	0.00	0.0	0	0	23
22	101	71	86	99	70	84	2	110	1966	55	1988	0.00	0.0	0	0	21
23	104	73	89	99	70	84	5	111	1966	56	2007	0.00	0.0	0	0	24
24	105	74	90	98	69	84	6	109	2002	54	1986	0.00	0.0	0	0	25
25	105	75	90	98	69	83	7	110	1963	59	1993	0.00	0.0	0	0	25
26	99	83	91	97	68	83	8	110	2010	53	1971	0.05	0.0	0	0	26
27	93	70	82	97	68	82	0	110	2010	54	1971	0.00	0.0	0	0	17
28	87	64	76	96	67	82	-6	108	2009	55	1982	0.00	0.0	0	0	11
29	90	63	77	96	67	81	-4	110	1980	56	2013	0.00	0.0	0	0	12
30	93	63	78	96	66	81	-3	109	1980	51	2005	0.00	0.0	0	0	13

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For October 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year:_Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	95	65	80	95	66	81	-1	111	1980	53	1971	0.00	0.0	0	0	15
2	93	68	81	95	66	80	1	111	1980	52	1971	0.00	0.0	0	0	16
3	98	64	81	94	65	80	1	107	1987	49	2002	0.00	0.0	0	0	16
4	101	64	83	94	65	79	4	107	1987	53	2002	0.00	0.0	0	0	18
5	100	65	83	93	64	79	4	108	1987	52	2009	0.00	0.0	0	0	18
6	94	64	79	93	64	78	1	110	1987	49	2009	0.00	0.0	0	0	14
7	87	74	81	93	63	78	3	108	1987	49	2009	0.00	0.0	0	0	16
8	79	68	74	92	63	78	-4	106	1996	51	2011	0.02	0.0	0	0	9
9	92	67	80	92	63	77	3	106	1996	46	1949	0.01	0.0	0	0	15
10	93	66	80	91	62	77	3	107	1991	48	1949	0.00	0.0	0	0	15
11	96	68	82	91	62	76	6	105	1965	50	2013	0.00	0.0	0	0	17
12	99	64	82	91	61	76	6	105	1999	50	2000	0.00	0.0	0	0	17
13	92	64	78	90	61	76	2	106	1950	47	1969	0.00	0.0	0	0	13
14	93	57	75	90	61	75	0	103	1961	50	1994	0.00	0.0	0	0	10
15	91	61	76	89	60	75	1	103	1950	52	1986	0.00	0.0	0	0	11
16	89	61	75	89	60	74	1	102	1958	49	1980	0.00	0.0	0	0	10
17	92	69	81	89	59	74	7	101	2011*	46	1994	0.00	0.0	0	0	16
18	93	66	80	88	59	74	6	104	2003	41	1971	0.00	0.0	0	0	15
19	94	64	79	88	59	73	6	104	2003	41	1971	0.00	0.0	0	0	14
20	92	65	79	87	58	73	6	103	2003	42	1949	0.00	0.0	0	0	14
21	92	67	80	87	58	73	7	104	2003	44	1949	0.00	0.0	0	0	15
22	94	64	79	87	58	72	7	104	2003	44	1996	0.00	0.0	0	0	14
23	95	64	80	86	57	72	8	101	2003	39	1996	0.00	0.0	0	0	15
24	95	64	80	86	57	71	9	102	1959	42	1996	0.00	0.0	0	0	15
25	96	66	81	86	57	71	10	98	1965	44	1975	0.00	0.0	0	0	16
26	88	66	77	85	56	71	6	98	1965	41	1971	0.00	0.0	0	0	12
27	87	62	75	85	56	70	5	99	2008	45	1971	0.00	0.0	0	0	10
28	89	55	72	84	55	70	2	98	1965	44	1996	0.00	0.0	0	0	7
29	91	55	73	84	55	69	4	97	1965	33	1971	0.00	0.0	0	0	8
30	91	58	75	84	55	69	6	95	1966	27	1971	0.00	0.0	0	0	10
31	89	59	74	83	54	69	5	97	1966	29	1971	0.00	0.0	0	0	9

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For November 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year:_Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	78	60	69	83	54	68	1	95	1997	42	1972	0.00	0.0	0	0	4
2	74	52	63	82	53	68	-5	93	1997	38	1971	0.00	0.0	0	2	0
3	75	53	64	82	53	67	-3	95	2010	40	1979	0.00	0.0	0	1	0
4	78	60	69	81	53	67	2	94	2010*	38	1956	0.00	0.0	0	0	4
5	84	54	69	81	52	67	2	94	1980	43	1994	0.00	0.0	0	0	4
6	87	51	69	80	52	66	3	94	1988	42	2011	0.00	0.0	0	0	4
7	86	53	70	80	52	66	4	92	2007	41	1993	0.00	0.0	0	0	5
8	89	54	72	80	51	65	7	92	1991	40	2011	0.00	0.0	0	0	7
9	88	54	71	79	51	65	6	89	1995	41	2000	0.00	0.0	0	0	6
10	88	53	71	79	50	64	7	89	1980	39	2010	0.00	0.0	0	0	6
11	83	54	69	78	50	64	5	88	2013*	36	1950	0.00	0.0	0	0	4
12	79	54	67	78	49	64	3	91	1999	32	1950	0.00	0.0	0	0	2
13	78	52	65	77	49	63	2	93	1999	35	1985	0.00	0.0	0	0	0
14	77	55	66	77	49	63	3	91	1999	32	2000	0.00	0.0	0	0	1
15	81	50	66	76	48	62	4	90	1999	39	1994	0.00	0.0	0	0	1
16	67	53	60	76	48	62	-2	88	1995	35	2000	0.00	0.0	0	5	0
17	70	43	57	75	47	61	-4	89	1995	35	1958	0.00	0.0	0	8	0
18	71	44	58	75	47	61	-3	87	2008*	34	1958	0.00	0.0	0	7	0
19	73	41	57	74	47	60	-3	87	2008*	35	1958	0.00	0.0	0	8	0
20	74	43	59	74	46	60	-1	87	2006	27	1994	0.00	0.0	0	6	0
21	75	51	63	73	46	60	3	87	1950	33	1994	0.00	0.0	0	2	0
22	76	44	60	73	45	59	1	88	1950	35	1992	0.00	0.0	0	5	0
23	74	53	64	72	45	59	5	86	1949	35	2010	0.00	0.0	0	1	0
24	74	45	60	72	45	58	2	87	1995	34	1971	0.00	0.0	0	5	0
25	71	43	57	71	44	58	-1	87	1950	32	1952	0.00	0.0	0	8	0
26	76	44	60	71	44	58	2	87	1995	34	2010	0.00	0.0	0	5	0
27	80	47	64	71	44	57	7	86	1954	26	2010	0.00	0.0	0	1	0
28	78	45	62	70	43	57	5	83	1949	30	1994	0.00	0.0	0	3	0
29	77	43	60	70	43	56	4	83	1953	33	1976	0.00	0.0	0	5	0
30	77	49	63	69	43	56	7	82	2008	32	1975	0.00	0.0	0	2	0

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locations Add to My Locations

Units: English | Metric

Table Graph Details

Actual Conditions For December 2014

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month Year GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	72	47	60	69	43	56	4	82	2008*	33	1952	0.00	0.0	0	5	0
2	67	57	62	69	42	55	7	82	1959	30	1991	0.00	0.0	0	3	0
3	64	57	61	68	42	55	6	83	1958	32	1991	0.08	0.0	0	4	0
4	73	54	64	68	42	55	9	80	2012*	35	2009*	0.00	0.0	0	1	0
5	73	52	63	68	42	55	8	80	1962	31	2009	0.00	0.0	0	2	0
6	76	58	67	67	41	54	13	81	1966	32	1972	0.00	0.0	0	0	2
7	78	51	65	67	41	54	11	79	1995	29	2011*	0.00	0.0	0	0	0
8	76	54	65	67	41	54	11	78	1996	29	1978	0.00	0.0	0	0	0
9	77	52	65	66	41	54	11	80	1962	26	1978	0.00	0.0	0	0	0
10	78	46	62	66	41	54	8	82	1950	25	1971	0.00	0.0	0	3	0
11	72	50	61	66	41	53	8	81	1958	31	1994	0.00	0.0	0	4	0
12	70	46	58	66	41	53	5	82	2010*	24	1971	0.03	0.0	0	7	0
13	66	43	55	66	40	53	2	80	1995	30	1985	0.00	0.0	0	10	0
14	65	39	52	66	40	53	-1	78	1952	29	2001	0.00	0.0	0	13	0
15	64	40	52	65	40	53	-1	81	1977	24	1971	0.00	0.0	0	13	0
16	61	40	51	65	40	53	-2	85	1980	26	2005	0.28	0.0	0	14	0
17	60	47	54	65	40	53	1	82	1998	29	2005	0.39	0.0	0	11	0
18	63	49	56	65	40	53	3	77	1950	30	1968	0.00	0.0	0	9	0
19	63	43	53	65	40	53	0	76	1999	25	1968	0.00	0.0	0	12	0
20	61	42	52	65	40	53	-1	79	1950	29	2006*	0.00	0.0	0	13	0
21	62	46	54	65	40	53	1	76	1950	29	1968	0.00	0.0	0	11	0
22	71	45	58	65	40	53	5	77	1955	24	1968	0.00	0.0	0	7	0
23	73	56	65	65	40	53	12	82	1955	27	1968	0.00	0.0	0	0	0
24	65	42	54	65	40	53	1	81	2005	30	1968	0.00	0.0	0	11	0
25	65	44	55	65	41	53	2	77	1980	30	1953	0.00	0.0	0	10	0
26	59	40	50	65	41	53	-3	79	1980	30	2002	0.00	0.0	0	15	0
27	59	40	50	65	41	53	-3	80	1980	25	1987	0.00	0.0	0	15	0
28	56	31	44	65	41	53	-9	80	1980	27	1988	0.00	0.0	0	21	0
29	58	29	44	65	41	53	-9	87	1980	28	2003	0.00	0.0	0	21	0
30	60	31	46	66	41	53	-7	83	1980	27	1988	0.00	0.0	0	19	0
31	50	35	43	66	41	53	-10	79	1980	26	1988	0.00	0.0	0	22	0

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For January 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	51	27	39	66	41	53	-14	82	1981	24	1976	0.00	0.0	0	26	0
2	57	27	42	66	41	54	-12	80	1981	27	2015	0.00	0.0	0	23	0
3	58	29	44	66	41	54	-10	78	1997	21	1974	0.00	0.0	0	21	0
4	62	31	47	66	41	54	-7	80	1981	23	1950	0.00	0.0	0	18	0
5	69	40	55	66	41	54	1	79	1981	22	1972	0.00	0.0	0	10	0
6	74	42	58	66	42	54	4	80	1962	25	1950	0.00	0.0	0	7	0
7	75	43	59	67	42	54	5	85	1962	24	1971	0.00	0.0	0	6	0
8	76	51	64	67	42	54	10	84	1962	20	1971	0.00	0.0	0	1	0
9	75	46	61	67	42	54	7	80	1962	25	1971	0.00	0.0	0	4	0
10	71	53	62	67	42	54	8	80	1962	26	1971	0.00	0.0	0	3	0
11	69	49	59	67	42	55	4	80	1986	27	1950	0.05	0.0	0	6	0
12	70	55	63	67	42	55	8	79	1983	26	1962	0.00	0.0	0	2	0
13	70	51	61	67	42	55	6	78	1996	25	2013	0.00	0.0	0	4	0
14	70	51	61	68	42	55	6	80	1983	25	2007	0.00	0.0	0	4	0
15	71	42	57	68	42	55	2	78	2014*	28	1987	0.00	0.0	0	8	0
16	73	44	59	68	42	55	4	83	1976	29	1964	0.00	0.0	0	6	0
17	72	43	58	68	42	55	3	82	2011*	25	2007	0.00	0.0	0	7	0
18	74	42	58	68	43	55	3	85	1971	30	2002	0.00	0.0	0	7	0
19	73	44	59	68	43	55	4	84	1971	29	1990	0.00	0.0	0	6	0
20	75	43	59	68	43	55	4	83	1971	30	2008	0.00	0.0	0	6	0
21	74	52	63	68	43	56	7	80	2009	30	1973	0.00	0.0	0	2	0
22	68	47	58	69	43	56	2	79	1994	31	1987	0.00	0.0	0	7	0
23	69	41	55	69	43	56	-1	82	1950	30	1972	0.00	0.0	0	10	0
24	77	45	61	69	43	56	5	82	1951	29	1996	0.00	0.0	0	4	0
25	75	49	62	69	43	56	6	89	1951	31	1972	0.00	0.0	0	3	0
26	61	51	56	69	43	56	0	81	2003	30	2002	0.19	0.0	0	9	0
27	69	53	61	69	43	56	5	79	2003	29	1972	0.01	0.0	0	4	0
28	71	50	61	69	43	56	5	80	2014*	29	1972	0.00	0.0	0	4	0
29	71	57	64	69	43	56	8	81	1953	30	1975	0.00	0.0	0	1	0
30	67	56	62	70	43	56	6	83	2003	26	1949	0.32	0.0	0	3	0
31	69	53	61	70	44	57	4	86	2003	30	1972	0.00	0.0	0	4	0

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City | Go | My Locati ons | Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For February 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: _Month ▼ _Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	74	49	62	70	44	57	5	84	2003*	28	2002*	0	0	0	3	0
2	73	45	59	70	44	57	2	85	1963*	31	1951*	0	0	0	6	0
3	77	47	62	70	44	57	5	84	1963*	23	1972*	0	0	0	3	0
4	79	48	64	70	44	57	7	84	1963*	26	2011*	0	0	0	1	0
5	80	49	64	70	44	57	7	87	1983*	33	1956*	0	0	0	1	0
6	82	50	66	70	44	57	9	88	1963*	30	1989*	0	0	0	0	1
7	82	48	65	71	44	57	8	89	1996*	31	1989*	0	0	0	0	0
8	84	53	68	71	44	58	10	88	1963*	35	2002*	0	0	0	0	3
9	84	52	68	71	45	58	10	86	1996*	30	1949*	0	0	0	0	3
10	83	58	70	71	45	58	12	87	1951*	32	1986*	0	0	0	0	5
11	82	60	71	71	45	58	13	90	1957*	33	1986*	0	0	0	0	6
12	81	53	67	71	45	58	9	85	1971*	29	1965*	0	0	0	0	2
13	84	51	68	72	45	58	10	90	1957*	31	1972*	0	0	0	0	3
14	87	50	68	72	45	59	9	87	2015*	31	1966*	0	0	0	0	3
15	82	51	66	72	46	59	7	86	2014*	26	1990*	0	0	0	0	1
16	83	51	67	72	46	59	8	87	1981*	22	1990*	0	0	0	0	2
17	80	54	67	72	46	59	8	88	1981*	31	1956*	0	0	0	0	2
18	81	48	64	72	46	59	5	93	1981*	35	1967*	0	0	0	1	0
19	81	50	66	73	46	60	6	90	1981*	31	1956*	0	0	0	0	1
20	80	54	67	73	46	60	7	86	1981*	32	1990*	0	0	0	0	2
21	80	50	65	73	47	60	5	92	1977*	32	1953*	0	0	0	0	0
22	75	55	65	73	47	60	5	88	1982*	32	1955*	0	0	0	0	0
23	67	54	60	74	47	60	0	87	2002*	31	1953*	0.04	0	0	5	0
24	71	48	60	74	47	61	-1	90	1986*	34	1996*	0	0	0	5	0
25	77	41	59	74	48	61	-2	93	1986*	32	1960*	0	0	0	6	0
26	79	44	62	74	48	61	1	92	1986*	35	1977*	0	0	0	3	0
27	77	49	63	75	48	61	2	93	1986*	30	1996*	0	0	0	2	0
28	74	57	66	75	48	61	5	93	1986*	31	1962*	0	0	0	0	1

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For March 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: _Month ▼ _Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	60	51	56	75	48	62	-6	90	1986*	34	1962*	0.74	0	0	9	0
2	64	50	57	75	48	62	-5	89	2009*	36	1997*	0.25	0	0	8	0
3	65	43	54	76	49	62	-8	90	1986*	31	1971*	0	0	0	11	0
4	69	50	60	76	49	62	-2	88	1986*	31	2002*	0	0	0	5	0
5	74	46	60	76	49	62	-2	91	1986*	33	2002*	0	0	0	5	0
6	82	46	64	76	49	63	1	92	1986*	36	1977*	0	0	0	1	0
7	83	53	68	76	49	63	5	90	1960*	37	1982*	0	0	0	0	3
8	83	49	66	77	49	63	3	91	1957*	35	1969*	0	0	0	0	1
9	87	51	69	77	50	63	6	92	2004*	34	1964*	0	0	0	0	4
10	87	56	72	77	50	64	8	95	1997*	41	2010*	0	0	0	0	7
11	84	56	70	78	50	64	6	93	1997*	38	1969*	0	0	0	0	5
12	88	63	76	78	50	64	12	92	2007*	37	1990*	0	0	0	0	11
13	88	66	77	78	50	64	13	95	2007*	30	1956*	0	0	0	0	12
14	92	62	77	78	50	64	13	95	2013*	38	1952*	0	0	0	0	12
15	91	60	76	78	50	64	12	94	2004*	34	1977*	0	0	0	0	11
16	91	56	74	79	50	65	9	98	2007*	36	1963*	0	0	0	0	9
17	91	59	75	79	51	65	10	99	2007*	36	2002*	0	0	0	0	10
18	85	66	76	79	51	65	11	94	1997*	37	1979*	0	0	0	0	11
19	76	63	70	79	51	65	5	96	1997*	39	1977*	0.03	0	0	0	5
20	83	58	70	80	51	65	5	99	2004*	41	2012*	0	0	0	0	5
21	93	56	74	80	51	66	8	100	2004*	40	1987*	0	0	0	0	9
22	90	56	73	80	51	66	7	98	2004*	39	2006*	0	0	0	0	8
23	86	57	72	80	51	66	6	95	1956*	43	2011*	0	0	0	0	7
24	87	60	74	81	51	66	8	95	1956*	37	1995*	0	0	0	0	9
25	89	65	77	81	52	66	11	96	1981*	41	1964*	0	0	0	0	12
26	89	65	77	81	52	66	11	96	1988*	40	1995*	0	0	0	0	12
27	94	57	76	81	52	67	9	100	1986*	36	1975*	0	0	0	0	11
28	97	59	78	82	52	67	11	97	2015*	40	1972*	0	0	0	0	13
29	96	64	80	82	52	67	13	96	2015*	37	1972*	0	0	0	0	15
30	97	61	79	82	52	67	12	100	1971*	38	1998*	0	0	0	0	14
31	96	63	80	82	52	67	13	100	2011*	38	1972*	0	0	0	0	15

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For April 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	89	60	74	83	53	68	6	99	2011*	44	2010*	0	0	0	0	9
2	86	61	74	83	53	68	6	98	1966*	40	1975*	0	0	0	0	9
3	85	60	72	83	53	68	4	101	1961*	40	1975*	0	0	0	0	7
4	87	54	70	83	53	68	2	106	1961*	41	1977*	0	0	0	0	5
5	87	59	73	84	53	68	5	100	1989*	42	1983*	0	0	0	0	8
6	81	51	66	84	54	69	-3	103	1989*	43	2006*	0	0	0	0	1
7	80	52	66	84	54	69	-3	105	1989*	44	1964*	0	0	0	0	1
8	78	56	67	84	54	69	-2	107	1989*	42	1999*	0	0	0	0	2
9	82	52	67	85	54	70	-3	102	1989*	42	2011*	0	0	0	0	2
10	85	51	68	85	55	70	-2	101	1960*	38	1975*	0	0	0	0	3
11	88	58	73	85	55	70	3	99	2014*	44	2001*	0	0	0	0	8
12	89	62	76	86	55	70	6	100	1990*	44	1967*	0	0	0	0	11
13	93	59	76	86	55	71	5	103	1985*	40	1983*	0	0	0	0	11
14	95	64	80	86	56	71	9	104	2002*	46	1983*	0	0	0	0	15
15	78	60	69	86	56	71	-2	104	1962*	46	2012*	0	0	0	0	4
16	80	55	68	87	56	71	-3	104	1984*	41	2009*	0	0	0	0	3
17	86	49	68	87	56	72	-4	103	1987*	44	1976*	0	0	0	0	3
18	94	54	74	87	57	72	2	104	1954*	41	1963*	0	0	0	0	9
19	95	60	78	88	57	72	6	106	1980*	44	1968*	0	0	0	0	13
20	93	59	76	88	58	73	3	103	1980*	46	1995*	0	0	0	0	11
21	87	56	72	88	58	73	-1	105	2012*	42	1967*	0	0	0	0	7
22	84	59	72	88	58	73	-1	106	2012*	41	1970*	0	0	0	0	7
23	82	61	72	89	58	74	-2	106	1949*	44	2010*	0	0	0	0	7
24	82	60	71	89	59	74	-3	105	1996*	46	1964*	0	0	0	0	6
25	79	57	68	89	59	74	-6	102	1987*	46	1989*	0	0	0	0	3
26	84	59	72	90	59	74	-2	106	1996*	48	1971*	0	0	0	0	7
27	90	62	76	90	60	75	1	106	1987*	45	1963*	0	0	0	0	11
28	96	62	79	90	60	75	4	106	1992*	44	1970*	0	0	0	0	14
29	98	65	82	91	60	76	6	107	1992*	45	1984*	0	0	0	0	17
30	101	67	84	91	61	76	8	105	1992*	46	1967*	0	0	0	0	19

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City | Go | My Locati ons | Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For May 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	101	67	84	91	61	76	8	105	1985*	49	1990*	0	0	0	0	19
2	98	70	84	92	61	76	8	105	1966*	48	1967*	0	0	0	0	19
3	93	67	80	92	62	77	3	103	2014*	50	1991*	0	0	0	0	15
4	88	64	76	92	62	77	-1	105	2004*	49	1999*	0.07	0	0	0	11
5	89	62	76	92	62	77	-1	105	1997*	45	1964*	0	0	0	0	11
6	87	66	76	93	62	78	-2	108	1987*	47	1988*	0	0	0	0	11
7	81	59	70	93	63	78	-8	108	1989*	46	1988*	0	0	0	0	5
8	73	55	64	93	63	78	-14	109	2001*	49	1964*	0	0	0	1	0
9	81	49	65	94	63	78	-13	108	2001*	49	2015*	0	0	0	0	0
10	90	58	74	94	64	79	-5	109	1960*	48	1977*	0	0	0	0	9
11	96	62	79	94	64	79	0	113	1960*	50	1982*	0	0	0	0	14
12	92	65	78	95	64	79	-1	112	1996*	50	1980*	0	0	0	0	13
13	90	63	76	95	64	80	-4	108	1996*	50	1962*	0	0	0	0	11
14	77	63	70	95	64	80	-10	107	2013*	50	1998*	0	0	0	0	5
15	63	54	58	96	65	80	-22	107	2012*	53	1962*	0.28	0	0	7	0
16	78	50	64	96	65	80	-16	109	1997*	50	2015*	0	0	0	1	0
17	87	59	73	96	65	81	-8	110	1997*	53	1977*	0	0	0	0	8
18	88	65	76	96	65	81	-5	110	1970*	54	1977*	0	0	0	0	11
19	88	58	73	97	66	81	-8	113	2008*	49	2011*	0	0	0	0	8
20	91	63	77	97	66	81	-4	111	2008*	51	1949*	0	0	0	0	12
21	86	64	75	97	66	82	-7	110	2005*	47	1975*	0	0	0	0	10
22	82	60	71	98	66	82	-11	113	2000*	45	1971*	0	0	0	0	6
23	86	57	72	98	66	82	-10	110	2001*	50	1971*	0	0	0	0	7
24	87	62	74	98	66	82	-8	112	2001*	51	2010*	0	0	0	0	9
25	93	67	80	98	67	83	-3	113	1951*	51	1980*	0	0	0	0	15
26	94	63	78	99	67	83	-5	112	1974*	52	1996*	0	0	0	0	13
27	96	68	82	99	67	83	-1	114	1951*	50	1962*	0	0	0	0	17
28	100	67	84	99	67	83	1	114	1983*	52	1971*	0	0	0	0	19
29	102	65	84	100	68	84	0	114	2000*	43	1971*	0	0	0	0	19
30	105	68	86	100	68	84	2	113	1984*	56	1988*	0	0	0	0	21
31	106	71	88	100	68	84	4	112	2012*	55	1991*	0	0	0	0	23

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City | Go | My Locati ons | Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For June 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: _Month ▼ _Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	104	74	89	101	68	84	5	114	2012*	46	1980*	0	0	0	0	24
2	101	66	84	101	68	85	-1	112	1960*	56	1983*	0	0	0	0	19
3	99	69	84	101	69	85	-1	113	1996*	55	1971*	0	0	0	0	19
4	97	67	82	102	69	85	-3	114	1996*	56	1998*	0	0	0	0	17
5	95	64	80	102	69	85	-5	116	1957*	55	1999*	0	0	0	0	15
6	95	61	78	102	69	86	-8	114	2002*	59	1993*	0	0	0	0	13
7	101	67	84	102	70	86	-2	117	1985*	52	1993*	0	0	0	0	19
8	106	69	88	103	70	86	2	118	1955*	58	1998*	0	0	0	0	23
9	90	74	82	103	70	87	-5	118	1955*	57	1995*	0.04	0	0	0	17
10	99	73	86	103	70	87	-1	116	1994*	60	1969*	0	0	0	0	21
11	101	72	86	104	71	87	-1	114	1956*	56	1976*	0	0	0	0	21
12	106	73	90	104	71	87	3	116	1956*	62	1998*	0	0	0	0	25
13	106	81	94	104	71	88	6	115	1979*	56	1998*	0	0	0	0	29
14	110	80	95	104	72	88	7	117	1966*	59	1997*	0	0	0	0	30
15	113	81	97	105	72	88	9	117	2000*	54	1962*	0	0	0	0	32
16	113	81	97	105	72	89	8	116	1971*	58	1990*	0	0	0	0	32
17	116	78	97	105	73	89	8	116	2015*	57	1995*	0	0	0	0	32
18	119	82	100	106	73	89	11	119	2015*	60	1995*	0	0	0	0	35
19	113	76	94	106	73	90	4	117	1961*	61	1975*	0	0	0	0	29
20	112	77	94	106	74	90	4	118	1981*	58	1975*	0	0	0	0	29
21	110	82	96	106	74	90	6	116	2008*	64	1975*	0	0	0	0	31
22	113	81	97	106	74	90	7	119	1960*	65	2010*	0	0	0	0	32
23	114	82	98	107	75	91	7	118	1961*	63	1998*	0	0	0	0	33
24	115	79	97	107	75	91	6	118	1994*	63	1998*	0	0	0	0	32
25	108	84	96	107	75	91	5	122	1970*	66	1991*	0	0	0	0	31
26	112	83	98	107	76	92	6	122	1990*	61	1965*	0	0	0	0	33
27	111	84	98	107	76	92	6	121	1973*	62	1996*	0	0	0	0	33
28	110	88	99	108	76	92	7	123	1994*	67	1991*	0	0	0	0	34
29	111	86	98	108	77	92	6	121	1994*	67	1997*	0	0	0	0	33
30	108	86	97	108	77	92	5	119	1972*	68	1997*	0	0	0	0	32

M = Missing

Actual Conditions For July 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	100	80	90	108	77	93	-3	118	1972*	62	1982*	0.16	0	0	0	25
2	106	79	92	108	78	93	-1	119	2001*	66	1995*	0	0	0	0	27
3	104	84	94	108	78	93	1	119	1985*	67	1979*	0	0	0	0	29
4	109	85	97	108	78	93	4	121	1989*	67	1956*	0	0	0	0	32
5	107	86	96	108	79	93	3	118	1981*	69	1987*	0	0	0	0	31
6	106	83	94	108	79	94	0	117	1965*	67	1994*	0	0	0	0	29
7	109	83	96	108	79	94	2	117	1985*	70	2005*	0	0	0	0	31
8	106	80	93	108	79	94	-1	119	1985*	73	1949*	0	0	0	0	28
9	99	74	86	108	80	94	-8	118	1958*	70	1987*	0	0	0	0	21
10	98	71	84	108	80	94	-10	118	1973*	71	2015*	0	0	0	0	19
11	98	74	86	108	80	94	-8	118	1958*	69	1974*	0	0	0	0	21
12	106	69	88	108	80	94	-6	118	1985*	69	2015*	0	0	0	0	23
13	110	78	94	108	80	94	0	119	2005*	66	1962*	0	0	0	0	29
14	109	82	96	108	80	94	2	118	2003*	73	2011*	0	0	0	0	31
15	106	78	92	108	81	95	-3	117	2006*	71	2001*	0	0	0	0	27
16	107	78	92	108	81	95	-3	119	1960*	69	1993*	0	0	0	0	27
17	107	83	95	108	81	95	0	121	2005*	64	1983*	0	0	0	0	30
18	99	79	89	108	81	95	-6	118	2005*	67	1987*	0.02	0	0	0	24
19	98	75	86	108	81	95	-9	119	1961*	62	1987*	0.05	0	0	0	21
20	100	76	88	108	81	95	-7	118	1978*	70	1993*	0	0	0	0	23
21	105	82	94	108	81	95	-1	118	2006*	69	1973*	0	0	0	0	29
22	104	79	92	108	81	95	-3	120	2006*	69	1995*	0	0	0	0	27
23	106	79	92	108	81	95	-3	117	1981*	69	1987*	0	0	0	0	27
24	108	78	93	108	81	95	-2	117	1980*	73	1995*	0	0	0	0	28
25	110	77	94	108	82	95	-1	117	2000*	71	1993*	0	0	0	0	29
26	112	76	94	108	82	95	-1	118	1995*	71	1986*	0	0	0	0	29
27	107	78	92	108	82	95	-3	120	1998*	72	1993*	0	0	0	0	27
28	107	77	92	108	82	95	-3	123	1995*	68	1987*	0	0	0	0	27
29	102	87	94	108	82	95	-1	116	1972*	64	1987*	0	0	0	0	29
30	110	85	98	108	82	95	3	117	1995*	73	1948*	0	0	0	0	33
31	109	80	94	108	81	94	0	120	1972*	72	2001*	0	0	0	0	29

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For August 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	104	85	94	108	81	94	0	120	1972*	70	1959*	0	0	0	0	29
2	112	83	98	108	81	94	4	118	1995*	70	1976*	0	0	0	0	33
3	111	84	98	107	81	94	4	118	1998*	68	1976*	0	0	0	0	33
4	113	79	96	107	81	94	2	118	1969*	67	1976*	0	0	0	0	31
5	115	80	98	107	81	94	4	118	2000*	70	1976*	0	0	0	0	33
6	107	87	97	107	81	94	3	118	1995*	66	1976*	0	0	0	0	32
7	109	84	96	107	81	94	2	117	1980*	68	1988*	0	0	0	0	31
8	106	76	91	107	81	94	-3	119	1980*	69	1999*	0	0	0	0	26
9	108	80	94	107	81	94	0	115	1995*	68	2009*	0	0	0	0	29
10	107	78	92	107	81	94	-2	116	2003*	67	1949*	0	0	0	0	27
11	108	80	94	107	81	94	0	116	1962*	70	1999*	0	0	0	0	29
12	109	87	98	107	81	94	4	116	1962*	69	1949*	0	0	0	0	33
13	114	87	100	107	81	94	6	119	1960*	66	1993*	0	0	0	0	35
14	116	88	102	107	80	94	8	117	1962*	65	1968*	0	0	0	0	37
15	116	90	103	107	80	94	9	116	2015*	64	1993*	0	0	0	0	38
16	116	89	102	107	80	94	8	116	2015*	67	1980*	0	0	0	0	37
17	112	88	100	107	80	94	6	116	1992*	67	1980*	0	0	0	0	35
18	111	83	97	107	80	93	4	115	1992*	64	1976*	0	0	0	0	32
19	109	83	96	107	80	93	3	114	1973*	66	1976*	0	0	0	0	31
20	106	83	94	107	80	93	1	113	1992*	68	1980*	0	0	0	0	29
21	106	82	94	107	80	93	1	116	1969*	69	2014*	0	0	0	0	29
22	107	81	94	107	79	93	1	116	1972*	68	2014*	0	0	0	0	29
23	108	77	92	106	79	93	-1	116	2011*	64	1968*	0	0	0	0	27
24	110	81	96	106	79	93	3	119	1985*	66	1968*	0	0	0	0	31
25	97	86	92	106	79	93	-1	115	1985*	68	1973*	0	0	0	0	27
26	107	81	94	106	79	92	2	115	2011*	66	1951*	0	0	0	0	29
27	111	85	98	106	79	92	6	115	2005*	67	1973*	0	0	0	0	33
28	110	86	98	106	78	92	6	118	1998*	65	1973*	0	0	0	0	33
29	113	87	100	106	78	92	8	118	1948*	66	1975*	0	0	0	0	35
30	112	86	99	106	78	92	7	116	1998*	62	1957*	0	0	0	0	34
31	107	82	94	106	78	92	2	119	1950*	62	1992*	0	0	0	0	29

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City Go My Locati ons Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For September 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	104	82	93	105	78	91	2	121	1950*	64	1966*	0	0	0	0	28
2	103	78	90	105	77	91	-1	118	1948*	64	2000*	0	0	0	0	25
3	105	76	90	105	77	91	-1	118	1948*	65	1964*	0	0	0	0	25
4	101	79	90	105	77	91	-1	115	1948*	61	1985*	0	0	0	0	25
5	101	80	90	105	76	90	0	113	1955*	59	1976*	0	0	0	0	25
6	104	81	92	104	76	90	2	114	1955*	66	1992*	0	0	0	0	27
7	106	83	94	104	76	90	4	112	1994*	60	1985*	0	0	0	0	29
8	108	85	96	104	75	90	6	116	1979*	65	2010*	0	0	0	0	31
9	95	79	87	104	75	89	-2	114	1993*	62	1961*	0	0	0	0	22
10	100	84	92	103	75	89	3	114	1990*	63	2005*	0	0	0	0	27
11	104	78	91	103	74	89	2	115	1990*	61	1985*	0	0	0	0	26
12	103	82	92	103	74	88	4	113	1971*	59	1985*	0	0	0	0	27
13	108	82	95	102	74	88	7	112	1971*	58	1985*	0	0	0	0	30
14	102	80	91	102	73	88	3	113	1971*	60	2005*	0	0	0	0	26
15	97	76	86	102	73	87	-1	113	2000*	61	2005*	0	0	0	0	21
16	97	76	86	101	72	87	-1	110	1962*	61	1970*	0	0	0	0	21
17	97	70	84	101	72	86	-2	112	1962*	61	1977*	0	0	0	0	19
18	100	69	84	100	72	86	-2	111	1980*	57	1985*	0	0	0	0	19
19	104	72	88	100	71	86	2	113	1962*	56	1985*	0	0	0	0	23
20	106	75	90	100	71	85	5	108	1962*	53	1971*	0	0	0	0	25
21	96	78	87	99	70	85	2	108	2009*	59	1986*	0	0	0	0	22
22	95	76	86	99	70	84	2	110	1966*	55	1988*	0.04	0	0	0	21
23	99	74	86	98	70	84	2	111	1966*	56	2007*	0	0	0	0	21
24	106	76	91	98	69	84	7	109	2002*	54	1986*	0	0	0	0	26
25	110	79	94	98	69	83	11	110	2015*	59	1993*	0	0	0	0	29
26	107	84	96	97	68	83	13	110	2010*	53	1971*	0	0	0	0	31
27	107	77	92	97	68	82	10	110	2010*	54	1971*	0	0	0	0	27
28	105	78	92	96	67	82	10	108	2009*	55	1982*	0	0	0	0	27
29	105	76	90	96	67	81	9	110	1980*	56	2013*	0	0	0	0	25
30	107	75	91	96	66	81	10	109	1980*	51	2005*	0	0	0	0	26

M = Missing

Blythe, CA

Change Location: Enter a Postal Code, or City | Go | My Locati ons | Add to My Locati ons

