

Appendix E-4

Arica Solar Project Jurisdictional Waters Report

**JURISDICTIONAL WATERS REPORT
ARICA SOLAR PROJECT
RIVERSIDE COUNTY, CALIFORNIA**



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Table of Contents

| | | |
|-----|---|----|
| 1 | INTRODUCTION | 4 |
| 1.1 | Background..... | 4 |
| 1.2 | Site Location | 4 |
| 1.3 | Project Summary | 4 |
| 2 | REGULATORY SETTING | 5 |
| 2.1 | Clean Water Act (§ 401 and § 404) | 5 |
| 2.2 | California Porter-Cologne Water Quality Act..... | 5 |
| 2.3 | California Fish and Game Code §§ 1600 to 1616 | 6 |
| 3 | ENVIRONMENTAL SETTING | 6 |
| 3.1 | Regional Setting..... | 6 |
| 3.2 | Hydrology | 7 |
| 3.3 | Rainfall..... | 7 |
| 3.4 | Soils | 8 |
| 3.5 | Sand Transport System | 8 |
| 4 | METHODS..... | 9 |
| 4.1 | Desktop Review | 9 |
| 4.2 | Field Investigations | 9 |
| 5 | RESULTS | 11 |
| 5.1 | Unvegetated Ephemeral Dry Wash..... | 11 |
| 5.2 | Desert Dry Wash Woodland | 11 |
| 6 | JURISDICTIONAL FINDINGS AND RECOMMENDATIONS | 12 |
| 6.1 | Clean Water Act (§ 401 and § 404) | 12 |
| 6.2 | California Porter-Cologne Water Quality Act..... | 12 |
| 6.3 | California Fish and Game Code §§ 1600–1616 | 13 |
| 7 | REFERENCES | 14 |

List of Tables

| | |
|---|----|
| Table 1. Regional Rainfall Totals 2010-2020 | 8 |
| Table 2. Summary of Colorado River Basin RWQCB Jurisdictional Waters in Acres | 12 |
| Table 3. Summary of CDFW Jurisdictional Water in Acres | 13 |

List of Photos

| | |
|-------------------------------------|----|
| Photo 1. Unvegetated Ephemeral Wash | 16 |
| Photo 2. Desert Dry Wash Woodland | 16 |

List of Figures

| | |
|-------------------------------------|----|
| Figure 1. General Vicinity | 17 |
| Figure 2. Hydrology | 18 |
| Figure 3. Soils | 19 |
| Figure 4. Aeolian Sand | 20 |
| Figures 5a-5f. Jurisdictional Areas | 21 |

Appendix

| | |
|--|--|
| Appendix A – Athos Solar Project Approved Jurisdictional Determination | |
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List of Acronyms

| | |
|--------|---|
| amsl | above mean sea level |
| BLM | Bureau of Land Management |
| CDFW | California Department of Fish and Wildlife |
| CEC | California Energy Commission |
| CEQA | California Environmental Quality Act |
| CFGF | California Fish and Game Code |
| CWA | Clean Water Act |
| DRECP | Desert Renewable Energy Conservation Plan |
| EIS | Environmental Impact Statement |
| EPA | United States Environmental Protection Agency |
| GIS | Geographic Information Systems |
| GPS | Global Positioning System |
| LSAA | Lake and Streambed Alteration Agreement |
| MESA | Mapping Episodic Stream Activity |
| NAIP | National Agriculture Imagery Program |
| NVCS | National Vegetation Classification System |
| PV | Photovoltaic |
| RWQCB | Regional Water Resources Control Board |
| SWANCC | Solid Waste Agency of North Cook County |
| SWRCB | State Water Resources Control Board |
| USACE | United States Army Corps of Engineers |
| USDA | United States Department of Agriculture |
| USGS | United States Geological Survey |
| USFWS | United States Fish and Wildlife Service |
| WDR | Waste Discharge Requirement |
| WRCC | Western Regional Climate Center |

1 INTRODUCTION

1.1 Background

Arica Solar, LLC is proposing to develop the Arica Solar Project (Project) near the Desert Center community within unincorporated Riverside County, California. The proposed Project site is located on Bureau of Land Management (BLM) managed lands. The Arica Solar Project is expected to generate 265 megawatts (MW) of renewable energy using photovoltaic (PV) panels and will connect to the existing Red Bluff substation.

This Jurisdictional Waters Report presents the methods, results, and recommendations associated with the jurisdictional waters evaluation performed in 2020. The primary purpose of this report is to provide the location of and quantify jurisdictional waters within the Project site. Information found in this report would be evaluated during future site design, impact calculations, and permitting process.

1.2 Site Location

The Project site is in unincorporated eastern Riverside County, California. It consists of approximately 2,000 acres of BLM-administered land. The Project site is situated within Chuckwalla Valley near the community of Desert Center, nearly halfway between the cities of Indio and Blythe, north of the Interstate-10 freeway, on the Sidewinder Well and Corn Spring 7.5-Minute U.S. Geological Survey topographic quadrangles.

The Project site is located within in the California Desert Conservation Area (CDCA) planning area, and within the southern Desert Tortoise Recovery Unit of the Northern and Eastern Colorado Desert Coordinated Management (NECO) Plan. The Project site is not located within any ACECs (Areas of Critical Environmental Concern), but Alligator Rock ACEC is almost 3 miles southwest, the Desert Lily Preserve ACEC is 3 miles north, and Joshua Tree National Park is 5 miles north of the Project site (Figure 1). The shared Project generation tie (gen-tie) line would cross the Chuckwalla ACEC.

The entirety of the Project site is located within the boundaries of the Riverside East Solar Energy Zone (SEZ) identified in the Solar Programmatic Environmental Impact Statement (EIS) approved by a Record of Decision signed by BLM on October 12, 2012. Additionally, the Project site is within the Chuckwalla Valley ecoregion subarea of the Desert Renewable Energy Conservation Plan (DRECP) area. The DRECP identifies the federal lands in and around the Project site in the Land Use Plan Amendment (LUPA) and Final Environmental Impact Statement (FEIS) as a Development Focus Area (DFA), as approved by a Record of Decision signed by BLM on September 14, 2016.

1.3 Project Summary

Arica Solar, LLC, a subsidiary of Clearway Energy Group LLC (Clearway), has proposed to construct and operate the Arica Solar Project on land administered by BLM, on approximately 2000 acres. The proposed solar project site would be adjacent to another concurrently proposed project (Victory Pass), also proposed by Clearway that will share a few components. The Project will consist of photovoltaic (PV) solar

modules, tracker components, power inverters, transformers, an electrical collection system, one or two project substations, a shared switchyard, battery storage, access roads, and a shared gen-tie line to the existing Southern California Edison (SCE) Red Bluff Substation.

2 REGULATORY SETTING

2.1 Clean Water Act (§ 401 and § 404)

The federal Clean Water Act (CWA) is applicable to jurisdictional waters of the United States. The Environmental Protection Agency (EPA) and the U.S. Army Corps of Engineers (USACE) finalized a revised definition of “waters of the United States” under the CWA, within the Navigable Waters Protection Rule, which became effective on June 22, 2020. Waters of the United States is clearly divided into four categories and encompasses *“the territorial seas and traditional navigable waters; perennial and intermittent tributaries that contribute surface water flow to such waters; certain lakes, ponds, and impoundments of jurisdictional waters; and wetlands adjacent to other jurisdictional waters”* (Federal Register 85:222250). Waters that are not included within four categories are not waters of the United States, and non-jurisdictional under the CWA.

2.2 California Porter-Cologne Water Quality Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne), Division 7 of the California Water Code, establishes the responsibilities and authorities of the nine RWQCBs and the SWRCB. This act establishes that the waters of the State shall be protected for use and enjoyment by the people of the State; that the activities and factors which may affect the quality of the waters of the State shall be regulated to attain the highest water quality. Porter-Cologne also names the RWQCBs to formulate and adopt water quality control plans for all areas within the region. The Project is located within the Colorado River (Region 7) RWQCB jurisdiction.

Under Porter-Cologne, the RWQCB may regulate discharge of waste. All parties proposing to discharge waste that could affect waters of the State must file a report of waste discharge with the appropriate RWQCB (§ 13260 of the California Water Code). The RWQCB would then respond to the report of waste discharge by issuing waste discharge requirements (WDRs), or by waiving WDRs for the proposed discharge. Both of the terms *Discharge of Waste* and *waters of the State* are broadly defined such that discharges of waste, including fill, any material resulting from human activity or any other discharge that may directly or indirectly affect waters of the State. While all waters of the U.S. that are within the borders of California are also waters of the State pursuant to Porter-Cologne, the converse is not true. Waters of the U.S. are federally jurisdictional and legally distinct from waters of the State. While § 404 permits and § 401 certifications are required when activity results in fill or discharge directly below ordinary high-water mark of waters of the U.S., any activity that results or may result in a discharge that directly or indirectly impacts waters of the State or the beneficial uses of those waters may be subject to WDRs.

Pursuant to California Water Code § 13191.3(a), the SWRCB and RWQCBs would comply with the listing requirements of § 303(d) of the CWA which requires states to identify waters that do not meet or are not expected to meet by the next listing cycle, applicable water quality standards.

2.3 California Fish and Game Code §§ 1600 to 1616

Pursuant to § 1602 of the California Fish and Game Code (CFG), California Department of Fish and Wildlife (CDFW) may require a Lake or Streambed Alteration Agreement (LSAA) prior to any activity that would substantially divert or obstruct the natural flow, or substantially change the bed, channel, or bank of a river, stream or lake, or use material from a streambed. CDFW's issuance of a LSAA is subject to California Environmental Quality Act (CEQA) certification.

