Appendix C1: Biological Resources Assessment-Coachella Valley MSHCP Consistency Analysis

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KPC COACHELLA BIOLOGICAL RESOURCES ASSESSMENT AND COACHELLA VALLEY MSHCP CONSISTENCY REPORT

Riverside County, California

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1 INTRODUCTION

Rocks Biological Consulting (RBC) has prepared this Biological Resources Assessment and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Consistency Report for the proposed Desert Lakes Project (project). This report has been prepared to evaluate potential impacts on biological resources within the project site and to assess project conformance with the California Environmental Quality Act (CEQA; Public Resources Code § 21000 et seq.), the federal Endangered Species Act (ESA; 16 U.S. Code [USC] § 1531 et seq.) and the state Endangered Species Act (CESA; California Fish and Game Code [Cal. Fish and Game Code] § 2050 et seq.), and applicable federal, state, and local laws.

RBC conducted a formal aquatic resources delineation for the project site to identify areas that may be considered jurisdictional under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act; the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Act; and streambed and riparian habitats under California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code (§1602). The complete analysis of jurisdictional features is included in the *Desert Lakes Project Jurisdictional Delineation Report* (RBC 2019) under separate cover. The results of the aquatic resources delineation are summarized in this report.

The project site is entirely within the CVMSHCP area and partially within the East Indio Hills Conservation Area (EIHCA). As such, RBC conducted a CVMSHCP consistency analysis to determine whether the project conforms with the Conservation Goals and Objectives of the CVMSHCP.

1.1 PROJECT LOCATION

The project site is located along the western foothills of the Little San Bernardino Mountains on the eastern flank of the Coachella Valley, north of the Salton Sea. The site is immediately north of Interstate 10 (I-10) and east of Coachella Canal Road in the City of Coachella, Riverside County, California (Figure 1). A portion of the Coachella Canal runs north to south through the westernmost portion of the project site. State Route 86 is located approximately two miles west of the project site.

The project site lies within the northeast portion of the United States Geological Survey (USGS) *Indio* 7.5-minute topographic quadrangle in Sections 24, 25, 26, 27, and 28; Township 5 South; Range 8 East; and within the northwestern portion of *Thermal Canyon* quadrangle in Section 30, Township 5 South, Range 9 East, San Bernardino Base Meridian.

1.2 PROJECT DESCRIPTION

The proposed project consists of a Specific Plan for a new master planned community located at the eastern entrance to the City of Coachella (City). The 2812-acre project site will provide a mixture of land uses intended to create a cohesive entrance to the City, with residential components that will be compatible with the surrounding existing and planned neighboring areas.

The proposed project will provide additional commercial, residential, educational, employment, and recreational opportunities for residents and visitors within the City, including a hotel and casino.

1.3 REGULATORY FRAMEWORK

Several regulations have been established by federal, state, and local agencies to protect and conserve biological resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project. The final determination as to what types of permits are required is made by the regulating agencies.

1.3.1 FEDERAL REGULATIONS

Federal Endangered Species Act

The ESA provides for the listing of endangered and threatened species of plants and animals and the designation of critical habitat for listed species. The ESA regulates the "taking" of any endangered fish or wildlife species, per Section 9 of the ESA. As development is proposed, the responsible agency or individual landowner is required to consult with the USFWS to assess potential impacts to listed species (including plants) or its critical habitat, pursuant to Sections 7 and 10 of the ESA. USFWS is required to determine the extent of impact a project would have to a particular species. If it is determined that potential impacts to a species would likely occur, measures to avoid or reduce such impacts must be identified. USFWS may issue an incidental take statement, following consultation and the issuance of a Biological Opinion. This allows for take of the species that is incidental to another authorized activity, provided that the action will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties with the development of a habitat conservation plan (HCP). Section 7 of the ESA provides for permitting of projects where interagency cooperation is necessary to ensure that a federal action/decision does not jeopardize the existence of a listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 USC § 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and listed at 50 Code of Federal Regulations (CFR) 10.13. USFWS enforces the MBTA, which prohibits "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Appropriation Act of 1899

The Rivers and Harbors Appropriation Act of 1899 (Rivers and Harbors Act; 33 USC § 403) prohibits the discharge of any material into navigable waters, or tributaries thereof, of the United States without a permit. The Rivers and Harbors Act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the Clean Water Act of 1972 (CWA; 33 USC § 1251 et seq.), discussed below. However, the 1899 act

retains relevance and created the structure under which the Corps oversees CWA Section 404 permitting.

Clean Water Act

Pursuant to Section 404 of the CWA, the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 CFR 328.3 (as amended at 80 Federal Register (FR) 37104, June 29, 2015). The Corps, with oversight from the U.S. Environmental Protection Agency (USEPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board, provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that a proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

1.3.2 STATE REGULATIONS

California Environmental Quality Act

CEQA was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA; 42 USC § 4321 et seq.). CEQA requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, where feasible.

CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity, which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

California Endangered Species Act and Natural Community Conservation Planning Act

The CESA, in combination with the Native Plant Protection Act of 1977 (NPPA; Cal. Fish and Game Code § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists species of special concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. CDFW is responsible for assessing development projects for their potential to impact listed species and their habitats. State listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

In 1991, the California Natural Community Conservation Planning Act (NCCP Act; Cal. Fish and Game Code § 2800 et seq.) was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. California law established the NCCP program "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600 -1602

Pursuant to Division 2, Chapter 6, Section 1602 of the Cal. Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Lake or Streambed Alteration Agreement Application must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515

Within California, fish, wildlife, and native plant resources are protected and managed by CDFW. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the Cal. Fish and Game Code address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the Cal. Fish and Game Code.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to surface waters under the federal CWA. In addition, the RWQCB is responsible for administering the Porter-Cologne Act.

Pursuant to the Porter-Cologne Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

1.3.3 REGIONAL AND LOCAL PLANS

Coachella Valley Multiple Species Habitat Conservation Plan

The County of Riverside developed the CVMSHCP (Coachella Valley Association of Governments [CVAG] 2007) to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth. The CVMSHCP sets Conservation Goals and Objectives to ensure conservation of the Covered Species and conserved natural communities in the CVMSHCP Reserve System. In addition to setting Conservation Goals and Objectives for the Covered Species and conserved natural communities, the CVMSHCP has designated Core Habitat, Other Conserved Habitat, Essential Ecological Processes, and Biological Corridors and Linkages. The CVMSHCP area is divided into Conservation Areas based on a combination of ecological and jurisdictional factors.

2 METHODS

2.1 BIOLOGICAL RESOURCES ASSESSMENT

Prior to commencing field surveys, RBC conducted a literature and database review to assist in determining the existence or potential occurrence of special-status biological resources on and within the vicinity of the project site. RBC queried the CVMSHCP database (Figure 2; CVAG 2019), California Natural Diversity Database (CNDDB; Figure 3; CDFW 2019), USFWS database for special-status species, and USFWS database for endangered species and critical habitat (USFWS 2019a) within a five-mile radius of the project site. RBC also queried the California Native Plant Society Inventory of Rare and Endangered Plants of California (CNPS Inventory; CNPS 2019) within the nine USGS quadrangles surrounding the project site. These databases contain records of reported occurrences of state- and federally listed species or otherwise sensitive species and habitats that may occur within or within vicinity of the project site. RBC also reviewed other available technical information on the biological resources of the area, including previous surveys and recent findings on adjacent project sites.

In April and May 2019, RBC biologists conducted vegetation mapping, habitat assessments, and a general biological survey within the project site. Survey dates, times, and environmental conditions during the field surveys are presented in Table 1.

Table 1. Survey Dates and Conditions

Date	Biologists	Time (Start-End)	Temperature (°F) (Start-End)	Cloud Cover (%) (Start-End)	Wind Range (mph) (Start; End)
4/13/19	LR	1400-1630	92-95	10-10	2-4; 2-4
5/1/19	LR, TS	0615-1145	60-80	0-0	2-6; 2-4
5/2/19	LR, TS	0620-1130	63-80	20-20	0-2; 2-4
5/8/19	LR, BB	0630-1300	55-93	0-0	3-6 (8); 2-5
5/9/19	LR, BB	0630-1230	66-92	5-40	0-2; 2-4
BB = Brenda Bennett, LR = Lee Ripma, TS = Taku Shiozaki					

During the field surveys biologists took notes on existing site conditions, vegetation, and suitability of habitat for special-status species with potential to occur on site. Wildlife species were documented during field surveys by sight, calls, tracks, or scat. Plant species were recorded and mapped in the field and, if necessary, species identification was confirmed in the lab. In addition to species observed, expected wildlife usage of the project site was determined by known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area.

2.2 AQUATIC RESOURCES DELINEATION

RBC conducted a formal aquatic resources delineation between May 7 and May 10, 2019 in order to identify areas that may be considered jurisdictional under the Corps pursuant to Section 404 of the CWA; jurisdictional under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Act, and streambed and riparian habitats under the CDFW pursuant to Cal. Fish and Game Code (§1602). Complete methods and results are presented in the *Desert Lakes Project Jurisdictional Delineation Report* (RBC 2019).

3 RESULTS

3.1 EXISTING SITE CONDITIONS

The project site is located within the Coachella Valley within the Sonoran Desert region, a subdivision of the Colorado Desert. The site is mostly undeveloped land, consisting of gently-sloped terrain within the broad alluvial fan derived from the Little San Bernardino Mountains to the north, with the bedrock highlands of the Little San Bernardino and Orocopia Mountains to the northeast, east, and southeast. The project site includes several southwest-trending ridges of relatively low relief with alluvial drainages that drain into a larger alluvial fan. The western extent of the project site (adjacent to the Coachella Canal) has been subject to historic human disturbance, including previous agricultural use. On-site disturbances include unpaved roads, power lines, illegal dumping, and Off Highway Vehicle (OHV) use.

The project site lies within the boundary of the CVMSHCP planning area and a small portion of the EIHCA is present at the far western boundary of the site. The site is also in the immediate vicinity of the Desert Tortoise Linkage and Conservation Area (Figure 2).

3.2 TOPOGRAPHY AND SOILS

Elevations on the project site range from approximately 35 to 758 feet above mean sea level (amsl). Surface drainage generally runs from the northeast to the southwest. Per soils data from the National Resource Conservation Service (NRCS), the soils onsite consist of the following types: Badland; Borrow pits; Carrizo stony sand (2 to 9 percent slopes); Carsitas gravelly sand (0 to 9 percent slopes); Carsitas cobbly sand (2 to 9 percent slopes); Chuckwalla very gravelly sand clay loam (2 to 5 percent slopes); and Myoma fine sand (0 to 5 percent slopes). Soil types within the project site are presented on Figure 4.

3.3 VEGETATION COMMUNITIES AND LAND USES

There are six vegetation communities and/or land uses within the project site. The site is primarily comprised of Sonoran creosote bush scrub. The numerous ephemeral washes on site generally contain a mix of desert wash scrub and Sonoran creosote bush scrub. A list of vegetation communities and land uses and their size within the project site is provided in Table 2. A list of plants observed during the field surveys is provided in Appendix B. A map of the vegetation and land uses is presented on Figure 5.

Table 2. Vegetation Communities and Land Uses

Vegetation Community	Acres
Sonoran Creosote Bush Scrub	1855.20
Desert Wash Scrub/Sonoran Creosote Bush Scrub	916.00
Mesquite Hummocks	0.99
Agricultural Land	2.43
Disturbed Habitat	36.48
Tamarisk Scrub	0.99
TOTAL	2812.08

Sonoran Creosote Bush Scrub

Sonoran creosote bush scrub (1855.20 acres) is the dominant habitat type within the project site. This community occurs on upland slopes, hills, bajadas, and alluvial fans, and within the ephemeral washes on site. Sonoran creosote bush scrub is dominated by widely-spaced stands of creosote bush (*Larrea tridentata*) with open soil, annual plants, and other shrubs occurring between creosote bush shrubs. Other common shrubs within this community include white bursage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), and desert-holly (*Atriplex hymenelytra*). Observations of short-lived annual plant species was limited due to the timing of the field survey.

Desert Wash Scrub/Sonoran Creosote Bush Scrub

An intermixing of two vegetation types; desert wash scrub and Sonoran creosote bush scrub occur across large areas of the project site (916.00 acres) most often within, but not limited to, the numerous ephemeral washes on site. These washes contain a mix of species associated with both vegetation types including desert-lavender (*Condea emoryi*), smoke tree (*Psorothamnus spinosus*), indigo bush (*Psorothamnus schottii*), desert bird-of-paradise (*Hoffmannseggia microphylla*), rush

sweet-bush (*Bebbia juncea* var. *aspera*), catclaw acacia (*Senegalia greggii*), and occasional blue palo verde (*Parkinsonia florida*), as well as creosote bush and white bursage.

Mesquite Hummocks

Mesquite hummocks (0.99 acre) occur only on the western portion of the project site within the EIHCA. Mesquite hummocks consist solely of mesquite (*Prosopis glandulosa* var. *glandulosa*) on a raised hummock of blown sand. These habitats are important habitat for wildlife and have a stabilizing effect on sand dunes.

Agricultural Land

Agricultural land within the project site (2.43 acres) consists of grapevines under active cultivation. Agricultural areas are both disturbed and irrigated and provide little habitat for native plant and wildlife species.

Disturbed Habitat

Disturbed habitat within the project site (36.48 acres) consists primarily of bare soils and non-native species resulting from human disturbance. Disturbed lands have been graded, cleared, or used to the point where the land cannot support native vegetation. Disturbed areas occur mostly in the western portion of the site adjacent to agricultural land.

Tamarisk Scrub

Tamarisk scrub (0.99 acre) within the project site consists primarily of dense tamarisk (*Tamarix ramosissima*) shrubs. Tamarisk scrub typically occurs on sandy or gravelly soils within, or in close proximity to washes or streams and often follows major anthropogenic disturbance. Tamarisk scrub occurs in the western portion of the site in areas disturbed by both agriculture and construction of a water tower.

3.4 WILDLIFE

Avian species observed in the project site include mourning dove (*Zenaida macroura*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), house finch (*Haemorphus mexicanus*), loggerhead shrike (*Lanius ludovicianus*), northern mockingbird (*Mimus polyglottos*), verdin (*Auriparus flaviceps*), black-tailed gnatcatcher (*Polioptila melanura*), black-throated sparrow (*Amphispiza bilineata*), Wilson's warbler (*Cardellina pusilla*), barn swallow (*Hirundo rustica*), and turkey vulture (*Cathartes aura*).

Reptile species observed within the project site include desert iguana (*Dipsosaurus dorsalis*) and common-side blotched lizard (*Uta stansburiana*). No amphibian species were observed or heard within the project site and none are expected to occur.

Mammal species observed in the project site include black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), white-tailed antelope squirrel (*Ammospermophilus leucurus*), and desert cottontail (*Sylvilagus audubonii*). A complete list of animal species observed, heard, or inferred from sign or scat is provided in Appendix C.

Butterfly species observed in the project site include striated queen (*Danaus gilippus strigosus*) and western pygmy blue (*Brephidium exilis exilis*).

3.5 SPECIAL-STATUS BIOLOGICAL RESOURCES

Special-status biological resources are those defined as follows: 1) Species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened/endangered population sizes; 2) Species and habitat types recognized by local and regional resource agencies as sensitive; 3) Habitat areas or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; 4) Wildlife corridors and habitat linkages; and/or 5) Biological resources that may or may not be considered sensitive, but are regulated under local, state, and/or federal laws.