Units: English | Metric

Table Graph Details

Actual Conditions For October 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: _Month ▼ _Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	105	75	90	95	66	80	10	111	1980*	53	1971*	0	0	0	0	25
2	95	73	84	95	66	80	4	111	1980*	52	1971*	0	0	0	0	19
3	95	68	82	94	65	80	2	107	1987*	49	2002*	0	0	0	0	17
4	90	73	82	94	65	79	3	107	1987*	53	2002*	0	0	0	0	17
5	84	69	76	93	64	79	-3	108	1987*	52	2009*	0	0	0	0	11
6	82	64	73	93	64	78	-5	110	1987*	49	2009*	0.03	0	0	0	8
7	89	62	76	93	63	78	-2	108	1987*	49	2009*	0	0	0	0	11
8	99	67	83	92	63	78	5	106	1996*	51	2011*	0	0	0	0	18
9	100	71	86	92	62	77	9	106	1996*	46	1949*	0	0	0	0	21
10	99	76	88	91	62	77	11	107	1991*	48	1949*	0	0	0	0	23
11	99	71	85	91	62	76	9	105	1965*	50	2013*	0	0	0	0	20
12	98	73	86	90	61	76	10	105	1999*	50	2000*	0	0	0	0	21
13	99	75	87	90	61	76	11	106	1950*	47	1969*	0	0	0	0	22
14	102	72	87	90	61	75	12	103	1961*	50	1994*	0	0	0	0	22
15	101	79	90	89	60	75	15	103	1950*	52	1986*	0	0	0	0	25
16	95	71	83	89	60	74	9	102	1958*	49	1980*	0.24	0	0	0	18
17	89	71	80	89	59	74	6	101	2011*	46	1994*	0	0	0	0	15
18	89	72	80	88	59	74	6	104	2003*	41	1971*	0.24	0	0	0	15
19	82	65	74	88	59	73	1	104	2003*	41	1971*	0	0	0	0	9
20	83	63	73	87	58	73	0	103	2003*	42	1949*	0.33	0	0	0	8
21	82	61	72	87	58	72	0	104	2003*	44	1949*	0	0	0	0	7
22	84	60	72	87	58	72	0	104	2003*	44	1996*	0	0	0	0	7
23	89	61	75	86	57	72	3	101	2003*	39	1996*	0	0	0	0	10
24	90	64	77	86	57	71	6	102	1959*	42	1996*	0	0	0	0	12
25	86	66	76	86	56	71	5	98	1965*	44	1975*	0	0	0	0	11
26	91	62	76	85	56	71	5	98	1965*	41	1971*	0	0	0	0	11
27	89	59	74	85	56	70	4	99	2008*	45	1971*	0	0	0	0	9
28	88	65	76	84	55	70	6	98	1965*	44	1996*	0	0	0	0	11
29	85	67	76	84	55	69	7	97	1965*	33	1971*	0	0	0	0	11
30	83	64	74	84	55	69	5	95	1966*	27	1971*	0	0	0	0	9
31	86	58	72	83	54	69	3	97	1966*	29	1971*	0	0	0	0	7

M = Missing

Actual Conditions For November 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	90	55	72	83	54	68	4	95	1997*	42	1972*	0	0	0	0	7
2	92	56	74	82	53	68	6	93	1997*	38	1971*	0	0	0	0	9
3	75	59	67	82	53	67	0	95	2010*	40	1979*	0	0	0	0	2
4	71	51	61	81	53	67	-6	94	2010*	38	1956*	0	0	0	4	0
5	69	45	57	81	52	67	-10	94	1980*	43	1994*	0	0	0	8	0
6	76	49	62	80	52	66	-4	94	1988*	42	2011*	0	0	0	3	0
7	77	53	65	80	52	66	-1	92	2007*	41	1993*	0	0	0	0	0
8	77	46	62	80	51	65	-3	93	2016*	40	2011*	0	0	0	3	0
9	80	45	62	79	51	65	-3	90	2016*	41	2000*	0	0	0	3	0
10	72	50	61	79	50	64	-3	89	1980*	39	2010*	0	0	0	4	0
11	71	48	60	78	50	64	-4	88	2013*	36	1950*	0	0	0	5	0
12	73	45	59	78	49	64	-5	91	1999*	32	1950*	0	0	0	6	0
13	78	44	61	77	49	63	-2	93	1999*	35	1985*	0	0	0	4	0
14	76	44	60	77	49	63	-3	91	1999*	32	2000*	0	0	0	5	0
15	72	48	60	76	48	62	-2	90	1999*	39	1994*	0.05	0	0	5	0
16	66	52	59	76	48	62	-3	88	1995*	35	2000*	0	0	0	6	0
17	69	48	58	75	47	61	-3	89	1995*	35	1958*	0	0	0	7	0
18	73	45	59	75	47	61	-2	87	2008*	34	1958*	0	0	0	6	0
19	79	45	62	74	47	60	2	87	2008*	35	1958*	0	0	0	3	0
20	83	51	67	74	46	60	7	87	2006*	27	1994*	0	0	0	0	2
21	80	57	68	73	46	60	8	87	1950*	33	1994*	0	0	0	0	3
22	78	46	62	73	45	59	3	88	1950*	35	1992*	0	0	0	3	0
23	76	43	60	72	45	59	1	86	1949*	35	2010*	0	0	0	5	0
24	79	44	62	72	45	58	4	87	1995*	34	1971*	0	0	0	3	0
25	71	52	62	71	44	58	4	87	1950*	32	1952*	0	0	0	3	0
26	65	44	54	71	44	58	-4	87	1995*	34	2010*	0	0	0	11	0
27	61	42	52	70	44	57	-5	86	1954*	26	2010*	0	0	0	13	0
28	63	36	50	70	43	57	-7	83	1949*	30	1994*	0	0	0	15	0
29	62	39	50	70	43	56	-6	83	1953*	33	1976*	0	0	0	15	0
30	64	34	49	69	43	56	-7	82	2008*	32	1975*	0	0	0	16	0

M = Missing

Actual Conditions For December 2015

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	67	36	52	69	42	56	-4	82	2008*	33	1952*	0	0	0	13	0
2	70	37	54	68	42	55	-1	82	1959*	30	1991*	0	0	0	11	0
3	72	37	54	68	42	55	-1	83	1958*	32	1991*	0	0	0	11	0
4	64	39	52	68	42	55	-3	80	2012*	35	2009*	0	0	0	13	0
5	74	40	57	68	42	54	3	80	1962*	31	2009*	0	0	0	8	0
6	71	42	56	67	41	54	2	81	1966*	32	1972*	0	0	0	9	0
7	73	44	58	67	41	54	4	79	1995*	29	2011*	0	0	0	7	0
8	73	42	58	67	41	54	4	78	1996*	29	1978*	0	0	0	7	0
9	69	43	56	66	41	54	2	80	1962*	26	1978*	0	0	0	9	0
10	71	41	56	66	41	54	2	82	1950*	25	1971*	0	0	0	9	0
11	72	53	62	66	41	53	9	81	1958*	31	1994*	0	0	0	3	0
12	67	47	57	66	40	53	4	82	2010*	24	1971*	0	0	0	8	0
13	70	38	54	66	40	53	1	80	1995*	30	1985*	0	0	0	11	0
14	62	46	54	66	40	53	1	78	1952*	29	2001*	0	0	0	11	0
15	58	37	48	65	40	53	-5	81	1977*	24	1971*	0	0	0	17	0
16	60	37	48	65	40	53	-5	85	1980*	26	2005*	0	0	0	17	0
17	62	29	46	65	40	53	-7	82	1998*	29	2015*	0	0	0	19	0
18	66	34	50	65	40	53	-3	77	1950*	30	1968*	0	0	0	15	0
19	63	35	49	65	40	53	-4	76	1999*	25	1968*	0	0	0	16	0
20	65	42	54	65	40	53	1	79	1950*	29	2006*	0	0	0	11	0
21	62	36	49	65	40	53	-4	76	1950*	29	1968*	0	0	0	16	0
22	71	46	58	65	40	53	5	77	1955*	24	1968*	0	0	0	7	0
23	72	44	58	65	40	53	5	82	1955*	27	1968*	0	0	0	7	0
24	63	46	54	65	40	53	1	81	2005*	30	1968*	0	0	0	11	0
25	60	42	51	65	40	53	-2	77	1980*	30	1953*	0	0	0	14	0
26	57	43	50	65	40	53	-3	79	1980*	30	2002*	0	0	0	15	0
27	57	36	46	65	41	53	-7	80	1980*	25	1987*	0	0	0	19	0
28	54	26	40	65	41	53	-13	80	1980*	26	2015*	0	0	0	25	0
29	59	35	47	65	41	53	-6	87	1980*	28	2003*	0	0	0	18	0
30	59	30	44	66	41	53	-9	83	1980*	27	1988*	0	0	0	21	0
31	61	34	48	66	41	53	-5	79	1980*	26	1988*	0	0	0	17	0

M = Missing

Actual Conditions For January 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	59	33	46	66	41	53	-7	82	1981*	24	1976*	0	0	0	19	0
2	65	36	50	66	41	54	-4	80	1981*	27	2015*	0	0	0	15	0
3	67	41	54	66	41	54	0	78	1997*	21	1974*	0	0	0	11	0
4	54	47	50	66	41	54	-4	80	1981*	23	1950*	0.13	0	0	15	0
5	58	50	54	66	41	54	0	79	1981*	22	1972*	0.34	0	0	11	0
6	64	45	54	66	42	54	0	80	1962*	25	1950*	0.04	0	0	11	0
7	58	46	52	66	42	54	-2	85	1962*	24	1971*	0.04	0	0	13	0
8	61	41	51	67	42	54	-3	84	1962*	20	1971*	0	0	0	14	0
9	61	36	48	67	42	54	-6	80	1962*	25	1971*	0	0	0	17	0
10	62	47	54	67	42	54	0	80	1962*	26	1971*	0	0	0	11	0
11	62	45	54	67	42	54	0	80	1986*	27	1950*	0	0	0	11	0
12	63	37	50	67	42	55	-5	79	1983*	26	1962*	0	0	0	15	0
13	62	35	48	67	42	55	-7	78	1996*	25	2013*	0	0	0	17	0
14	64	35	50	68	42	55	-5	80	1983*	25	2007*	0	0	0	15	0
15	72	42	57	68	42	55	2	78	2014*	28	1987*	0	0	0	8	0
16	65	41	53	68	42	55	-2	83	1976*	29	1964*	0	0	0	12	0
17	69	42	56	68	42	55	1	82	2011*	25	2007*	0	0	0	9	0
18	65	44	54	68	42	55	-1	85	1971*	30	2002*	0	0	0	11	0
19	70	41	56	68	42	55	1	84	1971*	29	1990*	0	0	0	9	0
20	73	43	58	68	43	55	3	83	1971*	30	2008*	0	0	0	7	0
21	71	46	58	68	43	56	2	80	2009*	30	1973*	0	0	0	7	0
22	70	41	56	68	43	56	0	79	1994*	31	1987*	0	0	0	9	0
23	65	42	54	69	43	56	-2	82	1950*	30	1972*	0	0	0	11	0
24	71	43	57	69	43	56	1	82	1951*	29	1996*	0	0	0	8	0
25	70	43	56	69	43	56	0	89	1951*	31	1972*	0	0	0	9	0
26	68	47	58	69	43	56	2	81	2003*	30	2002*	0	0	0	7	0
27	70	42	56	69	43	56	0	79	2003*	29	1972*	0	0	0	9	0
28	72	44	58	69	43	56	2	80	2014*	29	1972*	0	0	0	7	0
29	71	41	56	69	43	56	0	81	1953*	30	1975*	0	0	0	9	0
30	82	45	64	70	43	56	8	83	2003*	26	1949*	0	0	0	1	0
31	77	48	62	70	44	56	6	86	2003*	30	1972*	0.01	0	0	3	0

M = Missing

Actual Conditions For February 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	62	45	54	70	44	57	-3	84	2003*	28	2002*	0	0	0	11	0
2	58	38	48	70	44	57	-9	85	1963*	31	1951*	0	0	0	17	0
3	60	39	50	70	44	57	-7	84	1963*	23	1972*	0	0	0	15	0
4	65	33	49	70	44	57	-8	84	1963*	26	2011*	0	0	0	16	0
5	71	48	60	70	44	57	3	87	1983*	33	1956*	0	0	0	5	0
6	71	42	56	70	44	57	-1	88	1963*	30	1989*	0	0	0	9	0
7	80	44	62	71	44	57	5	89	1996*	31	1989*	0	0	0	3	0
8	82	53	68	71	44	58	10	88	1963*	35	2002*	0	0	0	0	3
9	83	50	66	71	45	58	8	86	1996*	30	1949*	0	0	0	0	1
10	84	48	66	71	45	58	8	87	1951*	32	1986*	0	0	0	0	1
11	83	47	65	71	45	58	7	90	1957*	33	1986*	0	0	0	0	0
12	83	47	65	71	45	58	7	85	1971*	29	1965*	0	0	0	0	0
13	84	45	64	72	45	58	6	90	1957*	31	1972*	0	0	0	1	0
14	87	51	69	72	45	59	10	87	2016*	31	1966*	0	0	0	0	4
15	88	65	76	72	46	59	17	88	2016*	26	1990*	0	0	0	0	11
16	88	55	72	72	46	59	13	88	2016*	22	1990*	0	0	0	0	7
17	88	47	68	72	46	59	9	88	2016*	31	1956*	0	0	0	0	3
18	83	62	72	72	46	59	13	93	1981*	35	1967*	0	0	0	0	7
19	81	58	70	73	46	60	10	90	1981*	31	1956*	0	0	0	0	5
20	84	54	69	73	46	60	9	86	1981*	32	1990*	0	0	0	0	4
21	87	53	70	73	47	60	10	92	1977*	32	1953*	0	0	0	0	5
22	85	51	68	73	47	60	8	88	1982*	32	1955*	0	0	0	0	3
23	76	56	66	74	47	60	6	87	2002*	31	1953*	0	0	0	0	1
24	76	46	61	74	47	61	0	90	1986*	34	1996*	0	0	0	4	0
25	83	48	66	74	48	61	5	93	1986*	32	1960*	0	0	0	0	1
26	86	46	66	74	48	61	5	92	1986*	35	1977*	0	0	0	0	1
27	86	51	68	75	48	61	7	93	1986*	30	1996*	0	0	0	0	3
28	87	52	70	75	48	61	9	93	1986*	31	1962*	0	0	0	0	5
29	89	53	71	75	48	62	9	89	2016*	38	2012*	0	0	0	0	6

M = Missing

Actual Conditions For March 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	90	53	72	75	48	62	10	90	2016*	34	1962*	0	0	0	0	7
2	89	56	72	75	48	62	10	89	2016*	36	1997*	0	0	0	0	7
3	88	55	72	76	49	62	10	90	1986*	31	1971*	0	0	0	0	7
4	88	55	72	76	49	62	10	88	2016*	31	2002*	0	0	0	0	7
5	84	57	70	76	49	62	8	91	1986*	33	2002*	0	0	0	0	5
6	81	59	70	76	49	63	7	92	1986*	36	1977*	0	0	0	0	5
7	67	45	56	76	49	63	-7	90	1960*	37	1982*	0	0	0	9	0
8	78	45	62	77	49	63	-1	91	1957*	35	1969*	0	0	0	3	0
9	84	54	69	77	50	63	6	92	2004*	34	1964*	0	0	0	0	4
10	87	58	72	77	50	64	8	95	1997*	41	2010*	0	0	0	0	7
11	87	57	72	78	50	64	8	93	1997*	38	1969*	0	0	0	0	7
12	76	50	63	78	50	64	-1	92	2007*	37	1990*	0	0	0	2	0
13	80	47	64	78	50	64	0	95	2007*	30	1956*	0	0	0	1	0
14	83	51	67	78	50	64	3	95	2013*	38	1952*	0	0	0	0	2
15	86	57	72	78	50	64	8	94	2004*	34	1977*	0	0	0	0	7
16	90	52	71	79	50	65	6	98	2007*	36	1963*	0	0	0	0	6
17	90	53	72	79	51	65	7	99	2007*	36	2002*	0	0	0	0	7
18	92	56	74	79	51	65	9	94	1997*	37	1979*	0	0	0	0	9
19	93	59	76	79	51	65	11	96	1997*	39	1977*	0	0	0	0	11
20	95	59	77	80	51	65	12	99	2004*	41	2012*	0	0	0	0	12
21	94	58	76	80	51	66	10	100	2004*	40	1987*	0	0	0	0	11
22	82	60	71	80	51	66	5	98	2004*	39	2006*	0	0	0	0	6
23	78	59	68	80	51	66	2	95	1956*	43	2011*	0	0	0	0	3
24	85	53	69	81	51	66	3	95	1956*	37	1995*	0	0	0	0	4
25	89	54	72	81	52	66	6	96	1981*	41	1964*	0	0	0	0	7
26	84	60	72	81	52	66	6	96	1988*	40	1995*	0	0	0	0	7
27	86	53	70	81	52	67	3	100	1986*	36	1975*	0	0	0	0	5
28	80	58	69	82	52	67	2	97	2015*	40	1972*	0	0	0	0	4
29	70	52	61	82	52	67	-6	96	2015*	37	1972*	0	0	0	4	0
30	71	45	58	82	52	67	-9	100	1971*	38	1998*	0	0	0	7	0
31	79	51	65	82	52	67	-2	100	2011*	38	1972*	0	0	0	0	0

M = Missing

Actual Conditions For April 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	85	55	70	83	53	68	2	99	2011*	44	2010*	0	0	0	0	5
2	88	51	70	83	53	68	2	98	1966*	40	1975*	0	0	0	0	5
3	91	54	72	83	53	68	4	101	1961*	40	1975*	0	0	0	0	7
4	93	58	76	83	53	68	8	106	1961*	41	1977*	0	0	0	0	11
5	95	61	78	84	53	68	10	100	1989*	42	1983*	0	0	0	0	13
6	96	65	80	84	54	69	11	103	1989*	43	2006*	0	0	0	0	15
7	90	69	80	84	54	69	11	105	1989*	44	1964*	0.01	0	0	0	15
8	75	62	68	84	54	69	-1	107	1989*	42	1999*	0.03	0	0	0	3
9	83	62	72	85	54	70	2	102	1989*	42	2011*	0	0	0	0	7
10	74	57	66	85	55	70	-4	101	1960*	38	1975*	0.06	0	0	0	1
11	76	58	67	85	55	70	-3	99	2014*	44	2001*	0	0	0	0	2
12	85	57	71	86	55	70	1	100	1990*	44	1967*	0	0	0	0	6
13	90	60	75	86	55	71	4	103	1985*	40	1983*	0	0	0	0	10
14	90	62	76	86	56	71	5	104	2002*	46	1983*	0	0	0	0	11
15	82	61	72	86	56	71	1	104	1962*	46	2012*	0	0	0	0	7
16	84	65	74	87	56	71	3	104	1984*	41	2009*	0	0	0	0	9
17	87	65	76	87	56	72	4	103	1987*	44	1976*	0	0	0	0	11
18	91	56	74	87	57	72	2	104	1954*	41	1963*	0	0	0	0	9
19	95	56	76	88	57	72	4	106	1980*	44	1968*	0	0	0	0	11
20	99	62	80	88	58	73	7	103	1980*	46	1995*	0	0	0	0	15
21	98	62	80	88	58	73	7	105	2012*	42	1967*	0	0	0	0	15
22	97	61	79	88	58	73	6	106	2012*	41	1970*	0	0	0	0	14
23	87	65	76	89	58	74	2	106	1949*	44	2010*	0	0	0	0	11
24	93	62	78	89	59	74	4	105	1996*	46	1964*	0	0	0	0	13
25	81	60	70	89	59	74	-4	102	1987*	46	1989*	0	0	0	0	5
26	82	52	67	90	59	74	-7	106	1996*	48	1971*	0	0	0	0	2
27	85	59	72	90	60	75	-3	106	1987*	45	1963*	0	0	0	0	7
28	77	59	68	90	60	75	-7	106	1992*	44	1970*	0	0	0	0	3
29	88	55	72	91	60	76	-4	107	1992*	45	1984*	0	0	0	0	7
30	75	60	68	91	61	76	-8	105	1992*	46	1967*	0.04	0	0	0	3

M = Missing

Actual Conditions For May 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	84	55	70	91	61	76	-6	105	1985*	49	1990*	0	0	0	0	5
2	90	60	75	92	61	76	-1	105	1966*	48	1967*	0	0	0	0	10
3	95	66	80	92	62	77	3	103	2014*	50	1991*	0	0	0	0	15
4	102	65	84	92	62	77	7	105	2004*	49	1999*	0	0	0	0	19
5	90	66	78	92	62	77	1	105	1997*	45	1964*	0	0	0	0	13
6	79	60	70	93	62	78	-8	108	1987*	47	1988*	0	0	0	0	5
7	79	57	68	93	63	78	-10	108	1989*	46	1988*	0	0	0	0	3
8	85	56	70	93	63	78	-8	109	2001*	49	1964*	0	0	0	0	5
9	89	62	76	94	63	78	-2	108	2001*	49	2015*	0	0	0	0	11
10	93	64	78	94	64	79	-1	109	1960*	48	1977*	0	0	0	0	13
11	96	66	81	94	64	79	2	113	1960*	50	1982*	0	0	0	0	16
12	102	67	84	95	64	79	5	112	1996*	50	1980*	0	0	0	0	19
13	103	68	86	95	64	80	6	108	1996*	50	1962*	0	0	0	0	21
14	101	74	88	95	64	80	8	107	2013*	50	1998*	0	0	0	0	23
15	93	68	80	96	65	80	0	107	2012*	53	1962*	0	0	0	0	15
16	93	62	78	96	65	80	-2	109	1997*	50	2015*	0	0	0	0	13
17	92	65	78	96	65	81	-3	110	1997*	53	1977*	0	0	0	0	13
18	93	65	79	96	65	81	-2	110	1970*	54	1977*	0	0	0	0	14
19	100	70	85	97	66	81	4	113	2008*	49	2011*	0	0	0	0	20
20	96	72	84	97	66	81	3	111	2008*	51	1949*	0	0	0	0	19
21	86	59	72	97	66	82	-10	110	2005*	47	1975*	0	0	0	0	7
22	86	56	71	98	66	82	-11	113	2000*	45	1971*	0	0	0	0	6
23	90	60	75	98	66	82	-7	110	2001*	50	1971*	0	0	0	0	10
24	86	63	74	98	66	82	-8	112	2001*	51	2010*	0	0	0	0	9
25	86	56	71	98	67	83	-12	113	1951*	51	1980*	0	0	0	0	6
26	90	57	74	99	67	83	-9	112	1974*	52	1996*	0	0	0	0	9
27	94	67	80	99	67	83	-3	114	1951*	50	1962*	0	0	0	0	15
28	97	66	82	99	67	83	-1	114	1983*	52	1971*	0	0	0	0	17
29	94	64	79	100	68	84	-5	114	2000*	43	1971*	0	0	0	0	14
30	97	67	82	100	68	84	-2	113	1984*	56	1988*	0	0	0	0	17
31	102	69	86	100	68	84	2	112	2012*	55	1991*	0	0	0	0	21

M = Missing

Actual Conditions For June 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	105	73	89	101	68	84	5	114	2012*	46	1980*	0	0	0	0	24
2	110	74	92	101	68	85	7	112	1960*	56	1983*	0	0	0	0	27
3	113	77	95	101	69	85	10	113	2016*	55	1971*	0	0	0	0	30
4	118	78	98	102	69	85	13	118	2016*	56	1998*	0	0	0	0	33
5	114	78	96	102	69	85	11	116	1957*	55	1999*	0	0	0	0	31
6	109	74	92	102	69	86	6	114	2002*	59	1993*	0	0	0	0	27
7	107	76	92	102	70	86	6	117	1985*	52	1993*	0	0	0	0	27
8	105	77	91	103	70	86	5	118	1955*	58	1998*	0	0	0	0	26
9	103	81	92	103	70	87	5	118	1955*	57	1995*	0	0	0	0	27
10	98	77	88	103	70	87	1	116	1994*	60	1969*	0	0	0	0	23
11	99	73	86	104	71	87	-1	114	1956*	56	1976*	0	0	0	0	21
12	98	70	84	104	71	87	-3	116	1956*	62	1998*	0	0	0	0	19
13	99	70	84	104	71	88	-4	115	1979*	56	1998*	0	0	0	0	19
14	102	70	86	104	72	88	-2	117	1966*	59	1997*	0	0	0	0	21
15	101	75	88	105	72	88	0	117	2000*	54	1962*	0	0	0	0	23
16	102	69	86	105	72	89	-3	116	1971*	58	1990*	0	0	0	0	21
17	106	73	90	105	73	89	1	116	2015*	57	1995*	0	0	0	0	25
18	110	73	92	106	73	89	3	119	2015*	60	1995*	0	0	0	0	27
19	119	83	101	106	73	90	11	119	2016*	61	1975*	0	0	0	0	36
20	124	86	105	106	74	90	15	124	2016*	58	1975*	0	0	0	0	40
21	111	87	99	106	74	90	9	116	2008*	64	1975*	0	0	0	0	34
22	113	84	98	106	74	90	8	119	1960*	65	2010*	0	0	0	0	33
23	112	79	96	107	75	91	5	118	1961*	63	1998*	0	0	0	0	31
24	111	80	96	107	75	91	5	118	1994*	63	1998*	0	0	0	0	31
25	109	83	96	107	75	91	5	122	1970*	66	1991*	0	0	0	0	31
26	111	82	96	107	76	92	4	122	1990*	61	1965*	0	0	0	0	31
27	114	89	102	107	76	92	10	121	1973*	62	1996*	0	0	0	0	37
28	115	85	100	108	76	92	8	123	1994*	67	1991*	0	0	0	0	35
29	103	88	96	108	77	92	4	121	1994*	67	1997*	0	0	0	0	31
30	106	86	96	108	77	92	4	119	1972*	68	1997*	0.03	0	0	0	31

M = Missing

Actual Conditions For July 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	108	83	96	108	77	93	3	118	1972*	62	1982*	0	0	0	0	31
2	108	83	96	108	78	93	3	119	2001*	66	1995*	0	0	0	0	31
3	108	83	96	108	78	93	3	119	1985*	67	1979*	0	0	0	0	31
4	112	81	96	108	78	93	3	121	1989*	67	1956*	0	0	0	0	31
5	111	80	96	108	79	93	3	118	1981*	69	1987*	0	0	0	0	31
6	109	82	96	108	79	94	2	117	1965*	67	1994*	0	0	0	0	31
7	107	79	93	108	79	94	-1	117	1985*	70	2005*	0	0	0	0	28
8	109	79	94	108	79	94	0	119	1985*	73	1949*	0	0	0	0	29
9	113	81	97	108	80	94	3	118	1958*	70	1987*	0	0	0	0	32
10	115	78	96	108	80	94	2	118	1973*	71	2015*	0	0	0	0	31
11	107	75	91	108	80	94	-3	118	1958*	69	1974*	0	0	0	0	26
12	109	79	94	108	80	94	0	118	1985*	69	2015*	0	0	0	0	29
13	109	76	92	108	80	94	-2	119	2005*	66	1962*	0	0	0	0	27
14	114	80	97	108	80	94	3	118	2003*	73	2011*	0	0	0	0	32
15	115	88	102	108	81	95	7	117	2006*	71	2001*	0	0	0	0	37
16	109	86	98	108	81	95	3	119	1960*	69	1993*	0	0	0	0	33
17	105	88	96	108	81	95	1	121	2005*	64	1983*	0	0	0	0	31
18	109	82	96	108	81	95	1	118	2005*	67	1987*	0	0	0	0	31
19	110	84	97	108	81	95	2	119	1961*	62	1987*	0	0	0	0	32
20	113	84	98	108	81	95	3	118	1978*	70	1993*	0	0	0	0	33
21	116	86	101	108	81	95	6	118	2006*	69	1973*	0	0	0	0	36
22	116	87	102	108	81	95	7	120	2006*	69	1995*	0	0	0	0	37
23	113	88	100	108	81	95	5	117	1981*	69	1987*	0	0	0	0	35
24	110	88	99	108	81	95	4	117	1980*	73	1995*	0	0	0	0	34
25	112	84	98	108	82	95	3	117	2000*	71	1993*	0	0	0	0	33
26	113	89	101	108	82	95	6	118	1995*	71	1986*	0	0	0	0	36
27	116	88	102	108	82	95	7	120	1998*	72	1993*	0	0	0	0	37
28	115	90	102	108	82	95	7	123	1995*	68	1987*	0	0	0	0	37
29	114	87	100	108	82	95	5	116	1972*	64	1987*	0	0	0	0	35
30	101	76	88	108	82	95	-7	117	1995*	73	1948*	0.24	0	0	0	23
31	105	82	94	108	81	94	0	120	1972*	72	2001*	0	0	0	0	29

M = Missing

Actual Conditions For August 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	105	83	94	108	81	94	0	120	1972*	70	1959*	0	0	0	0	29
2	105	83	94	108	81	94	0	118	1995*	70	1976*	0	0	0	0	29
3	107	85	96	107	81	94	2	118	1998*	68	1976*	0	0	0	0	31
4	107	86	96	107	81	94	2	118	1969*	67	1976*	0	0	0	0	31
5	109	85	97	107	81	94	3	118	2000*	70	1976*	0	0	0	0	32
6	110	83	96	107	81	94	2	118	1995*	66	1976*	0	0	0	0	31
7	112	84	98	107	81	94	4	117	1980*	68	1988*	0	0	0	0	33
8	111	81	96	107	81	94	2	119	1980*	69	1999*	0	0	0	0	31
9	104	83	94	107	81	94	0	115	1995*	68	2009*	0	0	0	0	29
10	104	84	94	107	81	94	0	116	2003*	67	1949*	0	0	0	0	29
11	104	83	94	107	81	94	0	116	1962*	70	1999*	0	0	0	0	29
12	106	85	96	107	81	94	2	116	1962*	69	1949*	0	0	0	0	31
13	113	87	100	107	81	94	6	119	1960*	66	1993*	0	0	0	0	35
14	112	88	100	107	80	94	6	117	1962*	65	1968*	0	0	0	0	35
15	116	87	102	107	80	94	8	116	2016*	64	1993*	0	0	0	0	37
16	115	83	99	107	80	94	5	116	2015*	67	1980*	0	0	0	0	34
17	110	85	98	107	80	94	4	116	1992*	67	1980*	0	0	0	0	33
18	108	84	96	107	80	93	3	115	1992*	64	1976*	0	0	0	0	31
19	105	79	92	107	80	93	-1	114	1973*	66	1976*	0	0	0	0	27
20	104	84	94	107	80	93	1	113	1992*	68	1980*	0	0	0	0	29
21	98	77	88	107	80	93	-5	116	1969*	69	2014*	0.14	0	0	0	23
22	106	78	92	107	79	93	-1	116	1972*	68	2014*	0	0	0	0	27
23	102	81	92	106	79	93	-1	116	2011*	64	1968*	0	0	0	0	27
24	108	78	93	106	79	93	0	119	1985*	66	1968*	0	0	0	0	28
25	107	83	95	106	79	93	2	115	1985*	68	1973*	0	0	0	0	30
26	102	81	92	106	79	92	0	115	2011*	66	1951*	0	0	0	0	27
27	101	80	90	106	79	92	-2	115	2005*	67	1973*	0	0	0	0	25
28	106	75	90	106	78	92	-2	118	1998*	65	1973*	0	0	0	0	25
29	111	78	94	106	78	92	2	118	1948*	66	1975*	0	0	0	0	29
30	112	80	96	106	78	92	4	116	1998*	62	1957*	0	0	0	0	31
31	110	82	96	106	78	92	4	119	1950*	62	1992*	0	0	0	0	31

M = Missing

Actual Conditions For September 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

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Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	104	83	94	105	78	91	3	121	1950*	64	1966*	0	0	0	0	29
2	106	84	95	105	77	91	4	118	1948*	64	2000*	0	0	0	0	30
3	106	81	94	105	77	91	3	118	1948*	65	1964*	0	0	0	0	29
4	101	72	86	105	77	91	-5	115	1948*	61	1985*	0	0	0	0	21
5	99	69	84	105	76	90	-6	113	1955*	59	1976*	0	0	0	0	19
6	99	66	82	104	76	90	-8	114	1955*	66	2016*	0	0	0	0	17
7	95	79	87	104	76	90	-3	112	1994*	60	1985*	0	0	0	0	22
8	100	79	90	104	75	90	0	116	1979*	65	2010*	0	0	0	0	25
9	105	77	91	104	75	89	2	114	1993*	62	1961*	0	0	0	0	26
10	110	75	92	103	75	89	3	114	1990*	63	2005*	0	0	0	0	27
11	109	78	94	103	74	89	5	115	1990*	61	1985*	0	0	0	0	29
12	103	78	90	103	74	88	2	113	1971*	59	1985*	0	0	0	0	25
13	95	73	84	102	74	88	-4	112	1971*	58	1985*	0	0	0	0	19
14	92	67	80	102	73	88	-8	113	1971*	60	2005*	0	0	0	0	15
15	96	60	78	102	73	87	-9	113	2000*	60	2016*	0	0	0	0	13
16	99	61	80	101	72	87	-7	110	1962*	61	2016*	0	0	0	0	15
17	102	63	82	101	72	86	-4	112	1962*	61	1977*	0	0	0	0	17
18	105	67	86	100	72	86	0	111	1980*	57	1985*	0	0	0	0	21
19	99	72	86	100	71	86	0	113	1962*	56	1985*	0	0	0	0	21
20	86	72	79	100	71	85	-6	108	1962*	53	1971*	0.13	0	0	0	14
21	88	72	80	99	70	85	-5	108	2009*	59	1986*	0	0	0	0	15
22	97	72	84	99	70	84	0	110	1966*	55	1988*	0	0	0	0	19
23	88	63	76	98	70	84	-8	111	1966*	56	2007*	0	0	0	0	11
24	95	60	78	98	69	84	-6	109	2002*	54	1986*	0	0	0	0	13
25	97	73	85	98	69	83	2	110	2015*	59	1993*	0	0	0	0	20
26	99	78	88	97	68	83	5	110	2010*	53	1971*	0	0	0	0	23
27	93	76	84	97	68	82	2	110	2010*	54	1971*	0	0	0	0	19
28	96	71	84	96	67	82	2	108	2009*	55	1982*	0	0	0	0	19
29	95	71	83	96	67	81	2	110	1980*	56	2013*	0	0	0	0	18
30	100	71	86	96	66	81	5	109	1980*	51	2005*	0	0	0	0	21

M = Missing

Actual Conditions For October 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

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Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	99	74	86	95	66	80	6	111	1980*	53	1971*	0	0	0	0	21
2	97	71	84	95	66	80	4	111	1980*	52	1971*	0	0	0	0	19
3	86	62	74	94	65	80	-6	107	1987*	49	2002*	0	0	0	0	9
4	87	62	74	94	65	79	-5	107	1987*	53	2002*	0	0	0	0	9
5	88	62	75	93	64	79	-4	108	1987*	52	2009*	0	0	0	0	10
6	91	61	76	93	64	78	-2	110	1987*	49	2009*	0	0	0	0	11
7	94	63	78	93	63	78	0	108	1987*	49	2009*	0	0	0	0	13
8	98	68	83	92	63	78	5	106	1996*	51	2011*	0	0	0	0	18
9	98	69	84	92	62	77	7	106	1996*	46	1949*	0	0	0	0	19
10	97	66	82	91	62	77	5	107	1991*	48	1949*	0	0	0	0	17
11	96	67	82	91	62	76	6	105	1965*	50	2013*	0	0	0	0	17
12	97	63	80	90	61	76	4	105	1999*	50	2000*	0	0	0	0	15
13	95	62	78	90	61	76	2	106	1950*	47	1969*	0	0	0	0	13
14	97	62	80	90	61	75	5	103	1961*	50	1994*	0	0	0	0	15
15	97	62	80	89	60	75	5	103	1950*	52	1986*	0	0	0	0	15
16	94	65	80	89	60	74	6	102	1958*	49	1980*	0	0	0	0	15
17	87	62	74	89	59	74	0	101	2011*	46	1994*	0	0	0	0	9
18	90	64	77	88	59	74	3	104	2003*	41	1971*	0	0	0	0	12
19	93	66	80	88	59	73	7	104	2003*	41	1971*	0	0	0	0	15
20	93	64	78	87	58	73	5	103	2003*	42	1949*	0	0	0	0	13
21	96	65	80	87	58	72	8	104	2003*	44	1949*	0	0	0	0	15
22	98	61	80	87	58	72	8	104	2003*	44	1996*	0	0	0	0	15
23	95	63	79	86	57	72	7	101	2003*	39	1996*	0	0	0	0	14
24	90	68	79	86	57	71	8	102	1959*	42	1996*	0.14	0	0	0	14
25	87	65	76	86	56	71	5	98	1965*	44	1975*	0	0	0	0	11
26	91	65	78	85	56	71	7	98	1965*	41	1971*	0	0	0	0	13
27	91	66	78	85	56	70	8	99	2008*	45	1971*	0	0	0	0	13
28	93	67	80	84	55	70	10	98	1965*	44	1996*	0	0	0	0	15
29	93	71	82	84	55	69	13	97	1965*	33	1971*	0	0	0	0	17
30	92	67	80	84	55	69	11	95	1966*	27	1971*	0	0	0	0	15
31	81	60	70	83	54	69	1	97	1966*	29	1971*	0	0	0	0	5