CDFW traditionally defines a stream (including creeks and rivers) as "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 surface or subsurface flow that supports or has supported riparian vegetation." CDFW's definition of lake includes natural lakes or man-made reservoirs. CDFW jurisdiction also includes riparian or wetland vegetation associated with a watercourse.

Streambed morphology and presence was evaluated for the Project site based on guidance from a combination of *A Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (USACE 2008a); *A Guide to Ordinary High Water Mark (OHWM) Delineation for Non-Perennial Streams in the Western Mountains, Valleys, and Coast Region of the United States* (USACE 2014); and *Mapping Episodic Stream Activity (MESA) Field Guide and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* ("MESA Guide"; Brady and Vyverberg 2013) published by the California Energy Commission in 2014. The primary objective of the MESA guide was to clarify definitions used to determine CDFW-jurisdictional waters and replace guidance (e.g., *A Field Guide to Lake and Streambed Alteration Agreements* [CDFW 1994]) with current understanding of fluvial geomorphology and ecohydrology. Guidance outlined in CDFW Code Sections 1600-1616 was used to determine the presence of stream bank, riparian areas, and floodplains where state jurisdiction may apply.

3 ENVIRONMENTAL SETTING

3.1 Regional Setting

The Project site is in the central portion of Chuckwalla Valley, east of Palm Springs in the Colorado Desert. The elevation of Chuckwalla Valley ranges from less than 400 feet above mean sea level (amsl) at Ford Dry Lake to approximately 1,800 feet amsl west of Desert Center and along the upper portions of the alluvial fans that surround the valley perimeter. The surrounding mountains rise to over 3,000 feet amsl. The topography of the Project site generally slopes downward toward the northeast at gradient of less than 1 percent. Ground surface elevations at the Project site itself ranges from approximately 485 feet amsl in the northeast to 645 feet amsl in the southwest.

Anthropogenic features and land use near the Project site include agriculture, renewable energy, energy transmission, and historical military operations.

3.2 Hydrology

The Project site resides within the Colorado River Hydrologic Region (HR). The Colorado River HR covers approximately 13 million acres (20,000 square miles) in southeastern California and is the most arid HR in California with annual precipitation averaging 5.5 inches (DWR 1994). The Project site is in the Big Wash HUC 10 Hydrologic Areas, which flow to closed basins, not connected with the Colorado River or other traditional navigable waters (Figure 2). Palen Dry Lake and Ford Dry Lake represent the lowest elevations within the basin.

Desert washes within this region are almost always dry but contract and expand dramatically in size due to extreme variations in flows, which can range from high-discharge floods to extended periods when surface flow is absent. The Project site lies between the alluvial fans emanating from the Eagle Mountains to the west, Chuckwalla Mountains to the south, and Coxcomb Mountains to the north.

The Project site is situated in the lower alluvial fan that is characterized by less stabilized soils consisting of finer sand and silt, compared to the upper alluvial fan that supports more stabilized, rocky soils with well-defined channels. The topography the Project site is relatively flat with gradients of less than two percent.

Alluvial processes across the Project site generally flow from southwest to northeast. The I-10 (about 2 miles south of the Project site) crosses the alluvial fan that emanates from the Chuckwalla Mountains. The I-10 and associated wing dikes, which were constructed over 45 years ago, have altered natural surface flows from dozens of meandering small alluvial washes into concentrated discrete channels. Lancaster et al. (2014) noted that changes to drainage patterns resulting from the construction of I-10 translate into downstream hydrological degradation, focusing surface flow into freeway undercrossings and rendering portions of the alluvial fan less active than under historical conditions. Minor washes located in the hydrological shadow of I-10 were cut off from upstream flows and therefore transport lower volumes of water and entrained sediment. Major, culverted washes received more surface flow and distribute a higher volume and fine sediment compared to conditions that preceded the construction of I-10. These effects persist on the Project site under current conditions.

3.3 Rainfall

Precipitation data was obtained from the Western Regional Climate Center (WRCC 2020) for the most proximate stations to the Project site: Blythe Airport and Eagle Mountain weather stations (approximately 40 and 10 miles from the Project site, respectively). Historical rainfall data were totaled and averaged for the winter (October through March) and summer (April through September) periods (Table 1). Over the period of analysis, the highest winter rainfall occurred in 2010 and highest summer rainfall occurred in 2012. Winter rains prior to the spring 2020 survey were above average over the period analyzed.

Table 1. Regional Rainfall Totals 2010-2020

| Year | Winter - October to March (inches)* | Summer - April to September (inches)* |
|-------------------------|--|--|
| 2010 | 4.8 | 0.1 |
| 2011 | 2.5 | 1.2 |
| 2012 | 1 | 3.31 |
| 2013 | 1.5 | 2.6 |
| 2014 | 0.7 | 1.2 |
| 2015 | 2.1 | 1.3 |
| 2016 | 1.5 | 0.7 |
| 2017 | 3.4 | 1.1 |
| 2018 | 0.1 | 0.5 |
| 2019 | 2.6 | 0.165 |
| 2020 | 3.6 | - |
| Seasonal Average | 2.2 | 1.2 |

**Source: Western Regional Climate Center (WRCC 2020): Blythe Airport and Eagle Mountain weather stations.*

3.4 Soils

Soils mapped on the Project site consist of two soil types per the United States General Soils Map. The southwestern portion of the site is mapped as the Vaiva-Quilotosa-Hyder-Cipriano-Cherioni map unit characterized by soils with high percentage (greater than 65 percent) of sand with moderate susceptibility to wind erosion. The northeastern portion of the site is mapped as Rositas-Dune-Land Carsitas. It is characterized by soils with a very high sand percentage (greater than 95 percent) and is highly susceptible to wind erosion (Figure 3).

3.5 Sand Transport System

The Project site is located within the Chuckwalla Valley, a region of active aeolian (wind-blown) sand migration and deposition. Aeolian processes play a major role in the creation and establishment of sand dune formations and habitat in the Chuckwalla Valley and those within the Project site. Aeolian sands (dunes, sand fields, and similar habitats) are important habitats for certain plants and animals.

In conjunction with the DRECP process, the Department of Conservation's California Geological Survey prepared a regional Eolian System Mapping Report for Eastern Riverside County in 2014 (Lancaster et al. 2014; note that eolian and aeolian are alternate spellings of the same word).

Active aeolian sand transport areas were consistent with analysis conducted by Kenney et al (2014) with active aeolian sand migration in the northern and northeastern boundaries and with aeolian sand sources in the remainder of the site (Figure 4). The active areas of aeolian sand migration areas have finer sand that is suitable habitat for sensitive wildlife (such as Mohave fringe toed lizard) and plant species (such as Harwood's milkvetch). There is some instability over time and space, as sand corridors expand, contract or migrate with changing weather and climate. A more recent analysis by Kenney in 2017 shows that the

remainder of the site, that has aeolian sand sources, has a low to moderate sand migration rate (Kenney 2017).

4 METHODS

4.1 Desktop Review

Initial analysis was performed with Geographic Information Systems (GIS) using the following digital datasets:

- 7.5' USGS topographic quadrangles;
- National Agriculture Imagery Program (NAIP) 4-band imagery (2020);
- National Wetlands Inventory Wetlands Mapper (USFWS 2020);
- National Vegetation Classification Standard (NVCS) layers from the (DRECP) Data Basin;
- Natural Resource Conservation Service (NRCS) Web Soil Survey (NRCS 2020);
- Eastern Riverside County Soil Mapping (Lancaster et al. 2014);
- Western Regional Climate Center (WRCC 2020);
- USGS National Hydrography Dataset (2020);
- Jurisdictional waters layers for Palen Solar Project
- Jurisdictional water layers for Athos Renewable Energy Project; and
- Jurisdictional waters layers for Desert Harvest Solar Project.

Relevant digital data were incorporated into ESRI ArcGIS Online and made accessible during field investigations via the ESRI Collector application.

4.2 Field Investigations

Field investigations (surveys) were conducted between May 20-21, 2020. Surveyors included Emily Thorn, Dave Kesonie, Lehong Chow, Jason St Pierre and field assistant Samantha Nielson. The former four were qualified with 40-hour jurisdictional waters training and previous experience with jurisdictional resources associated with arid lands of the California deserts, while the latter has some experience with jurisdictional resources associated with arid lands of California deserts only.

Data were collected using a combination of records entered in ESRI ArcGIS Collector® and hand-written field notes. Transects were typically performed perpendicular to flow patterns and conducted within all Project components to obtain sufficient quantity of data points to facilitate GIS digitization of jurisdictional features. Over 30 miles of pedestrian and vehicular transects were performed. Point data were collected at individual features that displayed characteristic sign of episodic flow and, in some cases, upland areas that lacked watercourse features. Data points were taken for each feature that crossed the Project, typically at the center of each feature and the width of the feature was recorded.

California Department Fish and Wildlife (CDFW) Jurisdictional Waters

The field investigation focused on CDFW's definition of jurisdictional waters, which was consistent with the *MESA (Mapping Episodic Stream Activity) Field Guide and Methods to Describe and Delineate Episodic Stream Processes on Arid Landscapes for Permitting Utility-Scale Solar Power Plants* ("MESA Guide"; Brady and Vyverberg 2013). The MESA Guide provides a current understanding of fluvial geomorphology and ecohydrology and facilitates mapping of State-jurisdictional waters.

Field investigations were conducted during a dry spring (Table 2). As a result, recent evidence of episodic flow was minimal during the survey; however, historical episodic flow and watercourse features, as defined by the MESA Guide (Brady and Vyverberg 2013), were evident during the surveys and subsequently recorded and photographed when observed. Such features included:

- vegetation channel alignment,
- sand-filled channels,
- levee ridges,
- wrack lines,
- bifurcated flow,
- bar-and-swale topography,
- braided channels,
- cut banks,
- organic drift, and
- low flow and secondary channels.