For purposes of this report, species are considered to have special status if they meet one or more of the following criteria:

- Listed under the federal or state Endangered Species Act
- USFWS Birds of Conservation Concern
- CDFW Species of Special Concern
- CDFW Fully Protected Species
- Covered as a state protected furbearing mammal (14 California Code of Regulations [14 CCR Section 460])
- Listed as having a California Rare Plant Rank (CRPR; exc. CRPR 4)
- Record reported in the CNDDB and/or USFWS database

The literature review revealed 43 special-status species (13 plants, 30 animals) with the potential to occur within or immediately adjacent to the project site. The following addresses threatened/endangered species and other non-listed special-status species identified as potentially present on the project site. A list of these species and a discussion of their potential to occur within the project site is included in Appendix D.

No state- and/or federally listed threatened or endangered species were observed onsite during the general biological field survey. However, the search of the CNDDB and USFWS databases shows three listed species have been documented within a five-mile radius of the project site as follows:

- Desert tortoise (*Gopherus agassizii*); federally listed threatened and state-listed threatened; CVMSHCP covered species
- Coachella Valley fringe-toed lizard (*Uma inornata*); federally listed threatened and state-listed endangered; CVMSHCP covered species
- Coachella Valley milk-vetch (*Astragalus lentiginosus* var*. coachellae*); federally listed endangered; CVMSHCP covered species

Habitat on the project site is moderately suitable for Coachella Valley milk vetch and desert tortoise. No suitable habitat for the Coachella Valley fringe-toed lizard is present on the project site. Additionally, the project site is not within any USFWS-designated Critical Habitat for the Coachella Valley milk-vetch, desert tortoise, or Coachella Valley fringe-toed lizard.

Two non-listed special-status species; loggerhead shrike and black-tailed gnatcatcher were observed during the general biological surveys (Figure 5). Based on review of the CNDDB, USFWS

database, and CNPS Inventory, 39 non-listed special-status species (12 plants and 27 animals) have been documented within a five-mile radius of the project site or have the potential to occur on the project site.

An analysis of the likelihood for occurrence of each special-status species documented within a 5-mile radius of the project site or potential to occur is provided in Appendix D. This analysis considers species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions.

3.6 BURROWING OWL AND NESTING BIRDS

Highly suitable habitat for burrowing owl (*Athene cunicularia*) and other special-status species such as Le Conte's thrasher (*Toxostoma lecontei*), loggerhead shrike (observed), and black-tailed gnatcatcher (observed), as well as numerous more common bird species is present within the project site and adjacent areas. These birds (common and special-status) are protected by Cal. Fish and Game Code, which make it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10.13, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The MBTA prohibits 'take' of nearly all native birds.

3.7 JURISDICTIONAL WATERS AND STREAMBEDS

The aquatic resources delineation determined that the project site supports Corps-jurisdictional non-wetland waters of the U.S., RWQCB-jurisdictional non-wetland waters of the State, and CDFW-jurisdictional non-wetland streambed, associated riparian habitat, and/or watercourse (RBC 2019). The total acreage and linear feet of each resource type is summarized in Table 3 below.

Table 3. Jurisdictional Resources within Project Site

Agency	Resource Type	Total Acreage	Total Linear Feet
Corps	Non-wetland waters of the U.S.	2.72	2,957
RWQCB	Non-wetland waters of the U.S./State	637.37	282,372
CDFW	Streambed (Bank)	637.37	282,372
	Riparian Vegetation	0.20	n/a

Estimated jurisdictional features observed within the project survey area during the formal jurisdictional delineation field effort include Feature (F) 1 to F16 and the Coachella Canal (Figure 6). Each named/numbered feature represents a separate watercourse, and as such, includes all functionally related and connected single-thread channels, compound channels, braided channels, and floodplains. Features that may connect outside of the project survey boundary were not deemed to be functionally related or connected for purposes of naming each on-site feature.

The Coachella Canal would be considered a Corps-jurisdictional non-wetland waters of the U.S. as a tributary (i.e., 33 CFR 328.3(a)(5)) to the Whitewater River and ultimately the Salton Sea. The

Coachella Canal and F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) would be considered non-wetland waters of the State/surface waters per the RWQCB. RBC also expects the Coachella Canal and F1 to F16 would be considered CDFW streambed, associated riparian habitat, and/or watercourse as defined by the *Mapping Episodic Stream Activity (MESA) Field Guide* (Vyverberg et. al. 2013). Generally, areas deemed as jurisdictional by the RWQCB and CDFW consist of watercourses comprised of ephemeral desert wash.

3.8 CVMSHCP CONSERVATION AREAS

As shown in Figure 2, the western portion of the project site is within the EIHCA and the project site shares a common boundary along the north and northeastern frontage with the Desert Tortoise and Linkage Conservation Area. Approximately 61 acres of the project site are within the EIHCA. This area within the EIHCA consists of Sonoran creosote bush scrub, mesquite hummocks, tamarisk scrub, disturbed habitat, and agricultural land. This portion of the project site is mapped as Other Conserved Habitat for LeConte's thrasher, Coachella Valley round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), and flat-tailed horned lizard (*Phrynosoma mcallii*), which are all Covered Species under the CVMSHCP. The EIHCA is part of the watershed for mesquite hummocks and provides potential habitat connectivity with the Thousand Palms Conservation Area through the Indio Hills Palms Conservation Area to the west.

3.9 CVMSHCP MODELED HABITAT

The project site supports modeled habitat (CVAG 2019) for the following special-status species:

- desert tortoise; federally and state endangered, CVMSHCP Covered Species
- Coachella Valley [Palm Springs] round-tailed ground squirrel; CDFW SSC, CVMSHCP Covered Species
- crissal thrasher; CDFW SSC, CVMSHCP Covered Species
- flat-tailed horned lizard; CDFW SSC, CVMSHCP Covered Species
- least Bell's vireo; federally and state endangered, CVMSHCP Covered Species
- LeConte's thrasher; USFWS BCC, CDFW SSC, CVMSHCP Covered Species
- Palm Springs pocket mouse; CDFW SSC, CVMSHCP Covered Species
- summer tanager; CDFW SSC, CVMSHCP Covered Species
- yellow warbler; USFWS BCC, CDFW SSC, CVMSHCP Covered Species
- yellow-breasted chat; CDFW SSC, CVMSHCP Covered Species

4 IMPACTS

4.1 THREATENED AND ENDANGERED SPECIES

No state- or federally threatened or endangered species were observed during the general biological field survey. There is moderate potential for the federally and state-threatened desert tortoise to occur within the project site and low potential for the federally endangered Coachella

Valley milk-vetch and the federally endangered and state-threatened Coachella Valley fringe-toed lizard to occur. In addition, suitable migration habitat for the federally and state-endangered least Bell's vireo is present onsite, but no breeding habitat is present, and this species is unlikely to nest within the project site. All four of these species are covered by the CVMSHCP. Any potential impacts on these species will be covered through compliance with the CVMSHCP.

Please note that while impacts on desert tortoise and their habitat are covered through participation in the CVMSHCP (and pre-established mitigation measures), the USFWS Permit Conditions for the CVMSHCP require that the USFWS be notified 45 days prior to the issuance of a grading permit to allow for the potential salvage of adult tortoises within the notification time period or that desert tortoise clearance surveys be conducted per USFWS protocol.

4.2 NON-LISTED SPECIAL STATUS SPECIES

Two non-listed special-status species; loggerhead shrike and black-tailed gnatcatcher were observed during the general biological field survey. RBC identified 39 non-listed special-status species that have a low, moderate, or high potential to occur within the project site (Appendix D). These species have no official state or federal protection status; however, they are required to be considered under CEQA. Of the non-listed special status species with potential to occur on the project site 13 are covered by the CVMSHCP while 26 species are not covered.

Through implementation of the CVMSHCP Reserve System and conservation objectives, the covered species are considered protected and adequately conserved through the CVMSHCP's pre-established Conservation Areas and avoidance, minimization, and mitigation measures. The non-listed special status species that are not covered by the CVMSHCP occur within the same habitats as the covered species and still considered relatively common within the Reserve System and across the Coachella Valley. Therefore, the project would not have significant impacts on any of the non-listed special species that could potentially occur onsite.

4.3 SPECIAL-STATUS PLANT COMMUNITIES/CALIFORNIA DESERT NATIVE PLANTS ACT

There will be no impacts on special-status plant communities as no such habitats occur on the project site.

4.4 BURROWING OWL AND MIGRATORY BIRDS

The burrowing owl, a species protected under the MBTA and the Cal. Fish and Game Code and covered under the CVMSHCP has high potential to occur on the project site. Impacts on burrowing owl would be considered less than significant through participation in the CVMSHCP; however, under the MBTA, project-related impacts on burrowing owl will require mitigation to ensure compliance with the MBTA and Cal. Fish and Game Code. Activities that cause destruction of active nests, or that cause nest abandonment and subsequent death of eggs or young may constitute violations of one or both of these laws. In order to comply with these state and federal regulations, a pre-construction survey for the burrowing owl is required on the project site 30 days prior to site disturbance. If burrowing owl is found to be present, avoidance measures will be required following accepted protocols. If burrowing owl is found to be present during the breeding

season (February 1 to August 31), no ground disturbance can begin within the occupied area until after the breeding season (i.e., after August 31) and/or until the burrowing owl have completed their nesting activities. Any relocation efforts must be coordinated with CDFW and/or USFWS.

Additionally, the project has the potential to impact active bird nests if vegetation is removed or ground disturbing activities are initiated during the nesting season (February 1 to August 31). The existing habitat on site supports special-status species loggerhead shrike and black-tailed gnatcatcher and has potential to support nesting bird species such as Le Conte's thrasher and several raptor species. Impacts on nesting birds are prohibited by the MBTA and Cal. Fish and Game Code, as such, ground-disturbing activities, including vegetation clearing, should be conducted outside of the nesting season. If avoidance of the nesting season is not feasible then a qualified biologist should conduct a nesting bird survey within three days prior to any disturbance of the project site, including disking, excavation, and grading. If active nests are identified, the qualified biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and sensitivity of the species observed. The buffer areas shall be avoided until the nests are no longer occupied and juvenile birds can survive independently from the nest.

4.5 JURISDICTIONAL WATERS AND STREAMBEDS

RBC expects that the Corps, RWQCB, and CDFW would take jurisdiction over aquatic resources on the project site as follows:

- *Corps Jurisdiction* - one non-wetland waters of the U.S., the Coachella Canal, totaling 2.72 acres (2,957 linear feet)
- *RWQCB Jurisdiction* - the Coachella Canal and non-wetland waters of the State/surface waters F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub), totaling 637.37 acres (282,372 linear feet)
- *CDFW Jurisdiction* - the Coachella Canal and non-wetland streambed, associated riparian habitat, and/or watercourse F1 to F16, totaling 637.57 acres (282,372 linear feet)

Assuming the Corps finalizes the Approved Jurisdictional Determination (AJD) and concludes that F1 to F16 are not jurisdictional, no Corps permitting would be required for the project assuming the proposed project will not impact the Coachella Canal. Impacts on jurisdictional features per other agencies (if deemed jurisdictional) would require Waste Discharge Requirements (WDR) from RWQCB and a Streambed Alteration Agreement (SAA) from CDFW. The RWQCB and/or CDFW may also require a functional assessment (e.g., California Rapid Assessment Method [CRAM]) to quantitatively estimate the stream condition for the evaluation of the proposed project. Additionally, compensatory mitigation would be required by the regulatory agencies to offset the proposed project impacts.

4.6 WILDLIFE CORRIDORS

The western-most area of the project site lies within the EIHCA which serves as a biological corridor and linkage to the Indio Hills Conservation Area through the Thousand Palms Conservation Area, which ultimately links with Joshua Tree National Park. The adjacent Desert Tortoise Linkage and Conservation Area provides biological corridors and linkages to the Little San

Bernardino Mountains and their associated canyon mouths and alluvial fans, which provide a linkage to the central part of the Plan Area.

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat. Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Through avoidance of impacts on the portion of the EIHCA that occurs on site and compliance with the CVMSHCP the project will not have a significant impact on regional wildlife movement.

4.7 LOCAL POLICIES AND ORDINANCES

The project would not conflict with local policies or ordinances because the project will adhere to CVMSHCP guidelines and procedures. The project will be required to adhere to CVMSHCP Section 4.5 *Lan Use Adjacency Guidelines* (Guidelines; CVAG 2007), which state:

> *The purpose of [Guidelines] is to avoid or minimize indirect effects from [d]evelopment adjacent to or within the Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators, such as dogs and cats. Edge effects will also be addressed through reserve management activities such as fencing.*
>
> These Guidelines include:
>
> *Drainage – Proposed [d]evelopment adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared to existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.*
>
> *Toxics – Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bio-products such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.*
>
> *Lighting – For proposed [d]evelopment adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize effects of lighting adjacent to or within the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.*
>
> *Noise – Proposed [d]evelopment adjacent to or within a Conservation Area that generates noise in excess of 75 dBA L_{eq} hourly shall incorporate setbacks, berms, or walls, as*

appropriate, to minimize the effects of noise on the adjacent Conservation Area in accordance with the guidelines included in the Implementation Manual.

Invasives – Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials listed in Table 4-112 of the CVMSHCP to the maximum extent [f]easible. The plants listed in Table 4-113 of the CVMSHCP are considered invasive and shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency Concurrence.

Barriers – Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

Grading/Land Development – Manufactured slopes associated with site [d]evelopment shall not extend into adjacent land in a Conservation Area.

4.8 CUMULATIVE IMPACTS

Cumulative impacts refer to incremental individual environmental effects of two or more projects when considered together. Such impacts taken individually may be minor but are collectively significant in light of regional impacts. The CVMSHCP has analyzed cumulative effects within the region of the project under CEQA, NEPA, CESA, and ESA. Because the project will comply with the CVMSHCP any cumulative project impacts would be less than significant.

5 REQUIRED AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

The following discussion provides project-specific avoidance, minimization, and mitigation measures that may be required by the lead agency for impacts on special-status resources.

5.1 DESERT TORTOISE

Moderately suitable habitat for the desert tortoise is present on the project site and modeled habitat per the CVMSHCP GIS data is present across the entire project site. While impacts on desert tortoise and their habitat will be covered through participation in the CVMSHCP, the USFWS Permit Conditions for the CVMSHCP require that the USFWS be notified 45 days prior to the issuance of a grading permit to allow for the potential salvage of adult tortoises within this notification time period or that desert tortoise clearance surveys are conducted per USFWS protocol.

5.2 BURROWING OWL

Suitable habitat for the CDFW SSC burrowing owl is present on site and the potential for this species to occur is high. The direct take of a burrowing owl, or any raptor, must be avoided. In accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) two

preconstruction take avoidance surveys should be conducted prior to any vegetation removal, ground disturbance, or similar activity as follows:

> *No less than thirty days prior to the onset of ground disturbance, a qualified biologist shall survey the construction limits of the Project and 500-foot buffer for the presence of burrowing owls and occupied nest burrows, in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012). A final survey shall be conducted within 24 hours prior to ground disturbance.*
>
> *If nesting and/or activity is present at any burrow site, then the active burrow shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for burrowing owls normally occurs from February 1 to August 31. To protect any burrow site, the following restrictions on construction are required between February 1 to August 31:*
>
> 1) *Clearing limits will be established a minimum of 300 feet in any direction from any occupied burrow; and*
> 2) *Access and surveying will not be allowed within 50 feet of any occupied burrow. Any occupied burrows found during the survey efforts shall be mapped on the construction plans and an ESA avoidance buffer shall be established. Construction during the non-nesting season can occur only at the sites if a qualified biologist has determined that the burrows are no longer active. If an active burrow is observed during the non-nesting period, the burrow site will be monitored by a qualified biologist, and when the owl is outside the burrow entrance, the biologist will flush any owl to open space areas. The biologist will then excavate the burrow site with tools or fill the burrow with soil so owls cannot return to the burrow site.*

Note that any relocation efforts must be coordinated with the CDFW and/or USFWS. If a burrowing owl is found to be present during the breeding season (February 1 to August 31), no ground disturbance can begin within the occupied area until after the breeding season (i.e., after August 31) and/or until the burrowing owl have completed their nesting activities. Generally, a 300- to 500-foot buffer is required around nesting owls during construction activities.