M = Missing

Actual Conditions For November 2016

Reports from: BLYTHE, CA [BLH]

(Lat: 33.62 Lon:-114.72)

Choose another month / year: Month ▼ Year ▼ GO

Choose another location: Postal Code or City GO

Enter a Different Station: station GO

Obs. Date	Act. High	Act. Low	Act. Avg	Norm. High	Norm. Low	Norm. Avg.	Norm. Dept.	Rec. High	Rec. Year	Rec. Low	Rec. Year	Precip. Amt	Snow Amt.	Snow Ground	Heat Deg Day	Cool Deg Day
1	80	53	66	83	54	68	-2	95	1997*	42	1972*	0	0	0	0	1
2	84	61	72	82	53	68	4	93	1997*	38	1971*	0	0	0	0	7
3	89	63	76	82	53	67	9	95	2010*	40	1979*	0	0	0	0	11
4	86	59	72	81	53	67	5	94	2010*	38	1956*	0	0	0	0	7
5	87	59	73	81	52	67	6	94	1980*	43	1994*	0	0	0	0	8
6	89	58	74	80	52	66	8	94	1988*	42	2011*	0	0	0	0	9
7	89	57	73	80	52	66	7	92	2007*	41	1993*	0	0	0	0	8
8	93	63	78	80	51	65	13	93	2016*	40	2011*	0	0	0	0	13
9	90	63	76	79	51	65	11	90	2016*	41	2000*	0	0	0	0	11
10	87	57	72	79	50	64	8	89	1980*	39	2010*	0	0	0	0	7
11	86	54	70	78	50	64	6	88	2013*	36	1950*	0	0	0	0	5
12	86	54	70	78	49	64	6	91	1999*	32	1950*	0	0	0	0	5
13	87	57	72	77	49	63	9	93	1999*	35	1985*	0	0	0	0	7
14	89	52	70	77	49	63	7	91	1999*	32	2000*	0	0	0	0	5
15	86	51	68	76	48	62	6	90	1999*	39	1994*	0	0	0	0	3
16	85	55	70	76	48	62	8	88	1995*	35	2000*	0	0	0	0	5
17	72	52	62	75	47	61	1	89	1995*	35	1958*	0	0	0	3	0
18	72	47	60	75	47	61	-1	87	2008*	34	1958*	0	0	0	5	0
19	72	42	57	74	47	60	-3	87	2008*	35	1958*	0	0	0	8	0
20	73	51	62	74	46	60	2	87	2006*	27	1994*	0	0	0	3	0
21	73	54	64	73	46	60	4	87	1950*	33	1994*	0.01	0	0	1	0
22	74	50	62	73	45	59	3	88	1950*	35	1992*	0	0	0	3	0
23	74	43	58	72	45	59	-1	86	1949*	35	2010*	0	0	0	7	0
24	75	52	64	72	45	58	6	87	1995*	34	1971*	0	0	0	1	0
25	76	44	60	71	44	58	2	87	1950*	32	1952*	0	0	0	5	0
26	65	42	54	71	44	58	-4	87	1995*	34	2010*	0	0	0	11	0
27	70	46	58	70	44	57	1	86	1954*	26	2010*	0.05	0	0	7	0
28	66	38	52	70	43	57	-5	83	1949*	30	1994*	0	0	0	13	0
29	66	44	55	70	43	56	-1	83	1953*	33	1976*	0	0	0	10	0
30	65	38	52	69	43	56	-4	82	2008*	32	1975*	0	0	0	13	0

M = Missing

Appendix D

Field Data

Appendix D

Field Data

Active Channels

Field Data Sheet : Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sam pl e Point # and/ o r Drainage ID # R S'-f0.-	Date: nl13//rn	Representativephoto taken?_Y_ Ye s /_ No

Upland Indicators	*WatercourseIndicators*	
Av Horlwn	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcat ed flow	Secondary channels
caliche·coatings. layers, rubble	B1ot1c crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathenng	Crusts: carbonate, sail, & soda	Sand filled channels
Coppice dunes: acuve & relict	Cut banks	Scour holesdownstream of obstructions
Deflated surfaces	Des1ccat1on Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drrft:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soillayer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment· tails
Relict channel	Headcuts	Springs
Rock fracture in place	lmbricated gravel	Stainingof rocks
Rock varnish	Knick Points	St epped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundati on. nood1ng, ponding , or substrate saturation	egetatlon - channel alignment
SOIidevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debris in place	Rliis	Wrack, woody

Note s:

• Adapted from: A Field Guide to the Identificat ion of the Ordinary High Water Mark (OHWM} In the Arid West Region of the Western United State s, A Delineation Manual (Lichvar and Mccolley 2008}; and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitting Utllity-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # and/or DrainageID# h:"S L\ b	Date: ,, / 13)/{p	Representative photo taken?_ Yes / No

Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
caliche ; coatings. layers,rubble	B,ouc crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts. carbonate, salt, & soda	Sand hlled channels
Coppice dunes: active & relict	u t banks	Scourholes downstream of obs-tructlons
Deflated surface5	Desiccatoon Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Reltct bar & swale	Flow or streaming lineat1ons	Sediment· tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	l(n,ck Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee **Ridges** sand & gravel	Substrate staining
Rublfied rock undersides	Observed ,nundat,on: flooding. ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debris In place	Rliis	Wrack, woody

Notes:

• Adapted from: A Field Guide to the ldentlflc.alionof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mccoll ey 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utltrty-Scale Solar Power Plants (Brady and Vyverberg , 2013) .

Field Data Sheet : Identificat ion of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID# _51./ C-	**Date:** 1,/13)1'1	**Re prese ntative photo taken?**/ Yes / No
U pland Indicators	*Watercourse Indicators*	
AV Horizon	Bars: mud, sand & gravel	Rippl es
Biotic Soll Crust	Beach ridges	/ Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
CJast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	u t b anks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drape	Sediment plastering
Desert pavement	0 r[ft: organic	Sediment ramps
Over-turned rock	EMposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	w or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morpho logy In gravel
No flow or pondingindicators	Levee Ridges: sand &gravel	Substrate staining
Rubifled rockundersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation -channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface roundingof landform	Overtumed rocks	Water levelmarks
Woody debris In place	Rills	Wrack: woody

Notes:

• Adapted from: AField Gulde to the Identificationof the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lithvar and McColley 2008); and M ethods t0 Describe and Delineate Episodic Stream Process on ArldLandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # and/ or **Drainage ID #** t.-<LIfO	**Date:** 11I/ /I/>	**Representative photo taken?** Yes/ .,P o

Upland Indicators	*W at ercourse Indicators*	
Av Horizon	Bars: mud. sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubat1on	Bifurcate d flow	Secondary channels
Callche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts· carbonate, salt,&soda	Sand filled channels
Coppice dunes: active & relict	/ut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sedimen t plastering
Desert pavement	Dri ft; organic	Sediment ramps
Over-turned rock	Exposed roo ts below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Spr ings
Rock fracture In place	Imbrlcated gravel	Stalningof rocks
Rock varnish	I<mck Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand &gravel	Substrate staining
Rubified rockundersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut be nches
Surface rounding of land form	Overturn ed rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes:

•Adapt ed fr om: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) i n the Arid West Regionof the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Ari d la ndscapes for Permitting Utility-ScaleSolar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicat ors of Upland and Watercourse Areas		
Sample Point # and/or Drain ageID# _ ⁴(J ;)	Date: JI/12/ /	Representative photo ta ken?_ Yes I L.o

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubation	Bifurcated now	Secondary channels
CJliche coatings,!avers, rubble	Biotic crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathenng	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: acuve & relict	V Cut banks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Dn ft : organic	Sediment ramps
Over turned rock	Exposed roots below intact soillayer	Sediment sorting
Relictbar &swale	Flow or streaming llneat1ons	Sediment: tail s
Relict channel	Headcuts	Springs
Rock fracture In place	lmbri cated gravel	Sta,n,ng of rocks
Rock varnish	Knick Pomts	Stepped bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand &gravel	Substrate staining
Rublfled rock undersides	Observed1nundation:llooding,ponding,or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debrisin place	Rliis	Wrack: woody

Notes:

•Adapted from: AField Guide to the Identificationof the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting U!illty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Feld Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID# I	**Date:** 1 /ltp / (ID	**Representative photo taken? _ _ Yes /i No**
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	v"" 'Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche'. coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstr uction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	/ Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud· cracks, curls/ drapes	Sediment plastering
Desert pavement	''' f Drift:organic	Sediment ramps
Over - turned rock	Exposed rootsbelow intact soillayer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sedimen t: tail s
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Stai ning o f rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No now or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes:

• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and McColley 2008); and Methods to Describe and Dellneate Episodic Stream Processon Arid landscapes for Permitting Utility-Scale Solar Power Plants(Bradyand Vyverberg, 2013).

Field Data Sheet : Identifi cat ion of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # RR and/or Drainage ID# I'DS	Date: 11/13//(	Representative photo taken? __ Yes/ - No

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic SollCrust	Beach ridges	yscour
Biotubation	Bifurcated flow	Secondary channels
Caliche: coatings. layers. rubble	B,ouccrusts	Secondary channel bypasstng obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts, carbona te, salt,& soda	Sand filled channels
Coppice dunes; active & relict	/Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Oes1ccatlon Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	' Drift: organ,c	Sediment ramps
Over-turned rock	EMposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/low ostreaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture 1n p lace	Imbncated gravel	Stainingor rocks
Rock varnish	Knick Points	Stepped-bed morpho logy in gravel
No flow or ponding Indicators	Levee Rodges sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation: flooding, ponding, or substrate saturatlon	Vegetation - channel alignment
Soildevelopment	Out or channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water *level* marks
Woody debris In place	Rills	Wrack: woody

Note s:

•Adapted from: A Field Guide to the Identifi cation of the Ordinary High Water Mark (OHWM) fn the Arid West Region of the Western United Stat es, A Delineation Manual (lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processon Aridla ndscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or DrainageID # RRLO'=f	**Date:** 1 1/13)/l,	**Representative photo taken?** Yes/ /. o

Upland Indicators	*Watercourse Indicators*	
Av Horizon	**Bars:** mud, sand & gravel	Ripples
Biotic SollCrust	Beach **ridges**	Scour
Biotubation	Bifurcat ed now	Secondary channels
Caliche : coatings, layers,rubble	B1ot1c crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	**Sediment sheets**
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	u t banks	Scour holesdownstream or obstructions
Deflated surfaces	Desiccation Mud: cracks, curl s/ drapes	Sedimen t plastering
Desert pavement	" 1/ ' 'o nft: organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soillayer	Sedimen t sorting
Relict bar &swale	/low ostreaming llneations	Sediment: tails
Relict channel	Headcuts	**Springs**
Rock frac ture on pl ace	lmbr ica ted gravel	Staining o f rocks
Rock varnish	Kmck Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation. flooding, ponding, or substrate saturation	Veget ation - channel alignmen t
Soil developmen t	Out of channel flow	Water-cut benches
Surface roun ding of land form	Overtu rned rocks	Water level marks
Woody debris In place	Rills	**Wrack; woody**

Notes :

•Adapted from: A Field Gulde to the Identificationof the Ordinary High Water Mark (OHWM)in the Arid West Region of the Western **United States, A Delineation Manual (Lichvar and Mccolley 2008) ; and Methods to Describe and Delineate EpisodicStream Processon** Arid Landscapes for Permitting Utility-ScaleSolar Power Plants (Brady and Vyverberg, 2013).

Dormant Channels

Summary of Observed Physical Indicators of Fluvial Inactivity Associated with Abandoned Water Courses Within the Study Area

NOTE THAT DATA SHEETS ARE ORGANIZED BY TYPE OF HYDROLOGIC DISCONNECTION DESCRIBED BELOW

Watercourse ID	Description of Hydrologic Disconnection	Physical Indicators of (fluvial inactivity)
RR1, RR2, & RR3	Small localized erosional features (rill erosion) associated with dirt access road through plowed farm field. Storm water flow contained within localized land feature. Plowed soils intercept surface water flow (Attachment A, Figure 7, Sheet 5).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR7 & RR8	Small localized erosional features (rill erosion) located on margins of graded dirt access road. Storm water flow contained within localized land feature. Roadway intercepts / cuts flow off. Roadway is actively maintained (Attachment A, Figure 7, Sheet 15).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR9, RR10, RR11, RR12, RR13, RR14, RR15, RR16, RR17, RR18, RR22, RR23, & RR40	Small localized erosional features (rill erosion) located on margins of an abandoned graded dirt access road. Storm water flow contained within localized land feature. Roadway intercepts / cuts surface water flow off (Attachment A, Figure 7, Sheet 11).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR6	Excavated ditch adjacent to abandoned cropland no longer irrigated from well-water source; Without irrigation, no excess irrigation runoff to ditch adjacent to constructed berm (Attachment A, Figure 7, Sheet 11).	Hydrologically isolated; no evidence of flow to or from the channel. No field indicators of flow found.
RR19, RR20a-f, RR21a-b, RR24a-e, RR25a-e, RR26, RR27a-b, RR28a-b, RR29, RR30a-b, RR31, RR32, RR33, RR34a-c, RR35, & RR36	Small localized erosional features (rill erosion) located on margins of an abandoned graded earthen levee surrounding a former irrigated cropland. Features result of levee construction (Attachment A, Figure 7, Sheet 11).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR37, RR38a, RR38b, & RR39	Storm water flow contained within localized land feature. Surface water flow cut-off upgradient by deeply incised dirt roadway maintained by periodic road grading; Roadway captures upslope surface water flows where they are absorbed into the soil. Roadway cut exposed underlying sand sheets / dune soils covered by alluvial fan deposits (see Appendix A, Figure 7, Sheets 10 & 15 and Figure 8). Hydrologically isolated with no flow to or from channels observed. Roadway is actively maintained.	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR47b, RR69, RR70, RR73, RR83, & RR85	Upgradient surface water flow cut-off from the west and northwest by sand sheet movement (see Appendix A, Figure 7, Sheet 10; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into

Summary of Observed Physical Indicators of Fluvial Inactivity Associated with Abandoned Water Courses Within the Study Area **NOTE THAT DATA SHEETS ARE ORGANIZED BY TYPE OF HYDROLOGIC DISCONNECTION DESCRIBED BELOW**		
Watercourse ID	**Description of Hydrologic Disconnection**	**Physical Indicators of (fluvial inactivity)**
		the soil.
RR90, RR91, RR92, RR93, RR94, RR95, RR96, RR97, RR98, RR99, RR 100, RR101, & RR 102,	Upgradient surface water flow cut-off by sand sheet movement and dune soils. Hydrologically isolated with no flow to or from channels observed (see Appendix A, Figure 8). (see Appendix A, Figure 7, Sheets 16 and 17; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR77 & RR80	Surface water flows from Pallowalla Wash/ channel diverted by earthen dike and intercepted by detention channel to protect solar farm project located to the northwest (see Appendix A, Figure 7, Sheet 6; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR66, RR67, RR68, RR81, & RR82, RR106	Sand sheet formation between discharge point and historical stream channels prevents surface water from reaching channels (see Appendix A, Figure 7, Sheets 2, 3, 5, & 6; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.
RR42 – RR47a, RR48 - RR58, RR60, RR71, RR72, RR74 – RR76, RR84, RR86 - RR88, RR103, & RR104	Sand sheet formation and movement combined with maintained incised dirt roadway cuts-off surface water flow to historical stream channels preventing surface water from reaching channels (see Appendix A, Figure 7, Sheets 9 & 10; and Figure 8).	Hydrologically isolated; no evidence of flow to or from the channels. Field indicators of surface flow found only to be over a short distance within the channel before infiltrating into the soil.

Field Data Sheet: Identification of Geomorph ic Ind icat ors of Upl and and Wate rcourse Areas		
Sample Point # and/or Drainage ID # RR&T	Date: 11/r /1r..	Representative photo taken? __ Yes/ _ _ L-o
Uplan d Indic at ors	I I	*Watercourse Indicators*
Av Horizon	Bars: mud, sand & gravel	Ripples
Blotrc SollCrust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	/utbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks,curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots belowIntact sol! layer	Sediment sorting
Relict bar &swale	ow or streaming llneat1ons	Sediment:: tails
Relict charinel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Stammg of rocks
Rock varnish	Knick Points	Stepped -bed morphology In gravel
No now or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rockundersides	Observed Inundation: flooding, ponding,or substrate saturation	Vegetation -channel allgnment
Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris 111 place	Rliis	Wrack: woody

Notes:

•Adapted from: AField Gulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uthvarand McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas,

Sample Point # ______ and/or Drainage ID # RR.	Date: 11/13/Jlit	Representative photo taken?_ Yes/ No

Upland Indicators	/ ▮ *Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
81otlcSoll Crust	Beach ridges	Scour
Blotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / **rock** weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	i/utbanks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccat1on Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Dri ft: organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbncated gravel	Staining of rocks
Rock varnish	Knick ?01nts	Stepped-bed morpho logy in gravel
No flow or pondinglnd1ca t or s	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed Inundation: flooding, ponding, or substrate saturatl on	Vegetation - channel alignment
Solldevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Notes:

•Adapted from:A FieldGuide to the Identification of the Ordinary High Water Mark(OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate EpisodicStream ?rocess on AridLandscapes for Perm i tt ing Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identific ation of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # and/or Dra i nage ID # RR(o3>	Date: U /J3) J<.0	Representative photo taken? Yes/ No
Upland Indicators	I ' **Watercourse Indicators**	
Av Horizon	Bars: mud, sand & gravel	Ripp le s
B1otlc Soll Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatlngs, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	/Cut banks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	E posed roots below Intact soil layer	Sediment sorting
Relict **bar** & swale	/Flow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation: flooding. ponding, or substrate saturation	Vegetation - channel alignment
Soildevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes:

• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United St.ates, A Delineation Manual (Lichvar and McCollev 2008); and Mel hods to Describe .and Delineate Episodic Stream Process on Aridlandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Ident ifi cat ion of Geomorphic Indicator s of Upland and Wat ercourse Areas		
Sam ple Point # : and/or DrainageID# /<RC,':f	Date: 11)13)/	Represent ati ve photo t aken?_ Yes/ L.0

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruc-t1on
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand ntled channels
Coppice dunes: active & relict	I/Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desfccatlon Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	/low ostreaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	lmbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubffled rock undersides	Observed inundation: noodlng, ponding, or substrate saturation	Vegetation - channel alignment
Solldevelopment	Out of channel flow	Water-cut benches
Surface roundi ng of landform	Overtumed rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Notes:

"Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # : **and/or Drainage ID #** RR.GS	**Date:**)/;3//	**Representative photo taken?__ Yes/ /. o**

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand &gravel	Rlpples
BioticSoil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flo w or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation : noodlng, ponding, or substrate saturation	Vegetation - channel alignment
Solldevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debris in place	Rliis	Wrack: woody

Notes :

"Adapted from: AField Gulde to the ldentlfic-ationof the Ordinary High Water Marl< (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llthvarand Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Protess on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomor phic Indicator s of Upland and Watercourse Areas

Sample Point # J?R. , : an d/or Dra i nage ID # . 1	Date: 11/13)/i	Repr esenta tive phot o take n? _ _ Yes / .L. 0

Up la nd Indicators	***Wat ercourse Indicators***	
Av Horizon	Bars:mud, sand & gravel	Ripples
Biotic SollCrust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt,& soda	Sand filled channels
Coppice dunes: **active** & relict	I, tbanks	Scour holes downstream of obstructions
Deflated surfaces	Des1cca1ton Mu d: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	/low ostreaming ilneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbri cated gravel	Staining of rocks
Roclcvarmsh	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubifled rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Veget ation - channel alignment
Soildevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Waterlevel marks
Woody debris In place	Rills	Wrack: woody

Notes:

• Adapted from: A FieldGuide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western UnitedStates, A Delineation Manual (Uchvar and McColley 200B); and Methods to Describe and Delineat e Episodic Stream Process on **Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).**

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # a ood Drainage ID # RR'1C,	Date: JJ/13/ J	Representative photo taken? Yes/
Upland Indicators	/ **Watercourse Indicators**	
Av Horizon	Bars: mud,sand & gravel	Ripples
B1ot1c Soil Crust	Beach ridges	Scour
Biotubat1on	Bifurcated flow	Secondary channels
Callche:coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks,curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over·turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	,-Flow or streaming lineations ./	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Point s	Stepped-bed mo rphology In gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soildevelopment	Out of channel flow	Water-cut benches
Surface rou nding of landform	Overturned rocks	Water level marks
Woody debris in place	Rlii s	Wrack: woody

Notes:

• Adapted from: A Field Guide to the Identifi cation of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitt ing Utili ty-Scale Sola,Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # and/or Drainage ID # R.R f:t1 :	Date: uJ,))	Representative photo taken? _ _ Yes/ L.o

Upland Indicators	*W atercour se Indicators* f	
Av Horizon	Bars: mud, sand &gravel	Ripples
Biotic SoilCrust	Beach ridges	Scour
Biotubat1on	Bifurcated flow	Secondary channels
Callche : coatings , layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	t ban ks	Scour holes downstream of obstructions
DeOated surfaces	Desiccation Mud: cracks,curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turn ed rock	Exposed rootsbelowIntact soil layer	Sediment sorting
Relict bar & swale	low or streaming llneations	Sediment: tails
Relict channel	Headcuts	Spnngs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morpho logy in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundati on: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soildevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overtumed rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes:

*Adapted from: AFieldGuide to the Identifi cation of the Ordinary High Water Marl((OHWM) in the Arid West Region of the Western United States, A Delineatio n Manual (Ilchvar and Mccolley2008) and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants(Brady and Vyverberg, 2013).

Active Watercourses

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID # FP 1	Date: n/r //o	Representative photo taken? 'V''' Yes/ __ No SP /-)-:
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach rrdges	Scour
Blotubation	Bifurcated flow	Secondary channels
Caliche: coatings , layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Oast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream or obstructions
Deflated surfaces	V esiccatlon Mud: crackscurls/ drapes	Sediment plastering
Desert pavement	a'''·'Drift:organic	Sediment ramps
Over-turn ed rock	Exposed roots belowIntact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sediment· **tails**
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No rlow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inu ndation : noodlng, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface ro unding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes:

•Adapted from: A Field Gulde to the Identificati on of the Ordinary High Water Mark {OHWM} In the Arid West Regionof the Western United States, A Delineation Manual (Lichvar and McColley 2008}; and Methods to Describe and Delineate Episodic Stream Process on AridLandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Ident ificat ion of Geomorphic Indicato rs of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID# FP ;L	Date : 11/r)/&J	Represe nta t ive photo take n? / Yes /_ No 1, 7. ! t..\

Upland Indicators	' I Watercourse Indicators	
Av Horizon	Bars: mu,d sand & gravel	Rlpples
Biotic Soll Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers,rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainageswales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, cur ls/ drapes	Sediment plastering
Desert pavement	Dnh:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sediment:tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observedinundatio n: flooding,ponding,or substr atesaturatlon	Vegetation - channelalignment
Soll developme nt	Out of channel flow	Water-cut benches
Surface roundi ng of landform	Overturned rocks	Water level marks
Woody debrisIn place	Rills	Wrack: woody

Notes:

• Adapted from: A Field Guide to the Identi fication of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permi tt ing Utili ty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# ffJ and/or Dra inage ID#	Date 11/23/1 I f	Representativephototaken? Yes/ _ _ No
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripp les
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated now	Secondary channels
canche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	*Sand* filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated sur faces	Desiccation Mud: cracks, curls *I* drapes	Sediment plastering
Desert pavement	Drif t: organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sedlmen t sorting
Rellct bar & swale	Flow or streaming lineatlons	Sediment· tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped -bed morphology in gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rubifled rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channelalignment
Soll development	Out of channel now	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes:

• Adapted from: A Field Gulde to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (lichvar andMccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Abandoned Channels

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# l+ : and/or Dra in age ID # {ZJl. \	Date: ll /11 Hlu	Representativephoto taken? __I Yes / _ No
Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubatlon	Bifurcated now	Secondary channels
Callche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	and filled channels
Coppice dunes: active& relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	,osedroots below Intact soil layer	Sediment sorting
Relict bar & swale	/Flow orstreaming llneatlons v	Sediment: tails
Relict channel	Headcuts	Springs
Rock fractureIn place	lmbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	levee Ridges: sand & gravel	Substrate staining
Rubilledrock undersides	Observed inundat ion: flooding, ponding, or substrate saturation	Vegetation - channel alignment
0011 development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

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• Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uc.hvar and Mccolley 2008); and Methods to Desaibe and Delineate Episodi c Stream Process on Aridlandscapes for Permitting Utlll ty-Scale Solar Power Plants (Brady and Vyverberg. 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Wat ercourse Areas

Sample Point# \ ..,_ and/ or Drainage ID# Q._(2._ t	Date: //1\i/\v	Representativephoto taken?___!_Yes/_ No

Upland Indicators	Watercourse Indicators	
Av Horizon	Bar5:mud, sand & gravel	Ripp les
Biotic Soil Crust	Beach ridges	Scour
Biotuballon	Bifurcated flow	Secondary channels
Callche coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obst ruction
Carbonate etching	Drainage swales	Sediment sheets
Cla5t / rock weathering	Crusts: carbonate, salt,& soda	an d filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Ori :organic	Sediment ramps
Over-turned rock	Exposed rootsbelow Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracturein place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rub,fied rock undersides ,,.	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation -channel alignment
!/' Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills .	Wrack: woody

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•Adapted from A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitt ing Utili ty•Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Dag # |+ _. 0..(7..6	Date : \\,, ,\li	Representativephoto taken? Yes / _ No
U pland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand &gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blo!ubation	Bifurcated flow	Secondary channels
Caliche· coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	I/' Sand filled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desen pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roo ts below Intact soil layer	Sediment sorting
Reflct bar & swale	f'fo w or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No rtow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface rounding of landforrn	Overturned rocks	Water level marks
Woody debris in place	Jlills	Wrack : woody

Notes: >JevJ.P A). u - ;,t::/4v ? (-J 4),,f f-'{,ll, M ;; ' ' Flow q>.

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• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitting Utility-Scale Solar Power Plants {Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point#)._0 and/or Drainage ID # 12-.r<. "=}-	Date : lt/ ,\) /H.1	Representative phototaken? _!_ ves /_ No

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSollCrust	Beach ridges	co ur
Blotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etchmg	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, sail,& soda	Sand fllled channels
Coppice dunes: active & relict	Cut banks I	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaminglineatlons \	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
j/" Soll development	Out of channel flow	Water-cut benches
Surface roun ding of landform	overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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*Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark(OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on AridLandscapes for Permitting Utllity•Scale Solar Power Plants (Brady and Vyverberg, 2013).

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Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
1 L Sample Point# _ i.J II and/or tJJ .., Drainage ID# t,.t--	Date: \. / I?. / \\J	Representative photo taken? _ Ves / _ No

Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand &gravel	Ripples
Biotic Soil Crust	Beach rldges	our
Biotubation	Blfurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt. & soda	Sand fllled channels
Coppice dunes: active & relict	/ Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud· cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	/low ostreaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack : woody

Notes: Small localized channel adjacent to graded dirt Road. No flow into or out of channel. Some spotty flow within channel result of local Rainfall, but no flow outside banks. Flow infiltrated into channel soil.

• Adapted from: /,.fleldGulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (lichvarand Mccolley 2008); and Methodsto Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants {Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point #--- and/or Drainage 10 #	Date: II / I /' I(J	Representative photo taken? _f__ves /_ No
Upland Indicators	***Watercourse Indicators***	
Av Hori{on	Bars: mud, sand & gravel	Ripples
B1otfc Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, (ayers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	n d filled channels
Coppice dunes: active & rellct	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relfct bar & swale	Flow or streaminglIneatlons \I	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Notes: Small localized Rill on margin of an abandoned dirt Road. Isolated, no flow into or out of channel. flow within channel spotty & contained in channel. Local precipitation caused flow w/ flow draining into channel soil.

"" Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # ’— ’˙ : andJor D rainageID II ! t	Date : 1\ /\'At \\o	Representative photo taken? _ Yes/ _ No
Upland Indicators	***Watercourse Indicators*** I	
Av Horizon	Bars mud, sand & gravel	Ripples I
Biotic Soll Crust	Beach ridges	scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche coatings. layers,rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
C!ast / rock weathering	Crusts·carbonate, salt,& soda	Sand filled channels
Coppice dunes:active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	EMposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	/low ostreaming Hneations	Sediment: tails
Relict channel	Headcuts	Spnngs
Rock frac ture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	levee Ridges: sand & gravel	Substrate staining
Rubined rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
oil development	Out of channel flow	Water-cut benches
Surface rounding of l;indform	Overturned rocks	Water level marks
Woody debris in place	**Rills**	Wrack:woody

Note..: /(l! Cf,(f b)

*Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark(OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
SamplePoint# 1..,(8 and/ or Drainage ID # Rl2-l 1	Date : \\1, / l "'	Representativephoto taken? _ I Yes/ _ No

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Galiche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainageswales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	and filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	£>(p o sedroo ts below Intact sol! layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment. tails
Relict channel	Headcuts	Springs
Rock fracture In place	I mbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology1n gravel
No flow or ponding Indicators	LeveeRidges: sand & gravel	Substrate staining
Rublfled rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
1I development	Out of channel no w	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in pl ace	Rliis	Wrack: woody

Notes:

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• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# LI **and/or** **Drainage ID #** ,Ztz \l	**Date:** l /l?../l"'	**Representativephoto taken?** _ Ves / _ No

Upland Indicators	*Watercourse Indicators*	
Av Horlrnn	Bars: mud, sand & gravel	Ripples
BioticSoil Crust	Beach ridges	Scour
B1otubatlon	Bifurca t ed flow	Secondary channels
Callche:coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	and filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks. curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations v'	Sediment: talls
Relict channel	Headcuts	Springs
Rock fracture In place	I mbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flowor pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed i nundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
0oil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water l evel marks
Woody debris In place	Rills	Wrack: woody

Notes: 5 /r'A5' (1,)

*Adapted from: A FieldGuide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mc.Colley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # :—q and/or Drainage ID # t J.-	Date : \1/ t,l / \ lp	Representativephoto taken?__ Yes/ __ No
Upla nd Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubb le	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage sw ales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	/"d filled channels
Coppice dunes: active& relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morp hology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation: floodi ng, ponding, or substrate saturation	Vegetati on - channel alignment
oil development	Out of channel flow	Water-cut benches
Surface roundi ng of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

Notes 5 t:,,._ ;?,e_7 K/V)

• Adaptedfrom: AFieldGui de to the Identificationof the Ordinary High Water Mark(OHWMIIn the Arid West Region of the Western United Stat es, A Delineation Manual (lichvar andMccolley 2008;) and Methods to Describe and Delineate Episodic Stream Process on Arld Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # 1 (**and/or Drainage ID#** Kt'	**Date:** '\J l'l llu	**Representative photo taken?** _ ¹_ **Yes** / _ _ **No**

Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated now	Secondary channels
Caliche coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	d filled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Denated surfaces	Desiccation Mud : cracks, curls / drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sediment. tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
,,·-5011 development	Out of channel now	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

No _._p j? 7 (}'-4(,Nb/ R. I/

• Adapted from : A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# L. C. 1- **and/or** t' **Drainage ID #** 1 I'-- .)	**Date:** \l/lJ./ llr	**Representative photo taken?_ Yes /_ No**

Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche coatings, layers, rubble	Bioticcruru	Secondary channel bypasslng obstruction
Carbonate etching	Drainage swales	Sediment sheets
Oast / rock weathering	Cru5ts: carbonate, salt, & soda	nd filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstruct,om
Deflated surfaces	Deslccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons /	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channelalignment
l ..sfiil development	Out of channel flow	Water-cul benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: Same as RRG (See Notes)

• Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark(OHWMJ In the Arid WestRegion of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes tor Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identifi cation of Geomorphic Indicator s of Upland and Watercourse Areas		
Sample Point# ..-l and/or Drainage ID # t'r-'"	Date: \I ,i lllP	Representative photo taken?_ Yes/ No
U pland Indicators	*Wa tercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbona te, salt,& soda	filled channels
Coppice dunes: active &relict	Cutbank5	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Oese11 pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or s ream,ng lfneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	lmbncated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	ObservedInundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
0oil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Ove11urned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: JeR_ 7 $tl,(#)

• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008) and Methods to Describe and Delineate Episodic Stream Process on Aridl..lndscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomor ph ic Indicator s of Upland and Watercourse Areas		
Sample Point # L9 ; and/ or Drainage ID# |<'	Date : \ /\.lllto	Re presentative photo taken? _ _ Ye s / _ _ No
Upland Indicators	***WatercourseIndicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obst ruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	nd filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks,curls/ drapes	Sediment plasterlng
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons /	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbr icated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
l., .Soil development	Out of channel flo w	Water-cut benches
Surface roundingor landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody
No te 4;>/?./c 1($' /V)		
• Adapted from: A Field Guide to the Identifi cation of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitti ng Utility -Scale Solar Power Plants (Brady and Vyverbe.rg, 2013).		