Upland features including desert pavement, deflated sand sheets, gravel lag deposits, and islands were also recorded. Jurisdictional waters and riparian communities were mapped at a minimum scale of 1:6000, often down to 1:3000, as suggested in the MESA guidance for utility solar projects (Brady and Vyverberg 2013). The field delineation utilized the Holland Code Classification System for vegetation communities (Holland 1986) for identifying xeric riparian vegetation. Where vegetation contained a mixture of upland and wash-dependent indicator species from two or more Holland vegetation communities, the indicator species that appeared with the greatest vegetation coverage (absolute dominance based on percent cover) was used to identify the vegetation community.

Post-field analysis

Post-field analysis was conducted by surveyors and GIS specialists, in tandem, to code, define, designate, and edit all acquired field data representing jurisdictional waters. Acreages were calculated using GIS by referencing collected digital data and aerial photography. The linear path and extent of Unvegetated Ephemeral Dry Washes were digitized using polylines with an accompanying width measurement. The width value was used to convert polylines to polygons. The resulting features were reviewed and further refined based on interpretation of high-resolution aerial imagery. Rainfall data and historical aerial imagery were reviewed to estimate the time that anthropogenic influences may have affected hydrology and determine whether channels downstream of diversions may have been abandoned.

5 RESULTS

Potential RWQCB and CDFW-jurisdictional waters identified within the Project site consisted of streambeds (Unvegetated Ephemeral Dry Wash) and streambeds-riparian (Desert Dry Wash Woodland) - (Figures 5a to 5f).

5.1 Unvegetated Ephemeral Dry Wash

Unvegetated Ephemeral Dry Washes were mapped consistent with the presence of active channels, primarily within the creosote bush scrub. Unvegetated Ephemeral Dry Washes were not dominated by xeric riparian vegetation such as desert ironwood or blue palo verde, yet irregular and isolated occurrences of wash-dependent shrubs and trees may be found within mapped Unvegetated Ephemeral Dry Wash (Figures 5a-5f).

Active channels within the lower alluvial fan, where the Project is situated, showed sign of frequent avulsion (changes in flow direction following surface water flow events) due to patterns of brief, intense surface water flow. The avulsion process results in a network of active and inactive (abandoned) channels. Active channels supported evidence of scour, cut banks, levee ridges, wrack lines, and organic drift. Inactive channels and swales were characterized as discontinuous, shallow depressions with no evidence of recent episodic flow. Areas that had aeolian sand characteristics did not support evidence of active channels. Although some of these features are visible on aerial imagery and may appear to be active, the absence of watercourse indicators, presence of upland indicators (e.g., bioturbation), and isolation from a larger floodplain disqualified these features as being mapped as Unvegetated Ephemeral Dry Wash.

Narrow washes and sheet wash, within hydrological shadow of I-10, and its associated levees, were mapped as Unvegetated Ephemeral Dry Washes if they supported watercourse characteristics. While these washes have been affected by upstream diversions and likely support far less surface flow than under historical conditions, some could become active after sufficient rainfall.

5.2 Desert Dry Wash Woodland

Desert Dry Wash Woodland is a xeric riparian vegetation community (Holland Code 62200). Areas mapped as Desert Dry Wash Woodland were composed of ephemeral dry wash (streambed) and riparian interfluves within a matrix of dominant wash-dependent vegetation (Figures 5a, 5b, 5e). Holland (1986) describes this community as an open to relatively densely covered, drought-deciduous, microphyll (small compound leaves) riparian scrub woodland. Desert Dry Wash Woodland is characterized by braided wash channels that experience regular avulsion. This community is synonymous with blue palo verde (*Parkinsonia florida*) - ironwood (*Olneya tesota*) (microphyll) woodland alliance (Sawyer et. al 2009) and Sonoran - Coloradan Semi Desert Wash Woodland / Scrub (NVCS). Within the Project site, this vegetation community is dominated by an open tree layer of ironwood, blue palo verde, and smoke tree (*Psoralea arguta*) of at least 2-3% cover. The understory is a modified creosote scrub with big galleta grass (*Hilaria rigida*) and occurs only in small areas along the southwestern boundary.

6 JURISDICTIONAL FINDINGS AND RECOMMENDATIONS

The following discussion represents the best effort at determining the jurisdictional boundaries using the most current regulations and guidance from the USACE and CDFW.

6.1 Clean Water Act (§ 401 and § 404)

The Project site is within a closed surface hydrology basin that drains to Ford Dry Lake and does not meet the criteria described for waters of the U.S. described in section 2.1. No territorial seas or navigable waters, their tributaries, lakes/pounds or wetlands were found within the Project site. USACE has determined that no jurisdictional waters of the United States were found within other projects in the same basin (Desert Sunlight, Desert Harvest, and Palen Solar Projects). An Approved Jurisdictional Determination (SPL-2018-00708) was issued by the USACE on October 29, 2018 for the adjacent Athos Renewable Energy Project (Appendix A), The Approved Jurisdictional Determination states the following:

Based on available information, I have determined waters of the United States do not occur on the project site. The aquatic resources identified are intrastate isolated waters with no apparent interstate or foreign commerce connection. As such, these waters are not currently regulated by the Corps of Engineers. This disclaimer of jurisdiction is only for Section 404 of the Clean Water Act. Other Federal, State, and local laws may apply to your activities.

Due to the conclusion drawn in the Athos Approved Jurisdictional Determination, as well as other nearby Projects, and the federal jurisdictional criteria identified in Section 2.1 of this report, it is assumed that waters of the U.S. do not occur within the Project and regulations under the Clean Water Act appear to not be applicable.

6.2 California Porter-Cologne Water Quality Act

The RWQCB regulates discharges to jurisdictional waters under the California Porter-Cologne Water Quality Control Act, which is implemented through issuance of National Pollutant Discharge Elimination System permits for point source discharges and WDRs for non-point source discharges.

Table 2. Summary of Colorado River Basin RWQCB Jurisdictional Waters in Acres

| Area | Unvegetated Ephemeral Wash (OHWM width) |
|--------------|---|
| Project Site | 69.3 |

The California WQCB regulations adopted in April 2020 requires project proponents to apply to the appropriate RWQCB to obtain authorization for dredge or fill in jurisdictional waters of the State. Based on the findings above, an application should be submitted to the Colorado River Basin RWQCB, along with the required supplemental material (including precise impact calculations) and fee, for Project

disturbances located within RWQCB-jurisdictional areas. CEQA review will be required for the effects to jurisdictional waters of the State.

6.3 California Fish and Game Code §§ 1600–1616

The area estimated to meet the definition of CDFW-jurisdictional waters within the Project site are shown in Table 3 below.

Table 3. Summary of CDFW Jurisdictional Water in Acres

| Area | Unvegetated Ephemeral Wash (bank to bank) | Desert Dry Wash Woodland | TOTAL |
|--------------|---|-----------------------------|-------|
| Project Site | 91.2 | 10.9 | 102.1 |

California Fish and Game Code § 1602 requires project proponents to notify CDFW prior to any activity that may substantially modify CDFW-jurisdictional streambeds. Based on the findings above, a Notification of Lake or Streambed Alteration form should be submitted to CDFW, along with the required supplemental material (including precise impact calculations) and fee for Project disturbances located within CDFW-jurisdictional areas. CEQA review will be required for the effects CDFW-jurisdictional streambeds and associated riparian habitat.