5.3 NESTING BIRDS

To avoid direct impacts to raptors and/or native/migratory birds, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, a qualified avian biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey shall be conducted three calendar days prior to the start of construction activities (including removal of vegetation). If nesting birds are observed, a letter report or mitigation plan in conformance with applicable state and federal law (i.e. appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be

prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to CDFW and/or USFWS, as applicable, for review and approval and implemented to the satisfaction of the agency(ies). The project biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction. If nesting birds are not observed during the pre-construction survey, no further mitigation is required.

5.4 JURISDICTIONAL WATERS AND STREAMBEDS

If there are no impacts on the Coachella Canal, no Corps permit would be required. Impacts on jurisdictional features per RWQCB and CDFW (if deemed jurisdictional) would require WDR from RWQCB and SAA from CDFW. The RWQCB and/or CDFW may also require a functional assessment (e.g., CRAM) to quantitatively estimate the stream condition for the evaluation of the proposed project. Additionally, compensatory mitigation would be required by the regulatory agencies to offset the proposed project impacts. We recommend consulting with the regulatory agencies as soon as possible in the project planning process to avoid/reduce processing delays.

5.5 EAST INDIO HILLS CONSERVATION AREA

The project is within the EIHCA and adjacent to the Desert Tortoise Linkage and Conservation Area. In order to avoid direct impacts on the EIHCA, it is recommended the project dedicate the entire portion of the project site within the EIHCA as conserved open space. Dedication of this portion of the project site would ensure that the project would not conflict with the CVMSHCP Conservation Objectives. The project would comply with CVMSHCP Section 4.5 Land Use Adjacency Guidelines to avoid and minimize indirect effects to the adjacent Desert Tortoise Linkage and Conservation Area.

5.6 DEVELOPMENT MITIGATION FEE

Per the CVMSHCP Section 5.2.1.1 *Local Development Mitigation Fee*, the project will be conditioned by the lead agency to pay a mitigation fee for the costs of mitigating impacts of the project. See Table 4 below for the Local Development Mitigation Fee per building type.

Table 4. Local Development Mitigation Fee

Building Type	Fee as of July 1, 2018
Commercial/Industrial per acre	$5,911
Residential (fee is per unit)	
0-8 units per acre	$1,331
8.1 – 14 units per acre	$554
More than 14 units per acre	$247

Source: Coachella Valley Conservation Commission 2019

6 CONCLUSIONS

In summary, the 2,812-acre project site supports sensitive biological resources including jurisdictional waters of the state and U.S., two non-listed special-status bird species, moderate potential to support the state and federally-threatened desert tortoise, low potential to support the federally endangered Coachella Valley milk-vetch, and moderate to high potential to support numerous non-listed special-status species including burrowing owl. In addition, 61 acres of the project site is within the EIHCA.

The CVMSHCP was developed to enhance and maintain biological diversity by protecting critical Core Habitat while allowing development in other areas. The CVMSHCP sets Conservation Goals and Objectives to ensure conservation of the Covered Species and conserved natural communities in the CVMSHCP Reserve System. Protection of large areas of habitat across the Plan Area provides coverage for a variety of special-status biological resources including those on the project site and with potential to occur. If the project complies with CVMSHCP guidelines and the recommended measures outlined in section 6.0 are implemented, the project would be consistent with the goals and objectives of the CVMSHCP.

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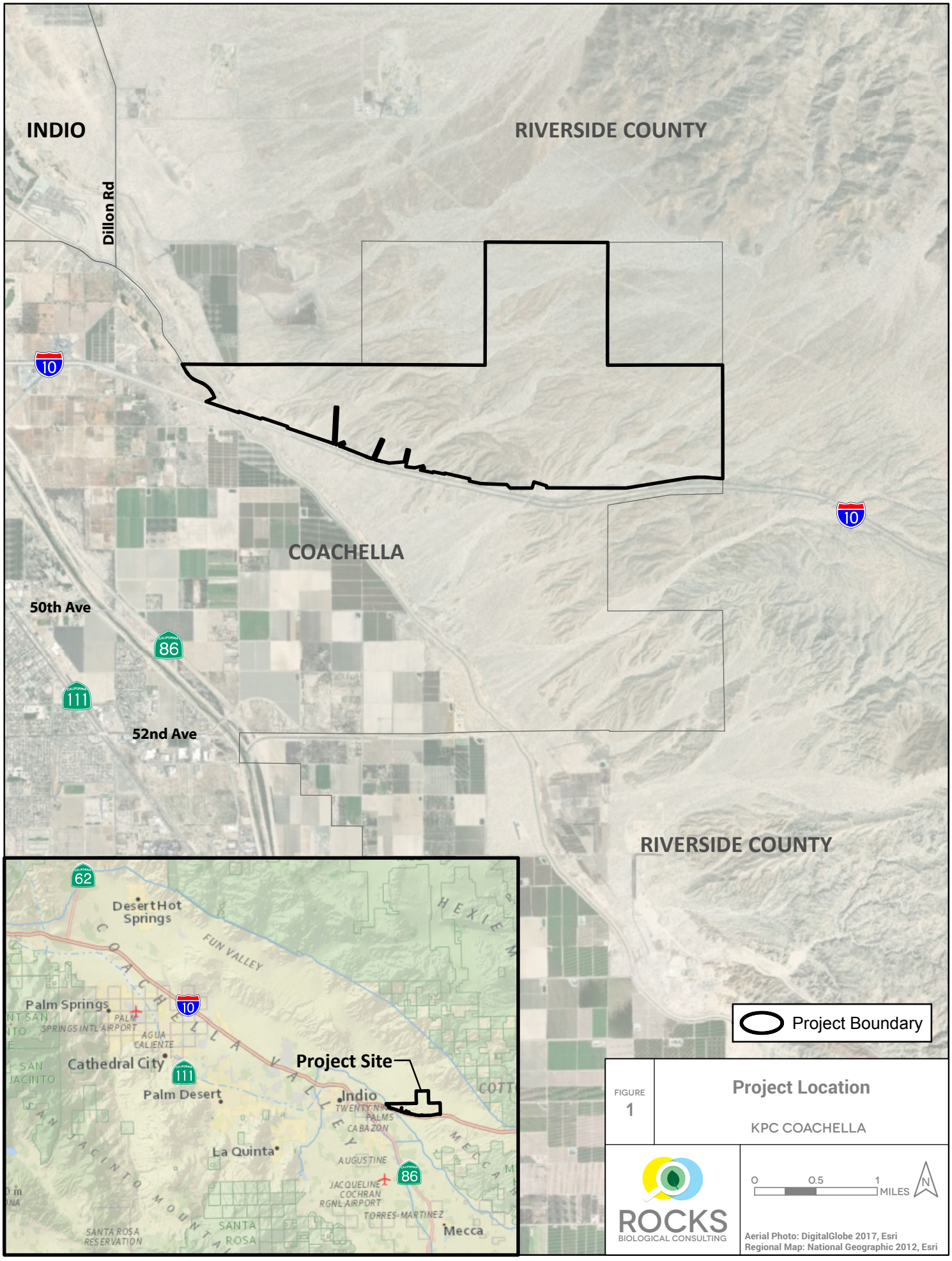
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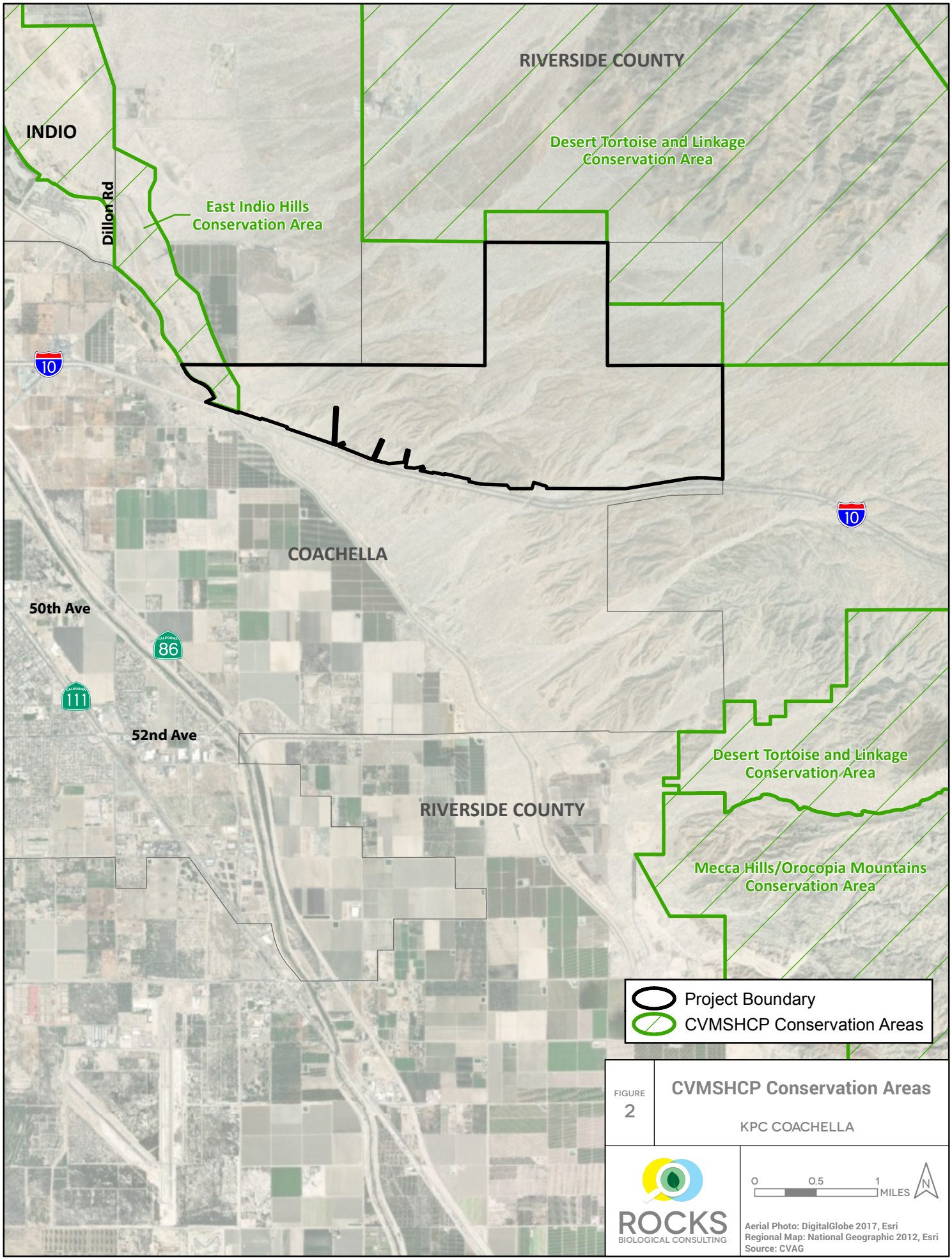
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INDIO
RIVERSIDE COUNTY
Dillon Rd
10
COACHELLA
50th Ave
86
111
52nd Ave
10
RIVERSIDE COUNTY
62
Desert Hot Springs
COACHELLA VALLEY
FUN VALLEY
HEXIE
Palm Springs
10
SPRINGS INTL AIRPORT
AGUA CALIENTE
Cathedral City
111
Palm Desert
Project Site
Indio
TWENTY-NINE PALMS
CABAZON
La Quinta
AUGUSTINE
86
JACQUELINE COCHRAN RGNL AIRPORT
TORRES-MARTINEZ
Mecca
SAN JACINTO MOUNTAINS
SANTA ROSA RESERVATION
SANTA ROSA
Project Boundary
FIGURE
1
Project Location
KPC COACHELLA
ROCKS
BIOLOGICAL CONSULTING
0
0.5
1
MILES
N
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri


RIVERSIDE COUNTY
INDIO
Desert Tortoise and Linkage Conservation Area
East Indio Hills Conservation Area
Dillon Rd
10
10
COACHELLA
50th Ave
86
111
52nd Ave
Desert Tortoise and Linkage Conservation Area
RIVERSIDE COUNTY
Mecca Hills/Orocopia Mountains Conservation Area
Project Boundary
CVMSHCP Conservation Areas
FIGURE 2
CVMSHCP Conservation Areas
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 0.5 1 MILES
N
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri
Source: CVAG

Project Boundary
1-mile Buffer
3-mile Buffer
5-mile Buffer
CNDDB Species Locations

Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Mecca-aster
Mecca-aster
Palm Springs pocket mouse
flat-tailed horned lizard
Palm Springs pocket mouse
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Palm Springs pocket mouse
flat-tailed horned lizard
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
Palm Springs pocket mouse
Palm Springs pocket mouse
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
flat-tailed horned lizard
Palm Springs pocket mouse
Palm Springs pocket mouse
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
ferruginous hawk
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
American badger
flat-tailed horned lizard
Crissal thrasher
chaparral sand-verbena
western yellow bat
burrowing owl
Le Conte's thrasher
glandular ditaxis
gravel milk-vetch
Coachella Valley milk-vetch
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
burrowing owl
Crissal thrasher
Palm Springs round-tailed ground squirrel
western yellow bat
western mastiff bat
Crissal thrasher
black-tailed gnatcatcher
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
vermilion flycatcher
western yellow bat
burrowing owl
Crissal thrasher
black-tailed gnatcatcher
burrowing owl
Coachella Valley fringe-toed lizard
burrowing owl
burrowing owl
Mecca-aster
burrowing owl
burrowing owl
desert tortoise
Palm Springs pocket mouse
burrowing owl
burrowing owl
burrowing owl
chaparral sand-verbena
Mecca-aster
Mecca-aster
chaparral sand-verbena
chaparral sand-verbena
burrowing owl
desert bighorn sheep
desert tortoise
desert bighorn sheep
Palm Springs pocket mouse
desert tortoise
desert tortoise
desert tortoise
jackass-clover

FIGURE 3	CNDDB KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 3,250 6,500 FEET

Base Map: USGS 7.5' Quadrangles (Thermal Canyon, Indio) 2013, Esri
Source: CDFW

Project Boundary

Soils

- Badland
- Borrow pits
- Carrizo stony sand, 2 to 9 percent slopes
- Carsitas gravelly sand, 0 to 9 percent slopes
- Carsitas cobbly sand, 2 to 9 percent slopes
- Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes
- Coachella fine sand, wet, 0 to 2 percent slopes
- Gilman loamy fine sand, 0 to 5 percent slopes
- Gilman fine sandy loam, wet, 0 to 2 percent slopes
- Myoma fine sand, 0 to 5 percent slopes
- Water
- Unmapped