Field Data Sheet : Identification of Geomorphic Indicators of Upla nd a nd Wat e rcourse Are as		
Sample Point # -Z..t\ and/or Drainage ID#	Date: ', I IIII	Represent ative photo taken? _ Yes/___No
Upland Indicators	***W atercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic SoilCrust	Beach ridges	Scour
Bfotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt, & soda	d filled channels
Coppice dunes: acti ve & relict	Cut banks	Scour holes dowmtream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaminglIneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	ObservedInundation: flooding, ponding, or substrate saturation	Vegetation - channelalignment
V 0lldevelopmen t	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Note s: A f?-. ff

Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# v and/or Drainage ID # ▪	Date: ll /l ;1. /Ho	Representative photo taken?___ Yes/_ No

Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripple5
Biotic Soll Crust	Beach ridges	/cour
Biotubation	Bifurcated flow	Secondary channels
Callche · coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swale5	Sediment sheets 't.
Oast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastenng
Desertpavement	Drift: organic	Sediment ramps
Over-turned roe](	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides .,	Observed inundation: flooding. ponding, or substrate saturation	Vegetation - channel alignment
\Aoil development	Out of channel flow	Water-cut benches
Surface roundi ng of landform	Overturned rocks	Water level marks
Woody debris In place	- Rills	Wrack; woody 2

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"• Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark {OHWM) in the Arid West Region of the Western United States, A Delineation Manual (li chvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Aridlandscapes for Permitt ing Utili ty-Scale Solar Power Plants {Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # ,0 and/or Drainage ID# K :,]	Date: | r \ lP / l t.P	Representative photo taken?__ Yes / __ No
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	/our
Biotubation	Bifurcated flow	Secondary channels
<:aliche : coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
DeOated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	lo w or streaming llneations	Sediment: talls
Relict channel	Headcuts	Springs
Rock fracture In place	lmbr!cated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morpho logy in gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rubifled rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channelalignment
\/'3'oil development	Out of channel flow	Water-cut benches
Surface rounding of Jandform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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•Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Aridlandscapes for Permitting Utllity-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# iT **and/or** **Drainage** ID # f	**Date:** /l\lll\JJ	**Representative photo taken? _ Yes/ _ No**

Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars:mud, sand & gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
callche:coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, &soda	Sand filled channels
Cuppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Il eflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soll layer	Sediment sorting
Reflct bar & swale	Flow or streaming llneatl ons	Sediment; tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
/o flow or ponding Indicators	levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundati on: flooding, ponding, or substrate saturation	Vegetation - channel alignment
_soil"lfevelopment }	Out of channel now	Water-cut benches
/urface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack : woody

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* Adapted fronl: A Field Guide to the Identificati on of the Ordinary"'iiigh Water Mark(OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on AridLandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # l '- **and/or Dra inage ID #** it-.. li	**Date:** 1\/\?-h\.p	**Representativ e photo taken?** V **Yes/___No**

Upland Indicat ors	*W atercourse Indicat ors*	
Av Horizon	Bars: mud, sand& gravel	Ripples
BioticSoil Crust	Beach rii;lges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubb le	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
ell ated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relic:t channe l	Headcuts	Sprfng:;
Rock fracture In place	Imbrlcated gravel	Staining of roe.ks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or pondingindicators	Levee Ridges,sand & gravel	Substrate staining
RublfTed rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
\-. ulface rounding oflandform	Overturn ed rocks	Water level marks
Woody debris in place	RIils	Wrack : woody

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•Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western Unite d States , A Delineation Manual (Uchvar and Mccolley 2008); and M ethods to Describe and Delineate Episodi c Stream Processon Ari d Landsc.ipesfor Permitt ing Utlll ty-Scale Solar Power Plants {Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # •Lfl, and/ or Drainage ID# IC\	D ate: \ /11 /1,11	Representative photo taken?_ _ Yes / _ No
Upland Indicators	***Wate rcourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripp les
Biotic Soil Crust	Beach ridges	/Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche:coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand fil led channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposedroots below tntact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingo f rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubifled rock undersides	Observed Inundation: nooding, ponding, or substrate saturation	Vegetation - channel allgnment
oildevelopme	tochannel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

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• A d a pted from : A Field Guide to th e Ident lficati on of th e Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and M ccolley 2008); and M ethods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitt ing Utlll ty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identific at ion of Geomorphic Indicators of Upland and Wate rcourse Areas		
Sample Point /t '11J , and/or **Drainage ID #** .. t: I .W	**Date:** l, Jtt,	**Representative photo taken?** Lves No ___
Upland Indicators	***W atercourse Indicators***	
Av Horizon	**Bars:** mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	/our
B1otubatlon	Bifurcated now	Secondary channels
Callche : coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes· active & relict	Cutbank5	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below fntact soll layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No now or ponding indicators	Levee Ridges: !.and & gravel	Substrate staining
Rubified rock undersides	Observed inundation ; flooding, ponding, or substrate saturation	Vegetation- channel alignment
0"011 development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack : woody
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' Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utilit y-Scale Solar Power Plants (Brady and Vyverberg, 2013).		

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID RR ;;i0 b	Date: J1!1d-JJ (,	Representative photo taken? _ Yes/
Upland Indicators	*Watercourse Indicators*	
AV Horiwn	Bars: mud. sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubatlon	Bifurcated now	Secondary channels
Caliche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cu t banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intat t soil layer	Sediment sorting
Relict bar & swale	Flo w or streaming llneations	Sedlmerit·tails
Relict channel	Headcuts	Springs
Rock fract\Jre In place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knlck Po,nts	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubrfled rock undersides	Observed lnundatlon : flooding, ponding, or substrate saturation	Vegetation - channel alignment
l Soil development	Out or channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debrisin place	Rill s	Wrack: woody

Notes: ft/ I'1 (t '-6 J

• Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point It J<R an d/ or Drainage ID # ;:Ji)C--	Date: il1/;))jI,	Representative photo taken?___ Yes / -P0
Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callthe: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	ut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	flow or str eaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rublfled rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
t,.>d'I development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

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• Adopted from A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # and/or Drainage ID # RR;;>o0\	**Date:** 1 _,/, / 1	Representative photo take n? Yes/

Upland Indicators	*Watercourse Indicators*	
Av Hamon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swale	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Copplce dunes: active & relict	Cu t banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact sofl layer	Sediment sort ing
Relict bar & swale	Flow ontreamlng llneations	Sediment : tail s
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inu ndation : flooding, ponding, or substrate saturation	Vegetation - channel alignment
v"S oll development	Out of channel flow	Water cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debris In place	Rills	Wrack: woody

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•Adapted from: A Field Guide to the Ident ificat ion of th e Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and M t Coliey 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Ident ifi cation of Geomorphic Indicat ors of Upland and Watercourse Areas

Sampl e Poi nt # an d/or Drain age ID # RR-:::Jr> e_..	Da t e: 11 /1;;>//&?	Rep rese n t at i ve ph o t o t ake n? _ Yes / d.

U pland Indicators	W atercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blorubation	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, sal t, & soda	Sand filled channels
Coppice dunes: active & relict	utbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift·organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	low or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gra\lel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rockundersides	Observed inundatio n: flooding, ponding, or substrate saturation	Vegetation - channel alignment
/Solldevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rllls	Wrack: woody

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'f r Field Gulde to the Identifi cation of the Ordinary High Water Mark (OHWM) in the Arid *West* Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitt ing Utili ty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point /t and/or Drainage ID /t jf(<d ɗ	Date: II JrJ/Jt,,.	Representative photo taken? Yes/ / No

Upland Indicators	*Watercourse Indicator s*	
Av Horizon	Bars: mud, sand &gravel	Rlpples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated now	Secondary channels
cali c.he: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
aast / rock weathering	Crusts: carbonate, salt,&soda	Sand filled channels
Coppice dunes: active &relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	Vlow streaming llneations	Sediment: tafls
Rellt t channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation: flooding, ponding, or substr ate saturation	**Vegetation** - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surf:ace rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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• Adapted from: A Field Gulde to the Identlfli;ation of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Proi;esson Ari d Landscapes for Perm i tting Utili ty -Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # rL. and/ or Drainage ID# 'o' 1- I 0v	Date: \ / IL / I4"	Representative photo taken? ....::!_Yes / _ _ No

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	/cour
BlotubatiOn	Bifurcated flow	Secondary channels
Cailche:coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift;organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaminglIneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Irnbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate **staining**
RubiOed rock undersides	Observed Inundation: flooding,ponding, or substrate saturation	Vegetation - channel alignment
_/'Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack : woody

Notes: AP- JC, a.,A/DJIU.A

***Adapted** from: A FleldGulde to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Westem United States, A Oelineatfon Manual (Uchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on AridLandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # and/or Dra inageID# RRJlb	Date: 11})-:;_/Jt.	Re presentative photo taken? __ Yes/ L.0

Upla nd Indicators	I I Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotlc crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts; carbonate, salt,& soda	Sand filled channels
Coppice dunes: active& relict	i/-utbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Ftow or stream ing lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Statnlng of rocks
Rock varnish	knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides ,,	Observed Inundation: rlooding, ponding, or substrate saturatiun	Vegetation - d1annel alignment
ii development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Waterlevelmarks
Woody debris In place	Rills	Wrack : woody

51:---(AR-| <t(>..uA,OL)

• Adap ted from: A fieldGuide to the Identificationof the Ordinary HighWater Mark (OHWM) in the Arid WestRegion of the Western Uni ted States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Aridlandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# ______ and/or Drainage ID # r!_ r	**Date:** , ' /l lL / ll1	**Representative photo taken ? _ Yes/ _ No**

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	/cour
Biotubation	Bifurcated now	Secondary channels
CaHche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainageswales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cul banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: tails
Rellct channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand &gravel	Substrate staining
Rublfied rockundersides ,,,..	Observed Inundation: noodlng, ponding, or substrate saturation	**Vegetation** - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: :: 6-:;> fe/c_ /7 r JU Nu

• Adapted from : A Field Guide to the Identifi cation of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identifi cation of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# l<7i and/ or Drainage ID# __(:2d't	Date: II /13/ /f.t,	Representative photo taken?_ Yes / 0-

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
caliche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	/ Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Des1ccation Mud: cracks, curls / drapes	Sedimen t plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	/lowcstre l i s on	Sediment: tails
Relict channel	Headcuts	Spr ings
Rock fracture in place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped,bed morphology In gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substra te staining
Rubified rock undersides	Observed Inundation: flooding, ponding, or substra te saturation	Vegetation - channel alignment
011 developme nt	Ou t of chan n e l flo w	Water•cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: R.fc, (..L(,AJiJ/ ")

• Ad a pted from : A Fi eld Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (lichvar and McColley 2008); and M ethods to Describe and Delineate **Episodic** Stream Process on Arid l..lndscapesfor Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and/or Drainage ID# .Rf<. c).':J. L-	Date: 11/r ,,	Representative photo taken? _ Yes / / No

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Rlpp le.s
BioticSoil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: CO'ltlngs, layers, rubble	Blotlc crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	ut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	?w or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped -bed morphology in gravel
No [low or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation : flooding, ponding, or substrate saturation	Vegetation - channel alignment
/ Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Note s: { fe..fc- /7 (>".ijJ)1/)

•**Adapted** from: A Field Gulde to the Identificationof the Ordinary High **Water Mark (OHWM)** In the **Arid West Region** of th e **Western United States, A Delineation** Manual **(lichvar and Mccolley 2008);** and **M ethods to** Describe and Delineate **Episodic Stream Process** on **Arid landscapes** for **Permitting** Utility-Scale Solar **Power** Plants **(Brady** and Vyverberg, **2013).**

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and/or Drainage ID # R '-t cl	Date: It I 13//(/}	Representativephoto taken? _ Yes/

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand &gravel	Ripples
Biotic S011Crust	Beach ridges	Scour
Biotubalion	Bifurcated flow	Secondary channels
Callche, coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Oast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	V Cul banks	Scourholes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/ Flow or streaming llneations	Sedlment: talls
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation; flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out o f channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debris In place	Riffs	Wrack : woody

Notes: 7'--<- Q-;:> J: /1 ($.4-P A/")

•Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delfneation Manual (Uchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utili ty-ScaleSolar Power Plants j8rady and Vyverberg 2013).

Field Dat a Shee t: Id e ntificat io n of Ge o morphic Indi cat o rs of Upl a nd and Wat e rcourse Are as		
Sample Point# and/or Drainage ID# RR d-'-\L	Date: 11) 13 /J	Represent at ive photo taken? _ Yes/ /.o
Upland In d icators	***Wate rcourse Indicators***	
Av Horizon	Bars: mud, sand &gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	t ut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls / drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flo w or streaming lineations	Sediment: rails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No now or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubifled rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack; woody

Notes:

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• Ad apt ed from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodi c Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point II 7-'1 and/or Drainage ID# ‾fu , ‾,, .J (N	Date: \ \ /llP /l(n	Representative photo taken? _ ·_ Yes / __ No

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	/cour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic:crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swa les	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/ Flow or streaming llneations	Sediment: tails
Relictchannel	Headcuts	Springs
Rock fracture in place	lmbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed lnundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: > l'1{ > NL'7U-.;>)

" Adapted from: A Fle ld Gul d e to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual {Llchvarand Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants(Brady and Vyver be rg, 2013).

Field Data Sheet: Identi ficat ion of Geom o rphic Indicators of Upland and Watercourse Areas		
Sample Point # ________ and/or Drainage 10# R f<";).'5 b	Date: ;,);3//	Representative photo taken? Yes/
Upla nd Indicators	*W atercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Rlpples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channel s
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate. salt,& soda	Sand filled channels
Coppicedunes: active & relict	ut banks	Scour holes downstream of obstructions
Deflated surfaces	Deslccation Mud:cracks, curls / drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	El<posed roots below intact soil layer	Sediment sorting
Relict bar & swale	/ow or streaming llneat,ons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Stainmg of rocks
Rock varnish	Knick Points	Stepped -bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation : flooding. ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debrisIn place	Rliis	Wrack: woody

Notes "':...- ftR I c,_ (/VD/'°::,)

• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utllity-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Ident ifi cat ion of Geomorphic Indicator s of Upland and Watercourse Areas

Sample Point # and / or Drainage ID # RR;JSL--	Date: n)1!::>/ I	Representati ve photo taken? _ _ Yes/ INo

U pland Ind ic a tors	I ***Wate rcourse Indicators***	
Av Horizon	Bars:mud, sand & gravel	Rippl es
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carb onat e, salt, & soda	Sand filled channels
Coppice dunes: active & relict	u t b anks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: crack,scurls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Rellct bar & swal e	o w or streaming llneations	Sediment: tails
Rellct channel	Headcuts	Springs
Rock fra cture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observedinundation: flooding,ponding,or substrate saturation	Vegetation - channel altgnment
Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes : 5 J?R /7 {>\LP AA:))

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Field Data Sheet : Id e ntific ation of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # and/or Drainage ID # R {<d d	Date: n J J3 /It,	Representative photo taken? _ _ Yes/ b
Upland Indicators	I ***Wa ter courseIndicat ors***	
Av Horizon	Bars: mud, sand &gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate,salt,& soda	Sand filled channels
Coppice dunes: active & relict	/Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud · cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Eicposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	y/')'fow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand &gravel	Substrate staining
Rubmed rock undersides	Observed inundation: flooding, ponding, or substrate saturatio n	Vegetation - channel alignment
011development	Out of channel flow	Water-cut benches
Surface roun ding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: R le;(,,u:rl)

• Adapted from: AField Guide to the Identificatio n of the Ordinary High Water Mark (OHWM)in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utllity-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # and/or Drainage ID# RR cl5e.-	Date: If JI3))I,	Representative photo taken? __ Yes / _ o_

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated now	Secondary channels
caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Ei<posed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatfons	Sediment : tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped -bed morphology In gravel
No flow or pondmg indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation: nooding, ponding, or substrate saturation	Vegetation - channel alignment
I development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris m place		Wrack: woody

Notes: .O 0-?

Rills

,eA. / e, r A.l) J

• **Adapted** from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid landscapes for Permitting Utility-Scale Solar Power Plants (Sradyand Vyverberg, 2013).

<table>
<tr><td colspan="4">Field Data Sheet: Identification of Geomorph ic Indicators of Upland and Watercourse Areas</td></tr>
<tr><td>Sa"'ple Point# 1⁄4
and/or
Drainage ID# r</td><td>Date:
l /\LR/ llP</td><td colspan="2">Representative photo taken? _ Yes/_ No</td></tr>
<tr><td>Up land Indicators</td><td colspan="3">Water course Indicators</td></tr>
<tr><td>Av Horizon</td><td>Bars: mud, sand & gravel</td><td colspan="2">Rfpples</td></tr>
<tr><td>Biotic Soil Crust</td><td>Beach ridges</td><td colspan="2">cour</td></tr>
<tr><td>Biotubation</td><td>Bifurcated flow</td><td colspan="2">Secondary channels</td></tr>
<tr><td>Callche: coatings, layers, rubble</td><td>Biotic crusts</td><td colspan="2">Secondary channel bypassing obstruction</td></tr>
<tr><td>Carbonate etching</td><td>Drainage swales</td><td colspan="2">Sediment sheets</td></tr>
<tr><td>Clast / rock weathering</td><td>Crusts: carbonate, salt, & soda</td><td colspan="2">Sand fil led channels</td></tr>
<tr><td>Coppice dunes: active & relict</td><td>Cut banks</td><td colspan="2">Scour holes downstream of obstructfons</td></tr>
<tr><td>Deflated surfaces</td><td>Desiccation Mud:cracks, curls/ drapes</td><td colspan="2">Sediment plastering</td></tr>
<tr><td>Desert pavement</td><td>Drift:organ1c</td><td colspan="2">Sediment ramps</td></tr>
<tr><td>Over-turned rock</td><td>EMposed roots below Intact soil layer</td><td colspan="2">Sediment sorting</td></tr>
<tr><td>Relict bar & swale</td><td>Flow or streaming llneati ons</td><td colspan="2">Sediment: t.ills</td></tr>
<tr><td>Relict channel</td><td>Headcuts</td><td colspan="2">Springs</td></tr>
<tr><td>Rock fracture fn place</td><td>Imbrlcated gravel</td><td colspan="2">Staining of rocks</td></tr>
<tr><td>Rock varnish</td><td>Knick Points</td><td colspan="2">Stepped-bed morphology 1n gravel</td></tr>
<tr><td>No flow or ponding indicators</td><td>Levee Ridges: sand & gravel</td><td colspan="2">Substrate staining</td></tr>
<tr><td>Rubifled rock undersides</td><td>Observed inu ndation: flooding, ponding, or substrate saturation</td><td colspan="2">Vegetation - channel alignment</td></tr>
<tr><td>Soll development</td><td>Out o f channel now</td><td colspan="2">Water-cut benches</td></tr>
<tr><td>Surface rounding of landform</td><td>Overturned rocks</td><td colspan="2">Water level marks</td></tr>
<tr><td>Woody debris In place</td><td>Rills</td><td colspan="2">Wrack: woody</td></tr>
<tr><td colspan="4">Notes: ,,,:
/J U-?)G r M-)1 ,</td></tr>
<tr><td colspan="4">• Adapted from : A Fi el d Guide t o the Ide n tificat i on or the Ordinary HighWater Mark (OHWM) In the Arid West Region of the Western United States, A Delineatio n Ma nu al (Uchvar and M cco lley 2008); and M eth ods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitti ng Utlll t y-Scale Solar Power Plants (Brady and Vyverberg, 2013).</td></tr>
</table>

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and / or DrainageID It RR;>]a.	Date: n/1 /IA	Representative photo taken? _ Yes/ L. 0

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach rfdges	Scour
Blotubatlon	Bifurcated flow	Secondary channels
(a liche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand Oiled channe ls
Coppice dunes: active & relict	/utbanks	Scour holes dow nstream of obstructions
Deflated surfaces	Desiccation Mud: crack,scurls/ drapes	Sediment plastering
Desert pavement	Drift:organk	Sediment ramps
Over- turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar &swale	/low ostreaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Staining of rocks
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No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rub1fied rock undersides	Observed inundation : flood ing, ponding, or substrate saturation	Vegetation - channel alignment
,,,,,,,em1 development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: ;''' -;;,'----t S A I({ f ...U k() l

•Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineati on Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapesfor Permitting Utility-Scale Solar Power Plants(Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # 9r , ! : and/or Dra i nage ID # k'1 L1-b	Date: I\ /I V / / \J	Representative photo taken?__ Yes / __ No
Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSoil Crust	Beach ridges	/cour
Biotubatlon	Bifurcated flow	Secondary channels
Callche:coatings, layers, rubble	Blotfc crusts	Secondary channel bypassing obstr uct ion
Carbonate etching	Drainage swales	Sedime_nt sheets
Clast / rock weathering	Crusts: carbonate, salt, &soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Deslccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turnedrock	Exposed roots below Intactsoil layer	Sediment sorting
Reflct bar & swale	/ Flow or streaminglineatfons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morpho logy In gravel
No flow or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundatio n: flooding, ponding or substrate saturation	Vegetation - channel alignment
,/oll development	Out of channel flow	Water-cut benches
Surface roun ding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Note s: /r /7 (5'4?' .,,v4)

• Adapted from: A FieldGuide to the Identification of the Ordinary High Water Mark (OI-IWM} In the Arid West Region of the Western United States, A Oellneatlon Manual (llchvarand Mccolley 2008); and Methods to Describe and Delineate EpisodicStream Process on Arid Landscapes for Permitting Utlllty-Scale Solar Power Plants(Brady and Vyverberg. 2013).

Field Data Sheet: Identificat ion of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # 61 ________ and/or Drainage ID# ft --…	Date: l1 / \1Ji { l t?	Representative photo taken?_1__ves /__ No

Upland Indicators	*Wa te rcourse In d ic a tors*	
Av Horiion	Bars mud, sarid & gravel	Ripples
Biotic Soil *Crust*	Beach ridges	/cour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, sail, & soda	Sand nl led channels
Coppicedunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact solllayer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons ./	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides /	Observed Inundation: flooding, ponding, or substrate saturallon	Vegetation - channel alignment
poll development	Out of channel flow	Water-cut benches
Surface roundi ng of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis -	Wrack : woody \ \

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• **Adapted** from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Oelineatlon Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic StTeam Process on Aridl andscapes for PermittJng Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # and/ or Drainage ID # RRd b	Date:))Iı l!fA	Representative photo taken? _ Yes / No
Upland Indicators	(• *Wat ercourse Indicators*	
Av Horizon	Bars:mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche: coati ngs, layers, rubble	Biotic crusts	Secondary channel bypassing obstr uction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts; carbonate, salt,& soda	Sand Rliedchannels
Coppice dunes: active & relict	Ibanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-tumed rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	V Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture1n place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	St epped-bed morphology m gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Subst rate stalhing
Rublfled rockundersides	Observed inundati on: flooding, ponding, or substrate saturatwn	Veget ation - channel alignment
!'development	Out ofchannel flow	Water-cut benches
Surface rounding of landform	*Overturned* rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: ,,

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• Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar i!ndMccolley 2008);and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013}.

Field Data Sheet: Identification of Geomorphic Indi cators of Upland and Wat ercourse Areas

'), Sam ple Poi nt # ______ a nd/ or ·,· D rainageID # \	Da te: , /| '-1 /| \a	Repr esen ta ti ve photo taken?_' ¦_ Yes/ _ No

U pland Indicators	*Watercourse Indi cators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSoll Crust	Beach ridges	/cour
Blotubatlon	Bifurcated flow	Secondary channels
Calle.he: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflatedsurfaces	Desiccation Mud : cracks,curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	/ Flow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfled rock undersides –	Observed Inundation: flooding, ponding,or substrate saturation	Vegetation - channelalignment
oil development	Out of channel flow	Water-cut benches
Surface roun ding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

No te s:

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• Adap ted fr om : A Field Gulde to the Identificationof the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western Unit ed Stat es, A Deli neation Manual (Llchvar and M cColley 2008); and M ethods to Describe and Delineate EpisodicStream Process on Arid Landscapes for Permitting Utility-Scale Sol ar Power Plants (Bradyand Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # and/or Drainage ID # qy J ..,aJ(}..	Date: I/ tlPII LP	Representative photo taken? }_ Yes / _ _ No
Upland In dic ator s	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
BloLUbation	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
DeOated surfaces	Desiccation M ud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposed roots below intactsoil layer	Sediment sorting
Relict bar & swale	/ Flow or streaming llneat1ons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbncated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
/Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: >-- 6P fik_1 1(5 Jh' A/)

• Adapted from: A FieldGulde to the Identificationof the Ordinary High Water Mark (OHWM) In the Ari d West Region of the Western United States, A Delineation Manual (Uchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitting Utili ty-Scale Solar Power Plants(Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sam ple Point # an d/o r **DrainageID#** Rf?., b '2D	Date: JJ/O//I	Repr esent at i ve ph oto taken? _ _ Yes / _L.o
Uplan d Indicators	'/ / ***Wa tercourse Indicators***	
Av Horlzon	Bars: mud, sand & gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand Fliied channels
Coppice dunes: actlve & relict	u t b anks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatfons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channelalignment
c., _,)d1l deve l opment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: 1'?,e._1 ti(J.P " I'-!>)

•Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWMJ In the Arid West Region of th e Western United States, A Delineation Manual (Lichvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitti ng Utili ty-ScaleSolar Power Plants (Brady and Vyverberg, 2013).

Field Data She et : Identifi cation of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# 1_I and/or Drainage ID # / I ,J	Date: / l / lP	Representativephoto taken? — ' Yes/ — No

Upla nd Indicat ors	W atercourse Indicat ors	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	vscour
Biotubatlon	Bifurcated flow	Secondary channels
Callche: coatings. layers, rubb le	B1ot1ccrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatrons	Sediment : tails
Relict channel	Headcuts	Springs
Rock fractureIn place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicat ors	levee Ridges: sand &gravel	Substrate staining
Rublfied rock underside5	Observed Inundation : flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surfa ce rounding of landform	Overturned rocks	Water level m.irks
Woody debris In place	Rills	Wrack: woody

Note s:

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• Adapted from: AField Gulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United State5, A Delineati on Manual (Lichvar and Mccolley 2008); and M ethods to Descrbe and Delineate Episodic Stream Process on AridLandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Shee t: Id e ntification of Geo morphic Indicato rs of Upl a nd and Wate rcourse Areas		
Sample Point# !2!,f} . and/or Drainage ID # C t '.,a,..	Date: /hp /lIP	Representative photo taken? \/__ Yes / __ No
Upland Indicators	***Wate rcourse In d ic a tors***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	/our
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes; active &relict	Cul banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sortrng
Relict bar & swale	Flow or streaming lineat1on s ./	Sediment: tails
Relict channel	Headcut s	Springs
Rock fracture in place	tmbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding Indicators	LeveeRidges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation : flooding, po11ding, or substrate saturation	Vegetation - channelalignment
Solldevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

Notes:

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•Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permi tting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # ''; and/or Drainage ID#	Date : \\/1v/1v	Representative photo taken? .:!__Yes/ __ No
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSoil Crust	Beach ridges	/our
Biotubation	Bifurcated now	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand Olied channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
DeOated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soillayer	Sediment sorting
Rellct bar & swale	/ Flow or streaming Hneatlons	Sediment: tails
Relict channel	Headcuts	Sprlngs
Rock fracture In place	Imbricated gravel	Stainingof rock.s
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding Indicators	Leve.e Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
V o!ioll development	Out of channel now	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody
Notes: > All.\". f> AI)		
• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (lichvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permi tt ing Utility -Scale Solar Power Plants (Brady and Vyverberg, 2013).		

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point#) ,v i and/or DrainageID # V ii- ..) 0.,	Date: /ltt>/lv	Representative photo taken? __ Yes / _ _ No

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	/cour
Blotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Denated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soillayer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	imbrlcated gravel	Stainingof rocks
Rock varnish	Knick Point s	Stepped-bed morphology In gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inu ndation: flooding, ponding, or substrate saturation	Vegetation -channel alignment
evelopment	Outofchannel flow	Water-cutbenches
Surface rounding of iandform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: ' ? fi/?._ IC,(S /Vcl

• Adapted from: A Field Gulde to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Aridlandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg. 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Up la nd and W ate rcour se Areas		
Sample Point # and/or Dr ainage ID # RR3ib	Date: JJ/13//h	Representative photo taken? _ Yes / No
Upland Indicators	I I W ate rcourse Indicators	
Av Horizon	Bars: mud, sand &gravel	Ripp les
Bfotic Soil Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Callche : coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	ut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Dr! : organic	Sediment ramps
Over-turned rock	Exposed root s below intact soillayer	Sediment sorting
Relict bar & swale	o w or streaminglIneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	lmbncated gravel	Stainfng of rocks
Rock varn ish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges· sand & gravel	Substrate staining
Rublfled rock undersides	Observed inundation : flooding, ponding, or substrate saturation	Vegetation - channel alignment
.,-A'oll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes:

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• Adapted from: A Fleld Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western UnitedStates, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Ident ifi cation of Geomorphic Indicators of Upl and and Wate rcour se Areas		
Sample Point# **and/or** **Drainage ID #** R£ 3'ic.-	Date: JI/13/1(,.	Representative phot o taken? _ Yes L No

Upland Indicators	***W atercourse Indicators***	
Av Horizon	Bars: mud, sand &gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstrun lon
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbona te, salt, & soda	Sand filled channels
Coppice dunes: active & relict	u t banks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Elcposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/low ostreaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Stainingof roe.ks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubifled rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
/ Soil development	Out of channel flow	Water•cul benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

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ʼ Adapted from: A FieldGuide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western UnitedStates, A Delineation Manual (Llchvar and Mccolley ZOOS;)and M ethods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Perm itt ing Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sam ple Point # [redacted] and/or Drainage ID # i::	Date: \ / |v / ||P	Representative photo taken? .,J __Yes/ __ No

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biot,c Soll Crust	Beach ridges	-' cour
Biotubation	Bifurcated flow	Secondary channels
Calfche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate,salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soillayer	Sedimen t sorting
Relict bar & swale	Flow or streaming lineallons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Point s	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides /	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
oil development	Out of channel now	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debrisin place	Rliis	Wrack: woody

Notes: = ; > fl/c_ qI (_f..u /vt:1)

• Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mc:Colley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg. 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # Lj4 : and/or Drainage ID# \ - I	Date: ' /tlP /lll	Representative photo taken? _ Yes/ _ No

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars:mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers,rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast I rock weathering	Crusts: carbonate, salt, & soda	Sand fil led channels
Coppice dunes;active &relict	/utbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sedimetnramps
Over-turned rock	Exposed rootsbelow intactsoll layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	St aining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or pondingIndicators	LeveeRidges: sand & gravel	Subst rate staining
Rubilied rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface roundingof landform	Overturned rocks	Water level marks
Woody debris "' place	Rllls	Wrack: woody

Notes: >c.-J t>?(tR 1'1{> ..,v"lt.6)

• Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western Uni ted States, A Delineation Manual jlichvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid la ndscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identifica tion of Geomorphic Indicators of Upland and Wate rcourse Areas

Sample Point# and / o r Drainage ID # RR ,..	Date: 11/1 /)l	Representative photo taken? Yes/L No

Upland Indicators	Wate rcourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:org,mlc	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
/ No flow or pondingindicators	Levee Ridges: sand &gravel	Substrate staining
Rublfied rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
/ Surface roundingof landform	overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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• **Adapted** from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the We.stern United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Proces.s on Arid landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point#_ ________ and/or Drainage ID# V r - 0...	Date: t: / I\J /1'1	Rep res en ta tive pho to take n? .:!.__ves/ ____ No
Upland Indicators	***Wat ercourseIndica tors***	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSollCrust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
.:c.umce dunes: active & relict	Cut banks	Scour holes downstream of obstructions
lle llated surfaces	Desiccation M ud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift : organic	Sediment ramps
Over turned rock	Exposed roots below Intactsoillayer	Sediment sorting
Rel,ct bar & swale	Flow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in pl ace	Imbrlcated gravel	Staining of rocks
Rock varnish	l(r1ick Points	Steppe-d bed morphology in gravel
/o **flow** or pondingindicators	Levee Rid ges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed Inundation : flooding, ponding, or substrate saturation	Vegetation-channel alignment
Soll developme nt	Out of channel flow	Water-cut benches
V .8\Jrface roun ding of landform	Overturned rocks	Water level marks
Woody debrisIn place	Rliis	Wrack: woody

No te s: RR-31(s/L())

• Adapted fr om: A Field Guide to the Identifi cation of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Ari d Landscapes for Permitti ng Utility -Scale Solar Power Plants (Bradyand Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicato rs of Upland and Wat erco urse Are as

Sample Point # and /or Drainage ID fl Rf< 'c	Dat e: l\)J1ti)J'1 / /	Represe nt ativ e photo take n? _ Yes/ o

Upland Indi cat ors	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand &gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt,& soda	Sand filled channels
c,w n,ce dunes: active & relict	Cut banks	Scour holes downstream of obstructions
I'" nated surfaces	Desiccation Mud : cracks, curls / drapes	Sediment plastering
Desert pavement	Drift· organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	lmbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped- bed morphology in gravel
o flow orpondingIndicators	Levee Ridg es: sand & gravel	Substrate staining
Rublfled rock undersides	Observed Inundation: flooding,ponding, or substrate saturat ion	Vegetation - channelalignment
Soil development	Out of channel flow	Water-cut benches
-Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: /cK. s1 &dA/A,u.1,)

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• Adapted from: A Field Guide to the Identi fication of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identificat ion of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # L\ -:.J **and/ or** f-..((_ **Drainage ID#**	**Date :** I I / I\P / i	**Representativephototaken?** __I **Yes/** _ **No**
Upla nd Indicat ors	***Wate rcourse Ind ic a t ors***	
Av Horizon	Bars: mud, sand &grave l	Ripp les
BioticSollCrust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche : coatings, layers, rubble	Biotlc crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
C'last / rock weathering	Crust s: carbonate, salt,& soda	Sand filled channels
Coppicedunes: active & relict	Cut banks	Scour holes downstream of obstructions
Denated surfaces	Desiccation M ud: cracks, curls / drapes	Sedimen1 plastering
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Rellct bar & swale	Flow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fractu re in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
o flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation : flooding. ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
urface roundgtolandform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: So-.JJ i /2.. 3:;-(JUA.£1)

• Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM In the Arid West Region of the Western United States, A Dellneation Manual (Uchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid landscapes for Permitt ing Utility -Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # **and/or** **Drainage** ID # [illegible]	**Date:** 11/1 /II	Representativephoto taken? Yes/ [illegible]
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand fllled channels
Coppice dunes: actl ve & relict	Cutbanks	Scour holes downstream ot obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	lmbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
/ No flow or ponding Indicators	Levee Ridges: sand& gravel	Substrate staining
Rubifled rock undersl des	Observed inundat1on: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-wt benches
rfaceroundingof landform	Overturned rocks	Water level marks
Woody debris In place	J Rills	Wrack: woody

Notes: [illegible]

• **Adapted from: AField** Gulde **to the** Identification**of the** Ordinary High **Water Mark (OHWM) in the Arid West Region of the Western United States,** A Delineation Manual (Lichvar and **Mccolley 2008); and Methods** to **Describe** and **Delineate Episodic Stream Process** on **Arid** Landscapes **for Permitting** Utility-Scale **Solar Power Plants (Brady and Vyverberg, 2013).**

Field Data Sheet : Ident ifi cation of Geomorphic Indicator s of Upland and Watercourse Areas		
SamplePoint# /\R ,CJ : and/or Drainage ID # (A	Date: 11J, J1i	Rep r ese n t a ti ve ph oto taken? Yes/ o
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars:mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
B1otubatlon	Bifurcated flow	Secondary channels
Caliche:coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etchi ng	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relic!	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks. cuds/ drapes	Sediment plastering
Desert pavement	Dnft:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology m gravel
\ /o flow or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inunda tion: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
urface rounding of landform	Overturned rocks	Water levelmarks
Woody debris In place	Rills	Wrack: woody

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• Adapted from: A Field Gulde to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and M ccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on AridLandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identificationof GeomorphicIndicators of Upland and Watercourse Areas		
Sample Point# **and** **Drainage** ID # YJ<-=J-0	**Date:** 11/11)1	**Representative photo taken? Yes/..£.**
*Upland **Indicators***	' ***WatercourseIndicators***	
AV HoriZOl'I	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rockweathering	Crusts: carbonate. salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streamlhg llneations	Sediment: **tails**
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology ln gravel
l/ No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rockundersides	Observed inundation : flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Wate-r cut benches
urfa ce rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes:

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•Adapted from: A Field Guide to the Identi fication of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (llchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-ScaleSolar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicator s of Upland and Watercourse Areas

Sample Point # and/ or Drainage ID# /f1<13	Dat e: //J,:!)/	Repr esent ative phot o taken? _ Yes / £N o

Upland Indicators	Watercourse Indicators	
Av Horlion	Bars:mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage Sw ales	Sediment sheets
Clast / rockweathering	Crusts; carbonate, salt, & soda	Sand filledchannels
Coppice dunes: active & relfct	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls / drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rode	EKposed roots below Intact sell layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sedime n t: talls
Relict channel	Headcuts	Springs
Rock frac t ure In place	lmbrica ted gravel	Staining of rocks
Rock varnish	Knick Points	St epped-bed morphology m gravel
/No flow or ponding indicators	levee Ridges: sand & gravel	Subs trate staining
Rubifled rock undersides	Observed inundation: flooding, ponding, or substrate sat uration	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
/Surface rounding of landform	overturned rocks	Water level marks
Woody debrisin place	Rill s	Wrack: woody

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*Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # and/or **Drainage** ID # RR'U-	Date: ,,l 3 {.p	Representativephoto taken? _ Yes/ LNo
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubat,on	Bifurcated flow	Secondary channels
Caliche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelowIntact soil layer	Sediment sorting
Relict bar &swale	Flow or streaming llneations	Sediment· tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
o now or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed mundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
oil development	Out of channel flow	Water-cut benches
/urface roudi gol andform	Overturned rocks	Water level marks
Woody debrisIn place	Rills	Wrack : woody