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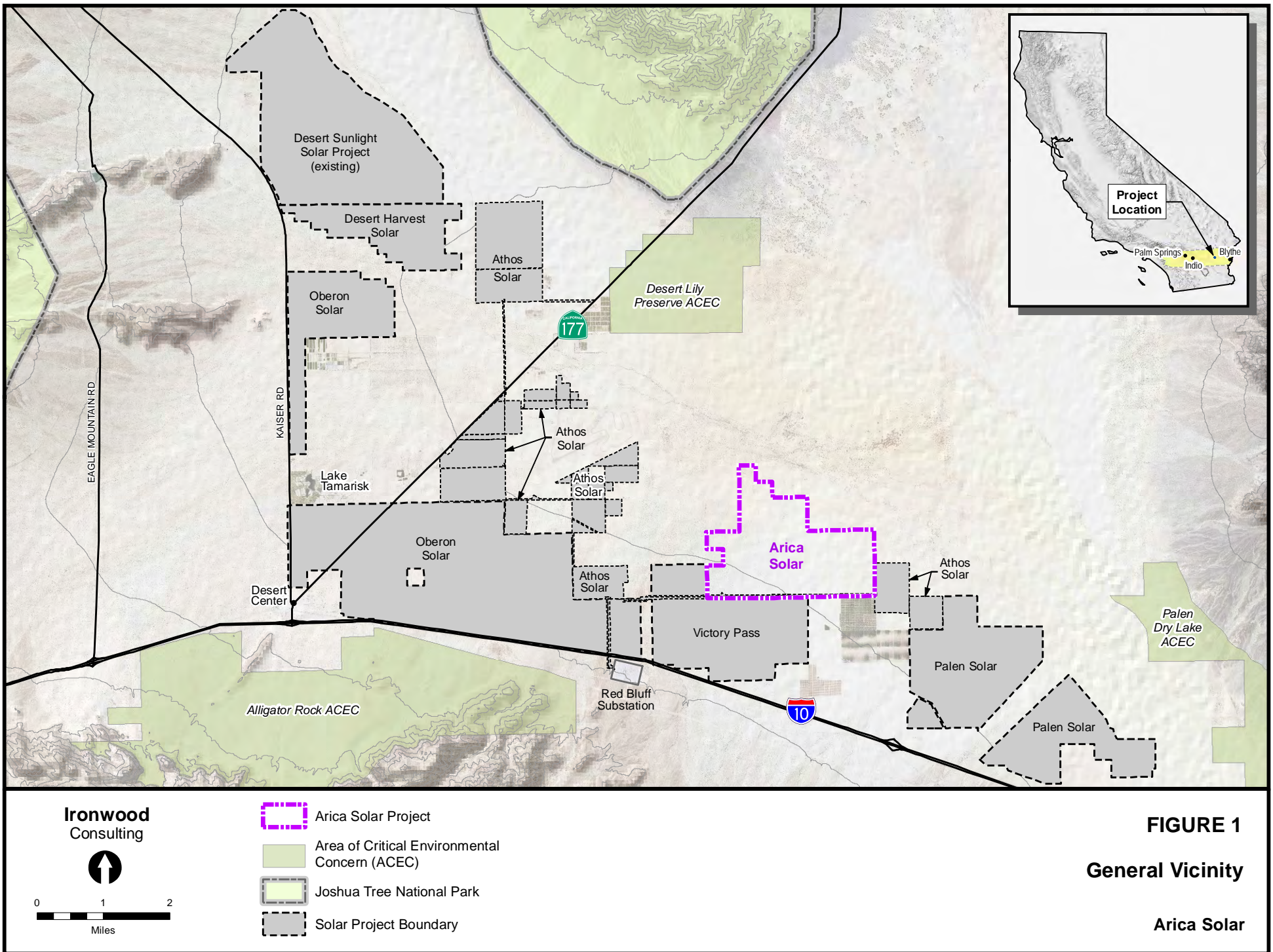
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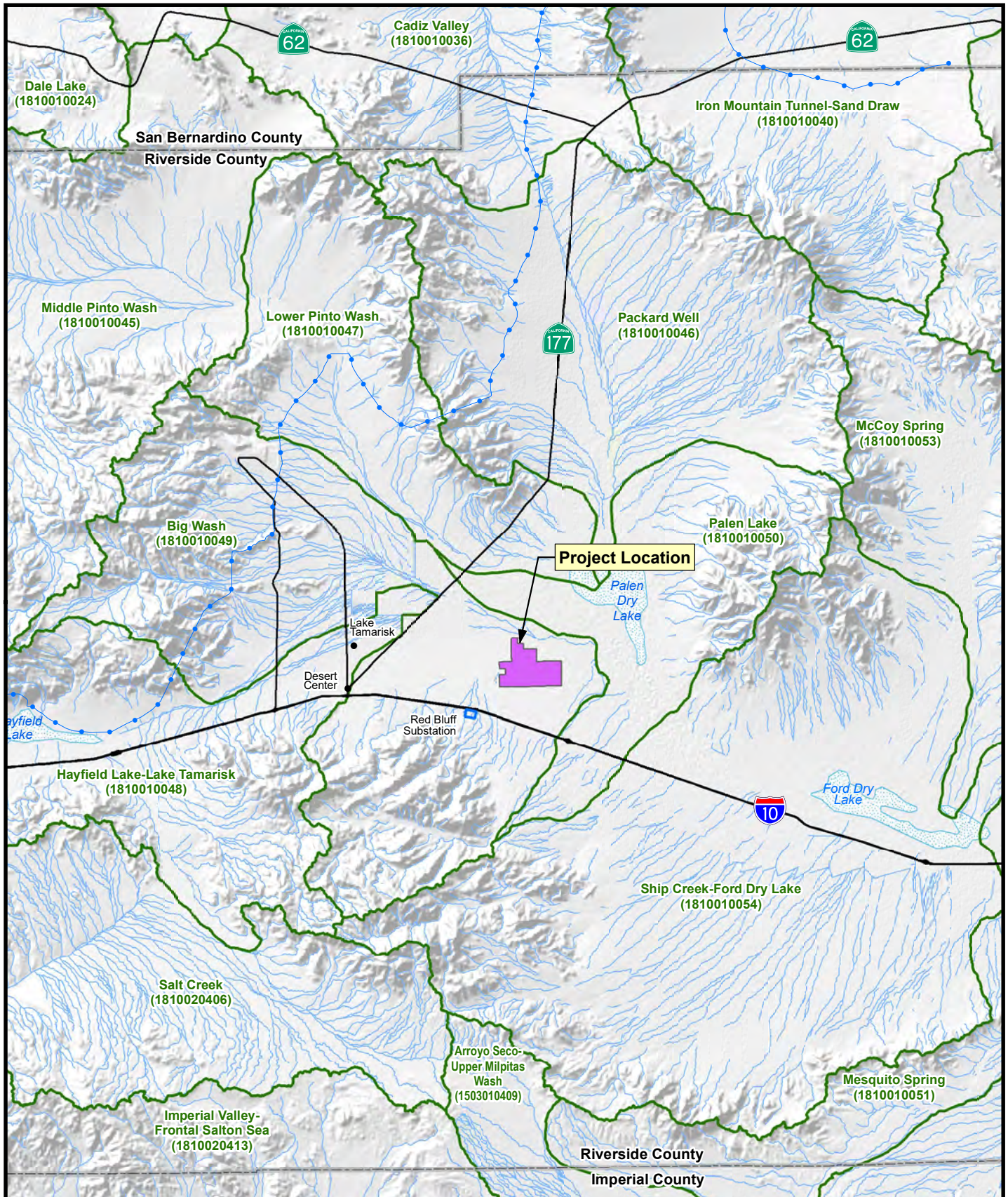
Photo 1. Unvegetated ephemeral wash