FIGURE 4

NRCS Soils Survey Data

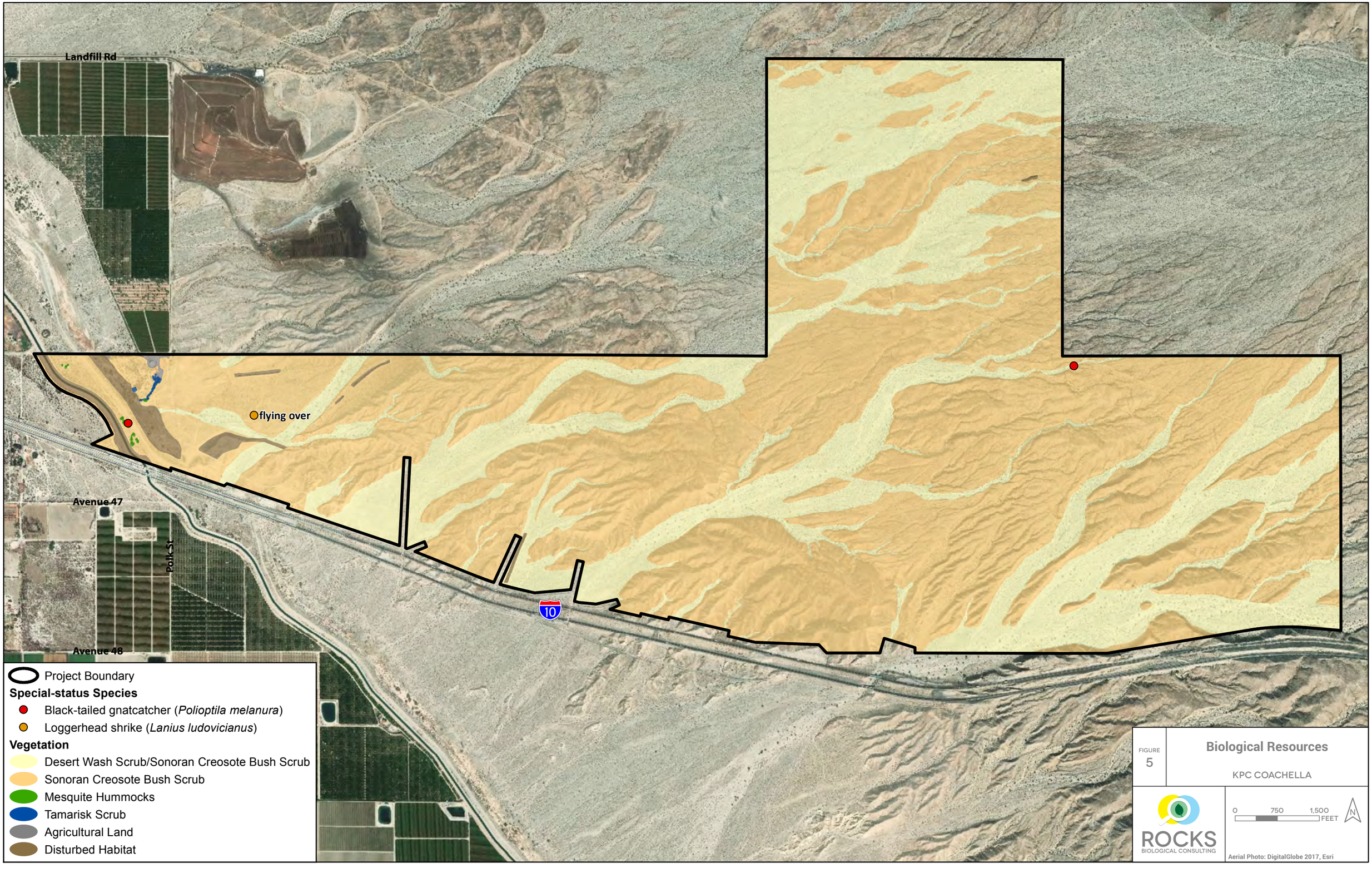
KPC COACHELLA

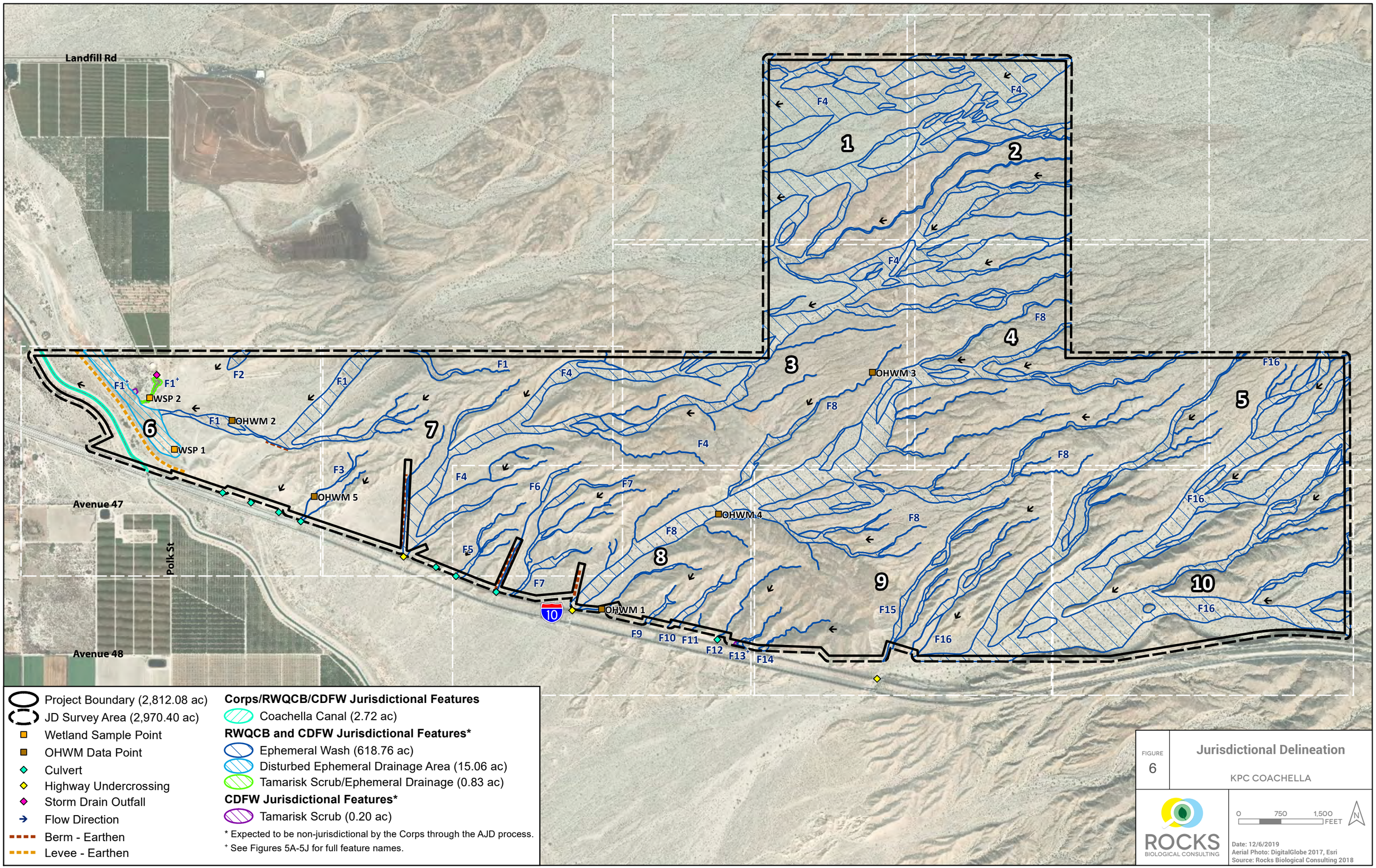
ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Aerial Photo: DigitalGlobe 2017, Esri
Source: USDA NRCS Soils


Landfill Rd
flying over
Avenue 47
Polk St
10
Avenue 48
Project Boundary
Special-status Species
Black-tailed gnatcatcher (Polioptila melanura)
Loggerhead shrike (Lanius ludovicianus)
Vegetation
Desert Wash Scrub/Sonoran Creosote Bush Scrub
Sonoran Creosote Bush Scrub
Mesquite Hummocks
Tamarisk Scrub
Agricultural Land
Disturbed Habitat
FIGURE 5
Biological Resources
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 750 1,500 FEET
N
Aerial Photo: DigitalGlobe 2017, Esri


Landfill Rd
Avenue 47
Avenue 48
Polk St
1
2
3
4
5
6
7
8
9
10
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
F13
F14
F15
F16
WSP 1
WSP 2
OHWM 1
OHWM 2
OHWM 3
OHWM 4
OHWM 5
10
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Wetland Sample Point
OHWM Data Point
Culvert
Highway Undercrossing
Storm Drain Outfall
Flow Direction
Berm - Earthen
Levee - Earthen
Corps/RWQCB/CDFW Jurisdictional Features
Coachella Canal (2.72 ac)
RWQCB and CDFW Jurisdictional Features*
Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)
CDFW Jurisdictional Features*
Tamarisk Scrub (0.20 ac)
* Expected to be non-jurisdictional by the Corps through the AJD process.
+ See Figures 5A-5J for full feature names.
FIGURE 6
Jurisdictional Delineation
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 750 1,500 FEET
N
Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: Rocks Biological Consulting 2018
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix A

Site Photographs

Appendix A

Site Photographs



Photo 1. Overview of the western portion of the project site, facing northeast. Photo shows sparse Sonoran creosote bush scrub on site. May 9, 2019.



Photo 2. Overview of the center portion of the project site, facing northwest. Photo shows typical sparse hills with Sonoran creosote bush scrub. May 9, 2019.

DRAFT



Photo 3. Typical desert wash scrub/Sonoran creosote bush scrub within eastern portion of the project site, facing northeast. May 8, 2019.

DRAFT



Photo 4. Typical desert wash scrub/Sonoran creosote bush scrub within eastern portion of the project site, facing southeast. May 2, 2019



Photo 5. Characteristic large ephemeral wash on site within eastern portion of the project site, facing southwest. May 2, 2019.

DRAFT



Photo 6. Characteristic large ephemeral wash on site within eastern portion of the project site, facing southwest. Photograph shows the mix of upland Sonoran creosote bush scrub and desert wash scrub. May 2, 2019.



Photo 7. Tamarisk scrub in disturbed wash by water tower and agricultural land within western portion of the project site, facing northeast. May 1, 2019.



Photo 8. Large disturbed area within western portion of the project site, facing northwest. May 1, 2019.

DRAFT



Photo 9. Mesquite hummocks in the western portion of the project site, facing northwest. May 1, 2019.



Photo 10. Sonoran creosote bush scrub within the project site, facing northwest. April 14, 2019.

DRAFT

Appendix B

Plant Species Observed

Appendix B

Plant Species Observed within Project Site

Family	Scientific Name	Common Name
Amaranthaceae	*Tidestromia suffruticosa* var. *oblongifolia*	Salton Sea honeysweet
Apocynaceae	*Asclepias subulata*	rush milkweed
Apocynaceae	*Funastrum hirtellum*	trailing townula
Arecaceae	*Phoenix dactylifera**	edible date palm
Asteraceae	*Ambrosia dumosa*	white bur-sage
Asteraceae	*Ambrosia salsola* var. *salsola*	cheesebush
Asteraceae	*Bebbia juncea* var. *aspera*	rush sweetbush
Asteraceae	*Chaenactis carphoclinia* var. *carphoclinia*	pebble pincushion
Asteraceae	*Encelia farinosa*	brittlebush
Asteraceae	*Geraea canescens*	desert sunflower
Asteraceae	*Isocoma acradenia* var. *bracteosa*	bracted alkali goldenbush
Asteraceae	*Lactuca serriola**	prickly lettuce
Asteraceae	*Monoptilon bellioides*	Mojave Desert star
Asteraceae	*Palafoxia arida* var. *arida*	desert Spanish-needle
Asteraceae	*Peucephyllum schottii*	pigmy-cedar
Boraginaceae	*Cryptantha barbigera*	bearded cryptantha
Boraginaceae	*Cryptantha maritima*	white-hair cryptantha
Brassicaceae	*Brassica tournefortii**	Sahara mustard
Brassicaceae	*Lepidium lasiocarpum* ssp. *lasiocarpum*	sand peppergrass
Brassicaceae	*Sisymbrium irio**	London rocket
Cactaceae	*Cylindropuntia bigelovii*	teddy-bear cholla
Cactaceae	*Cylindropuntia ramosissima*	diamond cholla
Cactaceae	*Ferocactus cylindraceus*	California barrel cactus
Cactaceae	*Opuntia basilaris* var. *basilaris*	beavertail cactus
Caryophyllaceae	*Achyronychia cooperi*	onyx flower
Chenopodiaceae	*Atriplex canescens*	four-wing saltbush
Chenopodiaceae	*Atriplex hymenelytra*	desert-holly
Chenopodiaceae	*Atriplex polycarpa*	many-fruit saltbush
Chenopodiaceae	*Chenopodium murale**	nettle-leaf goosefoot
Cleomaceae	*Peritoma arborea* var. *angustata*	desert bladderpod
Cucurbitaceae	*Brandegea bigelovii*	desert star vine
Ehretiaceae	*Tiquilia plicata*	fan-leaved tiquilia
Euphorbiaceae	*Croton californicus*	California croton
Euphorbiaceae	*Ditaxis lanceolata*	desert silverbush
Euphorbiaceae	*Euphorbia peplus**	petty spurge
Fabaceae	*Hoffmannseggia microphylla*	desert bird-of-paradise
Fabaceae	*Lupinus concinnus*	Bajada lupine
Fabaceae	*Parkinsonia florida*	blue palo verde
Fabaceae	*Prosopis glandulosa* var. *glandulosa*	mesquite
Fabaceae	*Psorothamnus arborescens*	California dalea
Fabaceae	*Psorothamnus emoryi* var. *emoryi*	white dalea
Fabaceae	*Psorothamnus schottii*	indigo bush
Fabaceae	*Psorothamnus spinosus*	smoke tree