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"Adapted from: AField Guide to the Identificationof the Ordinary HighWater Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate episodic Stream Process on AridLandscapes for PermittingUtility-Scale Solar Power Plants(Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point I#______________ a nd / or D rainage ID # S	D a t e: 11/13/ /	Repr ese ntativ e ph o t o t a k en? _ _ Ye s / .L.o
Upland Indicators	*Watercourse Indicat ors*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
81otubat1on	Bifu r cat ed flow	Secondary channels
caliche coatings, layers,rubble	81ot1c cru sts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clan / rock weathering	Crusts: carbonate, salt, & soda	Sand fil led channels
Coppice dunes· active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift • organic	Sedimen t ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Reli ct bar & swale	Flow or streaming llneauons	Sediment: tails
Relict channel	Headcu ts	Springs
Rock fracture in place	lmbrica ted gravel	Staini n g of rocks
Rock varnish	Knick Points	Stepped-bed morphology m gravel
\ / o flow or ponding Indicator	Levee Ridges: sand & gravel	Substrate staining
Rub1fled rock undersides	Observed inundation. flooding , ponding, or substrate saturation	Veget ation - channel alignment
o i l development	Out o f channel flow	Water-cut benches
rfacerounding of landform	Overturned rocks	Water level marks
Woody debris m place	Rills	Wrack: woody

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• Ad apted from : A Fie ld Gui d e to the I d en tifi catio n of the Or di nary High Water Mark (OHWM) In the Arid West Region of the Western Uni ted States, A Dellneatl on Manual (Lichvar and M ccoll ey 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitt ing Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Id entifi cation of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point // ; and/or Drainage ID # KR.90	Date: JJ Ir)lfo	Representative photo taken? _ Yes/ -6

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars:mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
COppice dunes : active & relict	Cutbanks	Scour holes downstream of ob5truct1ons
Defiated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	lo w or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped -bed morphology in gravel
/o flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfled rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
So,l development	Out of channel flow	Water-cut benches
urf ace rounding of landform	overturned rocks	Water level marks
Woody debris In place	Rills J	Wrack: woody A

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• Adapted from: A Field Gdlde to the Identifi cation of the Ordinary High Water Mark (OHWM) In the Arid West Regionof the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delfneate Episodic Stream Process on Arid Landscapes for Permitt ing Utili ty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Shee t: Identifi cation of Geomorphic Indicator s of Upland and Watercourse Areas		
Sample Point # and/or Drainage ID# RI<9I	Date: II/11:>/ J<.t;	Representativephoto taken? _ Yes/ . L – o

Upland Indicators	*Watercourse Indicators*	
Av Horiion	Bars: mud, sand & gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cu1banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud. cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift;organic	Sediment ramps
Oller-turned rock	Exposed roots below intact soil layer	Sediment sortfng
Relict bar &swale	Flow or streaming lineatfons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped -bed morphology In gravel
/ No flow or pondingindicators	levee Ridges: sand & gravel	Substrate staining
Rubifled rock undersides	Observed inundation : flooding, ponding, or substrate saturation	Vegetation - channel alignment
S011 development	Out of channel flow	Water-cut benches
vurface rounding of landform	Overturned rocks	Water levelmarks
Woody debris In place	Rills	Wrack: woody

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Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID # RR	Date:)I)1) }(/)	Representative photo taken? Yes / £ No
Upland Indicators	*W at ercourse Indicat ors*	
Av Horizon	Bars:mud, sand & gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotlc crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Cru.ts:carbonate, salt,&soda	Sand filled channels
Coppice dunes: active &relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact sofl layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knlcl(Points	St epped-bed morphology ,n gravel
o flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate stainong
Rubifled rockundersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
.,.,.satJ development	Olltof channel flow	Water-cut benches
/urf.lce rounding of landform	Overturned rodes	Water levelmarks
Woody debris In place	Rliis	Wrack: woody

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• Adapted from: A Field Guide to the Identlficatlonof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utllty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of GeomorphicIndicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID # RR.CJ:>	Date : J/ J,3)/lh	Representative photo taken? Yes/ /.o
Upl a nd Indicators	WatercourseIndicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotrc Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
dast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastenng
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below ,ntact soil layer	Sediment sorting
Relict bar &swale	Flow or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Jmbrlcated gravel	Stainingof rocks
Rock varnish	Knick Pofnts	Stepped-bed morphology In gravel
o flow or pondingIndicators	Levee Ridges: sand & gravel	Substra te staining
Rublfled rockundersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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ᐧ **Adapted** from: AField Guide to the Identificationof the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual {Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utlli ty•ScaleSolar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Id ent ifi cat ion of Geom orphic Ind ic ator s of Upl and and Wat ercour se Areas		
Sample Point# : and/or Drainage ID # Kf?CJ'i	Date: 1JJ13/1v	Representativephoto taken?_ Yes / /___ No
U pland Ind ic at ors	/ ***Wate rcou r se In d ica tors***	
Av Hamon	Bars:mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Bfotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubb le	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream or obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plasterlng
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: tails
Relfct channe l	Headcuts	Springs
Rock fracture 1n place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Point s	Stepped-bed morphology ln gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rub,fled rock undersides	Observed inundation : flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rill s	Wrack : woody

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• Adapted from:A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and McColley 2008);and Methods to Describe and Delineate Episodic Stream Process on Arid landscapes for Permitting Utlllty•Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Area

Sam pl e Po in t # an d /o r Drainage ID# J?R't5	Date: JI),))	Rep rese nt at iv e photo taken? _ Yes / .L- o

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
callche: coatings, layers, rubble	Biotfc crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Cfast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingo f rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
o flow or ponding Indicators	Levee Ridges: sand &gravel	Substrate staining
Rubifled rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil developmen t	Out of channel flow	Water-cut benches
ur face rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

Note s: ·1: t- 1, (5..U A,,' 1)

• Adap t e d fr om: A Fleld Guide to the Identifi cat ion of the Ordinary High Water Mark {OHWM) In the Arid West Region of the Western United States, A Delineati on Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Land scapes for Permitting Utili ty-Scale Solar Power Plants (8rady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID # P1?9	Date: 11/r /1	Representative photo taken?_ Yes/ L_ No
Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
B1ot1c Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers. rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etchi ng	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filledchannels
Coppice dunes: actlve & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud. cracks, curls/ drape:.	Sediment plastering
De:.ert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
/ No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation : flood!ng, ponding, or substrate saturation	Vegetation - channel ahgnment
Soll development	Out of channel now	Water-cut benches
,/5urface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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•Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permitting Utllty•ScaleSolar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicator s of Upland and WatercourseAreas

Sample Pofnt # and/or Drainage ID # .f P9r	Date: IJ/t / /(p	Representative photo taken?_ Yes /£.

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated now	Secondary channels
Caliche: coatings,layers, rubble	Bioticcrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	sand filled channels
Coppice dunes: active& relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	El<posed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streamlng llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology m gravel
No flow or ponding indicator s	Levee Ridges: sand & gravel	Substrate staining
Rubifled rockundersides	Observed 1nundat1on: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

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AGuide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sam ple Point # and / or Drainage ID # Rf.9.	Date: 11/1ll/	Representativephoto taken?_ Yes/ L.o
Upland Indicator s	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate et ching	Drainage swales	Sediment sheets
Oast / rock weathering	Crusts: carbonat e, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstrucUons
Deflated surfaces	Desiccation Mud:cracks, cur ls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sediment· tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
o flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observedinundation: flooding,ponding,or substrate saturation	Vegetation - channel allgnment
Soil development	Out of channel flow	Water-cut benches
,/urface rounding of fandform	Overturned rocks	Water levelmarks
Woody debris In place	Rliis	Wrack: woody

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•Adapted from: A Field Gulde to the Identificationof the Ordinary HighWater Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate EpisodicStream Processes on AridLandscapes for Permitting Utility-Scale Solar Power Plants(Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and/or Drainage ID# KKC-J'J	Date: 11/13)/C,,	Representative photo taken? _ Yes/..0o

Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotfccrusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filledchannels
Coppice dunes: active & rellct	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact sol! layer	Sediment sorting
Relict bar &swale	Flow or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology ln gravel
l o flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out or channel flow	Water-cut benches
urfa ce rounding of landform	Overturned rocks	Water level marks
Woody debris ln place	Rill s	Wrack: woody

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• Adapted from: A Fleld Guide to the Identlficatioo of the Ordinary High Water Mark (OHWM) In the Arid West Regioo of the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe aod Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# RR_ an d /or Drainage ID # / 00	Date: ll/1 //(,,;	Representative photo taken? _ Yes /_____o
Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars:mud, sand & gravel	Ripples
BioticSoil Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic.crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
dast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	El<posed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morpho logy In gravel
\/o flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
urface roughing of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

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•Adapted from: Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (llch11ar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processon Arid Landscapes for Permittlng Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013}.

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # and/or Drainage ID# Rf< /Ol	Date: ti)13/JfA	Representative photo taken? Yes / .L.o
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channe l bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crust s: carbonate, salt,& soda	Sand filledchannels
Coppice dunes:active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift organic	Sediment ramps
Over-turned rock	Exposedroots below intact soil layer	Sediment saning
Relict bar & swale	Flow or streaming llneations	Sediment : tails
Relict channel	Headcut s	Springs
Rock fracture in place	Imbrfcated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
V Soil development	Out of channel flow	Water-cut benches
i/urface rounding of landform	Overtumed rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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•Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Uch11ar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid l andscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/ or DrainageID# KPID	Date: ulr /1	Representativephototaken?_ Yes/_o
Upland Indicators	l *Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Cal1che: coatings, layers,rubble	Blotlc crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	E posed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Steppe -d bed morphology in gravel
_/N0 flow or pondingIndicators	levee Ridges: sand & gravel	Substrate st aining
Rubified rockundersides	Observedinundation: flooding, ponding, or subst rate saturation	Veget ation - channel alignment
Soil development	Out of channel flow	Water-cut benches
./urface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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• Adapted from: A Field Gulde to the Identifi cation of the Ordinary High Water Mark (OHWM) in the Arid West Regionof the Western United States, A Delineation Manual (lichvar andMccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas.		
Sample Point # and/or **Drainage** ID# Rf:,t"	**Date:** ll)13) }	**Representativephoto taken? _ Yes/ /__ No**
Upland Indicators	'/ r ***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ndges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche: coatings,layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneatlons	Sediment: talls
Relict channel	Headcuts	Springs
Rock fracture in place	lmbrlcated gravel	Stainingof rocks
Rock varnish -	Knick Points	Stepped -bed morphology in gravel
/o flow orpondingindicators	Levee Ridges: sand & gravel	Subst rate staining
Rubified rockundersides -	Observed Inundation: nooding, ponding, or substrate saturation	Vegetation - channel alignment
oil development	Out of channel flow	Water-cut benches
urfa ce rounding of landform	Overturned rocks	Water levelmarks
Woody debris in place	Rills -	Wrack: woody J .....;

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"Adapted from: A Field Gulde to the Identificationof theOrdinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Aridlandscapes for Permitting Utility-Scale Solar Power Plants(Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
SamplePoint # and/ or Dra in ageID# RR.BO	Date: II);3)}<.t;	Representative photo taken? _ Yes / __6-
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated now	Secondary channels
Calh:he: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstru c:t1on
Carbonate etching	Dralnage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud: cracks,curls / drapes	Sediment plastering
Desert pavemen t	Dr ift: organic	Sediment ramps
Over-turned rock	Exposed roots belowIn tact soIl layer	Sediment sorting
Relict bar & swale	f low or streaminglIneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
/No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate stammg
Rubified rock undersides	Observed in undation: Aoodlng, ponding, or substrate saturation	Vegetation - channel alignment
iidevelopment	Out of channel now	Water-cut benches
/ Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rllls	Wrack: woody

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• Adapted from: A Field Gulde to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid la nd scapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # a nd/ or Dr a i n age ID # RR	Date: II /cs} lf,,,	Representativephoto taken? _ Yes / _ No

Upla nd Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mu d, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate,salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	low or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fract ure In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
flow or ponding Indicators	Levee Ridges: sand & gravel	Substrat e staining
Rubified rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
/urface roughn form	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

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- From: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual flichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identi fication of Geomorphic Indicators of Upland and Wat ercourse Areas		
Sample Point # and/ or Drainage ID # 1?1?(':f	Date : 111, 1,	Representative photo taken? _ _ Yes/ o
Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand& gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated now	Secondary channels
Caliche: coatings,layers,rubble	Bioticcrusts	Secondary channel bypassing obstruct ion
Carbonate etchmg	Drainage swales	Sediment sheets
aast / rock weathering	Crusts: carbonate,salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks. curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
over-turned rock	Exposed roots below int.ict soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: tails
Rellct channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gr.ivel	Stainingof rocks
Rock varnish	Knick Points	Stepped •bed morphology 1n gravel
J0 flow or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel now	Water-cut benches
,/urfacerounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack : woody

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• Adapted from: A Fleld Gulde to the Identification of the Ordinary HighWater Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (llchvar and Mccolley 2008); and Methods to Describe and Dellneate Episodic Stream Processes on Aridlandscapes for Permitt ing Utili ty-Scale Solar Power Plants (Brady and Vyverberg, 2013)

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and/ or Drainage ID # RR&l.	Date : nl /I	Representative photo taken? Yes / ...L-o

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubation	Bifurca ted flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing o bstr uction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Des icca tio n Mud: crack5, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact sol!layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	lmbrlcated gravel	Staining of rocks
Rock varnish	Knie Points	Stepped-bed morphology 1n gravel
No flow or ponding Ind ica tor s	Levee Ridge s: sand & gravel	Substrate staining
Rubifled rock undersides	Observed inundation: flooding. ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
/rface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: > 1?./2 J6 {>--V)

• Adapted from: A FieId Guide to the Ide nti fication of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western Unit ed States, A Delineation Manual (lichvar and Mccolley 2008); and Methods to Describe and Delineate EpisodicStream Process on Arid landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point #______________ and/or Drainage ID # t?R&\	Date: JI)r:,//(p	Representative photo taken? _ Yes/ **No**
Upland Indicators	***Watercourse Indicators***	
Av Horiwn	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts carbonate, salt & soda	Sand fllled channels
Coppice dunes: active & relict	Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
o flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staming
Rubifled rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel flow	Water-cut benches
urf ace rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: > 0",, ..> RR.. lt,{,(S, /vOl)

•Adapted from: A Field Gulde to the Identi fication of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uchvar and McColley 2008); and Methods to Describe and Dellneate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# ard DrainageID # RR	Date: ;J/13/J	Representativephoto taken? Yes/

Upland Indicators	*Watercourse In dicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche:coatings, layers,rubble	Biotic crusts	Secondary channe l bypassing obst ruction
Carbonate etching	Drainage swales	Sediment sheets
dast / rock weathering	Crusts: carbonate, salt & soda	Sand filled channels
Coppice dunes: active &rellcl	Cul banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morpho logy m gravel
/No flow or ponding Indicators	levee Ridges: sand & gravel	Substrate staining
Rubifled rockundersides	Observed 1nundat1on: fl ooding, ponding. or substrate saturation	Vegetation - channelallgnmeni
oil development	Out of channel flow	Water-cut benches
rface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: - J3 /c(c_(,,(,(

• Adapted from: A FieldGulde to the Identificationof the Ordinary High Wat.er Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (lichvar andMccolley 2008); and Methods to Describe and Delineate EpisodicStream Process on Aridlandscapesfor Permittlng Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Id e ntifi cation of GeomorphicIndicators of Upland and Wat ercourseAreas		
Sample Point # and/or Drainage ID II f-\"t::! / Q/J;	Date: 1/ II3/ /{,,,	Repr esentat ive photo taken? Yes/ L.o

Upla nd Indicators	*Wa tercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Rfpples
Biotic Soll Cwst	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
callche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active& relict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud: cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Rellct bar &swale	Flow or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock frac ture in place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology m gravel
/No flow or ponding Indicators	Levee Ridges: sand &gravel	Substrate staining
Rubified rockundersides	Observed 1nundat1on: flooding, ponding, or substrate saturation	Vegetation- channel alignment
Soil development	Out of channel flow	Water-cut benches
urfa ce rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills -	Wrack: woody

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•Adapted from:A Field Gulde to the Identificatio n of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States,A Delfneation Manual (Lichvar and McColley 2008); and Methods to Describe and Delineate E'pisodic Stream Process on Arid Landscapes fo r Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identific at ion of Geomorphic Indicator s of Upland and Watercourse Areas

Sample Point# ; and/or Drainage ID # 'PR'4::J.	Date: 111,1,	Representativephototaken?_ Yes/ /.__ o

Upland Ind icat ors	I I *Watercourse In d icators*	
Av Horizon	Bars:mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand nl led channels
Coppice dunes: active & relict	Lba n ks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow Intact soil layer	Sediment sorting
Reifct bar & swale	/ow or streamingllneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology m gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rublfled rock undersides	ObservedInundation:flooding,ponding,or substrate saturation	Vegetation - channel allgnment
, .-Soildevelopment	Outofchannelflow	Water-cut benches
Surface ro unding of landform	Overturned rocks	Water level marks
Woody debris In pl ace	Rliis	Wrack: woody

Notes: SALL-+>c---fJMo 11. A._J i>o}« -W. I/C f-- //ow ,·N (()1-t . ,._. (,m,,. IJ,;.I /1 -6 (' C v f- CA I-tr,,V- /? a.t I, t JI) ,, A,f c/ /o ..dd -j/Dw . /AJ c;ha•._... ?!."Hf...1:1:'.<J Is. /12 , e.,,a -JJ,vc.v:,,,-j;,-; ond / -7/}7 e. LA,,. u r :So I .

• Adapted from: A FieldGuide to the Identification ofthe Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States. A Delineation Manual (llchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on

Field Data Sheet: Identification of Geomorphic Indicator s of Upland and Watercourse Areas

Sample Point # and/or Drainage ID# RR Y..3	Date : 11/13/J(/J	Representativephoto taken?_ Yes/ L. 0

Upland Indicators	Watercourse Indicators	
Av Horizon	BarS-: mud, sand & gravel	Ripples
Biotic SollCrust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	B1ot 1ccrusts	Secondary channel bypas.slng obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	u t banks	Scour holes downstream of obstructions
DeOated surfaces	Desiccation Mud cracks,curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	w or streaminglineatlons	Sediment: t.iils
Relictchannel	Headcuts	Springs
Rock fracture m place	Imbricatedgravel	Staining of **rocks**
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublned rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cut benches
Surface roun ding of landform	Overtumed rocks	Waterlevel marks
Woody debris in place	Rliis	Wrack: woody

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*Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark {OHWM) In the Arid West Region of the Western Uni ted States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapesfor Permitti ng Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Ident ification of Geomorphic Indicators of Upland and Watercourse Area s

Sample Point# : and/or Dra i nage ID # RR 4 lf	Date: 11/11>)/	Represent ative photo taken? _ Yes/

Upla nd Indicators	*Wat ercourse Indicators* I	
Av Horizon	Bars:mud, sand & gravel	Ripples
BioticSollCrust	Beach ridges	Scour
Blotubatlon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Brotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate,salt,& soda	Sand filled channels
Coppice dunes: active & rehct	u t b anks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud.cracks, curls/ drapes	Sediment pl ast ering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/ ow or streaminglIneations	Sediment: tails
Relictchannel	1-teadcuts	Spr ings
Rocle fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology 1ngravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
/ oil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturn ed rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

Notes: R ?/)

• Adapted from: A FieldGuide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western Unit ed Stat es, A Deli neation Manual (lfchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arld Landscapes for Per mi tt ing Ut ili ty -Scale Solar Power Plant s (Brady and Vyverberg, 2013).

Field Data Sheet: Identific ation of Geomorphic Indicators of Upland and Watercourse A eas		
Sample Point # and/or Drainage 10 # RR. 5	Date: JI/I / I	Representative photo taken?_ Yes/_L.o

Upland Indicators	Water course Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSollCrust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers. rubble	Blotlc crusts	Secondary channel bypassing ob stru ct ion
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	/Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud. cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Rellct bar & swale	w or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbncated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology 1ngravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation -channel alignment
0011development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Not s:

"Adapted from: A Field Gulde 10 the Identificati on of the Ordinary High Water Mark (OHWM} In the Arid West Regionof the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on AridLandscapes for Permlttlng Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Area		
Sample Point # and/or Drainage ID# RR 4'7	Date / / ; ;, / / '	Representativephototaken? Ves/ £,
Uplan d Indicators	I ***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Calfche· coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& sod.i	Sand filled channels
Coppice dunes: active & relict	u t b anks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud· cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turn ed rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/low ostreaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand &gravel	Substrate staining
Rubified rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
Soll development	Out of channel flow	Water-cul benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

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•Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitt ing Utility-Scale Solar Power Plants (Brady and Vvverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicator s of Upland and Watercourse Areas		
Sample Point // an d/or Drain a ge ID # /..f-:J- "'-	**Date:** 11/1:&//(?	**Representative photo taken? _ Yes /** ______
Upland Indicators	***Watercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic.Soil Crusl	Beach ridges	Scour
Biolubation	Bifurcated flow	Secondary channels
Caliche : coating,s layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainageswales	Sed,ment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channel s
Coppice dunes: active & relict	/ ut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccati on Mud: cracks, curls / drapes	Sediment plasteri ng
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposed roots below inlact soll layer	Sedime nt sortmg
Relict bar & swale	Flow or streaming lineat1on s	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Jmbricated gravel	Staining of rocks
Rock varnish	**Knick** Po ints	Stepped-bed morphology in gravel
No now or ponding indicators	Levee Rid ges: sand & gravel	Substrate staining
Rubl fied rock undersides	Observed inunda tion: flooding, ponding, or substrate saturation	Vegetation -channelalignment
/5 0 11development	Out of channel **flow**	Water -cut benches
Surfa ce rounding of landform	Overturned rocks	Water level marks
Woody debrism place	Rills	Wrack: woody

Notes:

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• ...ion of the Ordinary High Water Mark (OHWM) in the Arid West Regio n of the We stern United States, A Delineation Manual (Lichvar and McColtey 2008); and Methods to Describe and Delineate Episodic Stream Processon Ari d Landscapes for Permitt i ng Utility -Scale Solar Power Plants (Brady and Vyverb erg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # ________ and/or Drainage ID # &'i.8.	Date: 1,/,3//lo	Repr ese nt ativ e photo taken?_ Yes / .L0
Up la nd Ind icato rs	*W aterco urse In dicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channe l bypassfng obstr uction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relfct	u t banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls/ drapes	Sedi men t plastering
Desert pavement	Drift : organic	Sediment ramps
Over-turned rock	Exposed roots belowIntact sotllayer	Sediment sorting
Relict bar & swale	low or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No now or pondingindlcato	levee Ridges:sand & gravel	Substrate staining
Rublfled rock undersides	Observed inundatio n: flooding, ponding, or substrate saturation	Vegetation - channel alignment
l development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

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Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and/or Drainage ID # J?. >RL{9	Date: 11/13/;	Representative photo taken? Yes/ L.o

Upland Indicators	**Watercourse Indicators**	
Av Horfzon	Bars:mud, sand & gravel	Ripples
BioticSoil Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / roe weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	Ut banks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming llnearlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrlcated gravel	Stainingof rocks
Rock varnish	nick Points	Stepped-bed morphology,n gravel
No flow or pondingindicators	Levee **Ridges:** sand & gravel	Substrate staining
Rublfle d rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation -channel alignment
oil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debris in place	Rliis	Wrack: woody

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*Adapted from: AField Gulde to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Regionof the Western United States, A Delineation Manual (Uchvar and McColley 2008}; and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Wat ercourse Areas		
Sample Point# and/ or Drainage ID# RRSO	Dat e: 11/;:::,);r:	Re pre se nta ti ve ph o to take n? _ Ve.s / L. 0
Upland Indicators	I	**_W atercourse Indicators_**
AvHorizon	Bars: mud, sand & gravel	Rlpples
Biotic Sorl Crust	Beach ridges	Scour
Blotuba tlon	Bifurcated flow	Secondary channels
Callche : coa tings. layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbona te, salt, & soda	Sand filled channels
Coppice dunes: active & relict	/ut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sedlment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soillayer	Sediment sorting
Relict bar & swale	lo w or streaming llneations	Sediment· tails
Relict channel	Headcuts	Springs
Rock frat ture In place	Imbricated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	l evee Ridge s: sand & gravel	Substrate staining
Rubified rock undersides /	Observed Inundation: flooding, ponding, *or* substrate saturation	Vegetation - channel alignment
oll development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debrisin place	Rliis	W rack: woody

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- dr Field Gulde to the Identifl catfon of the Ordinary High Water Mark {OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utllity-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Wate rcourse Areas		
Sample Point # **and/ or** **Drainage** ID # RRs /	**Date:** 11/ 1'3/ l l,	**Represent ative photo taken? _ Yes/ No**
Upl a nd Indicators	f ***W atercourse Indicators***	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche : coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sedimen t sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	/Cut banks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soillaver	Sediment sorting
Rellct bar & swale	/ low or streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrica ted gravel	Staining of rocks
Rock varn ish	Knick Points	Stepped-bed morphology in gravel
No flow or pondingindicators	Levee Ridges : sand & gravel	Substrate staining
Rublfled rock undersides _,L	Observed inundati on: flooding, ponding, or substrate sat uration	Vegetation - channel alignment
oil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturn ed rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Notes:

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"Adapted from: A Field Gulde to the Identificatio n of the Ordinary High Water Mark (OHWM) in the Arid West Regon of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and M ethods to Describe and Delineate Episodic Stream Process on Ari d Land scapes for Per m i tt in g U t ility -Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # and/or Drainage ID# RRs-;;.	Date: ll/13,/)l		Representative photo taken? _ Yes/ No
Upland Indicators	(*Watercourse Indicators*		
Av Horizon	Bars: mud,sand & gravel	Ripples	
Biotic Soll Crust	Beach ridges	Scour	
Biotubatlon	Bifurcated now	Secondary channe ls	
Caliche: coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction	
Carbonate etchlng	Drainage swales	Sediment sheets	
Clast / rock weathering	Crusts:carbonate, salt,& soda	Sand filled channels	
Coppice dunes: active & relict	u t b anks	Scour holes downstream of obstructions	
Deflated surfaces	Desiccation Mud:cracks,curls/ drapes	Sediment plastering	
Desert pavement	Drrft:organ,c	Sediment ramps	
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting	
Relict bar & swale	Flow or streaming llnea1ions	Sediment: talls	
Relict channel	Headcuts	Springs	
Rock fracture in place	Imbrlcated gravel	Stainingof rocks	
Rock varnish	Knick Points	Stepped-bed morphology Tn gravel	
No flow or ponding Indicators	Levee Ridges: sand &gravel	Substrate staining	
Rubified rock undersides L	Observed Inundation: flooding, pondlng, or substrate saturatlon	Vegetation - channel alignment	
Ooil development	Out of channel flow	Water-cut benches	
Surface roundlng of landform	Overturned rocks	Water level marks	
Woody debris in place	Rliis	Wrack: woody	

Note s: >c...----(_ J?.R- 'IL r /

"Adapted from: A Fleld Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Method5 to De5cribe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utllity·Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and/or Drainage ID# /?R.53	Date: 11)1.Y If,,;	Representative photo taken? Yes/ o

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic SollCrust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caloche : coatings, layers,rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt. & soda	Sand filled channels
Coppice dunes: active & relict	ut banks	Scour holesdownstream of obstructions
Deflated surfaces	Desfccatlon Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soillayer	Sediment sorting
Relict bar &swale	/low o streaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture ln place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	levee Ridges: sand &gravel	Substrate staining
Rublfied rockundersides	Observed Inundation · flooding, ponding. or substrate saturation	Vegetation - channel alignment
.....-Soil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water levelmarks
Woody debris in place	Rliis	Wrack: woody

Notes

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•Adapted from: A Field Guide to the Identi fication of the Ordi nary High Water Marl((OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and /or **Drainage ID #** .RR.1£	Date: II /13)/	Representativephoto taken? _ Yes/ L.0
Upland Indicators	I I **Wat ercourse Indica to r s**	
Av Horizon	Bars: mud, sand &gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubatlon	Bifu rcated flow	Secondary channels
Calfche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbona te, salt, & soda	Sand filled channels
Coppice dunes:active & relict	u t banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: **cracks,** cur ls / drapes	Sediment plasterfng
Desert pavement	Drift : organic	Sediment ramps
Over turned rock	Exposed roots below Intactsoillayer	Sediment sorting
Relict bar & swale	/low ostreaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	Imbrfcated gravel	Staining of rocks
Rock varnish	Knick Points	Steppe-d bed morphology in gravel
No flow or ponding Indicators	levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides _L_	Observed Inundati on: flooding, ponding, or substrate saturation	Vegetation - channel alignment
oildevelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturnedrocks	Water level marks
Woody debris In place	R111s	W r ack : woody

Notes:

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• Adapted from: A Field Guide to the Identi fication of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United State s, A Delineation Manual (llchvar ,md Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utlli ty•Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of GeomorphicIndicators of Upland and Watercourse Areas

Sample Point #_________: and / or Drainage ID # RR5ro	Date :)I/13// / /	Representa tive photo taken? _ Yes/ L

Upland Indicators	*W atercourse Indicators*	
Av Horlzon	Bars: mud, sand & gravel	Ripp le s
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche· coat ings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbona te, salt,& soda	Sand fllled channels
Coppice dunes: active & re lict	Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soillayer	Sediment sorting
Relict bar & swale	Flow or streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	levee Ridges: sand & gravel	Subs1rate staining
Rubified rock undersides	Observed Inunda tion: floodi ng, ponding, or substrate saturation	Veget ation - channel alignment
evelopment	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: 5 Ice'-12rS u/ J

•Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United Stat es, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Ari d Land scapes for Permitting Utili ty-Scale Solar Power Plants (Brady and Vyverber,g 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID # !<RS3-	Date: J1/13)Jl -I I	Representative photo taken? __ Yes/ INo
Upland Indicators	*Wat ercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic SollCrust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche : coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast I rock weathering	Crusts: carbona te, salt, & soda	Sand filled channels
Coppice dunes: active & rellct	u t banks	Scour holes downstream of obstructions
Deflated surfaces	Deslctc1tlon Mud · cracks, curls/ drapes	Sediment plastering
Desen pavement	Drift·organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment saning
Relict bar & swale	w or streaming llneatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture in place	lmbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped -bed morphology in gravel
No flow or ponding indicators	levee Ridges: sand & gravel	Substrate stalning
Rublfled rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
evelopment	Oubfchannel flow	Water-cut benches
Surface rounding of landlorm	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

Notes:

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"Adapted from: A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Uchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitti ng Utili ty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Id ent ification of Geomorphic Indicators of Upland and WatercourseAreas

Sample Point # and/or Drainage ID# RRS'&	Date: II /13,/ '	Representative photo taken? __ Yes/ JNo

Upland Ind icators	*Watercourse Indicators*	
Av 1-lor i zon	Bars: mud, sand& gravel	Ripples
Biotic Soll Crust	Beach rfdges	Scour
Blotubation	Bffurcated flow	Secondary channels
callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Cru sts: carbonat e, salt, & soda	Sand fllled channels
Coppice dunes: active & relict	u t banks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud: cracks,curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Tntact soil layer	Sedfment sorting
Relict bar & swale	./lovvbreaming llneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding Indicators	*Levee* Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed inundation : flooding, ponding, or substra te saturation	Vegetation - channel alignment
1- oil development	Out of channel flow	Water-cut benches
Surface roun ding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Notes: t..4.. .. .. 5._(/ 1,8)

• Adapted from: A Field Guide to the Identificationof the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and McColley 2008); and Methods to Describe and Delineate EpisodicStream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Wat ercourse Areas		
Sample Point // and / or Drainage ID # J?R(pO	Date: 11/1 1/fo	Representative phot o t aken? _ Yes/ L
Upland Indicators	I *Wat ercourse Indicat ors*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubation	Bifurcated flo w	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crust s: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active &relict	Cut banks	Scour holes downstream of obstructions
Denatedsurfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Dri ft: organic	Sediment ramps
Over-turn ed rock	Exposed roots below intact sol! layer	Sediment sorting
Relictbar & swale	Flow or streaming lineatlons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture *in* place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Point s	Stepped-bed morphology in gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inunda tion: noodlng, ponding, or substrate saturation	Vegetation - channel alignment
oil development	Out *of* channel now	Water-cut benches
urf ace ro un ding of lan dform	Overt urn ed rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Notes: 5 A_e_ l(2.{S)

• ,Adapted from : A Fie ld Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western Uni ted States, A Delineation Manual (lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Proce on Arid Landscapes for Perm itt ing Utili ty -Scal e Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicator s of Upland and Watercourse Areas		
Sample Point # and/or Drainage ID # RR=t-1	Date: u/811	Represent ati ve photo taken? _ Yes/ L.0

Upland Indicators	*Wa tercourse Indicators*	
Av 1-toriZon	Bars : mud, sand & gravel	Ripples
Biotic SollCrust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sedimen t sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relltt	/ 1 ut banks	Scour holes downstream of obstructrons
Denated surfaces	Desiccation Mud: cracks, curls/ drapes	Sediment plasterrng
Desert pavemen1	Drift: organic	Sediment ramps
Over-turn ed rock	Exposed roots below Intact soil !aver	Sedimen t sorting
Relict bar & swale	/ Flow or streamrng llnea tl ons	Sediment : tails
Relictchannel	1-tea d cu ts	Springs
Rock fracture in place	lmbrfcated gravel	Stainingof rocks
Rock varnish	Knick Pornts	Stepped-bed mo rphology fn gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate stainrng
Rubified rock undersides	Observed Inundation: flooding, ponding, or substrate sa1uration	Vegetation - channel alignment
oil developmen t	Out of channel now	Water -cut benches
Surface ro undi ng of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack : woody

Notes:

At 4 c./s.A;l' ..<J"N2:::.)

ᐧ Ad a pted from : A Field Guide to the Identifi cation of the Ordinary 1-tlgh W at er M ark (OHW M) in the Arid West Region of the Western United States, A Delineatio n Manual (Lithvar and Mccolley 2008); and M ethods to Describe and Delineat e Episodic Stream Process on Arid Landscapes for Permi tting Utili ty-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point # **and/or** **Drainage ID #** RR-:/	**Date:** 11/1 11,	**Representative photo taken?** _ **Yes/** /____**No**

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand &gravel	Ripples
BioticSoll Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Calfche, coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts:carbonate, salt,& soda	Sand filled channels
Coppice dun es: active & relict	Cut banks	Scour holesdownstre?am of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pave?ment	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below Intact soil layer	Sediment sorting
Rellct bar & swale	./ Flow or streamlng llneallons	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture 1n place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges· sand & gravel	Substrate staining
Rubifled rock undersides /	Observedinundation: flooding,ponding,or substrate saturation	Vegetation - channel alignment
Soil development	Out of channel now	Water-cut benches
Surface ro unding of landform	Overturned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes: Rn 12.,

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"Adapted from: A fieldGulde to the Identi fication of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Method5 to Describe and Delineate Episodic Stream Process on Arid Land5capes for Permitting Utlllty-Scate Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Area s

Sample Point# : **and/or Drainage ID #** RR.r'T	**Date:** n/13/Jk	**Re prese ntative photo taken ?** *Yes/* /. o

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
BioticSollCrust	Beach ridges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Caliche : coatings, layers, rubble	Biotic crusts	Secondary channel bypassmg obstruction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	/Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	De51ccatlon Mud:cracks, curls/ drapes	Sediment plasterrng
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed root5 below intact soil layer	Sediment sorting
Rellct bar & swale	/Flow or streaming llneations	Sedlment: tails
Relict channel	Headcuts	Springs
Rock.fracture In place	fmbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or pondingIndicators	levee Ridges: sand & gravel	Substrate staining
Rublfled rock undersides	Observed inu ndation: flooding, ponding. or substrate saturation	Vegetation - channel alignment
oil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Note s :

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• Adapted from: A FleldGulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lkhvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on AridLandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverb erg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# a nd/ or Drainage ID# Ri S	**Date:** 11/13) /	**Re presentative photo taken? _ _ Yes /#**

Upland Indicat ors	/ *Watercourse Indicators*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic SoilCrust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes:active & relict	u t b anks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud : cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots belowintact soil layer	Sediment son Ing
Rel ict bar & swale	/tow orueaminglineations	Sediment: tails
Relict channel	Headcuts	**Springs**
Rock fracture in place	lmbrlcated gravel	Stainingof rocks
Rock varnish	Knick Point s	Stepped-bed morphology in gravel
No flow or pondingindicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observedinundation: flooding, ponding, or substratesaturation	Vegetation - channel alignment
J;"!,oll development	Out of channel flow	Water-cut benches
Surface ro undi ng of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes: 12 l/?../ ,4,...,<.,D

• **Adapt ed from: A** Field Guide to the **Identification of** the Ordinary High **Water Mark (OHWM)** In the **Arid West Region of** the **Western United States, A** Delineation Manual (Lichvar and Mccolley **2008); and Methods to Describe** and Delineate **Episodic** Stream **Process** on **Arid Landscapes for** Permitting Utility-Scale Solar **Power** Plants **(Brady and Vyverberg**, 2013).