Photo 2. Desert Dry Wash Woodland







Ironwood
Consulting



0 4
Miles



Arica Solar Project

Ephemeral Drainage

Aqueduct



Intermittent Water Feature




Watershed Boundary

FIGURE 2

Hydrologic Unit Map


Arica Solar


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Consulting



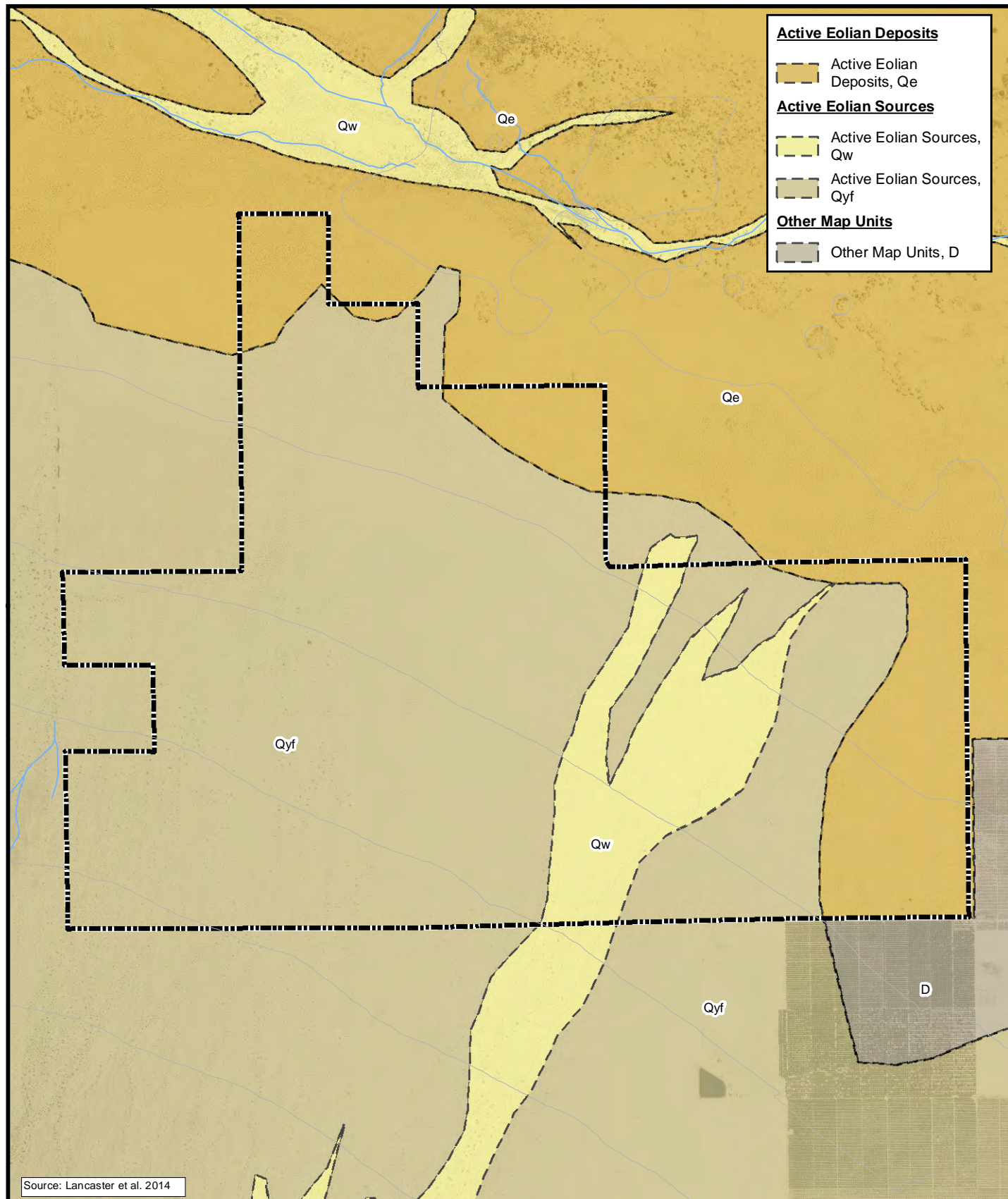
0 1,000 2,000
Feet

Soils

 *Rositas-Dune land-Carsitas (s1136)*

 *Vaiva-Quilotosa-Hyder-Cipriano-Cherioni (s1141)*

Arica Solar



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Consulting

Ephemeral Drainage
Arica Solar Project Boundary

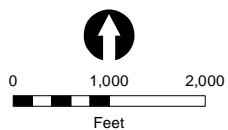
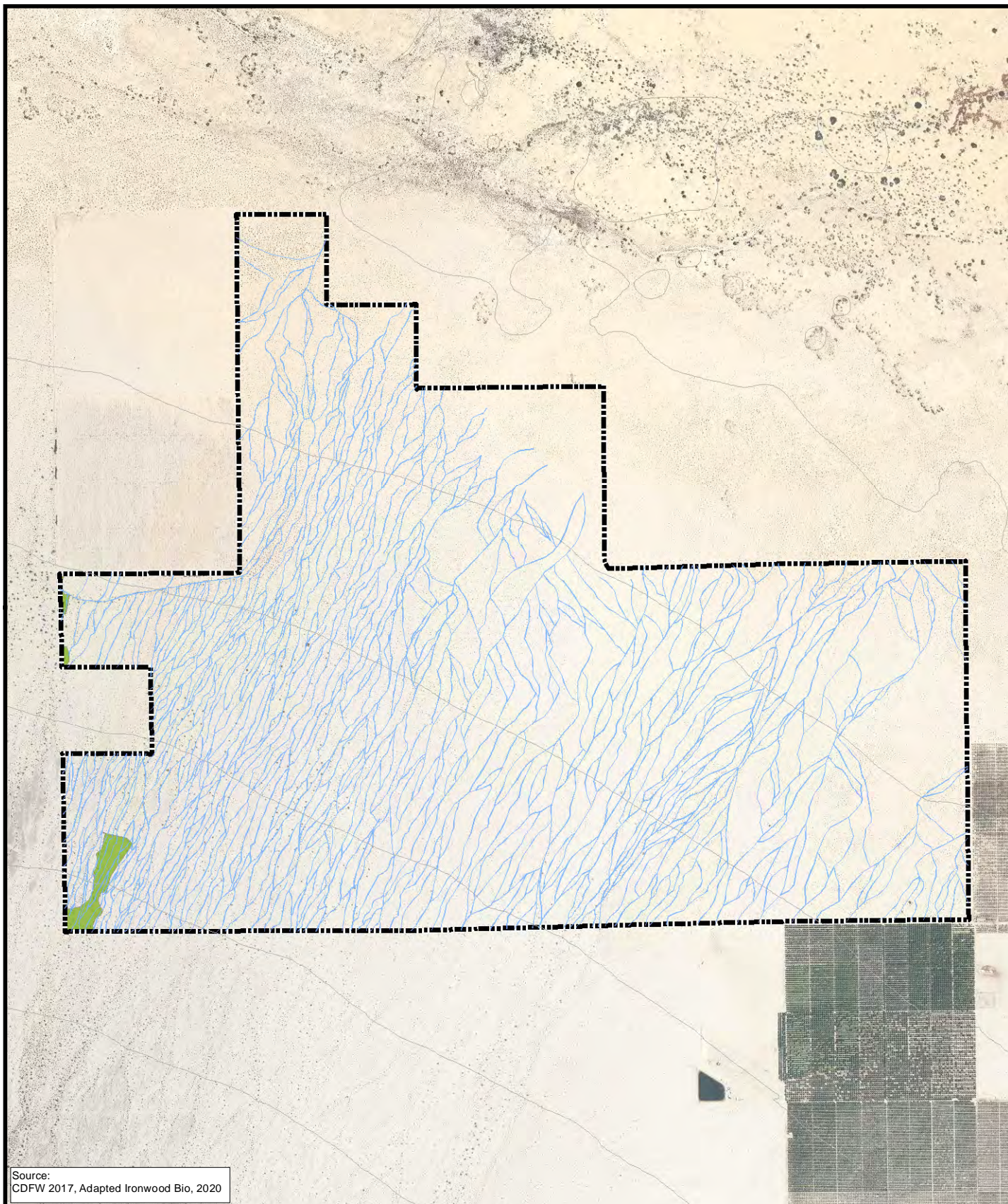


FIGURE 4
Aeolian Sand Transport

Arica Solar



Source:
CDFW 2017, Adapted Ironwood Bio, 2020

Ironwood
Consulting



0 1,000 2,000
Feet




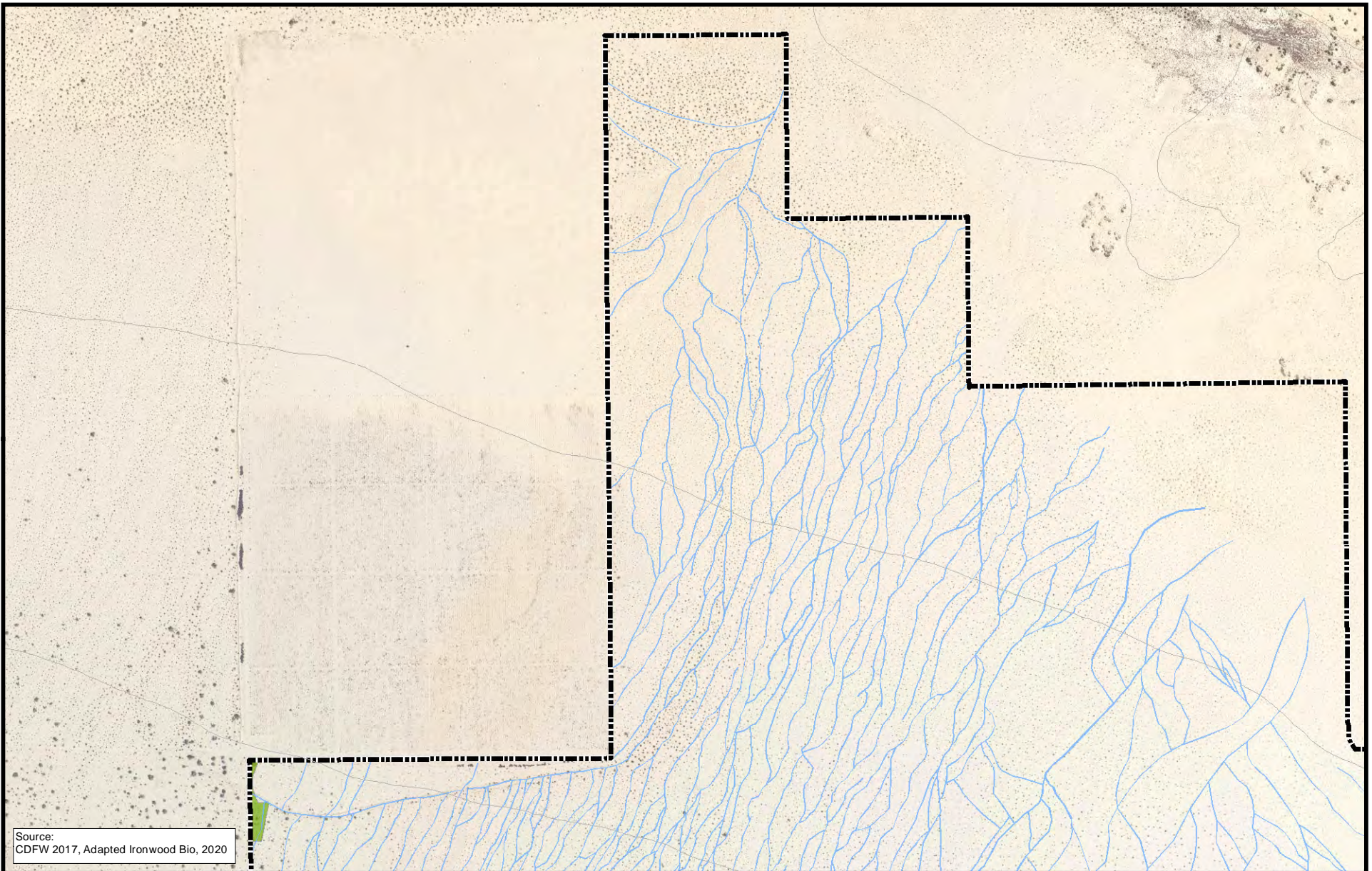
-  Unvegetated Ephemeral Wash
(RWQCB Jurisdiction - OHWM Width 69.3 acres)
(CDFW Jurisdiction - Bank to Bank 91.2 acres)
-  Dry Desert Wash Woodland
(10.9 acres)
-  Arica Solar Project
Boundary

FIGURE 5a

Jurisdictional Areas

Arica Solar






Source:
CDFW 2017, Adapted Ironwood Bio, 2020

Ironwood
Consulting



0 500 1,000
Feet

-  Unvegetated Ephemeral Wash
(RWQCB Jurisdiction - OWHM Width 69.3 acres)
(CDFW Jurisdiction - Bank to Bank 91.2 acres)
-  Dry Desert Wash Woodland
(10.9 acres)
-  Arica Solar Project Boundary