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Fabaceae	*Senegalia greggii*	catclaw acacia
Fouquieriaceae	*Fouquieria splendens* ssp. *splendens*	ocotillo
Hydrophyllaceae	*Emmenanthe penduliflora* var. *penduliflora*	whispering bells
Hydrophyllaceae	*Phacelia crenulata*	notch-leaf phacelia
Krameriaceae	*Krameria bicolor*	white rhatany
Lamiaceae	*Condea emoryi*	desert-lavender
Lamiaceae	*Salvia columbariae*	chia
Loasaceae	*Mentzelia involucrata*	sand blazing star
Loasaceae	*Petalonyx thurberi* ssp. *thurberi*	Thurber's sandpaper plant
Malvaceae	*Eremalche rotundifolia*	desert five-spot
Malvaceae	*Hibiscus denudatus*	rock hibiscus
Namaceae	*Nama demissa*	purple mat
Nyctaginaceae	*Abronia villosa* var. *villosa*	desert sand-verbena
Nyctaginaceae	*Allionia incarnata* var. *villosa*	hairy trailing windmills
Nyctaginaceae	*Mirabilis laevis* var. *villosa*	hairy wishbone plant
Onagraceae	*Chylismia brevipes*	yellow cups
Onagraceae	*Chylismia claviformis*	clavate fruited primrose
Onagraceae	*Eremothera boothii*	Booth's sun cup
Onagraceae	*Eulobus californicus*	false-mustard
Papaveraceae	*Eschscholzia minutiflora*	pygmy gold-poppy
Plantaginaceae	*Plantago ovata* var. *fastigiata*	woolly plantain
Poaceae	*Aristida adscensionis*	six-weeks three-awn
Poaceae	*Phalaris minor**	little-seed canary grass
Poaceae	*Schismus barbatus**	Mediterranean schismus
Polemoniaceae	*Aliciella latifolia* ssp. *latifolia*	broad-leaf gilia
Polemoniaceae	*Eriastrum eremicum* ssp. *eremicum*	desert woolly-star
Polemoniaceae	*Langloisia setosissima* ssp. *setosissima*	bristly langloisia
Polemoniaceae	*Loeseliastrum schottii*	Schott's calico
Polygonaceae	*Chorizanthe brevicornu* var. *brevicornu*	brittle spineflower
Polygonaceae	*Chorizanthe rigida*	rigid spineflower
Polygonaceae	*Eriogonum inflatum*	desert trumpet
Polygonaceae	*Eriogonum thomasii*	Thomas's buckwheat
Resedaceae	*Oligomeris linifolia*	narrow-leaf oligomeris
Solanaceae	*Datura wrightii*	western jimson weed
Solanaceae	*Nicotiana quadrivalvis*	Indian tobacco
Solanaceae	*Physalis crassifolia*	Greene's ground-cherry
Tamaricaceae	*Tamarix ramosissima**	saltcedar
Viscaceae	*Phoradendron californicum*	desert mistletoe
Zygophyllaceae	*Fagonia laevis*	California fagonia
Zygophyllaceae	*Larrea tridentata*	creosote bush
**: Non-native species*		

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Appendix C

Wildlife Species Observed

Appendix C

Wildlife Species Observed within Project Site

Family	Code	Common Name	Scientific Name
BUTTERFLIES			
Danaidae	DANGILSTR	striated queen	*Danaus gilippus strigosus*
Lycaenidae	BREEXIEXI	western pygmy blue	*Brephidium exilis exilis*
AMPHIBIANS and REPTILES			
Iguanidae	DIPDOR	desert iguana	*Dipsosaurus dorsalis*
Phrynosomatidae	UTASTA	common side-blotched lizard	*Uta stansburiana*
BIRDS			
Accipitridae	RTHA	red-tailed hawk	*Buteo jamaicensis*
Cathartidae	TUVU	turkey vulture	*Cathartes aura*
Columbidae	ROPI	rock pigeon*	*Columba livia*
Columbidae	MODO	mourning dove	*Zenaida macroura*
Corvidae	CORA	common raven	*Corvus corax*
Fringillidae	HOFI	house finch	*Haemorhous mexicanus*
Hirundinidae	BASW	barn swallow	*Hirundo rustica*
Laniidae	LOSH	loggerhead shrike (SSC; nesting) †	*Lanius ludovicianus*
Mimidae	NOMO	northern mockingbird	*Mimus polyglottos*
Parulidae	WIWA	Wilson's warbler	*Cardellina pusilla*
Passerellidae	BTSP	black-throated sparrow	*Amphispiza bilineata*
Passerellidae	CALT	California towhee	*Melozone crissalis*
Passeridae	HOSP	house sparrow	*Passer domesticus*
Polioptilidae	BTGN	black-tailed gnatcatcher (WL)	*Polioptila melanura*
Remizidae	VERD	verdin	*Auriparus flaviceps*
Sturnidae	EUST	European starling*	*Sturnus vulgaris*
Troglodytidae	ROWR	rock wren	*Salpinctes obsoletus*
Tyrannidae	SAPH	Say's phoebe	*Sayornis saya*
MAMMALS			
Canidae	CANLAT	coyote	*Canis latrans*
Leporidae	LEPCAL	black-tailed jackrabbit	*Lepus californicus*
Leporidae	SYLAUD	desert cottontail	*Sylvilagus audubonii*
Sciuridae	AMMLEU	white-tailed antelope squirrel	*Ammospermophilus leucurus*

SSC: *California Department of Fish and Wildlife (CDFW) Species of Special Concern*

WL: *California Department of Fish and Wildlife (CDFW) Watch List species*

*: *Non-native species*

†: *Species not observed nesting by RBC during project survey(s)*

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Appendix D

Special-status Plants and Animals with Potential to Occur

Appendix D

Special-Status Plants and Animals with Potential to Occur

Species	Status	Habitat Description	Potential to Occur
PLANTS			
California ayenia (*Ayenia compacta*)	ESA: -- CESA: -- CRPR: 2B.3 CVMSHCP: NC	Rocky soil in Sonoran and Mojavean desert scrub at 490 to 3595 feet elevation. Perennial herb. Blooms between March and April.	Moderate. Suitable habitat present on site.
California ditaxis (*Ditaxis serrata* var. *californica*)	ESA: -- CESA: -- CRPR: 3.2 CVMSHCP: NC	Sonoran desert scrub at 95 to 3280 feet elevation. Perennial herb. Blooms between March and December.	Moderate. Suitable habitat present on site.
chaparral sand-verbena (*Abronia villosa* var. *aurita*)	ESA: -- CESA: -- CRPR: 1B.1 CVMSHCP: NC	Sandy chaparral, coastal scrub and desert dunes at 245 to 5250 feet elevation. Annual herb. Blooms between March and September.	Low. Suitable sandy/dune habitat not present.
Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)	ESA: FE CESA: -- CRPR: 1B.2 CVMSHCP: C	Loose aeolian (i.e., windblown) or alluvial (i.e., water transported) sands that are located on dunes or flats, and along disturbed margins of sandy washes in the Coachella Valley at 130 to 2150 feet. Annual/short-lived perennial. Blooms between February and May.	Low. The project site does not support aeolian or alluvial sand dunes; however, sandy washes do occur on site.
Coves' cassia (*Senna covesii*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Dry, sandy washes and slopes in Sonoran desert scrub at 735 to 4250 feet elevation. Perennial herb. Blooms between March and June.	Moderate. Suitable habitat present on site.
glandular ditaxis (*Ditaxis claryana*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Sandy soils in Sonoran and Mojavean desert scrub at 0 to 1526 feet elevation. Perennial herb. Blooms between October and March.	Moderate. Suitable habitat present on site.
gravel milk-vetch (*Astragalus sabulonum*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Sandy/gravelly areas in flats, washes, and roadsides in Sonoran and Mojavean desert scrub and desert dunes at -197 to 3051 feet elevation. Annual/short-lived perennial. Blooms between February and June.	Moderate. Suitable Sonoran creosote bush scrub habitat (sandy and gravelly areas) present on site.
jackass clover *(Wislizenia refracta* ssp. *refracta)*	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Desert dunes, playas, and desert scrub of the Sonoran and Mojave deserts at 1968 to 2624 feet elevation. Annual herb. Blooms between April and November.	Moderate. Suitable habitat present on site.
little-leaf elephant tree (*Bursera microphylla*)	ESA: -- CESA: -- CRPR: 2B.3 CVMSHCP: NC	Rocky soils in Sonoran desert scrub at 655 to 2295 feet elevation. Perennial deciduous tree. Blooms between June and July.	Low. Suitable habitat present on site; however, species likely would have been observed during general biological survey.

Species	Status	Habitat Description	Potential to Occur
mecca aster (*Xylorhiza cognata*)	ESA: -- CESA: -- CRPR: 1B.2 CVMSHCP: C	Arid canyons in sandstone and clay in Sonoran desert scrub at 65 to 1300 feet elevation. Known principally in the Indio and Mecca hills of Riverside County. Perennial herb. Blooms between January and June.	Moderate. Suitable habitat present on site.
narrow-leaf sandpaper-plant (*Petalonyx linearis*)	ESA: -- CESA: -- CRPR: 2B.3 CVMSHCP: NC	Sandy or rocky canyons in desert scrub of the Sonoran and Mojave deserts at -80 to 3660 feet elevation. Perennial shrub. Blooms between March and May.	Moderate. Suitable habitat present on site.
Orocopia sage (*Salvia greatae*)	ESA: -- CESA: -- CRPR: 1B.3 CVMSHCP: C	Alluvial slopes in desert scrub of the Sonoran and Mojave deserts at -130 to 2705 feet elevation. Restricted to the Orocopia and Chocolate Mountains. Perennial evergreen shrub. Blooms between March and April.	Low. Suitable habitat present on site, but current distribution is limited to mountains southeast of the site.
slender cottonheads (*Nemacaulis denudata* var. *gracilis*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Coastal dunes, desert dunes and Sonoran desert scrub at -160 to 1310 feet elevation. Annual herb. Blooms between April and May.	Moderate. Suitable Sonoran desert scrub habitat present on site.
MAMMALS			
American badger (*Taxidea taxus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	A variety of habitats including arid fields, grasslands, and desert scrub containing friable soil to excavate dens. Preys on fossorial mammals, reptiles, and insects.	Moderate. Suitable habitat, soils, and prey species present on site.
Coachella Valley [Palm Springs] round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Habitats include eolian dunes and desert scrub containing shrubs for cover and burrowing. Prefers mesquite thickets and coarse sand/gravel soils.	Moderate. Suitable habitat and soils present on site.
desert bighorn sheep (*Ovis canadensis nelsoni*)	ESA: -- CESA: -- USFWS: -- CDFW: FP CVMSHCP: C	A variety of habitats including palm oases, desert riparian, desert succulent scrub, desert scrub, and perennial grasslands. Grazes in open areas and require steep, rocky areas for bedding. Close proximity to water sources is critical for this species.	Low. Suitable foraging and bedding habitat not present on site.
Palm Springs pocket mouse (*Perognathus longimembris bangsi*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	A variety of habitats including creosote bush scrub, desert scrub, and grasslands containing uncompressed soils and sparse to moderate vegetation cover.	Moderate. Suitable desert scrub habitat and soils present on site.

Species	Status	Habitat Description	Potential to Occur
western mastiff bat (*Eumops perotis californicus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	Chaparral, live oaks, and arid, rocky regions. Requires downward opening crevices to roost. Foraging habitats include desert washes, flood plains, chaparral, oak woodlands, grasslands, and agricultural fields.	Moderate. No suitable roosting habitat present on site; however, suitable desert wash foraging habitat present.
western yellow bat (*Lasiurus xanthinus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	A range of habitats in arid and dry areas. Inhabits secluded woodlands, agricultural lands, and sometimes even residential areas. In California, this species prefers to roost and forage in palms (both native palm oases and ornamental palms).	Low. No suitable palm habitat present on site.
BIRDS			
black-tailed gnatcatcher (*Polioptila melanura*)	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	Semiarid and desert thorn scrub with creosote bush.	Present. This species was documented onsite and suitable desert scrub habitat is present throughout.
burrowing owl (*Athene cunicularia*) ‡	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Found in grasslands and open scrub habitats from coasts to deserts. Strongly associated with ground squirrels (*Otospermophilus* spp., *Xerospermophilis* spp., etc.) and other fossorial mammal burrows.	High. Suitable open scrub habitat, soils, and fossorial mammals present on site. CNDDB records show historic occurrences onsite (Figure 3).
California horned lark (*Eremophila alpestris actia*)	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	Sparsely vegetated prairies, deserts, and agricultural lands.	Moderate. Suitable desert habitat present on site.
Cooper's hawk (*Accipiter cooperii*) †	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	A variety of habitats including riparian forests, interior valleys, and woodlands.	Low. Suitable breeding habitat not present on site.
Costa's hummingbird (*Calypte costae*) †	ESA: -- CESA: -- USFWS: BCC CDFW: -- CVMSHCP: NC	Habitats include deserts, desert washes, and hillsides within desert scrub, chaparral, coastal sage scrub, and various fringe habitats.	High. Suitable desert habitats present on site.
crissal thrasher (*Toxostoma crissale*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	In the Coachella Valley region, this species inhabits mesquite thickets containing catclaw acacia (*Acacia greggii*), desert ironwood (*Olneya tesota*), and arrowweed (*Pluchea sericea*).	Moderate. Suitable habitat (tamarisk thickets) present on site.

Species	Status	Habitat Description	Potential to Occur
ferruginous hawk (*Buteo regalis*) ±	ESA: -- CESA: -- USFWS: BCC CDFW: WL CVMSHCP: NC	Open habitats from grasslands to deserts. During winter, tend to aggregate where prey species, especially ground squirrels and prairie dogs, are abundant.	High. Suitable wintering habitat present on site.
Lawrence's goldfinch (*Spinus lawrencei*) †	ESA: -- CESA: -- USFWS: BCC CDFW: -- CVMSHCP: NC	Arid and open woodlands bordered by chaparral/scrub, annual weed fields, or aquatic features.	Low. No suitable woodland habitat present on site.
Le Conte's thrasher (*Toxostoma lecontei*)	ESA: -- CESA: -- USFWS: BCC CDFW: SSC CVMSHCP: C	Saltbush scrub, creosote bush scrub, and other lightly vegetated desert scrub. Permanent resident within California range.	High. Suitable desert scrub habitat present on site.
least Bell's vireo (*Vireo bellii pusillus*)	ESA: FE CESA: SE USFWS: -- CDFW: SSC CVMSHCP: C	Breeding habitat: riparian communities including Sonoran cottonwood-willow riparian forest, southern arroyo willow riparian forest, and southern sycamore-alder riparian woodland. Migration habitat: mesquite hummocks, desert dry wash woodland, desert saltbush scrub, desert sink scrub, mesquite bosque, and arrowweed scrub.	Low (breeding habitat). High (migration habitat). There is no suitable riparian breeding habitat on site or within the East Indio Hills Conservation Area. The site contains suitable migration habitat in the form of mesquite hummocks and desert dry wash woodland on site.
loggerhead shrike (*Lanius ludovicianus*) †	ESA: -- CESA: -- USFWS: BCC CDFW: SSC CVMSHCP: NC	Grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting.	Present. This species was observed onsite and suitable foraging and breeding habitat (tamarisk thickets) are present on site.
merlin (*Falco columbarius*) ±	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	Riparian habitats and coastal marshes. Uncommon to rare in southern California.	Low. Suitable wintering habitat not present on site.
northern harrier (*Circus hudsonius*) †	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	A variety of open habitats including deserts, plains, agricultural fields, and estuaries.	Low. Although suitable foraging habitat present on site, suitable breeding habitat not present on site.
Oregon vesper sparrow (*Pooecetes gramineus affinis*) ±	ESA: -- CESA: -- USFWS: BCC CDFW: SSC CVMSHCP: NC	Winters on open, flat areas containing low grasslands or savannahs in southern California.	Low. Suitable habitat not present on site.