Field Data Sheet : Id ent ifi cat ion of Geo m o rph ic In d icat o rs of Upl and an d W at ercou r se Areas

Sample Point # and/ or Drainage ID# !< +<.	Date: ll) 13)/'	Representativephoto taken? __ Yes/ L.o

Upland In d icators	/ Watercourse Ind icators	
Av Horilon	Bars: mud, sand & gravel	Ripp les
Biotic Soil Crust	Beach ridges	Scour
Biotubation	Bifurcated flow	Secondary channels
Caliche : coa t ings, layers.rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	sand filled channels
Coppice dunes: actrve & rel[ct	/Cut banks	Scour holesdownstream of obstructions
Deflated surfaces	Desiccation Mud: cracks. curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/lows streaming lIneations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbrlcated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding. ponding, or substrate saturation	Vegetation - channelalignment
I development	Out of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack: woody

Notes:

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•**Adapted** from: A FleldGuide **to the** Identi fication **of the** Ordinary **High Water Mark(OHWM)** In **the Arid *West* Region of the Western United States, A** Delineation Manual (Wchvar **and McColley 2008);** and **Methods to Describe and Delineate** Episodic Stream **Process** on **Arid Landscapes for Permitting** Utility-Scale **Solar Power** Plants **(Brady and Vyverberg, 2013).**

Field Dat a Sheet : Id entification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# and/or Drainage ID# RR.,€'1	Date: I // I 3))fc	Re presentat ive pho to ta ken? _ Yes/ /._ o
Upla n d Indicat ors	W at ercourse Indicators	
Av Hor12on	Bars : mud, sand & gravel	Ripples
Biotic Soil Crust	Beach rldges	Scour
Biotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etchlng	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relic1	Vutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud : cracks,curls/ drapes	Sediment plastering
Desert pavement	Drift:organic	Sediment ramps
Over-turned rock	Exposed rootsbelow intact soil layer	Sediment sorting
Relict bar & swale	Flow or streaming lineatlons	Sediment: talis
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Staining of roci<s
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
ii development	Out of channel flow	Water-cut benches
Surface ro unding of landform	Overturned rocks	Water level marks
Woody debris In place	Rills	Wrack: woody

Notes : 5 6-:::, AR_I/2(b' ,A)

•Adapted from: A Field Gulde to the Identifi cation of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western Unlted States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic StreamProcess on Arid Landscapes for Permitting Utility-ScaleSolar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet : Identific ation of Geomorphic Indicator s of Upl and and Watercourse Areas		
Sample Point# and/or Drainage ID# lit8(4	Date: III /!)II	Representative photo taken?__ Yes/_Loo
Upla nd Indi c a t o r s	*W a t erco ur se Ind ic ato rs*	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll*Crust*	Beach ridges	Scour
Biotubat1on	Bifurcated flow	Secondary channels
callche:coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruct ion
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt,& soda	Sand filled channels
Coppice dunes: active & relict	VCutbanks	Scour holes downstream of obstructions
Denated surfaces	Desiccation Mud: cracks,curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below *in ta ct* soil layer	Sediment sorting
Relict bar & swale	/lowostreaming llneatlons	Sediment: talls
Relict channel	Headcuts	Springs
Rock fracture In place	Imbricated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology i n gravel
No flow or ponding Indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation : flooding, ponding. or substrate saturation	Vegetation - channel alignment
0011developmen t	Ou t of channel flow	Water-cut benches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris In place	Rliis	Wrack : woody

Notes: HR_1/2.)

"**Adapted** from : A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas

Sample Point# and / or DrainageID# L(R<_2!/-	Date: ,, J /3) /(,,	Representative photo taken? Yes/ L-o

Upland Indicators	*Watercourse Indicators*	
Av Horizon	Bars. mud, sand &gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Blotubatlon	Bifurcated flow	Secondary channels
Callche: coatings, layers, rub ble	Biotic crusts	Secondary channel bypassing obstruc tion
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	/ulbanks	Soles downstream of obstructions
Deflated surfaces	Desiccation Mud:cracks, curls/ drapes	Sediment plastering
Desert pavement	Ori : organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sedimen t sorting
Relict bar & swale	VFIOW or streaming llneatlons	Sediment: tails
Rellct channel	Headcuts	Springs
Rock fracture In place	lmbrlcated gravel	Stainingof rocks
Rock varnish	l(nkkPoints	Stepped-bed morphology 1n gravel
No flow or pondingIndicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rock undersides	Observed mundat1on: floo ding, ponding, or substrate saturation	Vegetation - channel alignment
ii d evelopment	Out of channel flow	Water-cut benches
Surface ro undi ng of land form	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wr ack: woody

Notes: ...t.,o/.)

•Adapted from : A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States, A Delineation Manual (Llchvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stream Process on Ari d Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point# a nd/ or Drainage ID# f<R	Date: n/1;.I/	Representative photo taken? __ Yes/.L-0

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soil Crust	Beach ridges	Scour
Blotubation	Bifurcated flow	Secondary channels
Callche; coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	l/Cutbanks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation Mud: cracks, curls / drapes	Sediment plastering
Desert pavement	Drift ; organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swale	/Flow streaming lineations	Sediment: tails
Relict channel	Headcuts	Springs
Rock fracture In place	Imbr Icated gravel	Stainingof rocks
Rock varnish	Knick Points	Stepped-bed morphology in gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetatron - channel alignment
oil development	Out of channel flow	Water-cut benches
Surface rounding of landform	Over turned rocks	Water level marks
Woody debris in place	Rills	Wrack: woody

Notes:

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• Adapted from: A Fleld Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western UnitedStates, A Delineation Manual (Uchvar and McColley 2008); and Methods to Describe and Delineate Episodic Stream Process on Aridlandscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicators of Upland and Watercourse Areas		
Sample Point # and/or DrainageID# KR l0>	Date: ıı /,3,Ill- r	Representative photo taken? Yes / o
Upland Indicators	**Watercourse Indicators**	
Av Horizon	Bars: mud, sand & gravel	Ripples
Biotic Soll Crust	Beach ridges	Scour
Biotubatfon	Bifurcated flow	Secondary channels
Caliche: coatings, layers, rubble	Biotic crusts	Secondary channel bypassing obstr uction
carbonate etching	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	u t banks	Scour holes downstream or obstructions
Deflated surfaces	Desiccation M ud· cracks, curls/ drapes	Sediment plastering
Desert pavement	Drift: organic	Sediment ramps
Over-turned rock	Exposed roots below intact soil layer	Sediment sorting
Relict bar & swal e	? w or streaming llneatlons	Sediment: tafls
Relict channel	Headcuts	Springs
Rock fract ure m place	Imbr icated gravel	Staining of rocks
Rock varnish	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rublfied rockundersides	Observed inundation: flooding, ponding, or substrate saturation	Vegetation - channel alignment
development	Out of channel flow	Water-cutbenches
Surface rounding of landform	Overturned rocks	Water level marks
Woody debris in place	Rliis	Wrack: woody

Notes: > /4 '-{ (i.d,,/40)

• Adapted from A Field Gulde to the Identi fication of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western Uni ted States, A Delineation Manual (Lichvar and Mccolley 2008); and Methods to Describe and Delineate Episodic Stre.im Process on Arid l.ilndscapes for Permitting Utill ty-Scale Solar Power Plan ts (Brady and Vyverberg, 2013).

Field Data Sheet: Identification of Geomorphic Indicator s of Upland and Watercourse Areas

Sample Point # and/or Drainage ID # RRlo4	Date: 11/r l	Representative photo taken ? _ Yes/ _ No

Upland Indicators	Watercourse Indicators	
Av Horizon	Bars; mud, sand & gravel	Ripples
Blotlc Soil Crust	Beach **ridges**	Scour
Blotubation	Bifurcated now	Secondary channels
Callche:coatings, layers, rub ble	Biotic crusts	Secondary channel bypassing obstruction
Carbonate etchi ng	Drainage swales	Sediment sheets
Clast / rock weathering	Crusts: carbonate, salt, & soda	Sand filled channels
Coppice dunes: active & relict	/Cut banks	Scour holes downstream of obstructions
Deflated surfaces	Desiccation M ud: cracks. curls/ drapes	Sediment plasterlng
Desert pavement	Drift:organic	Sediment ramps
Over•turned rock	Exposed roots below lntaCL soillayer	Sediment sorting
Relict bar & swale	/ low or streaming llneatlons	Sediment: tails
Relict channel	Headcut s	**Springs**
Rock fracture In place	lmbricated gravel	Staining of rocks
Roel(varni sh	Knick Points	Stepped-bed morphology In gravel
No flow or ponding indicators	Levee Ridges: sand & gravel	Substrate staining
Rubified rock undersides	Observed Inundation: flooding, ponding.or substrate saturation	Vegetation - channel alignment
oil development	Out of channel flow	Water-cut benches
Surface roun ding o f landform	Overturned rocks	Water level marks
Woody debris In place	Rills	W rack: w oody

Notes:

Je l/ 2f's..u-.:Vt.:i

•Adapted from: A Field Gulde to the Identification of the Ordinary High Water Mark (OHWM) In the Arid West Region of the Western United States, A Delineation Manual (Lichvar and McColley 2008); and Methods to Describe and Oellneate Episodic Stream Process on Arid Landscapes for Permitting Utility-Scale Solar Power Plants (Brady and Vyverberg, 2013).

Appendix E1

Representative Onsite Photographs

Photo Point / Watercourse ID# RR1, dormant channel east side of north-south road.

Photo Point / Watercourse ID# RR2, dormant channel east side of north-south road.

Photo Point / Watercourse ID# RR3, dormant channel west side of north-south road, looking southwest.

Photo Point / Watercourse ID# RR6, looking southwest.

Photo Point / Watercourse ID# RR7, dormant channel looking east.

Photo Point / Watercourse ID# RR8, dormant channel looking east.

Photo Point / Watercourse ID# RR9, dormant channel looking northwest.

Photo Point / Watercourse ID# RR10, dormant channel looking south.

Photo Point / Watercourse ID# RR11, dormant channel looking northwest.

Photo Point / Watercourse ID# RR 12, dormant channel north side of road, looking north.

Photo Point / Watercourse ID# RR13, dormant channel north side of road, looking east-southeast.

Photo Point / Watercourse ID# RR14, dormant channel north side of road, looking east-southeast.

Photo Point / Watercourse ID# RR15, dormant channel north side of road, looking southeast.

Photo Point / Watercourse ID# RR16 and RR17, dormant channel north side of road, looking south.

Photo Point / Watercourse ID# RR18, dormant channel north side of road, looking south.

Photo Point / Watercourse ID# RR19, dormant channel north side of road, looking southwest.

Photo Point / Watercourse ID# RR18, dormant channel on south side of berm on southern side of farmed area.

PPhoto Point / Watercourse ID# RR19, dormant channel on south side of berm on southern side of farmed area.

Photo Point / Watercourse ID# RR20, dormant channel with 5 forks on south side of berm, south side of farmed area.

Photo Point / Watercourse ID# RR21a, dormant channel on south side of berm on southern side of farmed area.

Photo Point / Watercourse ID# RR22. Dormant channel.

Photo Point / Watercourse ID# RR23. Dormant channel.

Photo Point / Watercourse ID# RR24a. Dormant channel on east end of south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR25a. Dormant channel on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR26. Dormant channel on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR27a. Dormant channel on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR28a. Watercourse on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR29. Dormant channel on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR30a. Dormant channel on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR31. Dormant on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR32. Dormant channel with many side channels on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR33. Dormant channel on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR34a. Dormant channel on south side of berm on south side of farmed area.

Photo Point / Watercourse ID# RR35. Dormant channel on south side of berm on south side of farmed area.

Photo Point 41. Desiccation mud cracks and curls found in active Watercourse ID# FP2 bordered by (in upper right of photograph) upland surface indicators (coppice dunes, deflated surfaces, and surface rounding of landform) within abandoned Watercourse ID# FP3. Desiccation mud cracks and curls absent in FP3 watercourse.


a

Photo Point 42. Desiccation mud cracks and curls found within active Watercourse ID# FP2 evident in photograph.

Photo Point 43. Western edge of Watercourse ID# FP2. Note upland surface feature- deflated surfaces and coppice dunes.

Photo Point / Watercourse ID# RR36, sand filled watercourse west side transmission line corridor.

Photo Point / Watercourse FP#3. Active Watercourse. Desiccation mud cracks and curls evident in photograph.

Photo Point / Watercourse ID# RR37. Abandoned channel.

Photo Point / Watercourse ID# RR38. Abandoned channel.

Photo Point / Watercourse ID# RR39. Abandoned channel.

Photo Point / Watercourse ID# RR40. Abandoned channel.

Photo Point / Watercourse ID# RR41.

Photo Point 32

Photo Point 33

Photo Point 34

Photo Point 35

Photo Point 36

Photo Point PP11 looking west.

Photo Point PP12 looking east.

Photo Point PP13 looking west; concrete structure is a utility box not a drainage culvert.

Photo Point PP14 looking east.

Photo Point PP15 looking west; dirt flood control levee on south side of road designed to protect solar farm from flooding from Pallowalla Wash.

Photo Point PP16 looking south at terminus of Pallowalla Wash where there is no bed and bank and unconfined surface water sheet flow begins which dissipates into desert soils.

Photo Point PP17 looking north; Pallowalla Wash flood control levee to west.

Photo Point PP17; Pallowalla Wash Looking east before terminus at Photo Point PP16.

Photo Point PP18 looking northeast.

Photo Point PP19 looking north.

Photo Point PP19 looking west.

Photo Point PP20 looking south. Small drainage from the east enters road, but does not cross it.

Photo Point PP20a. Drainage at Photo Point PP20 dissipates in the road.

Photo Point PP21 looking south. Small channel entering road from the east, but does not flow across the road.

Photo Point PP22 looking north-northwest. Location is south of northern portion of solar farm project site; southern portion of project site is to the south.

Photo Point PP23 looking southwest onto project site. Note berm on project site side of road.

Photo Point PP24 looking north. Internal road in southern portion of the project site.

Photo Point PP25 looking north. Internal road in southern portion of the project site.

Photo Point PP26 looking south. Internal road in southern portion of the project site. Channel from the east drains onto but does not cross the road.

Photo Point PP27 looking north onto project site from just outside southwestern project site boundary.

Photo Point PP28 looking northwest. Location is offsite on road parallel to southwestern boundary of project site.

Photo Point PP29 looking northeast along power line route. Location is south of southern project site boundary.

Photo Point PP30 looking northeast along power line route. Location is south of southern project site boundary.

Photo Point PP31 looking northeast along power line route. Project site boundary is west-northwest of road.

Photo Point PP32 looking northeast along power line route. Project site boundary is west-northwest of road.

Photo Point PP33 (Watercourse ID# R140) looking northwest; small drainages entering road from the west.

Photo Point PP33a looking northwest toward road from drainage, which terminates in a small playa *basin southeast of project site; see figure.*

Photo Point PP33b looking northwest.

Photo Point PP34 looking northeast.

Photo Point PP35 looking northeast.

Photo Point PP36 looking northeast.

Photo Point PP37 (Watercourse ID# R142) looking southeast. Headwater of onsite drainage.

Photo Point PP37 (Watercourse ID# R142) looking northwest. Drainage flows to road from project site.

Photo Point PP37 looking south. Channel trending eastward.

Photo Point PP37 looking southeast. Drainage terminates in playa basin southeast of project site.

Photo Point PP38 looking southwest near property corner.

Photo Point PP39 looking northwest onto project site.

Photo Point PP40 looking northwest onto project site; sheet sand in background.

Photo Point PP41 looking northwest toward project site; sheet sandin background.

Photo Point PP42 looking west. Main portion of project site is approximately 1 – 1.25 miles to the west.

SP 1 – Looking West Near End of Palowalla Ditch, 09-16-2015.

SP2 – Looking Southeast 20 Feet Beyond the End of Palowalla Ditch, 09-16-2015.

SP3 – Looking North In Watercourse FP#1 Near End of Palowalla Ditch, 09-16-2015.

SP4 - Looking South at Edge of Watercourse FP#1 Associated With Palowalla Ditch

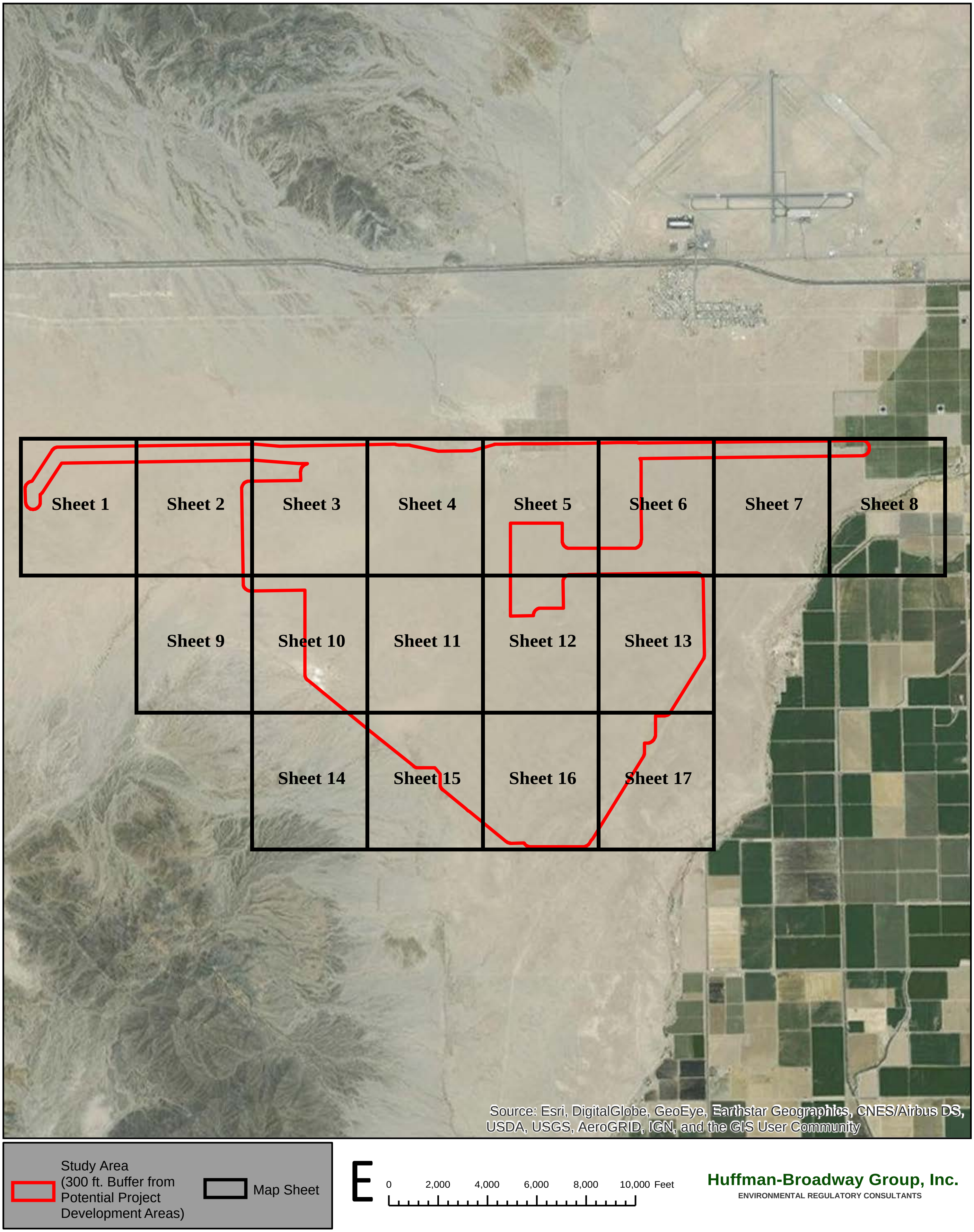
SP5 – Looking South Along Palowalla Ditch

SP6 – Looking South Within Palowalla Watercourse FP#1

SP7 – Looking Southeast within Watercourse FP#1

SP8 – Looking Southeast Within Palowalla Watercourse FP#1

Appendix E2
Photopoint Location Map



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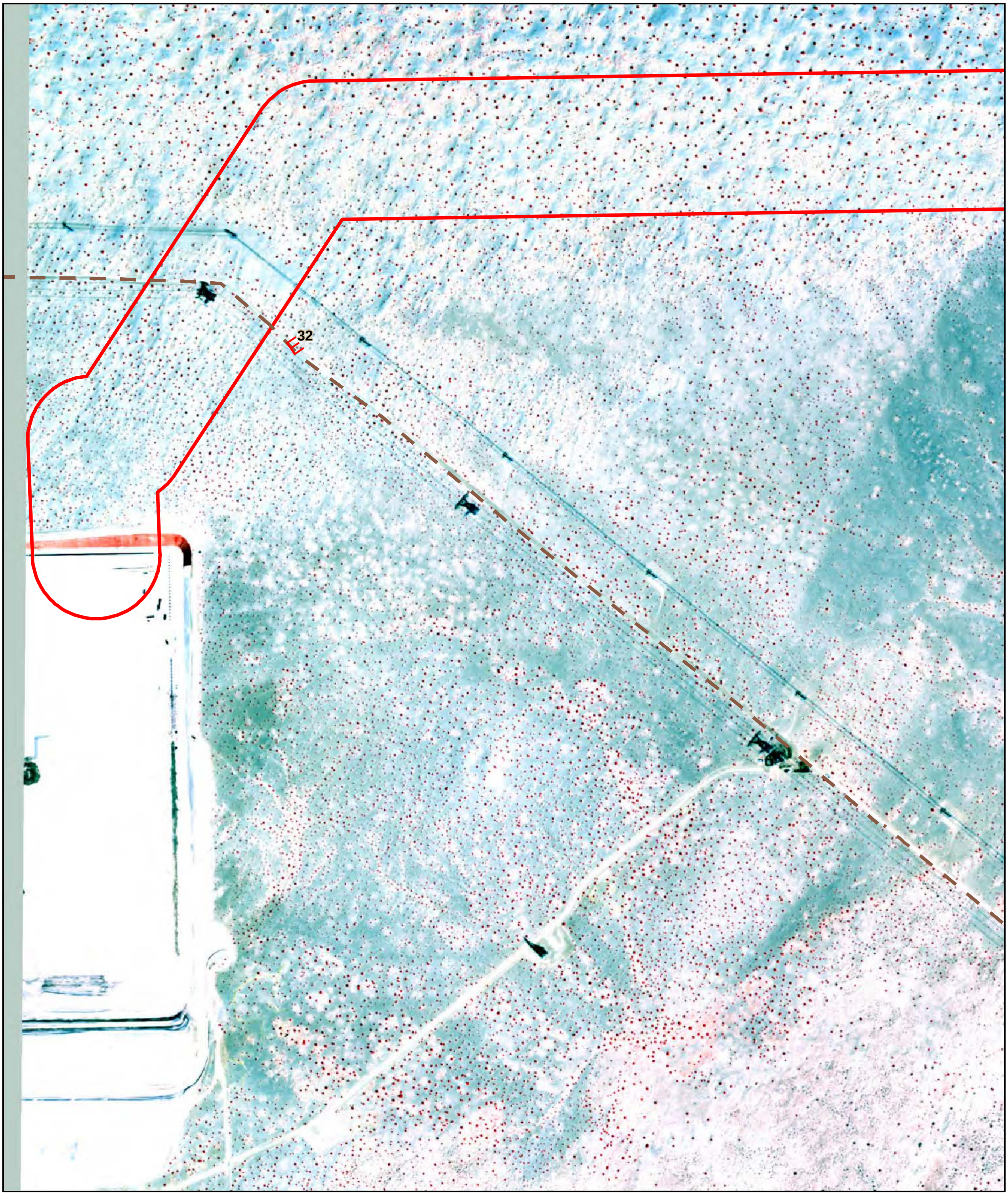
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Index Map

Desert Quartzite LLC Solar Farm Project,
Town of Blythe, Riverside County, California



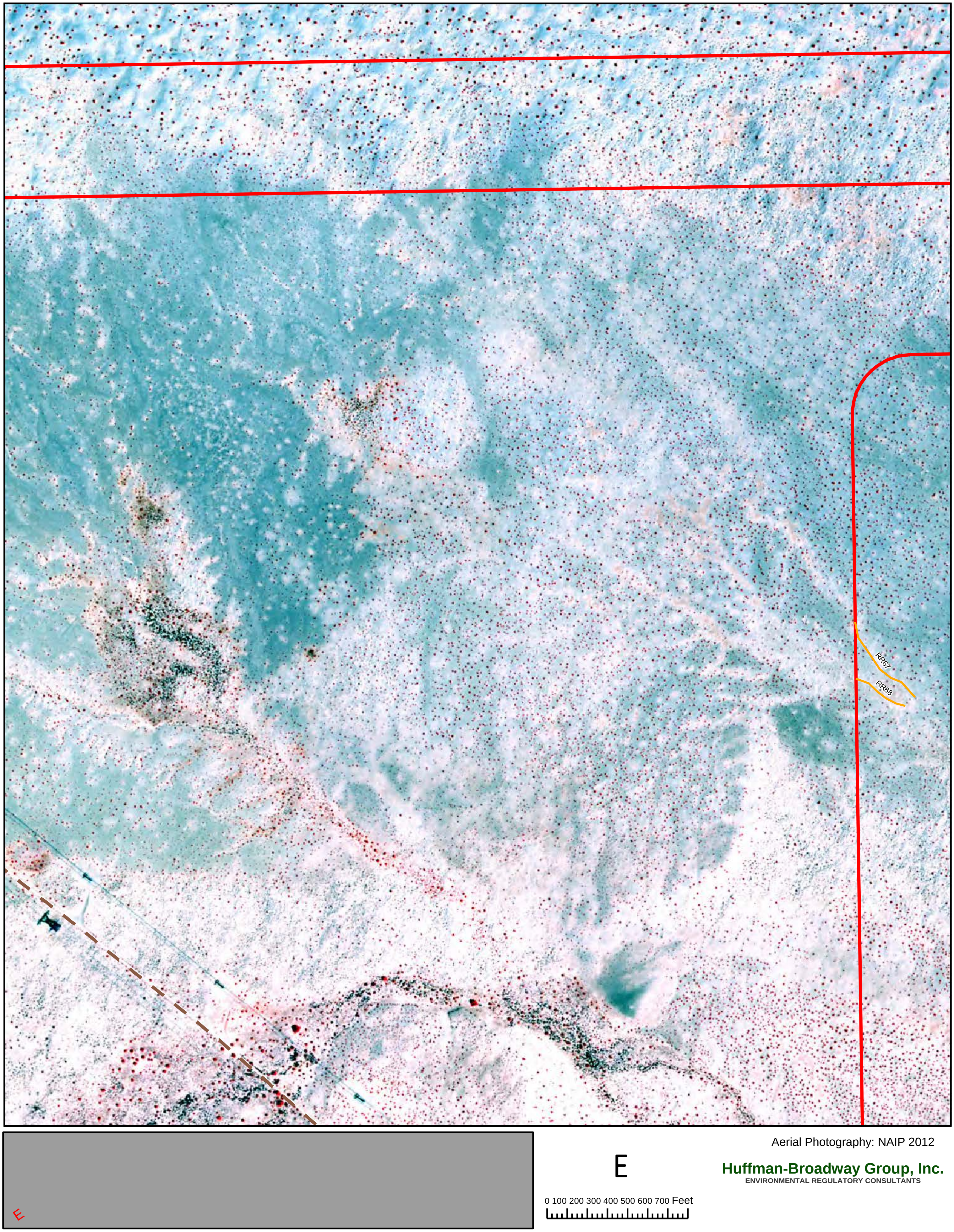
Aerial Photography: NAIP 2012

0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 1

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
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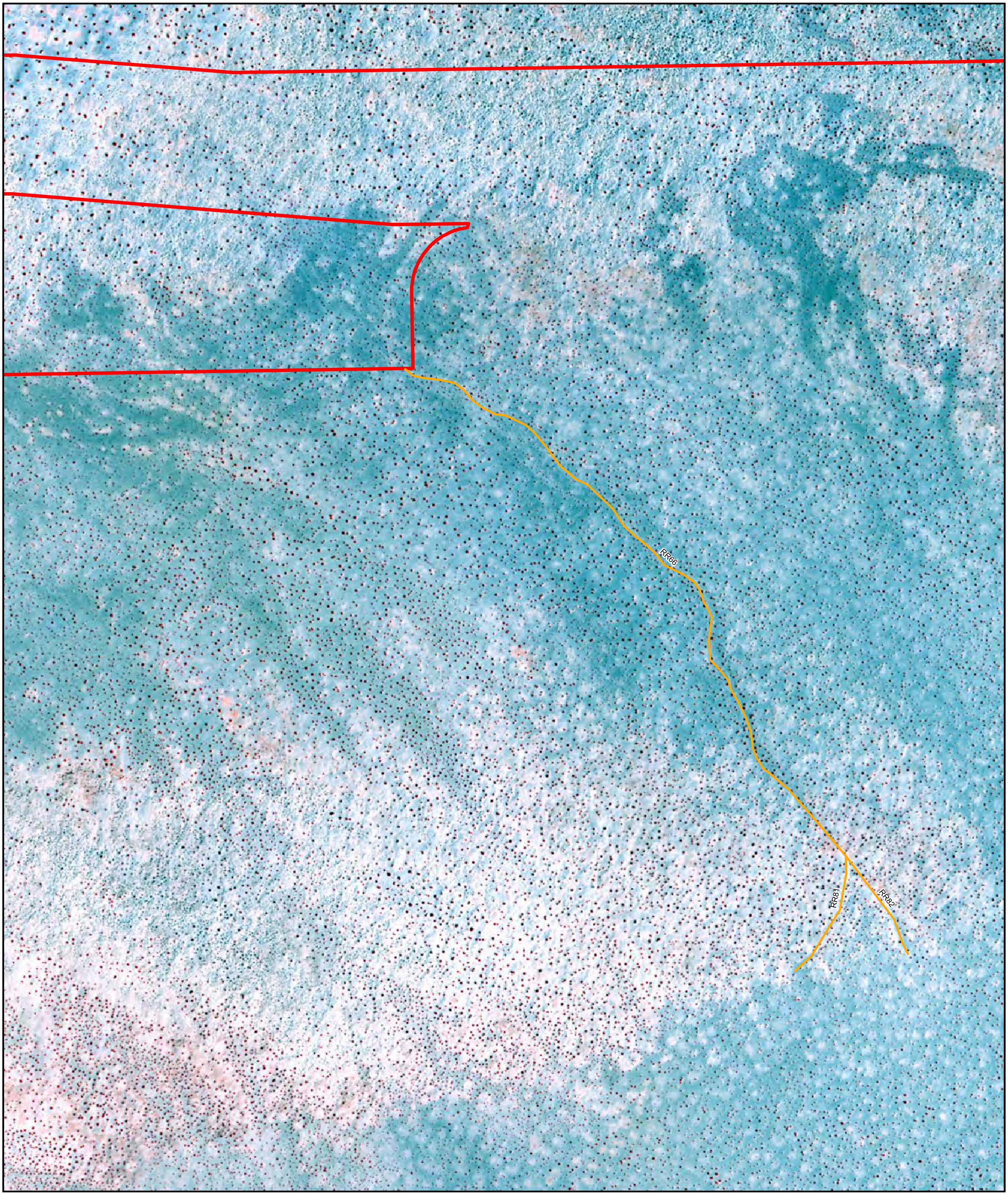
Appendix E. Representative Photo Point Locations, Sheet 2

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

E

0 100 200 300 400 500 600 700 Feet

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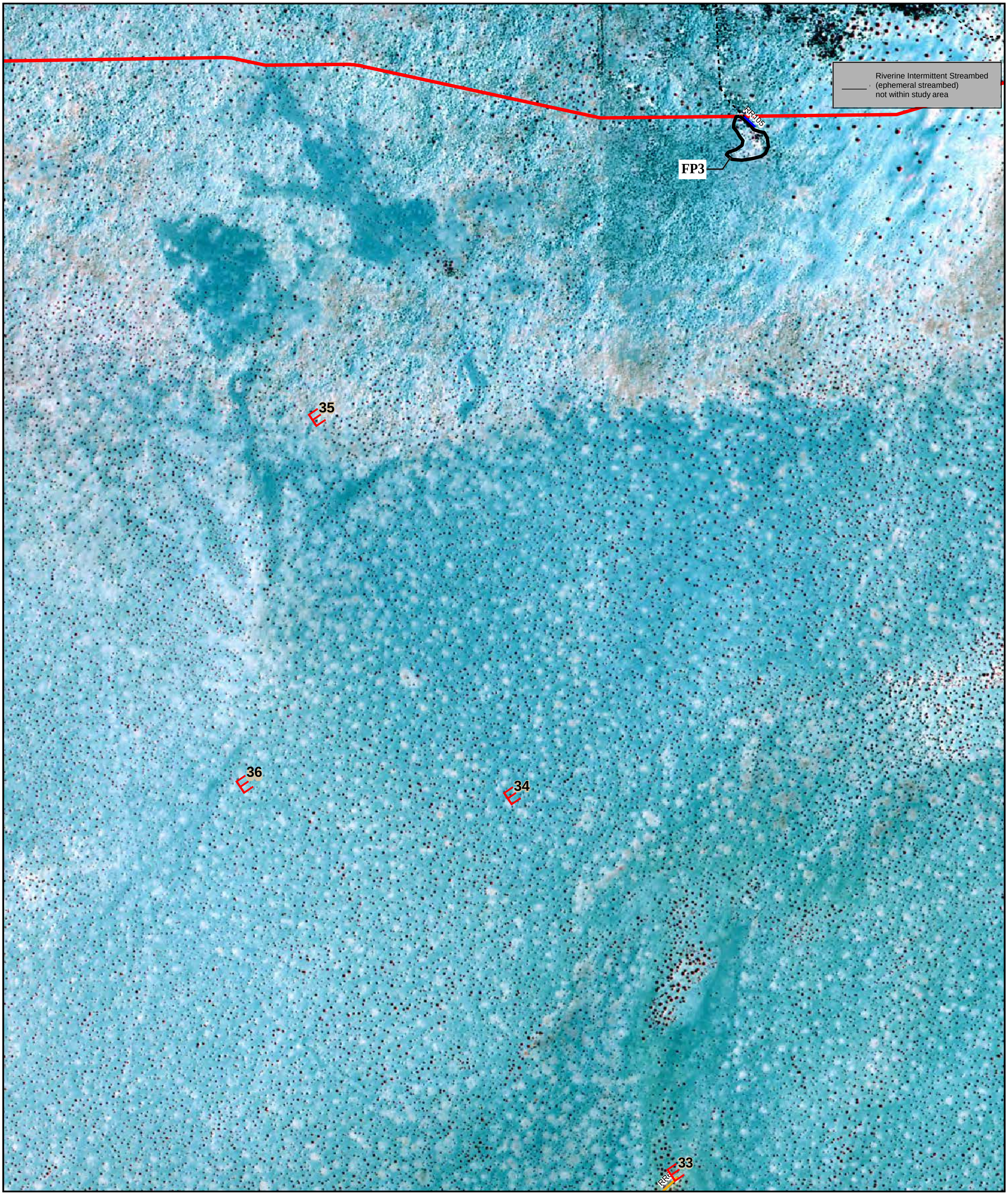
Appendix E. Representative Photo Point Locations, Sheet 3