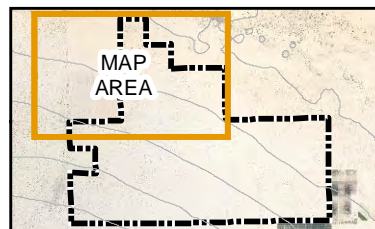
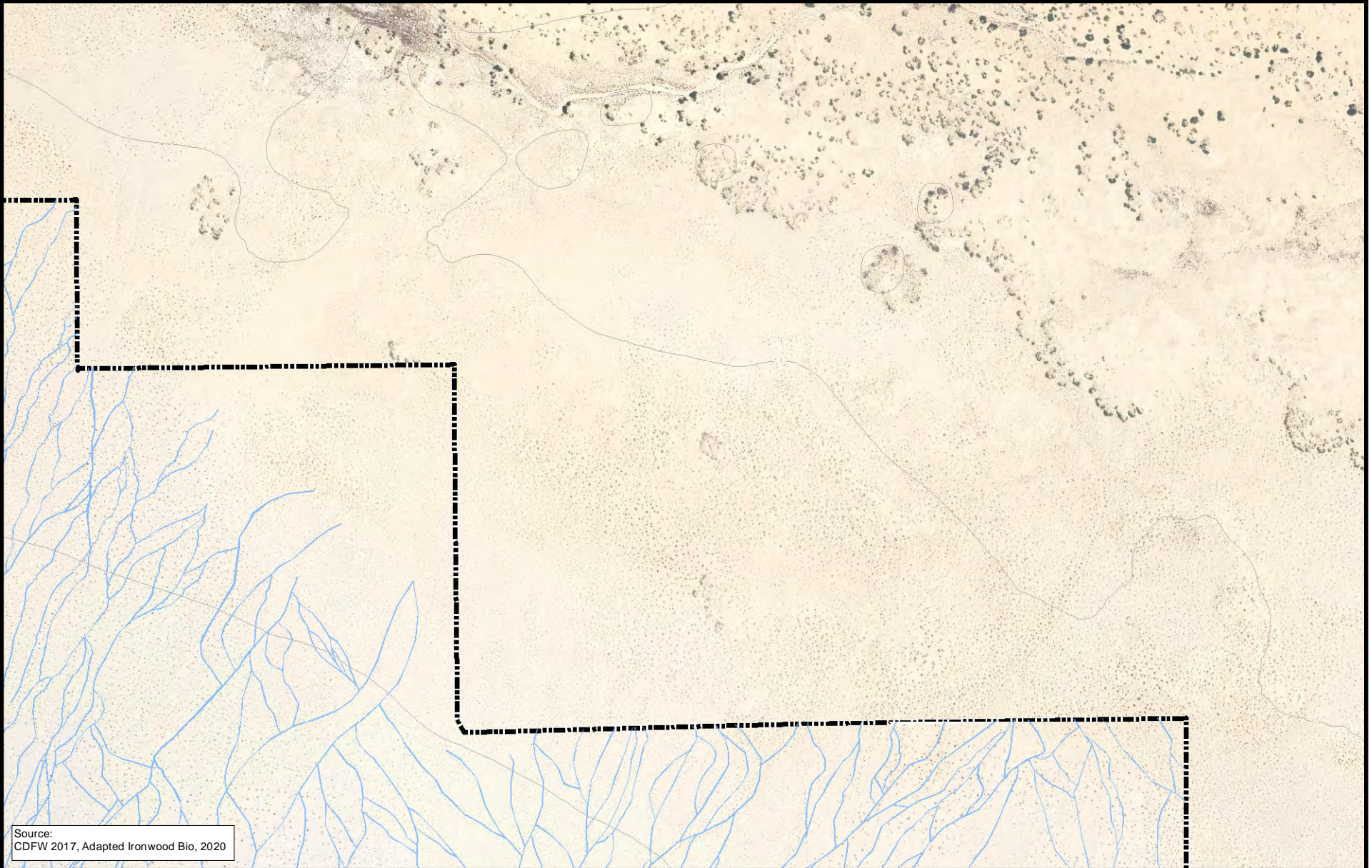


FIGURE 5b

**Jurisdictional Areas
Northwest Quadrant**

Arica Solar



Source:
CDFW 2017, Adapted Ironwood Bio, 2020

Ironwood
Consulting



0 500 1,000
Feet



-  Unvegetated Ephemeral Wash
(RWQCB Jurisdiction - OWHM Width 69.3 acres)
(OHWM Jurisdiction - Bank to Bank 91.2 acres)
-  Arica Solar Project Boundary



FIGURE 5c

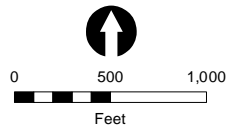
**Jurisdictional Areas
Northeast Quadrant**



Arica Solar



Source:
CDFW 2017, Adapted Ironwood Bio, 2020

Ironwood
Consulting



-  Unvegetated Ephemeral Wash
(RWQCB Jurisdiction - OHWM Width 69.3 acres)
(CDFW Jurisdiction - Bank to Bank 91.2 acres)
-  Arica Solar Project
Boundary

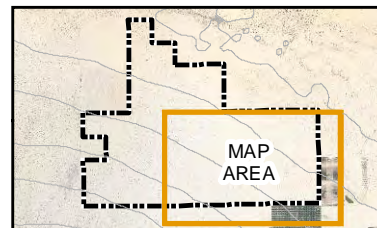
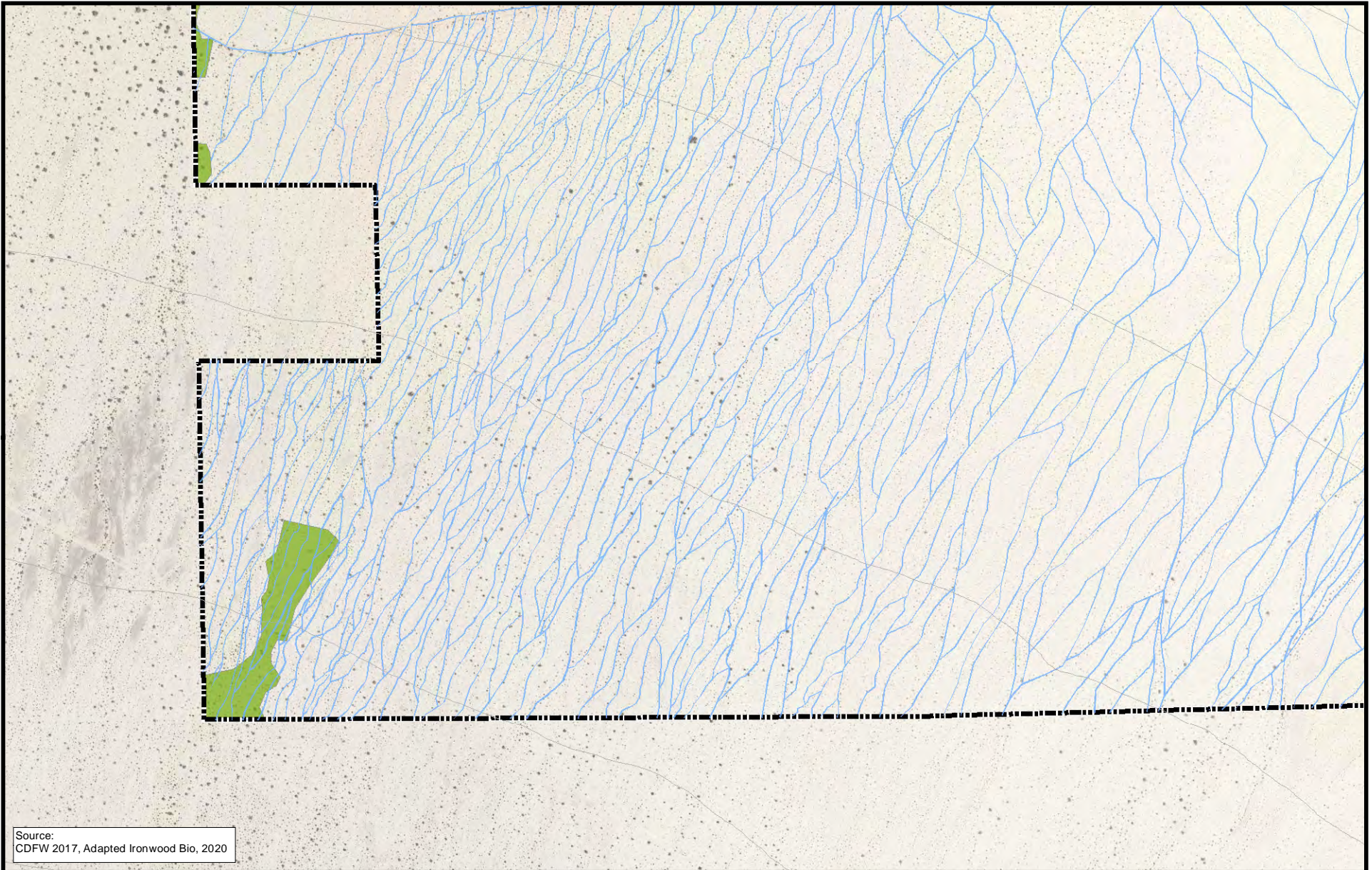