Species	Status	Habitat Description	Potential to Occur
peregrine falcon (*Falco peregrinus*) †	ESA: FDL CESA: SDL USFWS: BCC CDFW: FP CVMSHCP: NC	A variety of habitats. Most peregrine falcon will nest on open cliff faces, however, are also known to occupy water body fringes and human-built buildings and towers.	Low. Suitable habitat not present on site.
prairie falcon (*Falco mexicanus*) †	ESA: -- CESA: -- USFWS: BCC CDFW: WL CVMSHCP: NC	Desert shrubland and grasslands. Primarily forages in grassland habitats.	Low. Suitable desert shrubland occurs on site, however foraging habitat is sparse.
summer tanager (*Piranga rubra cooperi*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Breeding habitat: riparian natural communities including Sonoran cottonwood-willow riparian forest, southern arroyo willow riparian forest, and southern sycamore-alder riparian woodland. Migration habitat: mesquite hummocks, desert dry wash woodland, desert saltbush scrub, desert sink scrub, mesquite bosque coastal and valley freshwater marsh, and arrowweed scrub.	Low (breeding habitat). High (migration habitat). There is no suitable riparian breeding habitat on site or within the East Indio Hills Conservation Area. The site contains suitable migration habitat in the form of mesquite hummocks, and desert dry wash woodland on site.
vermilion flycatcher (*Pyrocephalus rubinus*) †	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	Deserts, scrub, agricultural fields, parks, golf courses, and riparian woodlands, often near water.	Moderate. Suitable breeding habitat (tamarisk thickets) present on site.
white-tailed kite (*Elanus leucurus*) †	ESA: -- CESA: -- USFWS: -- CDFW: FP CVMSHCP: NC	Low elevation grasslands, agricultural fields, wetlands/marshes, oak woodlands, savannahs, and riparian habitats bordering open areas.	Low. No suitable habitat occurs on site.
yellow-breasted chat (*Icteria virens*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Breeding habitat: riparian communities including Sonoran cottonwood-willow riparian forest, southern arroyo willow riparian forest, southern sycamore-alder riparian woodland. Migration habitat: mesquite hummocks, desert dry wash woodland, desert saltbush scrub, desert sink scrub, mesquite bosque coastal and valley freshwater marsh, arrowweed scrub.	Low (breeding habitat). High (migration habitat). There is no suitable riparian breeding habitat on site or within the East Indio Hills Conservation Area. The site contains suitable migration habitat in the form of mesquite hummocks, and desert dry wash woodland on site.
yellow warbler (*Setophaga petechia*) †	ESA: -- CESA: -- USFWS: -- USFWS: BCC CDFW: SSC CVMSHCP: C	Variety of riparian habitats and occasionally disturbed habitats bordering riparian areas.	Low. No suitable riparian habitat occurs on site.

Species	Status	Habitat Description	Potential to Occur
REPTILES/AMPHIBIANS			
Coachella Valley fringe-toed lizard (*Uma inornata*)	ESA: FT CESA: SE USFWS: -- CDFW: -- CVMSHCP: C	Fine, windblown sand and dune habitat with widely spaced desert shrubs; known only from the Coachella Valley.	Low. Although historically recorded in proximity of site, suitable aeolian transported sand and dune habitat not present on site.
desert tortoise (*Gopherus agassizii*)	ESA: FT CESA: ST USFWS: -- CDFW: -- CVMSHCP: C	Burrows in firm sandy or gravelly soils along creosote bush flats, riverbanks, washes, dunes, alluvial fans, hillsides, and canyons, often containing rocky areas.	Moderate. Suitable habitat and soils present on site.
flat-tailed horned lizard (*Phrynosoma mcallii*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Fine sand in desert washes and flats with vegetative cover and prey species (ants), generally below 600 feet elevation in Riverside, San Diego, and Imperial Counties.	Moderate. Suitable desert washes and flats are present on site and this species is known from the East Indio Hills Conservation Area

California Rare Plant Rank (CRPR) Definitions		
California Rare Plant Rank (CRPR)	1A	presumed extirpated in California and rare or extinct elsewhere
	1B	rare, threatened, or endangered in California and elsewhere
	2A	presumed extirpated in California but more common elsewhere
	2B	rare, threatened, or endangered in California but more common elsewhere
	3	plants for which more information needed
	4	plants of limited distribution
CRPR Threat Ranks	0.1	Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
	0.2	Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
	0.3	Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
Endangered Species Act (ESA)		
FE: Endangered Species Act (ESA) Federally Endangered Species FT: Endangered Species Act (ESA) Federally Threatened Species FDL: Endangered Species Act (ESA) Federally Delisted Species		
California Endangered Species Act (CESA)		
SE: California Endangered Species Act (CESA) State Endangered Species ST: California Endangered Species Act (CESA) State Threatened Species SDL: California Endangered Species Act (CESA) State Delisted Species		
United States Fish and Wildlife Service (USFWS)		
BCC: United States Fish and Wildlife Service (USFWS) Birds of Conservation Concern		
California Department of Fish and Wildlife (CDFW)		
FP: California Department of Fish and Wildlife (CDFW) Fully Protected Species SSC: California Department of Fish and Wildlife (CDFW) Species of Special Concern WL: California Department of Fish and Wildlife (CDFW) Watch List Species		

Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)
C: Species Covered Under Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) NC: Species Not Covered Under Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)
Bird Nesting Status
†: Nesting ±: Wintering ‡: Nesting and Wintering

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Appendix C2: Jurisdictional Delineation Report

ROCKS
BIOLOGICAL CONSULTING





KPC COACHELLA PROJECT
JURISDICTIONAL DELINEATION REPORT

Riverside County, California

December 6, 2019

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1 INTRODUCTION

Rocks Biological Consulting (RBC) conducted a formal jurisdictional delineation for the KPC Coachella Project (project) to identify areas that may be considered jurisdictional under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act; the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Act; and streambed and riparian habitats under California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code (§1602). This information is necessary to evaluate estimated jurisdictional impacts and permit requirements associated with the project, can be used by the agencies to assess project conformance with state and federal regulations, and serves as a request for the Corps to complete an Approved Jurisdictional Determination (AJD) based on the information provided in this report. Furthermore, Appendix A provides a checklist of the information contained in this report in compliance with the Corps Los Angeles District's *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (Corps 2017b).

1.1 PROJECT LOCATION

The project site for the proposed project is located along the western foothills of the Little San Bernardino Mountains immediately north of Interstate 10 (I-10) and east of Coachella Canal Road within the City of Coachella and an unincorporated area of Riverside County, California (Figure 1). The Coachella Canal runs north to south through the westernmost portion of the project site. State Route 86 is located approximately two miles west of the project site.

The latitude and longitude of the approximate center of the site is 33.711629, -116.108462. The project site sits on Township 5 South, Range 8 East, Sections 24, 25, 26, 27, and 28 and Township 5 South, Range 9 East, Section 30 within the Thermal Canyon and Indio 7.5-minute quadrangles, as mapped by the U.S. Geological Survey (USGS; Figure 2).

1.2 PROJECT DESCRIPTION

The proposed project consists of a Specific Plan for a new master planned community located at the eastern entrance to the City of Coachella. The 2,800-acre project site will provide a mixture of land uses intended to create a cohesive entrance to the City of Coachella, with unique residential components that will be compatible with the surrounding existing and planned neighboring areas. The proposed project will provide additional commercial, residential, educational, employment, and recreational opportunities for residents and visitors within the City of Coachella, including a hotel and casino.

1.3 REGULATORY BACKGROUND

Several regulations have been established by federal, state, and local agencies to protect and conserve aquatic resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project. Regulatory agencies make the final determination of whether a project requires authorization pursuant to these regulations.

1.3.1 APPLICABLE AQUATIC RESOURCE PROTECTION REGULATIONS

Clean Water Act

Pursuant to Section 404 of the Clean Water Act (33 U.S. Code [USC] § 1251 et seq.; CWA), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 Code of Federal Regulations (CFR) 328.3 (as amended at 80 Federal Register [FR] 37104, June 29, 2015; also referred to as the 2015 Clean Water Rule). The Corps, with oversight from the U.S. Environmental Protection Agency (USEPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

Under the 2015 Clean Water Rule applicable on the date of this report, the Corps defines waters of the U.S. as follows:

a. [T]he term "waters of the United States" means:

    1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

    2) All interstate waters, including interstate wetlands;

    3) The territorial seas;

    4) All impoundments of waters otherwise identified as waters of the United States under this section;

    5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section; and

    6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

Additionally, under the 2015 Clean Water Rule, waters of the U.S. also include all waters noted in 33 CFR 328.3 (a)(7) (i.e., prairie potholes, Carolina bays and Delmarva bays, pocosins, western vernal pools, and Texas coastal prairie wetlands) and all waters noted in 33 CFR 328.3 (a)(8) (i.e., "waters located within the 100-year floodplain" of a water identified in 33 CFR 328.3 (a)(1) through (3) and all waters "within 4,000 feet of the high tide line or OHWM" of a water identified in 33 CFR 328.3 (a)(1) through (5)) where they are determined to have a significant nexus to a water identified above in 33 CFR 328.3 (a)(1) through (a)(3).

A repeal of the 2015 Clean Water Rule was published on October 22, 2019. As a result, the following definition of waters of the U.S., per pre-2015 regulations, is anticipated to go into effect on December 23, 2019 per 33 CFR 328.3 (51 FR 41217; 53 FR 20764).

a. The term waters of the United States means:

1) All waters which are currently used, or were used in the past or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2) All interstate waters including interstate wetlands;
3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4) All impoundments of waters otherwise defined as waters of the United States under the definition;
5) Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;
6) The territorial seas;
7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.

The pre-2015 definition of waters of the U.S. was further defined by two Supreme Court cases, namely the 2001 Solid Waste Agency of Northern Cook County decision (Solid Waste Agency of Northern Cook County [SWANCC] v. U.S. Army Corps of Engineers et al., 2001) and the 2006 Rapanos decisions (Rapanos v. United States, 2006).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB, a division of the State Water Resources Control Board, provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to

surface waters under the federal CWA. In addition, the RWQCB is responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

California Fish and Game Code Section 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the California Fish and Game Code (CFGC), CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses and wetland habitats supported by a river, lake, or stream. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and applicant is the Lake or Streambed Alteration Agreement.

1.4 CONTACT INFORMATION

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Agency access to the project site can be coordinated with the applicant and/or agent upon request.

2 METHODS

Prior to the on-site delineation, field maps were created using a Geographic Information System (GIS) and a color aerial photograph at a 1:400 scale. RBC staff also reviewed U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) and topography data (Figure 2) and U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data (Figure 4) to further determine the potential locations of jurisdictional aquatic resources. Google Earth was also utilized to assess current and historic presence or absence of flow in the project area.

RBC regulatory specialists Shanti Santulli, Emily Trevino, and Sarah Krejca conducted the jurisdictional delineation field visit from May 7, 2019 to May 10, 2019. Shanti Santulli and Brenda Bennett conducted an additional jurisdictional delineation field visit from October 29, 2019 to October 30, 2019. Field survey conditions are shown below in Table 1.

Table 1. Field Survey Conditions

	Start				End			
Survey Date & Method	Time	Temp. (°F)	Cloud Cover (%)	Wind Speed (MPH)	Time	Temp. (°F)	Cloud Cover (%)	Wind Speed (MPH)
May 7, 2019 On foot; from vehicle	1200	89	5	5-10	1515	85	2	7-14
May 8, 2019 On foot; from vehicle	0630	64	0	15-20	1245	85	0	4-8
May 9, 2019 On foot; from vehicle	0630	66	5 (hazy)	0-1	1230	85	0	3-5
May 10, 2019 On foot; from vehicle	0645	68	90	1-5	0805	70	100	1-5
October 29, 2019 On foot; from vehicle	0930	58	0	3-4	1430	68	0	2-3
October 30, 2019 On foot; from vehicle	0830	54	0	1-2	1230	67	0	3-4

The project survey area included the proposed project area with a 100-foot buffer for a total of approximately 2,970 acres. Field staff utilized modeled hydrology data/figures for the project survey area provided by the project hydrologist, Q3 Consulting, to assist in focusing the field effort within the large project survey area (Appendix B). Areas with depressions, drainage patterns, and/or wetland vegetation within the project impact area were evaluated for potential jurisdictional status, with focus on the presence of defined channels and/or wetland vegetation, soils, and hydrology. Field staff examined potential Corps- and RWQCB-jurisdictional wetland areas using the routine determination methods set forth in Part IV, Section D, Subsection 2 of the Corps 1987 *Wetland Delineation Manual* (Wetland Manual) (Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (Arid West Supplement) (Corps 2008a).

Areas that met the three parameters per the Arid West Supplement (i.e., hydrophytic vegetation, hydric soils, and wetland hydrology) were considered wetland waters of the U.S./State. RBC staff based wetland plant indicator status (i.e., Obligate [OBL], occurs 99+% in wetlands; Facultative Wetland [FACW], occurs 67-99% in wetlands; Facultative [FAC], occurs 34-66% in wetlands; Facultative Upland [FACU], occurs 1-33% in wetlands; Upland [UPL], occurs 99+% in uplands) on the *National Wetland Plant List* (NWPL; Corps 2016) and hydric soils indicators on *Field Indicators of Hydric Soils in the United States, Version 8.2* (NRCS 2018). Soil chromas were identified in the field according to *Munsell's Soil Color Charts* (Munsell Color 2015) and using protocols per the Arid West Supplement.

Note that in April 2019 the State Water Resources Control Board adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (the Procedures) which will become effective on May 28, 2020, nine months after the Office of Administrative Law approved the Procedures on August 28, 2019. As detailed in the Procedures, the State Water Resources Control Board and RWQCBs (Water Boards) define a wetland as follows: "An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation."

Although the Procedures are not yet applicable to this project, the Procedures provide that RWQCB shall rely on a wetland area delineation from a final aquatic resource report verified by the Corps to determine the extent of wetland waters of the State. If any potential wetland areas have not been delineated in a final aquatic resources report verified by the Corps, the limits of such potential wetland waters of the State shall be identified using the same wetland delineation methods per the Corps as described above, except that a lack of vegetation (i.e., less than 5 percent areal coverage of plants during the peak of the growing season) does not preclude an area from meeting the definition of a wetland waters of the State.

Lateral limits of potential non-wetland waters of the U.S./State for the Corps and RWQCB, respectively, were identified using field indicators of an ordinary high water mark (OHWM). An OHWM is defined in 33 CFR 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas." RBC staff used *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (OHWM Field Guide; Corps 2008b) to estimate the extent of an OHWM in the field. For each feature exhibiting the potential presence of an OHWM, RBC completed a 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet following the guidance provided in the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (OHWM Datasheet; Corps 2010). Per the 2010 OHWM Datasheet, common indicators of an OHWM include a break in slope (i.e., abrupt cut in bank slope created by hydrogeomorphic processes across the landscape), changes in average sediment texture between floodplain units (i.e., low-flow, active floodplain, low terrace), and changes in vegetation species and/or cover between floodplain units.

CDFW potential jurisdictional boundaries were determined based on the presence of streambed and associated riparian habitat and/or wetland areas. Streambeds considered within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation" (Title 14, Section 1.72). Riparian habitat refers to vegetation and habitat associated with a stream. The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream. Isolated riparian habitat (i.e., where riparian vegetation did not appear associated with an ephemeral wash) were not considered CDFW-jurisdictional. CDFW follows the USFWS wetland definition and classification system, which defines a wetland as transitional land between terrestrial and aquatic systems having one or more of the following attributes: "(1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (USFWS 1979). A wetland is presumed when all three attributes are present; if less than three attributes are present the presumption of a wetland must be supported by "the demonstrable use of wetland areas by wetland associated fish or wildlife resources, related biological activity, and wetland habitat values" (CFGC 1994).

Furthermore, to assist in assessing CDFW streambed limits in desert areas, RBC staff utilized the methods outlined in the *Mapping Episodic Stream Activity (MESA) Field Guide* (Vyverberg et al. 2013). The MESA Field Guide was developed to describe methodology for delineating episodic streams within the arid and semi-arid California desert regions. The MESA guidelines indicate streams extend beyond an OHWM and can consist of associated features such as low-flow, active, and braided channels and banks associated with islands, secondary channels, and streambed within the bounds of a larger channel complex defined as the "watercourse" (Vyverberg et al. 2013).