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



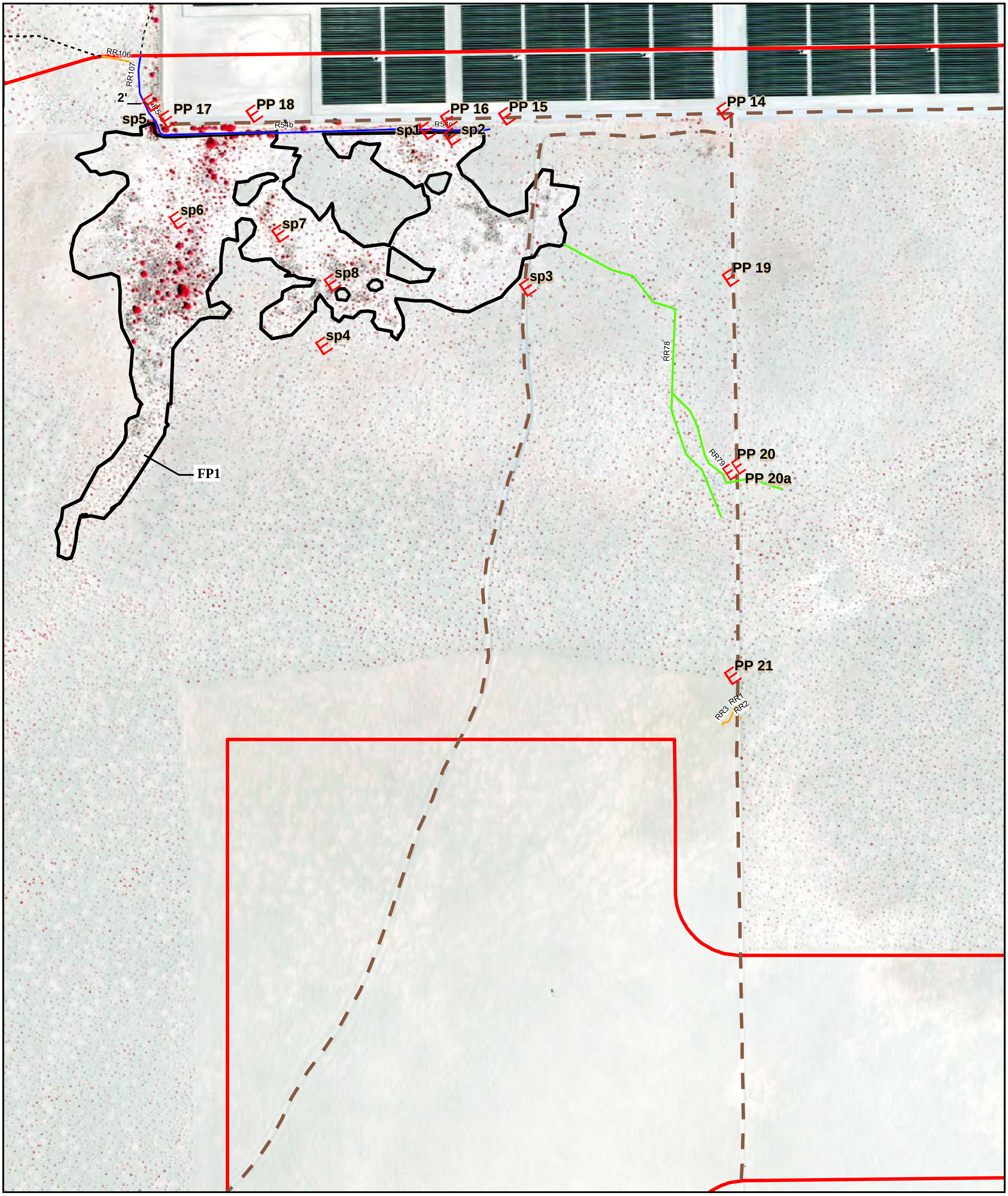
Aerial Photography: NAIP 2012

0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 4

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)
Dirt Roadway (intercepts surface water flow)
Earthen Levee
Photo Point Location

Areas Potentially Subject to CDFW Regulation
Active Channel
Dormant Channel
Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation
Abandoned Channel (Hydrologically Disconnected)

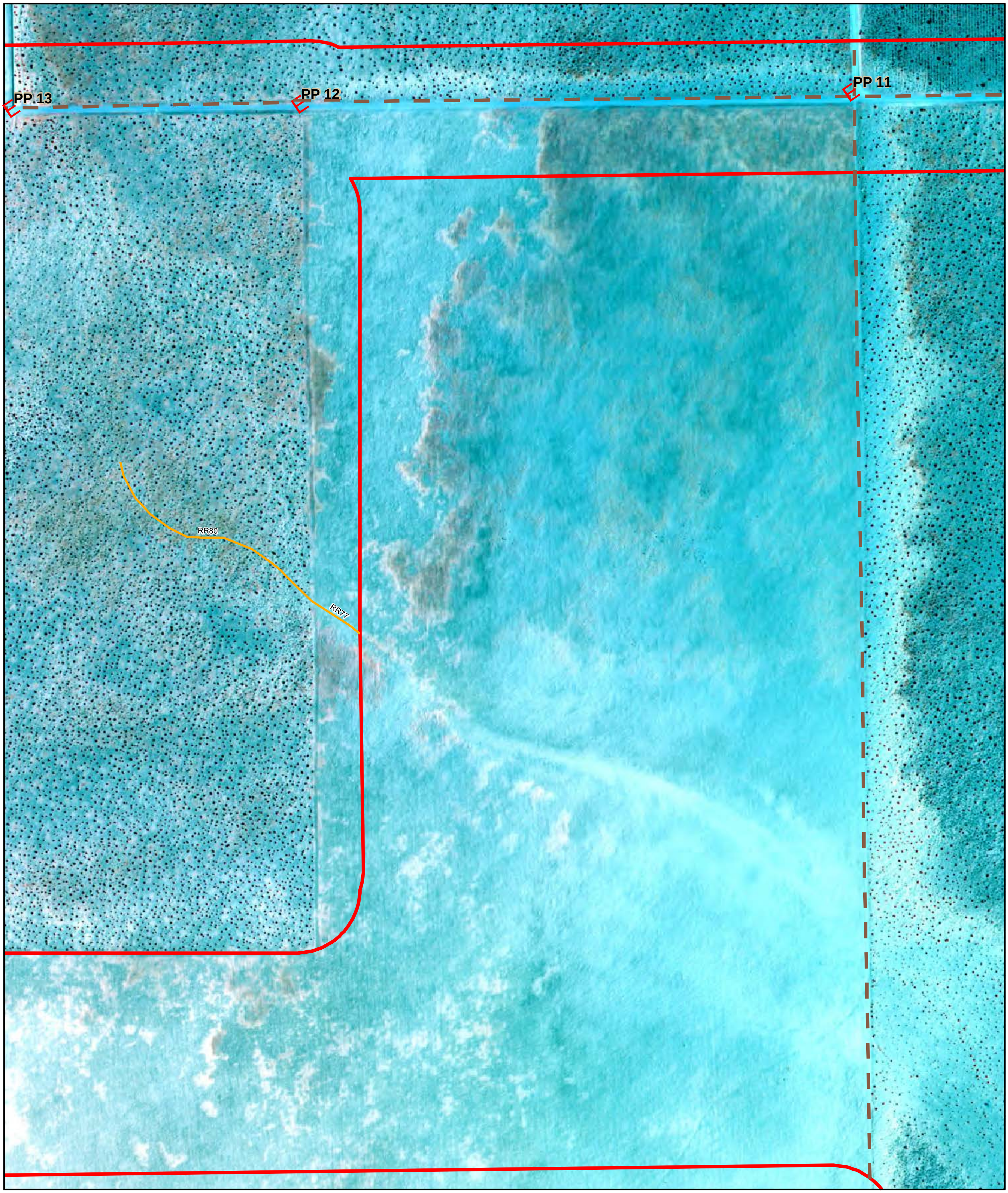
0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 5

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)
Dirt Roadway (intercepts surface water flow)
Earthen Levee
32 Photo Point Location

Areas Potentially Subject to CDFW Regulation
Active Channel
Dormant Channel
Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation
Abandoned Channel (Hydrologically Disconnected)

E

0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

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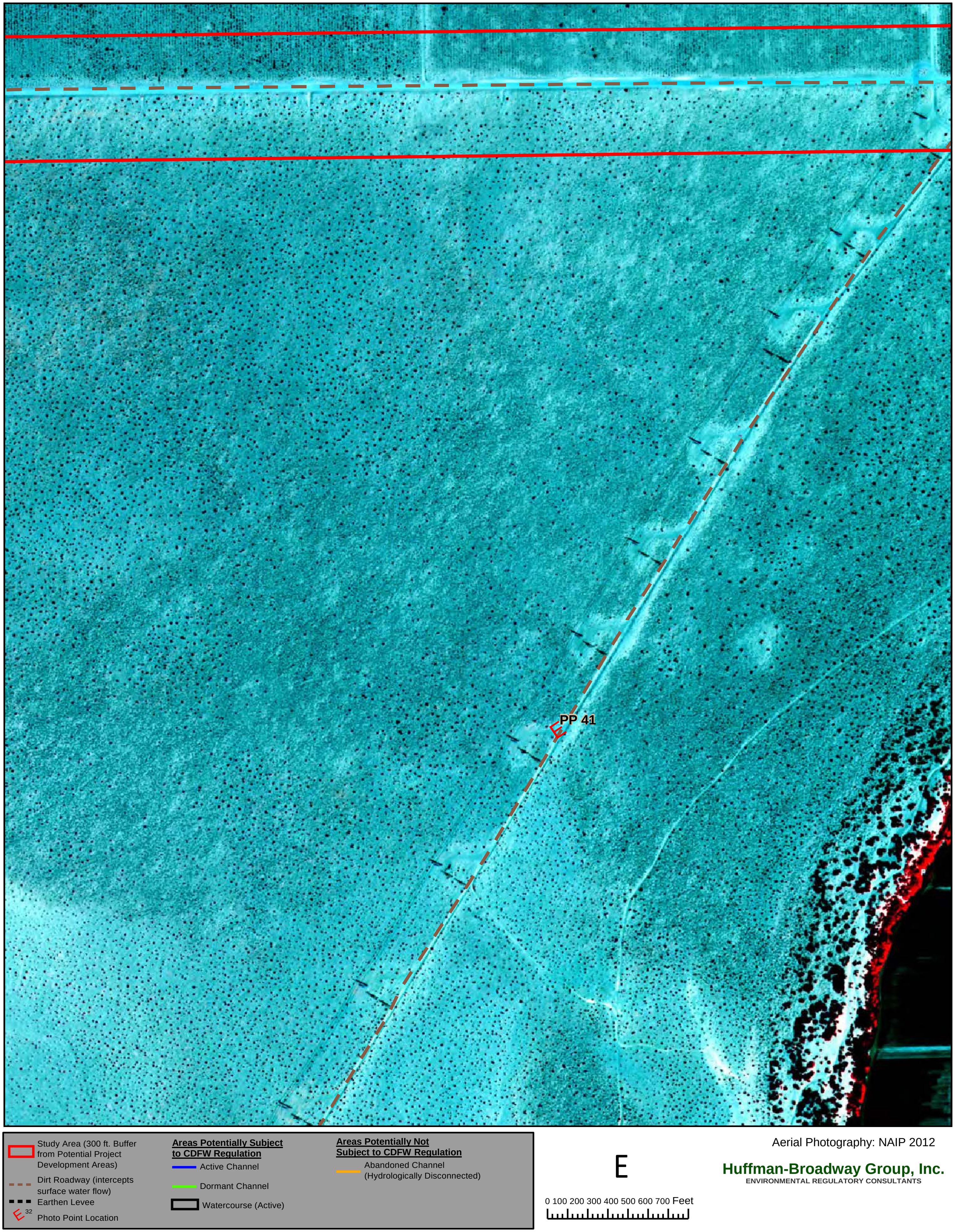
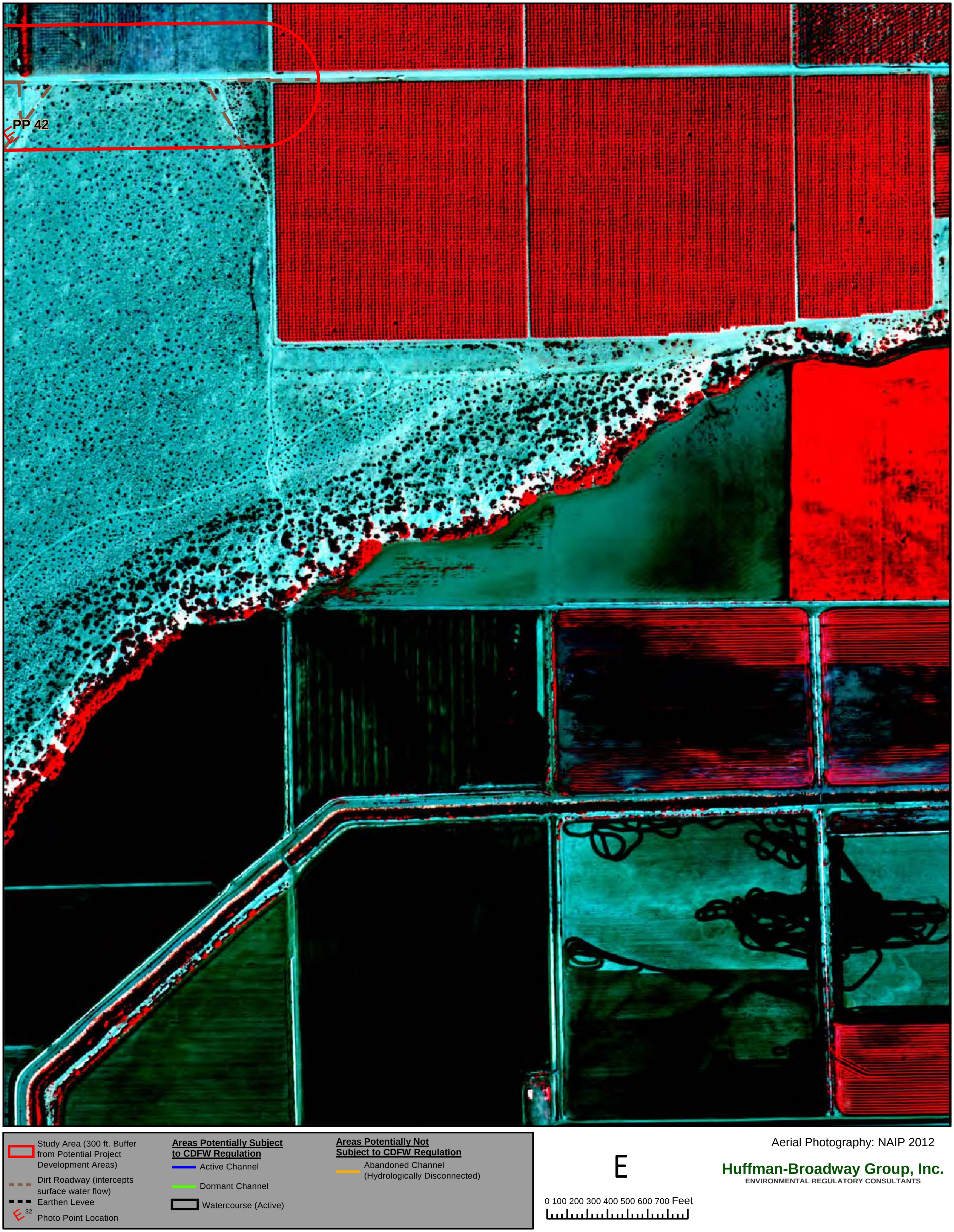
Appendix E. Representative Photo Point Locations, Sheet 6

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



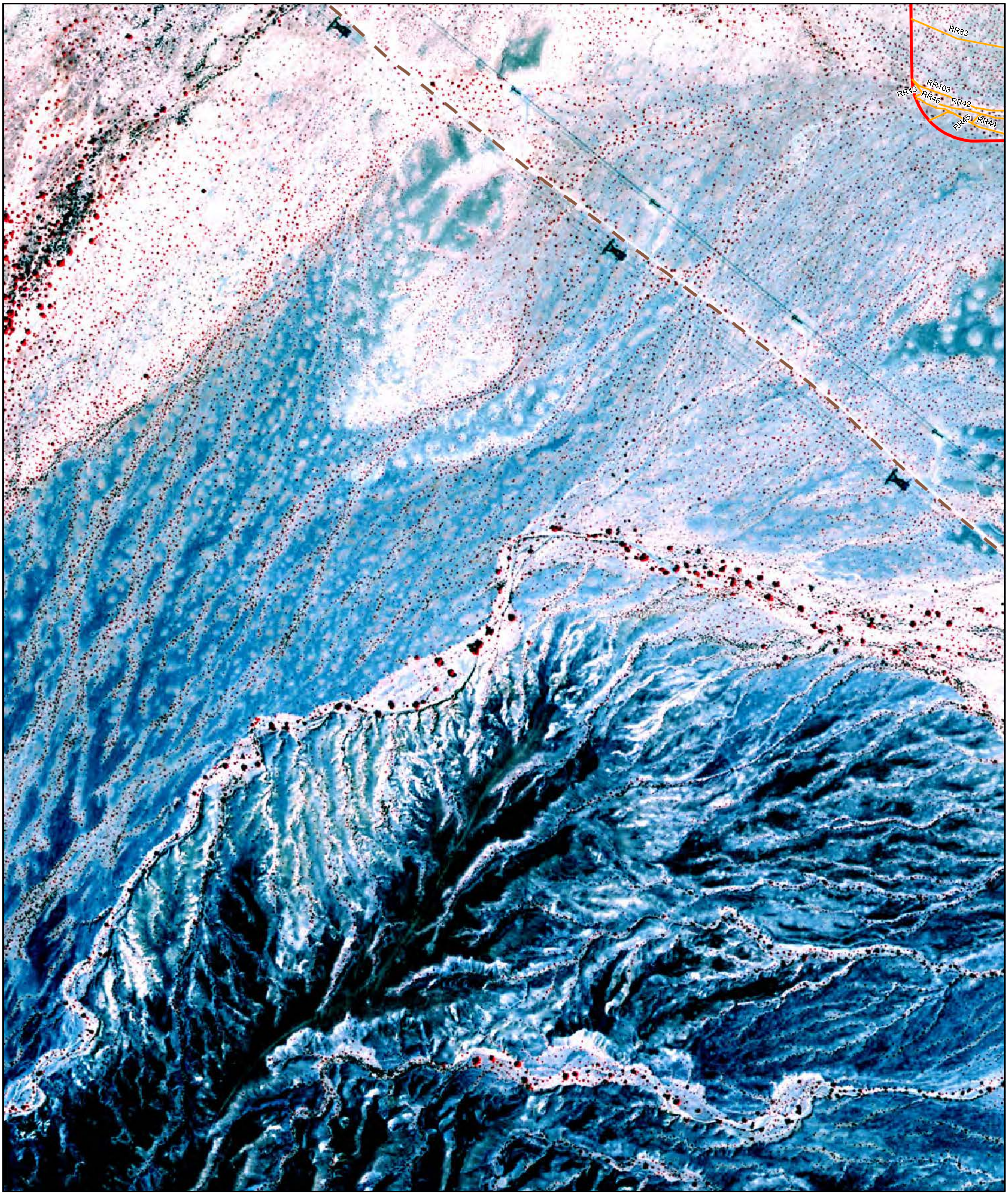
Appendix E. Representative Photo Point Locations, Sheet 7

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Appendix E. Representative Photo Point Locations, Sheet 8

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



E

E

0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
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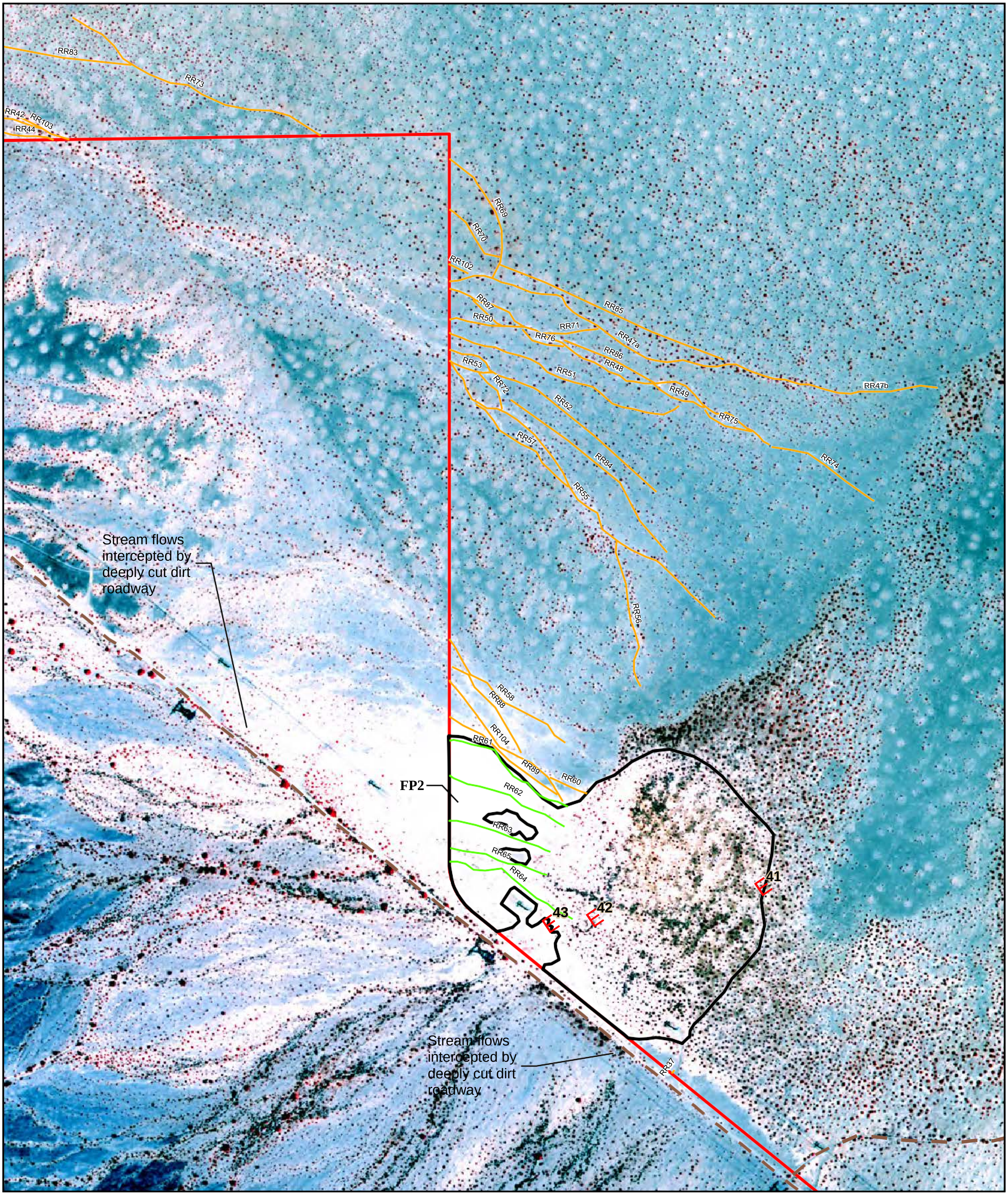
Appendix E. Representative Photo Point Locations, Sheet 9

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



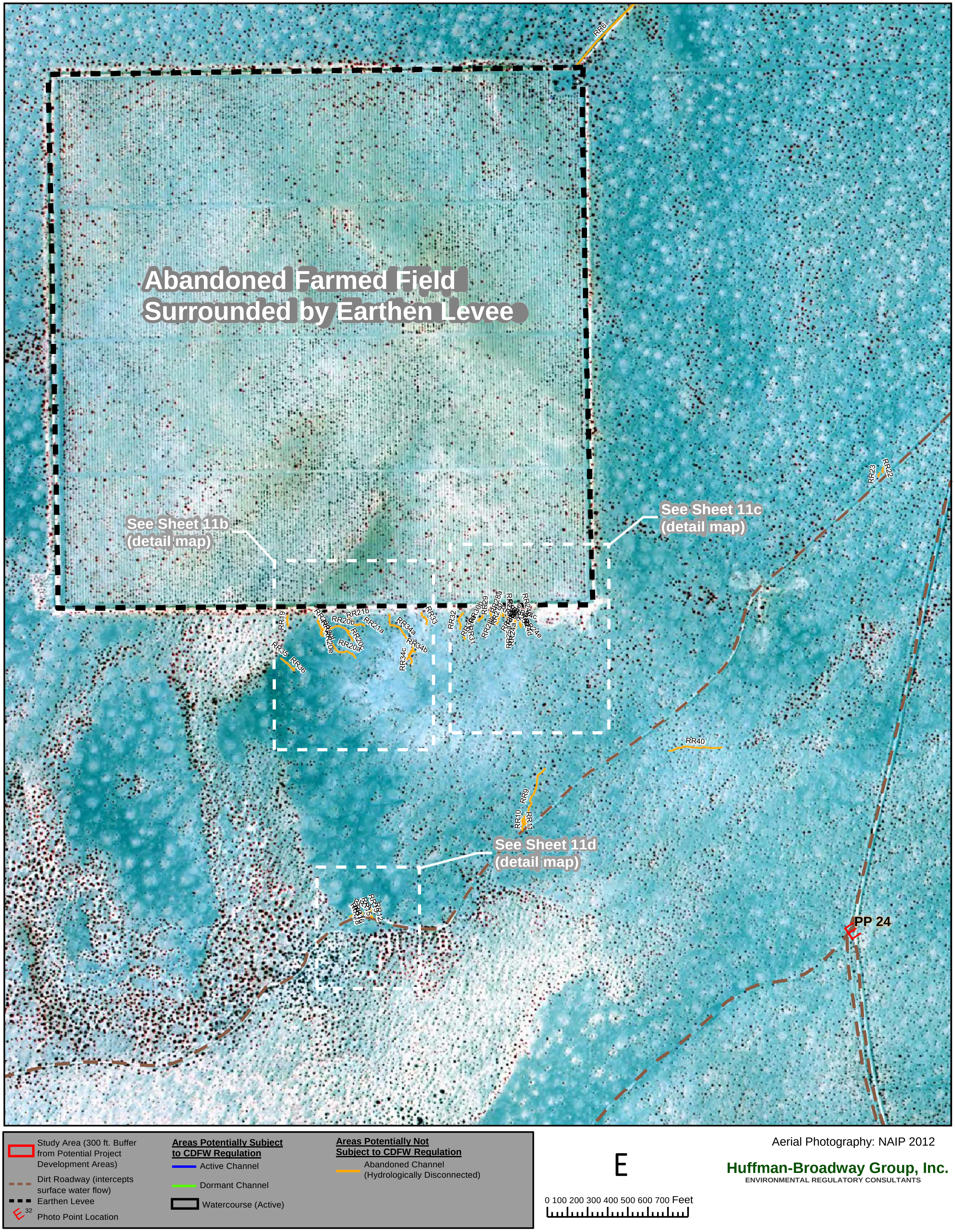
Aerial Photography: NAIP 2012

0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

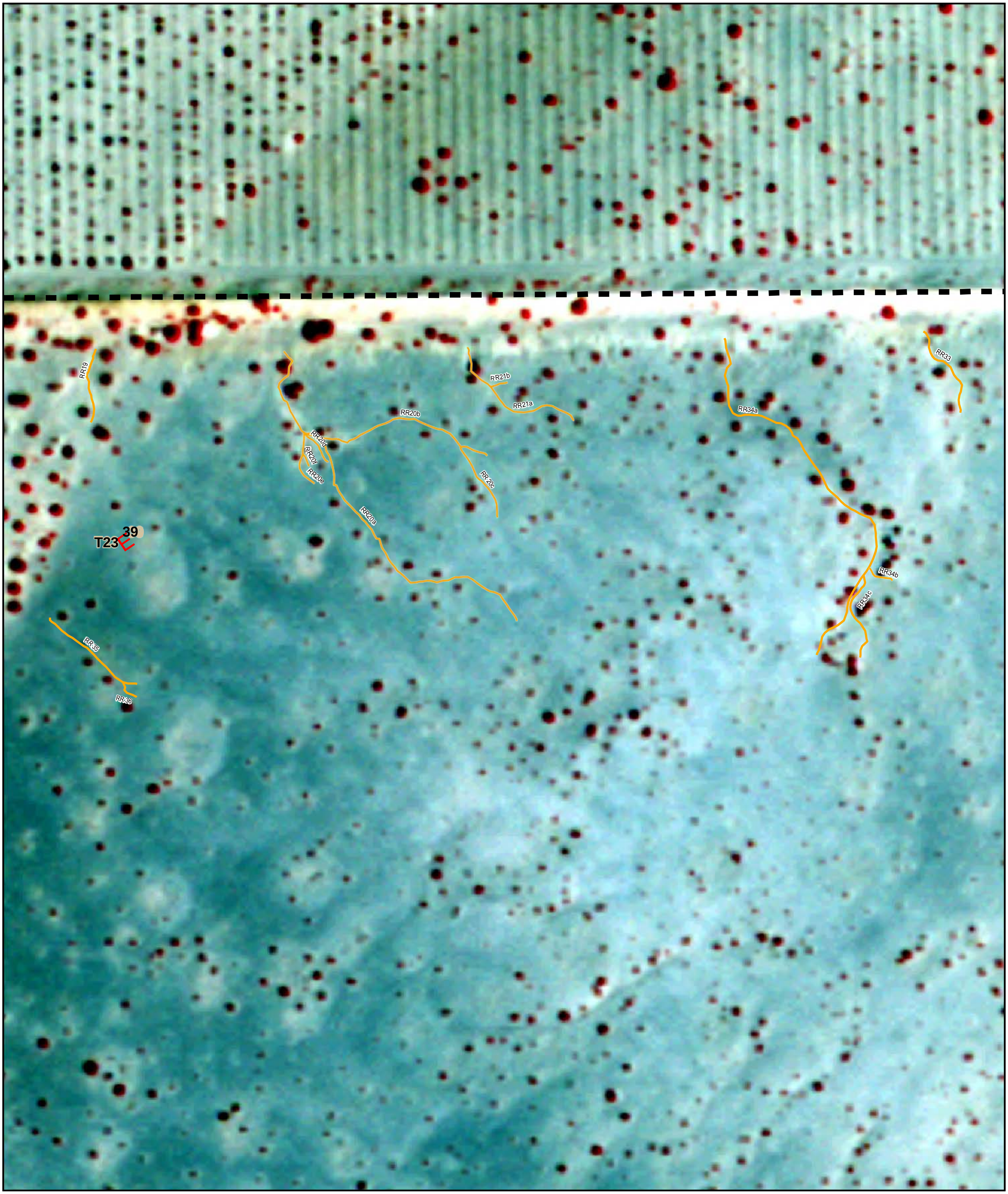
Appendix E. Representative Photo Point Locations, Sheet 10

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Appendix E. Representative Photo Point Locations, Sheet 11

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)

Dirt Roadway (intercepts surface water flow)

Earthen Levee

Photo Point Location

Areas Potentially Subject to CDFW Regulation

Active Channel

Dormant Channel

Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation

Abandoned Channel (Hydrologically Disconnected)

E

0 50 100 150 Feet

Aerial Photography: NAIP 2012

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Appendix E. Representative Photo Point Locations, Sheet 11b

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

Study Area (300 ft. Buffer from Potential Project Development Areas)

Dirt Roadway (intercepts surface water flow)

Earthen Levee

9 Photo Point Location

Areas Potentially Subject to CDFW Regulation

Active Channel

Dormant Channel

Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation

Abandoned Channel (Hydrologically Disconnected)

E

0 50 100 150 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.

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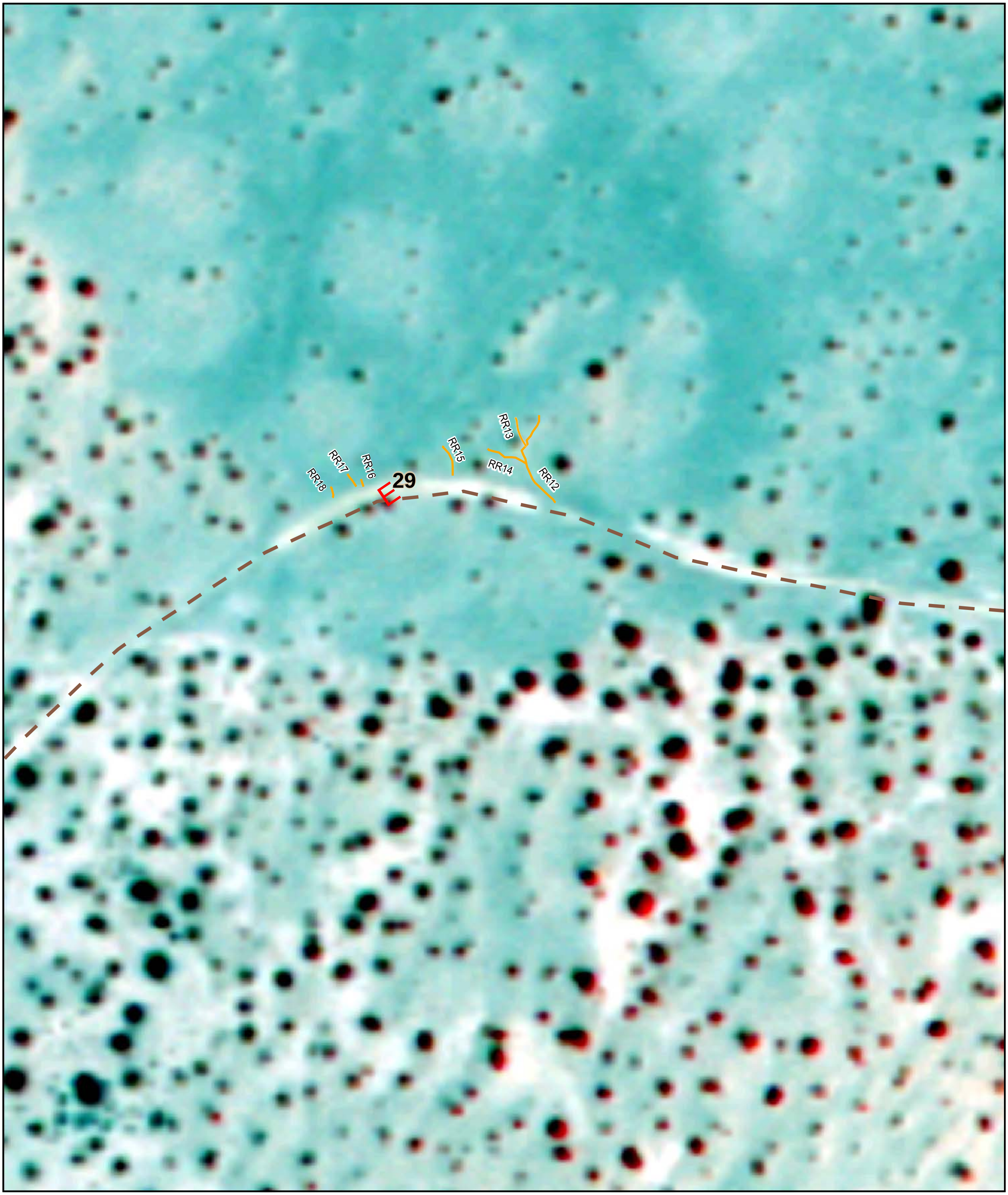
Appendix E. Representative Photo Point Locations, Sheet 11c

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)

Dirt Roadway (intercepts surface water flow)

Earthen Levee

Areas Potentially Subject to CDFW Regulation

Active Channel

Dormant Channel

Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation

Abandoned Channel (Hydrologically Disconnected)

E

0 25 50 75 Feet

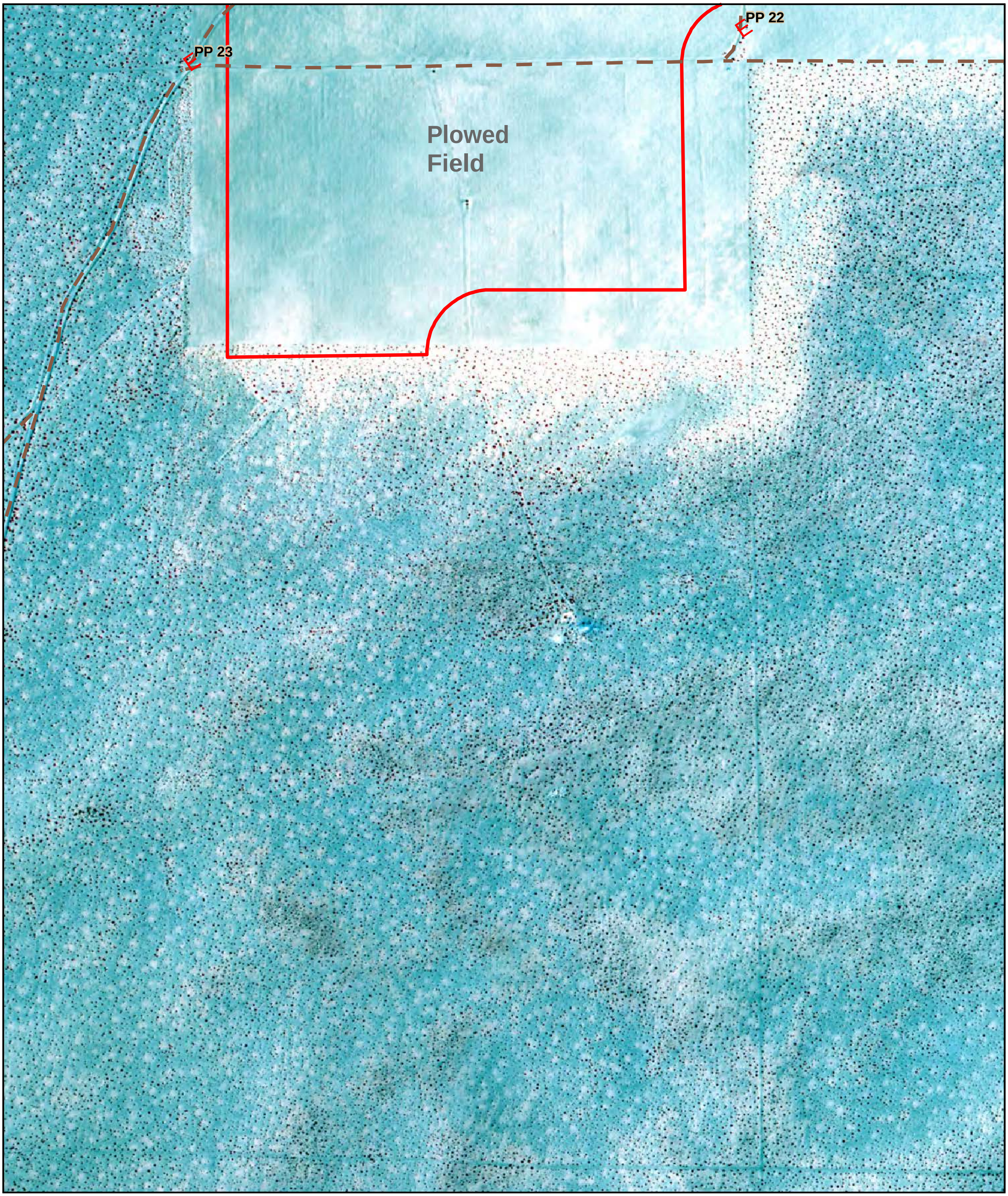
Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.

ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 11d

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



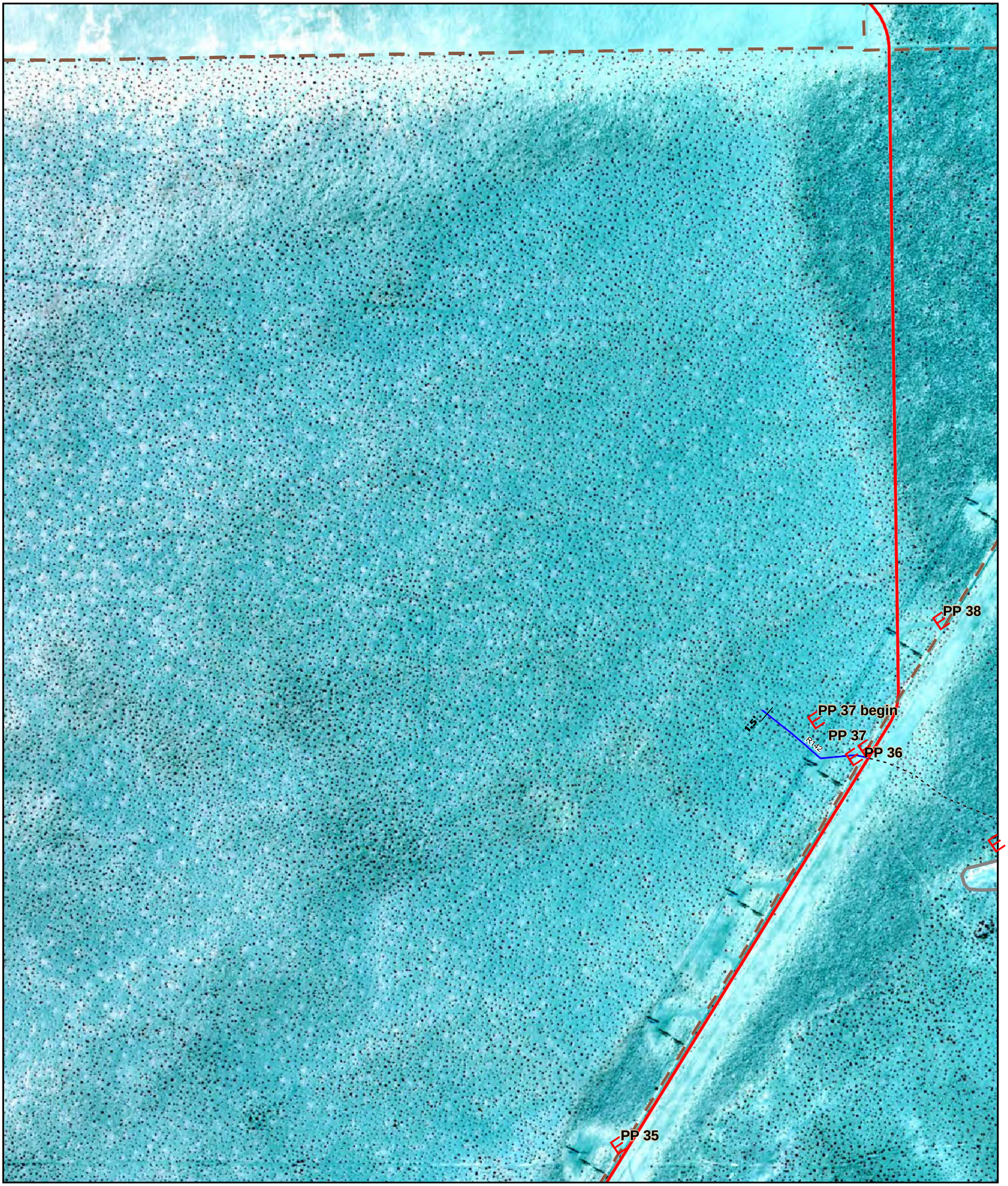
Aerial Photography: NAIP 2012

0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 12

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)
Dirt Roadway (intercepts surface water flow)
Earthen Levee
32 Photo Point Location

Areas Potentially Subject to CDFW Regulation
Active Channel
Dormant Channel
Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation
Abandoned Channel (Hydrologically Disconnected)

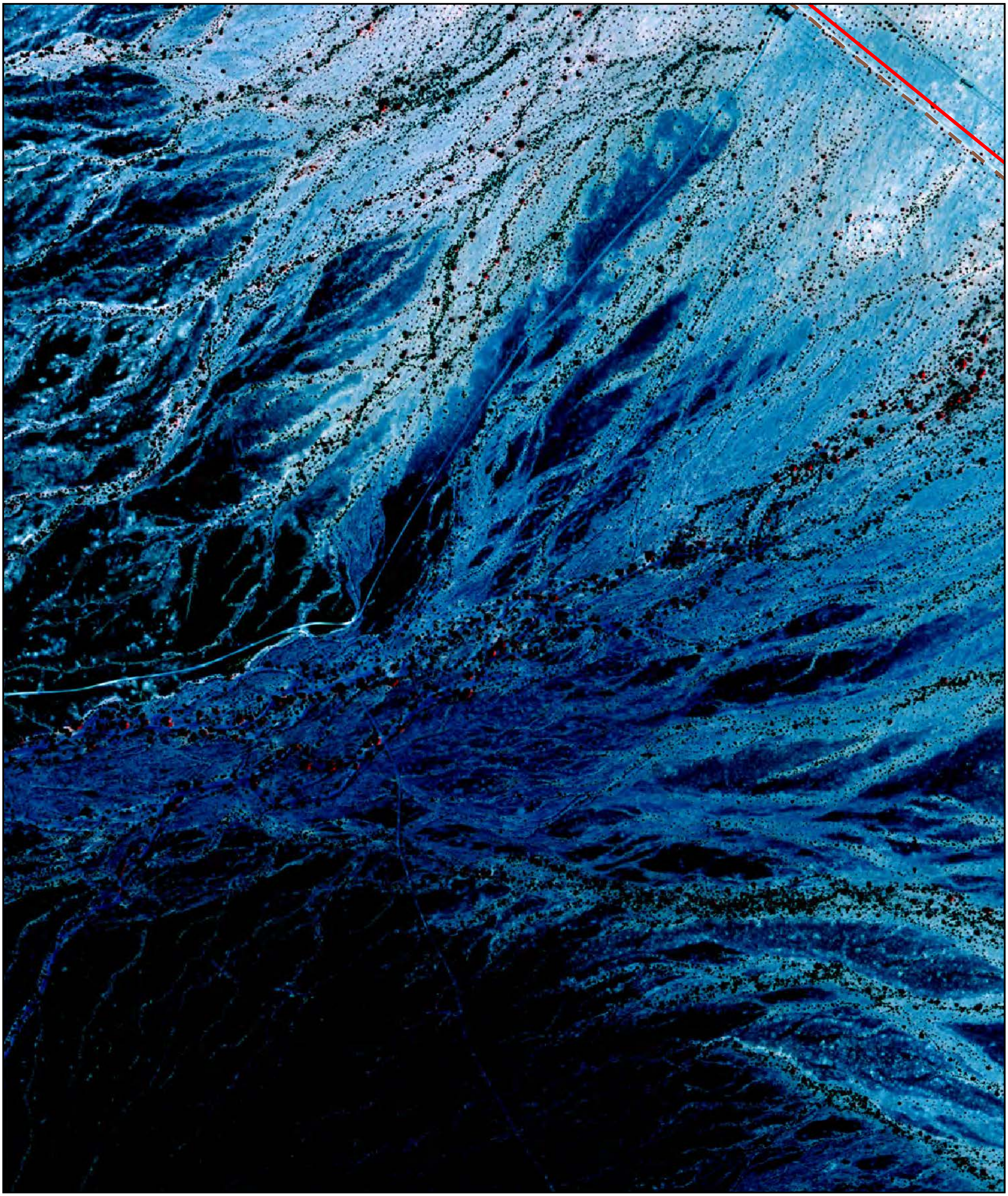
E

0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 13
Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Aerial Photography: NAIP 2012

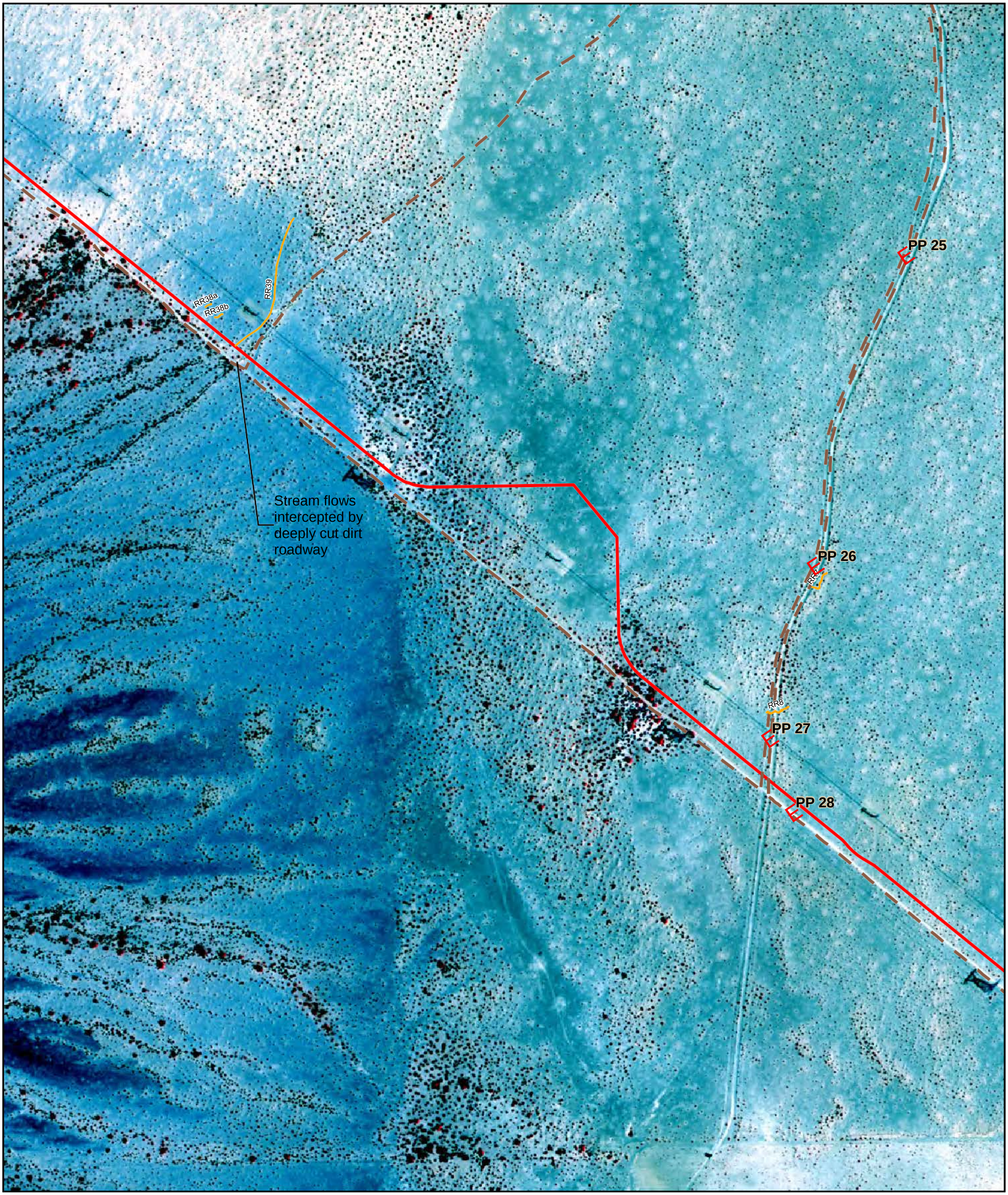
E

0 100 200 300 400 500 600 700 Feet

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 14

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



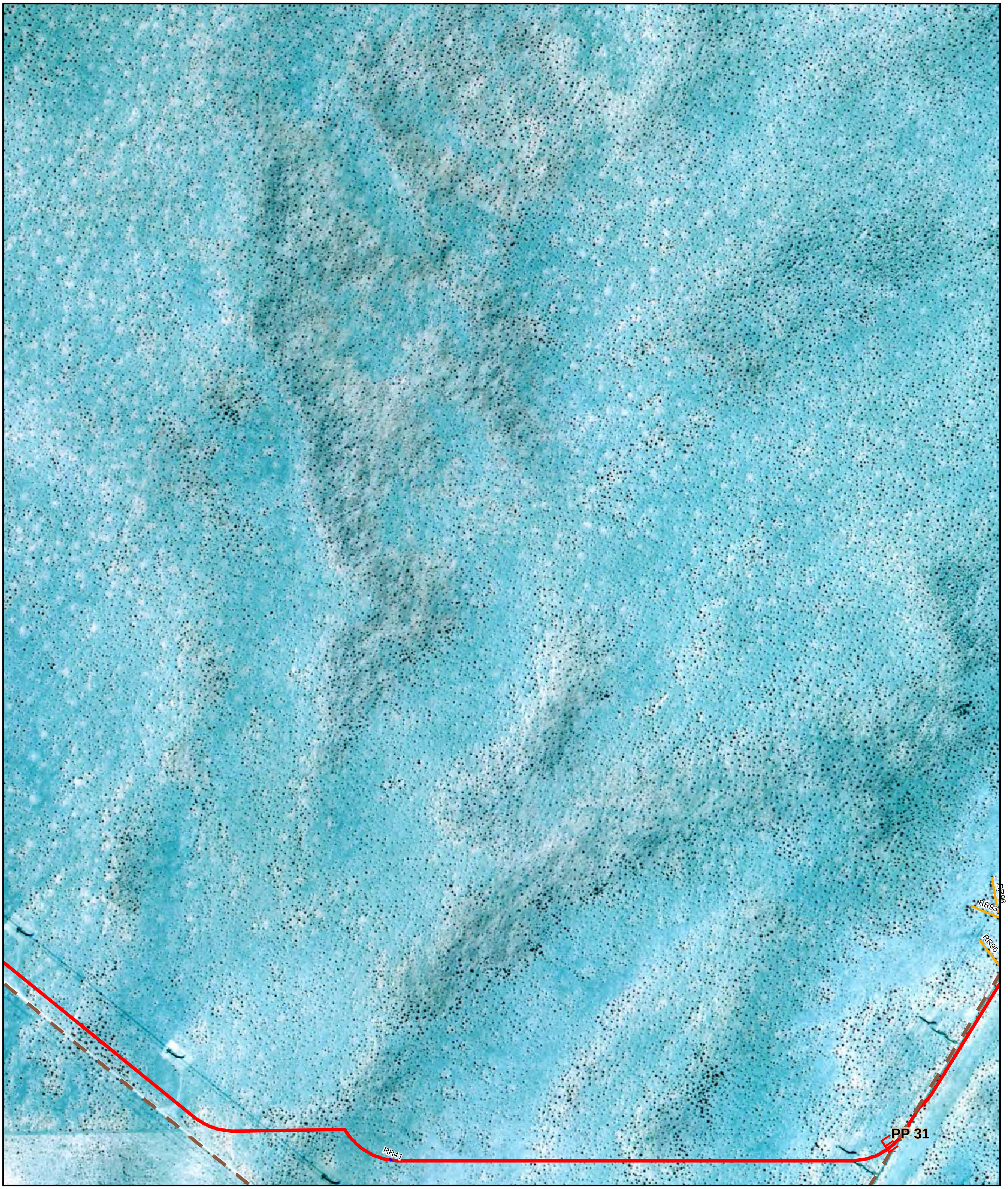
Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

0 100 200 300 400 500 600 700 Feet

Appendix E. Representative Photo Point Locations, Sheet 15

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California



Study Area (300 ft. Buffer from Potential Project Development Areas)
Dirt Roadway (intercepts surface water flow)
Earthen Levee
32 Photo Point Location

Areas Potentially Subject to CDFW Regulation
Active Channel
Dormant Channel
Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation
Abandoned Channel (Hydrologically Disconnected)

E

0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 16

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

Study Area (300 ft. Buffer from Potential Project Development Areas)
Dirt Roadway (intercepts surface water flow)
Earthen Levee
32 Photo Point Location

Areas Potentially Subject to CDFW Regulation
Active Channel
Dormant Channel
Watercourse (Active)

Areas Potentially Not Subject to CDFW Regulation
Abandoned Channel (Hydrologically Disconnected)

E

0 100 200 300 400 500 600 700 Feet

Aerial Photography: NAIP 2012

Huffman-Broadway Group, Inc.
ENVIRONMENTAL REGULATORY CONSULTANTS

Appendix E. Representative Photo Point Locations, Sheet 17

Desert Quartzite LLC Solar Farm Project, Town of Blythe, Riverside County, California

Appendix F
Computations for Delineated Areas

APPENDIX F. CALCULATIONS FOR DELINEATED WATERCOURSE AREAS											
Watercourse ID	Jurisdictional Category	Flow Regime Characteristics	Geomorphological Characteristics	Hydrological Characteristics	Width (ft)	Length (ft)	Area (ft^2) (length x width)	Area (acres)	Latitude	Longitude	Comments
Active Stream Channel											
R54a	Active Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Active	2.0	352	704	0.02	33.588788 N	114.753445 W	Has Recent fluvial indicators
R54b	Active Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Active	2.0	1141	2282	0.05	33.588386 N	114.751368 W	Has Recent fluvial indicators
R54c	Active Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Active	2.0	442	884	0.02	33.588387 N	114.748842 W	Has Recent fluvial indicators
R140	Active Channel	Eposodic	Fan Remnant	Active	1.5	522	783	0.02	33.552176 N	114.737683 W	Has Recent fluvial
R142	Active Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Active	1.5	590	885	0.02	33.564858 N	114.728189 W	Has Recent fluvial indicators
RR41	Active Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Active	1.6	12	19	0.00	33.544510 N	114.750381 W	Has Recent fluvial indicators
RR105	Active Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Active	1.1	70	77	0.00	33.588619 N	114.759489 W	Has Recent fluvial indicators
RR107	Active Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Active	2.2	50	110	0.00	33.589334 N	114.753514 W	Has Recent fluvial indicators
Total Active Stream Channel							5744	0.13			
Dormant Stream Channel											
RR61	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	1.1	673	740	0.02	33.565194 N	114.778972 W	Lack recent fluvial indicators like active channels, but has past flow indicators and hydrologically flow has not been cut off upgradient and has potential to become active again.
RR62	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	0.5	602	301	0.01	33.564882 N	114.778959 W	Same comment as above
RR63	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	0.8	501	401	0.01	33.564404 N	114.779125 W	Same comment as above
RR64	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	0.9	673	606	0.01	33.563766 N	114.778880 W	Same comment as above
RR65	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	1.6	477	763	0.02	33.564054 N	114.779161 W	Same comment as above
RR78	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	1.5	1668	2502	0.06	33.585094 N	114.745360 W	Same comment as above
RR79	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	1.3	788	1024	0.02	33.584233 N	114.744903 W	Same comment as above
RR89	Dormant Channel	Eposodic	Fluvial: Floodplain Watercourse on Fan Remnant	Dormant	0.7	630	441	0.01	33.565414 N	114.779065 W	Same comment as above
Total Dormant Stream Channel							6778	0.16			
Abandoned Stream Channel											
RR1	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.2	14	31	0.00	33.580885 N	114.744389 W	Hydrologically Disconnected
RR2	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.8	13	10	0.00	33.580737 N	114.744381 W	Hydrologically Disconnected
RR3	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	122	146	0.00	33.580766 N	114.744523 W	Hydrologically Disconnected
RR6	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.7	475	808	0.02	33.574551 N	114.761380 W	Hydrologically Disconnected
RR7	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	135	95	0.00	33.552155 N	114.759019 W	Hydrologically Disconnected
RR8	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	147	132	0.00	33.550483 N	114.759731 W	Hydrologically Disconnected
RR9	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	357	464	0.01	33.564053 N	114.762843 W	Hydrologically Disconnected
RR10	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	43	30	0.00	33.563770 N	114.762954 W	Hydrologically Disconnected
RR11	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.6	32	19	0.00	33.563751 N	114.762987 W	Hydrologically Disconnected
RR12	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	54	54	0.00	33.562516 N	114.765488 W	Hydrologically Disconnected
RR13	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.5	14	21	0.00	33.562560 N	114.765500 W	Hydrologically Disconnected
RR14	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	22	26	0.00	33.562522 N	114.765520 W	Hydrologically Disconnected
RR15	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	17	15	0.00	33.562520 N	114.765613 W	Hydrologically Disconnected
RR16	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.5	4	2	0.00	33.562489 N	114.765764 W	Hydrologically Disconnected
RR17	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.4	8	11	0.00	33.562493 N	114.765781 W	Hydrologically Disconnected
RR18	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	6	4	0.00	33.562476 N	114.765814 W	Hydrologically Disconnected
RR19	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	61	43	0.00	33.566532 N	114.766772 W	Hydrologically Disconnected

APPENDIX F. CALCULATIONS FOR DELINEATED WATERCOURSE AREAS											
Watercourse ID	Jurisdictional Category	Flow Regime Characteristics	Geomorphological Characteristics	Hydrological Characteristics	Width (ft)	Length (ft)	Area (ft^2) (length x width)	Area (acres)	Latitude	Longitude	Comments
RR20a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	333	300	0.01	33.566241 N	114.766070 W	Hydrologically Disconnected
RR20b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	160	192	0.00	33.566444 N	114.765988 W	Hydrologically Disconnected
RR20c	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.8	66	53	0.00	33.566313 N	114.765753 W	Hydrologically Disconnected
RR20d	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	30	27	0.00	33.566390 N	114.766172 W	Hydrologically Disconnected
RR20e	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.5	46	69	0.00	33.566370 N	114.766216 W	Hydrologically Disconnected
RR20f	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	11	11	0.00	33.566362 N	114.766205 W	Hydrologically Disconnected
RR21a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	120	108	0.00	33.566491 N	114.765701 W	Hydrologically Disconnected
RR21b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.4	15	21	0.00	33.566522 N	114.765700 W	Hydrologically Disconnected
RR22	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	38	42	0.00	33.568484 N	114.757016 W	Hydrologically Disconnected
RR23	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.0	31	62	0.00	33.568416 N	114.757081 W	Hydrologically Disconnected
RR24a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	74	52	0.00	33.566491 N	114.762953 W	Hydrologically Disconnected
RR24b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	18	16	0.00	33.566546 N	114.762913 W	Hydrologically Disconnected
RR24c	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	13	17	0.00	33.566502 N	114.762912 W	Hydrologically Disconnected
RR24d	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	16	18	0.00	33.566418 N	114.762962 W	Hydrologically Disconnected
RR24e	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.2	9	20	0.00	33.566417 N	114.762954 W	Hydrologically Disconnected
RR25a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.4	97	136	0.00	33.566483 N	114.763052 W	Hydrologically Disconnected
RR25b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	11	11	0.00	33.566488 N	114.763038 W	Hydrologically Disconnected
RR25c	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	17	22	0.00	33.566443 N	114.763041 W	Hydrologically Disconnected
RR25d	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	7	5	0.00	33.566447 N	114.763073 W	Hydrologically Disconnected
RR25e	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	10	13	0.00	33.566426 N	114.763064 W	Hydrologically Disconnected
RR26	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	49	49	0.00	33.566565 N	114.763173 W	Hydrologically Disconnected
RR27a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.3	23	53	0.00	33.566575 N	114.763248 W	Hydrologically Disconnected
RR27b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	13	12	0.00	33.566561 N	114.763261 W	Hydrologically Disconnected
RR28a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	76	84	0.00	33.566516 N	114.763326 W	Hydrologically Disconnected
RR28b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	20	18	0.00	33.566494 N	114.763346 W	Hydrologically Disconnected
RR29	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	84	109	0.00	33.566504 N	114.763463 W	Hydrologically Disconnected
RR30a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.1	61	128	0.00	33.566528 N	114.763607 W	Hydrologically Disconnected
RR30b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	14	10	0.00	33.566498 N	114.763639 W	Hydrologically Disconnected
RR31	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.5	29	15	0.00	33.566281 N	114.763888 W	Hydrologically Disconnected
RR32	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	104	135	0.00	33.566475 N	114.763958 W	Hydrologically Disconnected
RR33	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	79	79	0.00	33.566550 N	114.764523 W	Hydrologically Disconnected
RR34a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	337	303	0.01	33.566294 N	114.764850 W	Hydrologically Disconnected

APPENDIX F. CALCULATIONS FOR DELINEATED WATERCOURSE AREAS											
Watercourse ID	Jurisdictional Category	Flow Regime Characteristics	Geomorphological Characteristics	Hydrological Characteristics	Width (ft)	Length (ft)	Area (ft^2) (length x width)	Area (acres)	Latitude	Longitude	Comments
RR34b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	22	15	0.00	33.566087 N	114.764708 W	Hydrologically Disconnected
RR34c	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.3	74	170	0.00	33.565995 N	114.764774 W	Hydrologically Disconnected
RR35	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	91	100	0.00	33.565948 N	114.766775 W	Hydrologically Disconnected
RR36	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.4	18	25	0.00	33.565857 N	114.766679 W	Hydrologically Disconnected
RR37	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.0	23	46	0.00	33.561294 N	114.776518 W	Hydrologically Disconnected
RR38a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	39	35	0.00	33.555839 N	114.768408 W	Hydrologically Disconnected
RR38b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	53	69	0.00	33.555692 N	114.768243 W	Hydrologically Disconnected
RR39	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	696	696	0.02	33.556192 N	114.767345 W	Hydrologically Disconnected
RR40	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	278	250	0.01	33.564722 N	114.760142 W	Hydrologically Disconnected
RR42	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	644	580	0.01	33.573812 N	114.787043 W	Hydrologically Disconnected
RR43	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	37	26	0.00	33.574042 N	114.787896 W	Hydrologically Disconnected
RR44	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.6	601	962	0.02	33.573586 N	114.786825 W	Hydrologically Disconnected
RR45	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	60	60	0.00	33.573736 N	114.787008 W	Hydrologically Disconnected
RR46	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	196	176	0.00	33.573883 N	114.787655 W	Hydrologically Disconnected
RR47a	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	1861	1303	0.03	33.570636 N	114.777024 W	Hydrologically Disconnected
RR47b	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	591	414	0.01	33.570034 N	114.773243 W	Hydrologically Disconnected
RR48	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.0	1743	3486	0.08	33.570368 N	114.777397 W	Hydrologically Disconnected
RR49	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.6	270	432	0.01	33.569975 N	114.776295 W	Hydrologically Disconnected
RR50	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.5	358	537	0.01	33.570972 N	114.779241 W	Hydrologically Disconnected
RR51	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	1184	1066	0.02	33.570264 N	114.778089 W	Hydrologically Disconnected
RR52	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.6	1209	725	0.02	33.569863 N	114.778093 W	Hydrologically Disconnected
RR53	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	216	238	0.01	33.570394 N	114.779504 W	Hydrologically Disconnected
RR55	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.8	1788	1430	0.03	33.568751 N	114.777906 W	Hydrologically Disconnected
RR56	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.6	713	428	0.01	33.567220 N	114.777093 W	Hydrologically Disconnected
RR57	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	597	776	0.02	33.569419 N	114.778708 W	Hydrologically Disconnected
RR58	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.2	758	1668	0.04	33.566147 N	114.779108 W	Hydrologically Disconnected
RR60	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	191	229	0.01	33.565005 N	114.778072 W	Hydrologically Disconnected
RR66	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.5	3145	4718	0.11	33.583109 N	114.776297 W	Hydrologically Disconnected
RR67	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.1	499	1048	0.02	33.581439 N	114.787648 W	Hydrologically Disconnected
RR68	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.0	286	572	0.01	33.581048 N	114.787612 W	Hydrologically Disconnected
RR69	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	661	859	0.02	33.572484 N	114.779111 W	Hydrologically Disconnected
RR70	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	345	311	0.01	33.572143 N	114.779430 W	Hydrologically Disconnected

APPENDIX F. CALCULATIONS FOR DELINEATED WATERCOURSE AREAS

Watercourse ID	Jurisdictional Category	Flow Regime Characteristics	Geomorphological Characteristics	Hydrological Characteristics	Width (ft)	Length (ft)	Area (ft^2) (length x width)	Area (acres)	Latitude	Longitude	Comments
RR71	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.8	268	214	0.00	33.570852 N	114.777936 W	Hydrologically Disconnected
RR72	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	213	256	0.01	33.570163 N	114.779147 W	Hydrologically Disconnected
RR73	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	1327	1460	0.03	33.574105 N	114.783761 W	Hydrologically Disconnected
RR74	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.8	558	446	0.01	33.569067 N	114.773996 W	Hydrologically Disconnected
RR75	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	257	180	0.00	33.569617 N	114.775541 W	Hydrologically Disconnected
RR76	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	225	158	0.00	33.570723 N	114.778388 W	Hydrologically Disconnected
RR77	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	275	330	0.01	33.584178 N	114.737494 W	Hydrologically Disconnected
RR80	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.0	1182	2363	0.05	33.586554 N	114.741993 W	Hydrologically Disconnected
RR81	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.6	751	1202	0.03	33.578681 N	114.773637 W	Hydrologically Disconnected
RR82	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	554	665	0.02	33.578689 N	114.772993 W	Hydrologically Disconnected
RR83	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.5	1048	1572	0.04	33.574606 N	114.786354 W	Hydrologically Disconnected
RR84	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	1045	732	0.02	33.569144 N	114.777545 W	Hydrologically Disconnected
RR85	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.7	1144	801	0.02	33.571100 N	114.777307 W	Hydrologically Disconnected
RR86	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.0	474	474	0.01	33.570511 N	114.777332 W	Hydrologically Disconnected
RR87	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	187	206	0.00	33.571117 N	114.779227 W	Hydrologically Disconnected
RR88	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.0	535	1070	0.02	33.566074 N	114.779236 W	Hydrologically Disconnected
RR90	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	211	232	0.01	33.555597 N	114.735583 W	Hydrologically Disconnected
RR91	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	271	244	0.01	33.556500 N	114.735003 W	Hydrologically Disconnected
RR92	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.2	305	671	0.02	33.558701 N	114.733879 W	Hydrologically Disconnected
RR93	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.5	249	374	0.01	33.547558 N	114.740945 W	Hydrologically Disconnected
RR94	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Abandoned	1.1	152	167	0.00	33.548926 N	114.740258 W	Hydrologically Disconnected
RR95	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	154	139	0.00	33.547093 N	114.741063 W	Hydrologically Disconnected
RR96	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	171	222	0.01	33.547835 N	114.740955 W	Hydrologically Disconnected
RR97	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.5	216	324	0.01	33.548309 N	114.740252 W	Hydrologically Disconnected
RR98	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.3	150	195	0.00	33.549740 N	114.739072 W	Hydrologically Disconnected
RR99	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.8	222	178	0.00	33.555840 N	114.735408 W	Hydrologically Disconnected
RR100	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	272	326	0.01	33.557027 N	114.734369 W	Hydrologically Disconnected
RR101	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.6	247	395	0.01	33.558060 N	114.734215 W	Hydrologically Disconnected
RR102	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	2.0	103	206	0.00	33.571701 N	114.779655 W	Hydrologically Disconnected
RR103	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	0.9	790	711	0.02	33.573836 N	114.786816 W	Hydrologically Disconnected
RR104	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.2	800	960	0.02	33.565500 N	114.779087 W	Hydrologically Disconnected
RR106	Abandoned Channel	Upland	Fluvial: Floodplain Watercourse on Fan Remnant	Inactive Channel (Hydrologically Disconnected)	1.1	152	167	0.00	33.589362 N	114.753859 W	Hydrologically Disconnected
Total Abandoned Stream Channel							45189	1.04			
Active Watercourse											

APPENDIX F. CALCULATIONS FOR DELINEATED WATERCOURSE AREAS											
Watercourse ID	Jurisdictional Category	Flow Regime Characteristics	Geomorphological Characteristics	Hydrological Characteristics	Width (ft)	Length (ft)	Area (ft^2) (lengthx width)	Area (acres)	Latitude	Longitude	Comments
FP1	Active Watercourse	Active Floodplain	Fluvial: Floodplain Watercourse on Fan Remnant	Active	0.0	0	0	34.14	33.586918 N	114.750806 W	Has Recent fluvial indicators
FP2	Active Watercourse	Active Floodplain	Fluvial: Floodplain Watercourse on Fan Remnant	Active	0.0	0	0	32.32	33.563878 N	114.777083 W	Has Recent fluvial indicators
FP3	Active Watercourse	Active Floodplain	Fluvial: Floodplain Watercourse on Fan Remnant	Active	0.0	0	0	0.51	33.588349 N	114.759466 W	Lack recent fluvial indicators like active channels, but has past flow indicators and hydrologically flow has not been cut off and has potential to become active again.
Total Active Watercourse							0	66.98			