FIGURE 5d

**Jurisdictional Areas
Southeast Quadrant**

Arica Solar



Source:
CDFW 2017, Adapted Ironwood Bio, 2020

Ironwood
Consulting



0 500 1,000
Feet




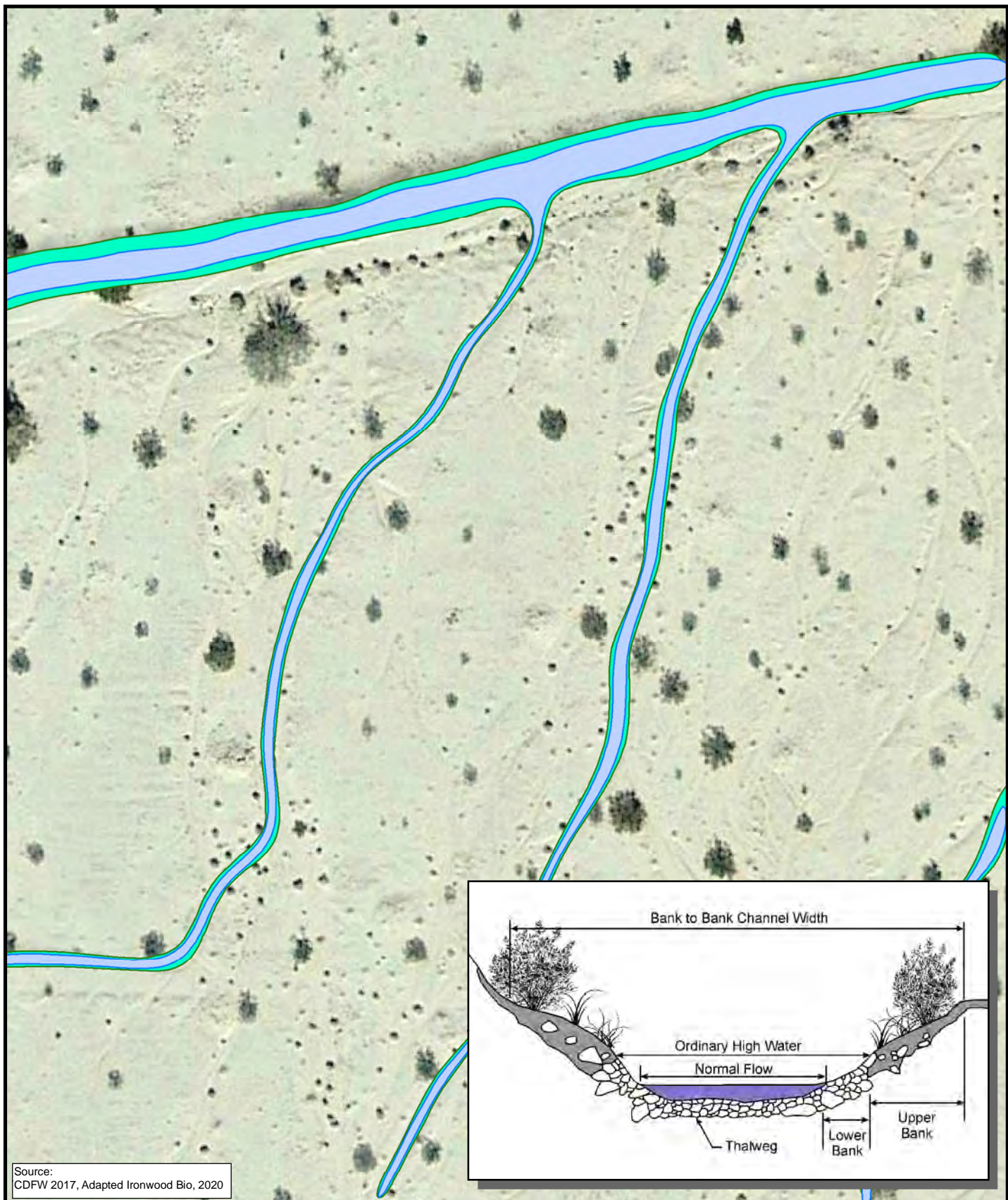
-  Unvegetated Ephemeral Wash
(RWQCB Jurisdiction - OHWM Width 69.3 acres)
(CDFW Jurisdiction - Bank to Bank 91.2 acres)
-  Dry Desert Wash Woodland
(10.9 acres)
-  Arica Solar Project
Boundary



FIGURE 5e

**Jurisdictional Areas
Southwest Quadrant**



Arica Solar



Ironwood
Consulting



0 25 50
Feet

-  Ordinary High Water Mark of Wash
-  Bank to Bank Width of Wash

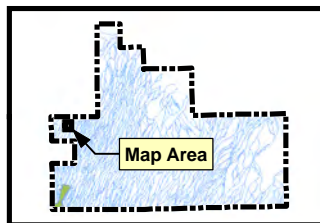


FIGURE 5f
Jurisdictional
Wash Detail
Arca Solar

APPENDIX A

Jurisdictional determination – Athos Renewable Energy Project



DEPARTMENT OF THE ARMY
CORPS OF ENGINEERS, LOS ANGELES DISTRICT
1451 RESEARCH PARK DRIVE, SUITE 100
RIVERSIDE, CALIFORNIA 92507-2154

October 29, 2018

SUBJECT: Approved Jurisdictional Determination

Scott White
Aspen Environmental Group
615 North Benson Ave., Suite E
Upland, California 91786

Dear Mr. White:

I am responding to your request (File No. SPL-2018-00708) dated May 9, 2018, on behalf of IP Athos, LLC, for an approved Department of the Army jurisdictional determination (JD) for the Athos Renewable Energy Project. The proposed project is located on approximately 3,300 acres, including approximately seven miles of transmission lines, in Desert Center, Riverside County, California (centered near lat. 33.7519°N, long. -115.3637°W).

The Corps' evaluation process for determining whether or not a Department of the Army permit is needed involves two tests. If both tests are met, a permit would likely be required. The first test determines whether or not the proposed project is located within the Corps' geographic jurisdiction (i.e., it is within a water of the United States). The second test determines whether or not the proposed project is a regulated activity under Section 10 of the Rivers and Harbors Act or Section 404 of the Clean Water Act. This evaluation pertains only to geographic jurisdiction.

Based on available information, I have determined waters of the United States do not occur on the project site. The basis for our determination can be found in the enclosed Approved Jurisdictional Determination (JD) form.

The aquatic resources identified on the project site in the project documentation you provided are intrastate isolated waters with no apparent interstate or foreign commerce connection. As such, these aquatic resources are not currently regulated by the Corps of Engineers. This disclaimer of jurisdiction is only for Section 404 of the Clean Water Act. Other federal, state, and local laws may apply to your activities. In particular, you may need authorization from the California State Water Resources Control Board, the California Department of Fish and Wildlife, and the U.S. Fish and Wildlife Service.

This letter includes an approved jurisdictional determination for the Athos Renewable Energy Project in Desert Center, Riverside County, California. If you wish to submit new information regarding this jurisdictional determination, please do so within 60 days. We will consider any new information so submitted and respond within 60 days by either revising the prior determination, if appropriate, or reissuing the prior determination. If you object to this or

any revised or reissued jurisdictional determination, you may request an administrative appeal under Corps regulations at 33 CFR Part 331. Enclosed you will find a Notification of Appeal Process (NAP) and Request for Appeal (RFA) form. If you wish to appeal this decision, you must submit a completed RFA form within 60 days of the date on the NAP to the Corps South Pacific Division Office at the following address:

Tom Cavanaugh
Administrative Appeal Review Officer
U.S. Army Corps of Engineers
South Pacific Division, CESPD-PDS-O, 2042B
1455 Market Street
San Francisco, California 94103-1399

In order for an RFA to be accepted by the Corps, the Corps must determine that it is complete, that it meets the criteria for appeal under 33 CFR Part 331.5 (see below), and that it has been received by the Division Office by **December 28, 2018**.

This determination has been conducted to identify the extent of the Corps' Clean Water Act jurisdiction on the particular project site identified in your request, and is valid for five years from the date of this letter, unless new information warrants revision of the determination before the expiration date. This determination may not be valid for the wetland conservation provisions of the Food Security Act of 1985. If you or your tenant are USDA program participants, or anticipate participation in USDA programs, you should request a certified wetland determination from the local office of the Natural Resources Conservation Service prior to starting work.

Thank you for participating in the regulatory program. If you have any questions, please contact me at (951) 276-6624 x263 or via e-mail at James.E.Mace@usace.army.mil. Please help me to evaluate and improve the regulatory experience for others by completing the customer survey form at http://corpsmapu.usace.army.mil/cm_apex/f?p=regulatory_survey.

Sincerely,

James E. Mace
Senior Project Manager
South Coast Branch
Regulatory Division

Enclosure(s)

NOTIFICATION OF ADMINISTRATIVE APPEAL OPTIONS AND PROCESS AND REQUEST FOR APPEAL

| | | |
|-------------------------------------|--|------------------------|
| Applicant: IP Athos, LLC | File Number: SPL-2018-00708 | Date: OCTOBER 29, 2018 |
| Attached is: | | See Section below |
| <input type="checkbox"/> | INITIAL PROFFERED PERMIT (Standard Permit or Letter of permission) | A |
| <input type="checkbox"/> | PROFFERED PERMIT (Standard Permit or Letter of permission) | B |
| <input type="checkbox"/> | PERMIT DENIAL | C |
| <input checked="" type="checkbox"/> | APPROVED JURISDICTIONAL DETERMINATION | D |
| <input type="checkbox"/> | PRELIMINARY JURISDICTIONAL DETERMINATION | E |

SECTION I - The following identifies your rights and options regarding an administrative appeal of the above decision. Additional information may be found at http://www.usace.army.mil/cecw/pages/reg_materials.aspx or Corps regulations at 33 CFR Part 331.

A: INITIAL PROFFERED PERMIT: You may accept or object to the permit.

- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **OBJECT:** If you object to the permit (Standard or LOP) because of certain terms and conditions therein, you may request that the permit be modified accordingly. You must complete Section II of this form and return the form to the district engineer. Your objections must be received by the district engineer within 60 days of the date of this notice, or you will forfeit your right to appeal the permit in the future. Upon receipt of your letter, the district engineer will evaluate your objections and may: (a) modify the permit to address all of your concerns, (b) modify the permit to address some of your objections, or (c) not modify the permit having determined that the permit should be issued as previously written. After evaluating your objections, the district engineer will send you a proffered permit for your reconsideration, as indicated in Section B below.