While in the field, potentially jurisdictional features were recorded using a hand-held Global Positioning System (GPS) unit with a level of accuracy ranging from four to 20 feet. RBC staff refined the data using aerial photographs and topo maps with two-foot contours to ensure accuracy. Plants were identified according to The Jepson Manual 2nd edition (Baldwin et al. 2012). A plant list compiled by RBC biologists during the May 1, 2, 8, and 9, 2019 field surveys, with each plant's wetland indicator status per the NWPL, is included as Appendix C. RBC staff used the vegetation community classifications mapped by RBC biologists during the May 1, 2, 8, and 9, 2019 field surveys. The vegetation community classifications follow Holland (1986) and nomenclature follows Jepson eFlora (Jepson Flora Project 2019).

All figures generated for this jurisdictional delineation report follow the Corps' *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (Corps 2016).

3 RESULTS

3.1 TOPOGRAPHY

The proposed project area consists of steep, hilly terrain associated with the Little San Bernardino foothills with interspersed, flatter alluvial fans and desert washes. Elevations within the project area range from 512 to 1,420 feet above mean sea level (Figure 2).

3.2 WATERSHED

The proposed project area is within the Whitewater River Hydrologic Unit Code [HUC] 8 (18100201), Middle Whitewater River HUC 10 (1810020107), and City of Indio – Whitewater River HUC 12 (181002010705) watersheds (Figure 3).

The Whitewater River watershed is approximately 4,500 square miles. The Whitewater River headwaters originate in the San Bernardino Mountains, and continue southeast to the Salton Sea and Sonoran Desert (Riverside County Watershed Protection [RCWP] 2018). The Middle Whitewater River HUC 10 encompasses approximately 177 square miles and the City of Indio – Whitewater River HUC 12 encompasses approximately 74 square miles.

3.3 HYDROLOGY

USGS NHD maps several "blue-line streams" within the project survey area, which are all ephemeral washes (Figure 2). USGS NHD also maps the Coachella Canal as a "green-line canal/ditch," along the western boundary of the project boundary. USFWS NWI maps several features with a designation of "Riverine" and two features with a designation of "Freshwater Forested/Shrub Wetland" within the project boundary and survey area (Figure 4). The two features designated as "Freshwater Forested/Shrub Wetland" appear to receive flows from a storm drain outfall (Figure 5).

The Coachella Canal, which is partially located on site, flows in the northwesterly direction, continuing into Lake Cahuilla, then the Whitewater River, which ultimately connects to the Salton Sea.

The known hydrologic sources for the other observed on-site aquatic features (i.e., ephemeral washes), discussed further below, are direct precipitation, including surface flows from the higher elevations, and from the agricultural operation runoff to the north of the western portion of the project survey area. Based on field observations, the ephemeral washes on site are topographically disconnected from and cannot connect to the Coachella Canal given the presence of a large 40- to 50-foot high levee along the north bank of the canal. On-site aquatic features generally flow in a southwesterly direction through the project survey area. Several on-site aquatic features are confined and/or redirected by several manmade berms, as shown on Figure 5. On-site ephemeral washes eventually flow toward the southern boundary of the property where they are directed under the I-10 through a number of culverts and undercrossings to the undeveloped property to the south. The La Entrada Specific Plan (La Entrada) is a master-planned residential community slated to occur on the undeveloped property to the south of the KPC Coachella property. Because any flows that leave the KPC Coachella property end up on the La Entrada site, RBC reviewed the *La Entrada Specific Plan, City of Coachella, California, Delineation of State and Federal Jurisdictional Waters* (La Entrada JDR; RBF Consulting 2013) for information regarding the hydrology in the area and downstream connectivity.

Based on the La Entrada JDR, flows from the La Entrada site are directed southwest to an evacuation outlet (i.e., culvert) under the Coachella Canal which serves as the only flood-conveyance facility for flows that continue south/downstream. After travelling through the evacuation outlet, flows are conveyed through Wasteway Channel No. 2 for approximately 2.2 miles before discharging into the Whitewater River. Based on hydrologic studies (conducted by the same project hydrologists for both the La Entrada site and the KPC Coachella property), it

would take nearly a 50-year storm event for waters to flow from the La Entrada site through the evacuation outlet (RBF Consulting 2013). Since the on-site features that flow under the I-10 from the KPC Coachella property are upstream and discharge onto the La Entrada site, Q3 Consulting determined that a similar assumption can be made for the KPC Coachella property. That is, the KPC Coachella Project will not change the analyzed hydrologic condition per the La Entrada JDR; therefore, flows from the KPC Coachella property would not discharge to the Whitewater River during a storm event below the 50-year annual return frequency (John McCarthy [Q3 Consulting], personal communication, June 14, 2019). Section 3.8 provides additional information regarding downstream connectivity of the on-site ephemeral washes.

RBC utilized the Natural Resources Conservation Service (NRCS) Agricultural Applied Climate Information System (AgACIS) database for the Indio Fire Station, California National Weather Service (NWS) station in Riverside County to access precipitation and Wetlands (WETS) Climate Tables data. WETS tables are utilized to define the range of normal precipitation and growing season for NWS stations. WETS tables define the "normal" range at the 30th and 70th percentile of all the data in the precipitation record for that station. RBC requested data for the past 30 years (1988-2019) to provide the pertinent pre-site visit precipitation data. Appendix D and Table 2 utilize the Indio Fire Station, California station due to its comprehensive historical data and proximity to the project site (i.e., approximately 3 miles northwest).

Riverside County is characterized by hot, dry summers and mild, relatively wet winters. The Indio Fire Station, California NWS station lists the highest averaged daily maximum temperature over the past 30 years as 106.9°F for the month of July and the lowest averaged daily minimum temperature over the past 30 years as 44.2°F for the month of December (NRCS 2019). The NRCS does not calculate a growing season length for this station since insufficient data is available for the 30-year period.

Table 2 describes the estimated monthly total precipitation for the proposed project area from November 2018 to October 2019 to provide the pertinent pre-site visit precipitation data from the NRCS AgACIS database for the Indio Fire Station, California NWS station.

Table 2. Precipitation Data for November 2018 to October 2019

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Monthly Total Precip. (inch[es])	0.00	0.43	0.55	1.35	0.16	0.00	0.00	0.00	0.02	0.00	0.22	0.00

*Per AgACIS database: "Values of 'M' indicate missing data."

Appendix D and Table 2 indicate that the field survey dates of May 7 to 10, 2019 and October 29 to 30, 2019 occurred after a year of less than normal precipitation for 2018. The field survey dates of May 7 to 10, 2019 occurred after a higher than normal precipitation period for the months of February and March 2019 and a normal precipitation period for the month of April 2019. The field survey dates of October 29 to 30, 2019 occurred after a normal precipitation period for the months of July and August 2019 and a higher than normal precipitation period for the month of September 2019.

3.4 SOILS

The NRCS Web Soil Survey does not provide soils data for the eastern portion of the project area. Based on the NRCS map of the portion of the project area for which soils data is available (Figure 4), the following soils occur within the project site boundary and are described below per the USDA's Official Soil Series Description and Series Classification database (NRCS n.d. a) and the Soil Survey of Riverside County, California, Coachella Valley Area (USDA 1980):

Badland – Badland consists of very steep, excessively drained, severely eroded areas broken by numerous deeply entrenched channels and steep side drainages with raw bands or freshly exposed material. Badland is composed of slightly consolidated sandy alluvium capped with a very thin mantle of loose sand and is primarily used for watershed, wildlife habitat, and recreation. The NRCS does not list Badland, which occurs on site, as hydric.

Borrow pits – Borrow pits result from the removal of soil and underlying material. The NRCS lists Borrow pits, which occurs on site, as hydric under Criteria 3, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

Carrizo stony sand, 2 to 9 percent slopes – The Carrizo series consists of very deep, excessively drained soils formed in mixed igneous alluvium. These soils are found primarily on numerous landforms on flood plains, fan piedmonts, and bolson floors in the Mojave Desert of southeastern California, western Arizona, and southern Nevada. These soils are primarily used for rangeland, recreation, and wildlife habitat. The NRCS does not list Carrizo stony sand, 2 to 9 percent slopes, which occurs within the 50-foot buffer and possibly occurs within the eastern portion of the project site, as hydric.

Carsitas gravelly sand, 0 to 9 percent slopes – The Carsitas series consists of very deep, somewhat excessively drained soils formed in alluvium from granitoid and/or gneissic rocks. These soils are found primarily on alluvial fans, fan aprons, valley fills, and dissected remnants of alluvial fans and in drainageways in the Colorado Desert of southeastern California. These soils are primarily used for watershed, wildlife habitat, and recreation. The NRCS lists Carsitas gravelly sand, 0 to 9 percent slopes, which occurs on site, as hydric under Criteria 4, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

Carsitas cobbly sand, 2 to 9 percent slopes – The Carsitas series consists of very deep, somewhat excessively drained soils formed in alluvium from granitoid and/or gneissic rocks. These soils are found primarily on alluvial fans, fan aprons, valley fills, and dissected remnants of alluvial fans and in drainageways in the Colorado Desert of southeastern California. These soils are primarily used for watershed, wildlife habitat, and recreation. The NRCS lists Carsitas cobbly sand, 2 to 9 percent slopes, which occurs on site, as hydric under Criteria 4, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil

series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes – The Chuckawalla series consists of very deep, well drained soils formed in stratified mixed alluvium. These soils are found primarily on fan terraces in low desert areas of southern California and southwestern Arizona, and used for recreation and watershed. The NRCS does not list Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes, which occurs on site, as hydric.

Myoma fine sand, 0 to 5 percent slopes – The Myoma series consists of moderately alkaline fine and very fine sands to a depth of about 31 inches, below 31 inches they are strongly alkaline very fine sands. These soils are found in southern California and primarily used for growing citrus fruits, grapes, alfalfa, dates, and truck crops under irrigation. The NRCS lists Myoma fine sand, 0 to 5 percent slopes, which occurs on site, as hydric under Criteria 4, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

As stated in the Arid West Supplement, RBC used the hydric soils list as a tool and made final hydric soils determinations based on field-collected data at representative wetland delineation sample points deemed appropriate on site as recorded on the attached Arid West Wetland Delineation Forms (Appendix E) discussed further below.

3.5 VEGETATION

Based on field surveys conducted by RBC biologists on April 13 and May 1, 2, 8, and 9, 2019, the following vegetation communities occur within the project survey area.

Agricultural Land – Agricultural land within the project survey area (3.84 acres) is under current cultivation. Agricultural areas are both disturbed and irrigated and provide little habitat for native plant and wildlife species. Agicultural land occurs in the western portion of the project survey area.

Desert Wash Scrub/Sonoran Creosote Bush Scrub – An intermixing of two vegetation types; desert wash scrub and Sonoran creosote bush scrub occurs across large areas of the project survey area most often within, but not limited to, the numerous ephemeral washes on site. These washes contain a mix of species associated with both vegetation types including desert-lavender (*Condea emoryi*), smoke tree (*Psorothamnus spinosus*), indigo bush (*Psorothamnus schottii*), desert bird-of-paradise (*Hoffmannseggia microphylla*), rush sweet-bush (*Bebbia juncea* var. *aspera*), catclaw acacia (*Senegalia greggii*), and occasional blue palo verde (*Parkinsonia florida*), as well as creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*).

Disturbed Habitat – Disturbed habitat within the project survey area (39.99 acres) consists primarily of bare soils and non-native species that are a result of human disturbance. Disturbed lands have been graded, cleared, or used to the point where the land cannot support native vegetation. Disturbed areas occur mostly in the western portion of the project survey area adjacent to agricultural land.

Mesquite Hummocks – Mesquite hummocks (1.28 acres) occur only on the western portion of the project survey area within the Coachella Valley Multiple Species Habitat Conservation Plan's (CVMSHCP) East Indio Hills Conservation Area. Mesquite hummocks consist solely of mesquite (*Prosopis glandulosa* var. *glandulosa*) on a raised hummock of blown sand. This habitat is important for wildlife and has a stabilizing effect on sand dunes.

Sonoran Creosote Bush Scrub – Sonoran creosote bush scrub (1,955.75) is the dominant habitat type within the project survey area. This community occurs on upland slopes, hills, bajadas, and alluvial fans, and within the ephemeral washes on site. Sonoran creosote bush scrub is dominated by widely-spaced stands of creosote bush with open soil, annual plants, and other shrubs occurring between creosote bush shrubs. Other common shrubs within this community include white bursage, brittlebush (*Encelia farinose*), and desert-holly (*Atriplex hymenelytra*). Observation of short-lived annual plant species was limited due to the timing of the field survey.

Tamarisk Scrub – Tamarisk scrub within the project survey area (1.10 acres) primarily consists of dense tamarisk (*Tamarix ramosissima*) shrubs. Tamarisk scrub typically occurs on sandy or gravelly soils within or in close proximity to washes or streams and often follows major anthropogenic disturbance. Tamarisk scrub occurs on the western portion of the project survey area in areas disturbed by both agriculture and construction of a water tower.

Table 3 provides vegetation community acreages within the project survey area (Figure 6).

Table 3. Vegetation Communities within Project Survey Area

Vegetation Community	Project Survey Area (acres)
Agricultural Land	3.84
Desert Wash Scrub/Sonoran Creosote Bush Scrub	968.45
Disturbed Habitat	39.99
Mesquite Hummocks	1.28
Sonoran Creosote Bush Scrub	1,955.75
Tamarisk Scrub	1.10
Total	**2,970.40**

3.6 FEATURES OBSERVED

The project survey area consists of hilly desert land with many braided dry, sandy washes. The western portion of the project survey area also includes one earthen levee and five earthen berms which confine or redirect flows throughout the project survey area, as shown on Figure 5. As further supported by the aerial imagery analysis provided in Appendix F, the western portion of the project survey area was heavily manipulated between 1940 and 1953 with the construction of the Coachella Canal, an adjacent earthen levee, and several earthen berms to obstruct or redirect flows. The locations of the earthen berms changed throughout the years, with the present-day locations first appearing in 2002 aerials (Appendix F).

Estimated jurisdictional features observed within the project survey area during the formal jurisdictional delineation field effort, further discussed in Section 3.7, include Feature (F) 1 to F16

(which includes F1 – Disturbed Ephemeral Drainage Area, F1 – Tamarisk Scrub/Ephemeral Drainage, F1 – Tamarisk Scrub, and F13 – Tamarisk Scrub in this report unless otherwise specified) and the Coachella Canal (Figure 5, 5A-5J). Each named/numbered feature represents a separate watercourse, and as such, includes all functionally related and connected single-thread channels, compound channels, braided channels, and floodplains. Features that may connect outside of the project survey boundary were not deemed to be functionally related or connected for purposes of naming each on-site feature. Some on-site delineated features may not be jurisdictional by an agency or agencies as detailed in Section 3.8.

RBC investigated two wetland sample points to determine the presence or absence of federally jurisdictional wetlands (Figure 5, 5A-5J; Appendix E) in areas displaying potential wetland landscape position (e.g., minimal slope and/or depressional) and hydrology (e.g., surface soil cracks). RBC also completed five OHWM Datasheets at representative sample points in areas observed to have defined drainage patterns in the project survey area since there were multiple dry washes (i.e., features) with similar hydrology/OHWM characteristics in the project survey area (Figure 5, 5A-5J; Appendix E). Note that RBC is able to provide the Figure 5 series, which shows the estimated jurisdictional resources on site, at a smaller scale, if requested by the resource agencies.