B: PROFFERED PERMIT: You may accept or appeal the permit

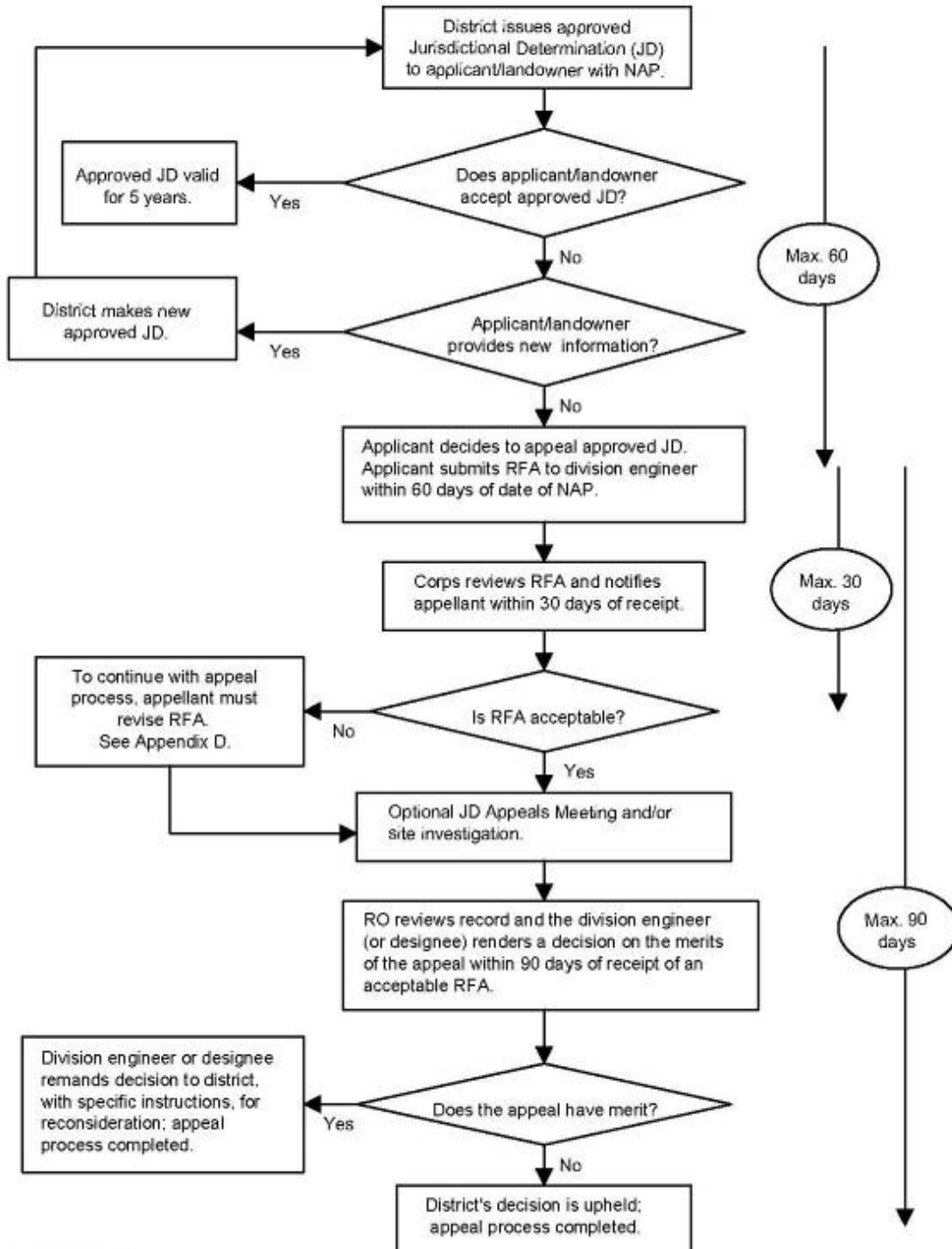
- **ACCEPT:** If you received a Standard Permit, you may sign the permit document and return it to the district engineer for final authorization. If you received a Letter of Permission (LOP), you may accept the LOP and your work is authorized. Your signature on the Standard Permit or acceptance of the LOP means that you accept the permit in its entirety, and waive all rights to appeal the permit, including its terms and conditions, and approved jurisdictional determinations associated with the permit.
- **APPEAL:** If you choose to decline the proffered permit (Standard or LOP) because of certain terms and conditions therein, you may appeal the declined permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

C: PERMIT DENIAL: You may appeal the denial of a permit under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice.

D: APPROVED JURISDICTIONAL DETERMINATION: You may accept or appeal the approved JD or provide new information.

| | | |
|---|--|--------------------------|
| <ul style="list-style-type: none"> • ACCEPT: You do not need to notify the Corps to accept an approved JD. Failure to notify the Corps within 60 days of the date of this notice means that you accept the approved JD in its entirety, and waive all rights to appeal the approved JD. • APPEAL: If you disagree with the approved JD, you may appeal the approved JD under the Corps of Engineers Administrative Appeal Process by completing Section II of this form and sending the form to the division engineer. This form must be received by the division engineer within 60 days of the date of this notice. | | |
| <p>E: PRELIMINARY JURISDICTIONAL DETERMINATION: You do not need to respond to the Corps regarding the preliminary JD. The Preliminary JD is not appealable. If you wish, you may request an approved JD (which may be appealed), by contacting the Corps district for further instruction. Also you may provide new information for further consideration by the Corps to reevaluate the JD.</p> | | |
| <p>SECTION II - REQUEST FOR APPEAL or OBJECTIONS TO AN INITIAL PROFFERED PERMIT</p> | | |
| <p>REASONS FOR APPEAL OR OBJECTIONS: (Describe your reasons for appealing the decision or your objections to an initial proffered permit in clear concise statements. You may attach additional information to this form to clarify where your reasons or objections are addressed in the administrative record.)</p> | | |
| <p>ADDITIONAL INFORMATION: The appeal is limited to a review of the administrative record, the Corps memorandum for the record of the appeal conference or meeting, and any supplemental information that the review officer has determined is needed to clarify the administrative record. Neither the appellant nor the Corps may add new information or analyses to the record. However, you may provide additional information to clarify the location of information that is already in the administrative record.</p> | | |
| <p>POINT OF CONTACT FOR QUESTIONS OR INFORMATION:</p> | | |
| <p>If you have questions regarding this decision and/or the appeal process you may contact:</p> <p>James Mace U.S. Army Corps of Engineers Los Angeles District 1451 RESEARCH PARK DRIVE, SUITE 100 RIVERSIDE, CALIFORNIA 92507-2154 Phone: (951) 276-6624 Email: James.E.Mace@usace.army.mil</p> | <p>If you only have questions regarding the appeal process you may also contact: Thomas J. Cavanaugh Administrative Appeal Review Officer, U.S. Army Corps of Engineers South Pacific Division 1455 Market Street, 2052B San Francisco, California 94103-1399 Phone: (415) 503-6574 Fax: (415) 503-6646 Email: thomas.j.cavanaugh@usace.army.mil</p> | |
| <p>RIGHT OF ENTRY: Your signature below grants the right of entry to Corps of Engineers personnel, and any government consultants, to conduct investigations of the project site during the course of the appeal process. You will be provided a 15 day notice of any site investigation, and will have the opportunity to participate in all site investigations.</p> | | |
| <p>_____</p> <p>Signature of appellant or agent.</p> | <p>Date:</p> | <p>Telephone number:</p> |

Administrative Appeal Process for Approved Jurisdictional Determinations



§ 331.5 Criteria.

(a) *Criteria for appeal* —(1) *Submission of RFA*. The appellant must submit a completed RFA (as defined at §331.2) to the appropriate division office in order to appeal an approved JD, a permit denial, or a declined permit. An individual permit that has been signed by the applicant, and subsequently unilaterally modified by the district engineer pursuant to 33 CFR 325.7, may be appealed under this process, provided that the applicant has not started work in waters of the United States authorized by the permit. The RFA must be received by the division engineer within 60 days of the date of the NAP.

(2) *Reasons for appeal*. The reason(s) for requesting an appeal of an approved JD, a permit denial, or a declined permit must be specifically stated in the RFA and must be more than a simple request for appeal because the affected party did not like the approved JD, permit decision, or the permit conditions. Examples of reasons for appeals include, but are not limited to, the following: A procedural error; an incorrect application of law, regulation or officially promulgated policy; omission of material fact; incorrect application of the current regulatory criteria and associated guidance for identifying and delineating wetlands; incorrect application of the Section 404(b)(1) Guidelines (see 40 CFR Part 230); or use of incorrect data. The reasons for appealing a permit denial or a declined permit may include jurisdiction issues, whether or not a previous approved JD was appealed.

(b) *Actions not appealable*. An action or decision is not subject to an administrative appeal under this part if it falls into one or more of the following categories:

(1) An individual permit decision (including a letter of permission or a standard permit with special conditions), where the permit has been accepted and signed by the permittee. By signing the permit, the applicant waives all rights to appeal the terms and conditions of the permit, unless the authorized work has not started in waters of the United States and that issued permit is subsequently modified by the district engineer pursuant to 33 CFR 325.7;

(2) Any site-specific matter that has been the subject of a final decision of the Federal courts;

(3) A final Corps decision that has resulted from additional analysis and evaluation, as directed by a final appeal decision;

(4) A permit denial without prejudice or a declined permit, where the controlling factor cannot be changed by the Corps decision maker (e.g., the requirements of a binding statute, regulation, state Section 401 water quality certification, state coastal zone management disapproval, etc. (See 33 CFR 320.4(j)));

(5) A permit denial case where the applicant has subsequently modified the proposed project, because this would constitute an amended application that would require a new public interest review, rather than an appeal of the existing record and decision;

(6) Any request for the appeal of an approved JD, a denied permit, or a declined permit where the RFA has not been received by the division engineer within 60 days of the date of the NAP;

(7) A previously approved JD that has been superseded by another approved JD based on new information or data submitted by the applicant. The new approved JD is an appealable action;

(8) An approved JD associated with an individual permit where the permit has been accepted and signed by the permittee;

(9) A preliminary JD; or

(10) A JD associated with unauthorized activities except as provided in §331.11.