Wetland Sample Point (WSP 1) was taken within the relatively flat F1 – Disturbed Ephemeral Drainage Area in an area primarily dominated by nettle-leaf goosefoot (*Chenopodium murale*; FACU) blue palo verde (Not Listed [NL]/UPL), and London rocket (*Sisymbrium irio*; NL/UPL). WSP 1 met the wetland hydrology parameter based on the presence of surface soil cracks; the hydrophytic vegetation and hydric soils parameters, however, were not met (Appendix E). Note that there was also evidence of recent surface manipulation within this area due to the presence of large tire tracks; therefore, the vegetation and top soil layer appeared disturbed.

WSP 2 was taken within F1 – Tamarisk Scrub/Ephemeral Drainage in an area that was primarily dominated by tamarisk/salt cedar (*Tamarix* sp.). The *Tamarix* sp. was likely *Tamarix ramosissima* (NL/UPL), but is understood to hybridize and function similarly to *Tamarix chinensis* (FAC). Assuming *Tamarix chinensis* as the dominant vegetation, WSP 2 met the hydrophytic vegetation parameter; the wetland hydrology and hydric soils parameters, however, were not met (Appendix E).

RBC determined the presence of an OHWM and bed and bank in the following representative locations within the project survey area: three locations within F8 (OHWM 1, 3, and 4), one location within F1 (OHWM 2), and one location within F3 (OHWM 5). OHWM 2 and 4 were taken as representative OHWM data points for the large watercourses (i.e., F4, F8, and F16); OHWM 1, 3, and 5 were taken as representative OHWM data points for the smaller watercourses and tributaries (i.e., F1 - F3, F5 - F7, and F9 - F15).

Table G-1 within Appendix G provides a summary of the existing characteristics of each of the observed on-site aquatic resources, F1 to F16 and the Coachella Canal. Overall, the watercourses observed on site consisted of generally unvegetated, dry, braided low-flow channels within sparsely vegetated active floodplains, which transitioned to low terraces generally dominated by creosote bush (NL/UPL), or pebble pincushion (*Chaenactis carphoclinia* var. *carphoclinia*; NL/UPL). Sediment was generally finer in the low-flow channels than within the active floodplains. The features varied in width from 3 to 1,650 feet (Appendix G, Table G-1). RBC utilized on-site field observations and a kmz file of the GIS limits of the jurisdictional

delineation site visit to define estimated minimum and maximum feature limits on Google Earth imagery. Indicators of an OHWM for the observed features within the project survey area included a change in vegetation cover, vegetation species, and sediment texture between the active floodplain and upland areas as well as a small break in slope along the active channel (Appendix E, OHWM 1-5). The extent of the mapped OHWM also matched the delineated bed and bank of each feature (Figure 5). Please note that some of the islands located within a delineated feature were CDFW-jurisdictional areas that would not have been included within the OHWM per the OHWM Field Guide; however, calling out CDFW-jurisdictional islands between the delineated washes would have taken a substantial effort so RBC included these CDFW-jurisdictional islands as part of the OHWM.

Note that F1 – Disturbed Ephemeral Drainage Area is located within the CVMSHCP's East Indio Hills Conservation Area, which is part of the watershed for mesquite hummocks. This area also has a general plan land use designation of Open Space and will be preserved as open space with project implementation.

Appendix H provides site photographs of the features and Figure 7 displays representative photo points.

3.7 JURISDICTIONAL RESOURCES AND ANALYSES

The Coachella Canal would be considered a Corps-jurisdictional, non-wetland waters of the U.S. as a tributary (i.e., 33 CFR 328.3(a)(5)) to the Whitewater River and ultimately the Salton Sea. However, all other on-site features would not be considered Corps-jurisdictional as detailed in Section 3.8 below.

The Coachella Canal and F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) would be considered non-wetland waters of the State/surface waters per the RWQCB. RBC also expects the Coachella Canal and F1 to F16 would be considered CDFW streambed, associated riparian habitat, and/or watercourse as defined by the MESA Guidelines. Generally, areas deemed as jurisdictional by the RWQCB and CDFW consisted of watercourses comprised of ephemeral desert wash.

Table 4, below, provides the total acreages of estimated jurisdictional resources. Tables I-1, I-2, and I-3 in Appendix I provide additional information regarding the Coachella Canal and F1 through F16 including acreages, linear feet, and dominant vegetation. None of the features within the project survey area met the three parameters per the Arid West Supplement; therefore, no Corps-/RWQCB-jurisdictional wetlands occur within the project survey area.

Although WSP 1 taken within F1 – Disturbed Ephemeral Drainage did meet the wetland hydrology parameter based on the presence of surface soil cracks, the area does not support any wetland associated fish or wildlife resources, related biological activity, or wetland habitat values. Similarly, although WSP 2 taken within F1 – Tamarisk Scrub/Ephemeral Drainage did meet the hydrophytic vegetation parameter, based on the assumption that the *Tamarix ramosissima*, an NL/UPL species, was functioning similar to *Tamarix chinensis*, a FAC species, the area does not support any wetland associated fish or wildlife resources, related biological activity, or wetland habitat values. Further, none of the other features within the project survey area exhibited any of the three wetland parameters. Therefore, RBC expects that none of the features within the project survey area would be considered jurisidictional wetlands per CDFW.

As estimated overall, the project survey area supports 2.72 acres (2,957 linear feet) of Corps-jurisdictional, non-wetland waters of the U.S.; 637.37 acres (282,372 linear feet) of RWQCB-jurisdictional, non-wetland waters of the State; and 637.57 acres (282,372 linear feet) of CDFW-jurisdictional, non-wetland streambed, associated riparian habitat, and/or watercourse as summarized in Table 4 below. Appendix I, Tables I-1, I-2, and I-3, provide details on the delineated on-site features per agency jurisdiction.

Table 4. Jurisdictional Resources within Project Survey Area*

Agency	Resource Type	Total Acreage	Total Linear Feet
Corps	Non-wetland waters of the U.S.	2.72	2,957
RWQCB	Non-wetland waters of the U.S./State	637.37	282,372
CDFW	Streambed (Bank)	637.37	282,372
	Riparian Vegetation	0.20	n/a

*Appendix I provides detailed information regarding the delineated on-site features per agency jurisdiction.

Section 3.8 provides details on why F1 to are not expected to be considered jurisdictional by the Corps.

3.8 NON-JURISDICTIONAL RESOURCES AND ANALYSES

RBC anticipates this report will be submitted to the agencies after changes to the Corps' waters of the U.S. regulations go into effect on December 23, 2019 (i.e., pre-2015 regulations and guidance will apply instead of the current 2015 Clean Water Rule). Furthermore, a revised definition of waters of the U.S. is anticipated to be published as early as January 2020, but its effective date, if applicable, remains uncertain. Given the above, for purposes of this jurisdictional delineation report, the non-jurisdictional status of F1 to F16 is analyzed under the pre-2015 regulations and guidance that will be effective on December 23, 2019.

While potentially jurisidictional per CDFW and/or the RWQCB, F1 to F16 (including F1 – Disturbed Ephemeral Drainage Area, F1 – Tamarisk Scrub/Ephemeral Drainage, and riparian habitat areas F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) located within the project survey area do not meet the Corps' definition of waters of the U.S. per pre-2015 regulations and guidance.F1 to F16 either terminate on site or ultimately flow to the southern boundary of the proposed project site where they are directed under the I-10 through a number of culverts and undercrossings to the undeveloped property to the south. In general, flows are isolated on this neighboring undeveloped property by the Coachella Canal.

Furthermore, as discussed above in Section 3.3 and based on hydrologic studies performed for the downstream La Entrada site and an AJD completed by the Corps in May 2018, flows from the La Entrada site are directed southwest to an evacuation outlet (i.e., culvert) under the Coachella Canal which serves as the only flood-conveyance facility for flows that continue south/downstream. After travelling through the evacuation outlet, flows are conveyed through Wasteway Channel No. 2 for approximately 2.2 miles before discharging into the Whitewater River. Runoff from the La Entrada site would not discharge through Wasteway Channel No. 2 to the Whitewater River for a storm event below the 50-year annual return frequency, which also

would apply to the ephemeral washes that flow from the KPC Coachella property onto the La Entrada site (John McCarthy [Q3 Consulting], personal communication, June 14, 2019). Flows that would reach the Whitewater River in at least a 50-year event would then travel approximately 13 miles before ultimately flowing into the Salton Sea. Given the above, flow events connecting the ephemeral washes on the KPC Coachella property to the Whitewater River are of such infrequent duration that they would only have a "speculative or insubstantial" effect on the "chemical, physical, or biological integrity" on the applicable traditionally navigable water (TNW), the Salton Sea.

Given the above rationale, F1 to F16 are not jurisdictional by the Corps as these ephemeral washes and riparian areas do not meet the criteria of jurisdictional waters per 33 CFR 328.3(a)(1) – (a)(7) (51 FR 41217; 53 FR 20764) and do not have significant nexus analysis to the nearest TNW, the Salton Sea. Table I-4 in Appendix I provides additional information regarding those features RBC expects the Corps would not deem jurisdictional.

Additionally, F1 – Tamarisk Scrub and F13 – Tamarisk Scrub are not jurisdictional by the RWQCB as these features are associated riparian habitat not considered non-wetland or wetland waters of the State/surface waters. Table I-5 in Appendix I provides additional information regarding those features RBC expects the RWQCB would not deem jurisdictional.

Appendix L includes the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet.

4 CONCLUSION

Based on RBC's field and desktop analysis of the project survey area, RBC expects that the Coachella Canal would be considered a Corps-jurisdictional, non-wetland waters of the U.S. (Appendix I, Table I-1); an RWQCB-jurisditional, non-wetland waters of the State/surface waters (Appendix I, Table I-2); and a CDFW-jurisdictional, non-wetland streambed and/or watercourse (Appendix I, Table I-3).

F1 to F16 would not be considered jurisdictional by the Corps (Appendix I, Table I-4). F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) would be considered RWQCB-jurisdictional non-wetland waters of the State/surface waters (Appendix I, Table I-2), while F1 – Tamarisk Scrub and F13 – Tamarisk Scrub would not be considered jurisdictional by the RWQCB as these features are associated riparian habitat not considered non-wetland or wetland waters of the State/surface waters (Appendix I, Table I-5). F1 to F16 would be considered CDFW-jurisdictional, non-wetland streambed, associated riparian habitat, and/or watercourse (Appendix I, Table I-3).

Assuming the Corps finalizes the AJD and concludes that F1 to F16 are not jurisdictional, no Corps permitting would be required for the project assuming the proposed project will not impact the Coachella Canal. Impacts on jurisdictional features per other agencies (if deemed jurisdictional) would require Waste Discharge Requirements (WDR) from RWQCB and a Streambed Alteration Agreement (SAA) from CDFW. The RWQCB and/or CDFW may also require a functional assessment (e.g., California Rapid Assessment Method [CRAM]) to quantitatively estimate the stream condition for the evaluation of the proposed project. Additionally, compensatory mitigation would be required by the regulatory agencies to offset the proposed project impacts.

Please note that the applicable agencies will make final jurisdictional determinations. RBC recommends early coordination with the resource agencies to determine the final jurisdictional boundaries, applicable permitting processes, compensatory mitigation requirements, and other potential permitting issues specific to the proposed project. Agency representatives may request to access the site to field-verify the results of this jurisdictional delineation report with the project applicant, or a designated representative.

The information provided in this report should remain valid for up to five years from the date of the field effort for the jurisdictional delineation unless site conditions change substantially, or a regulatory agency requires an updated report.

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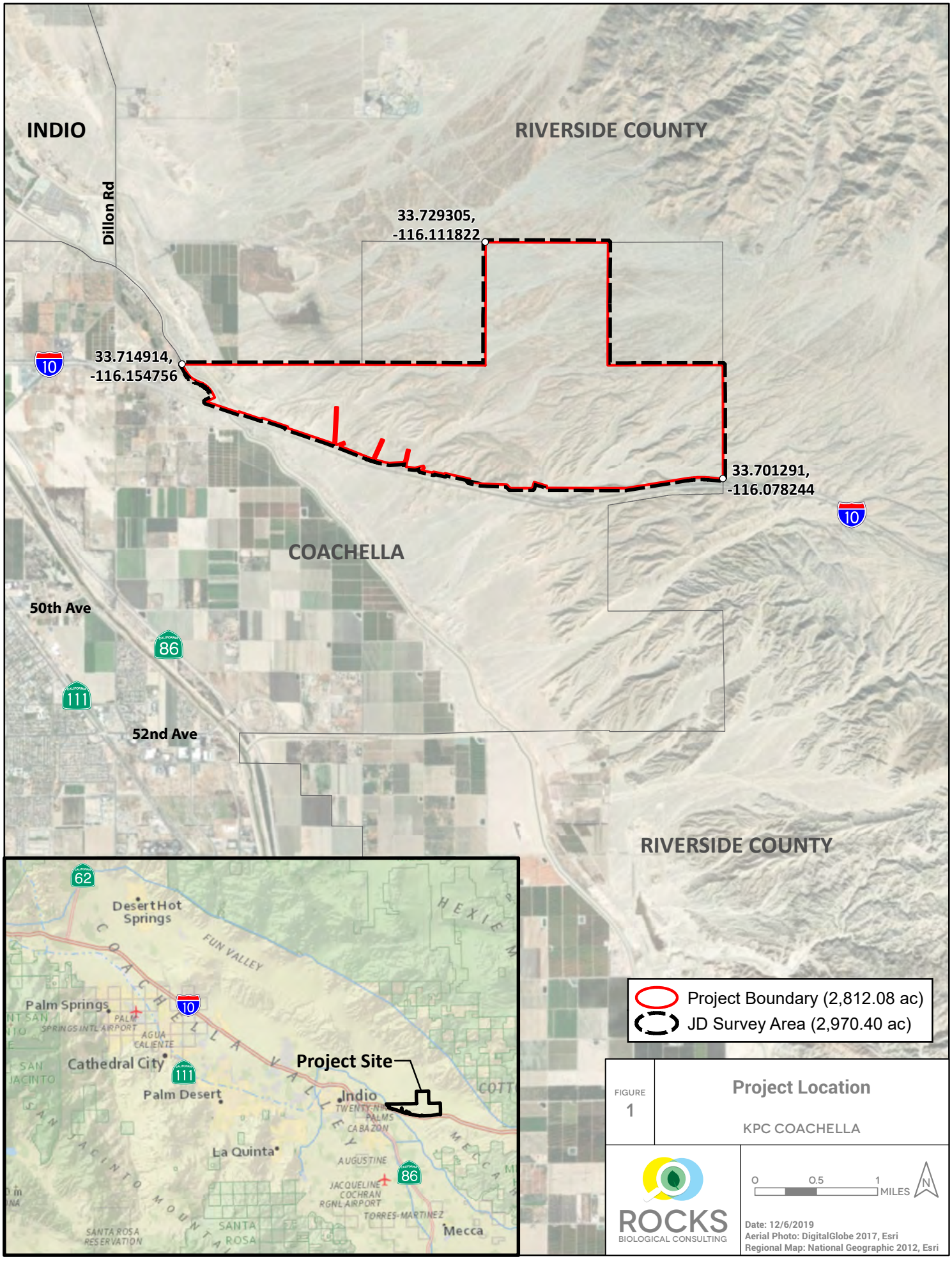
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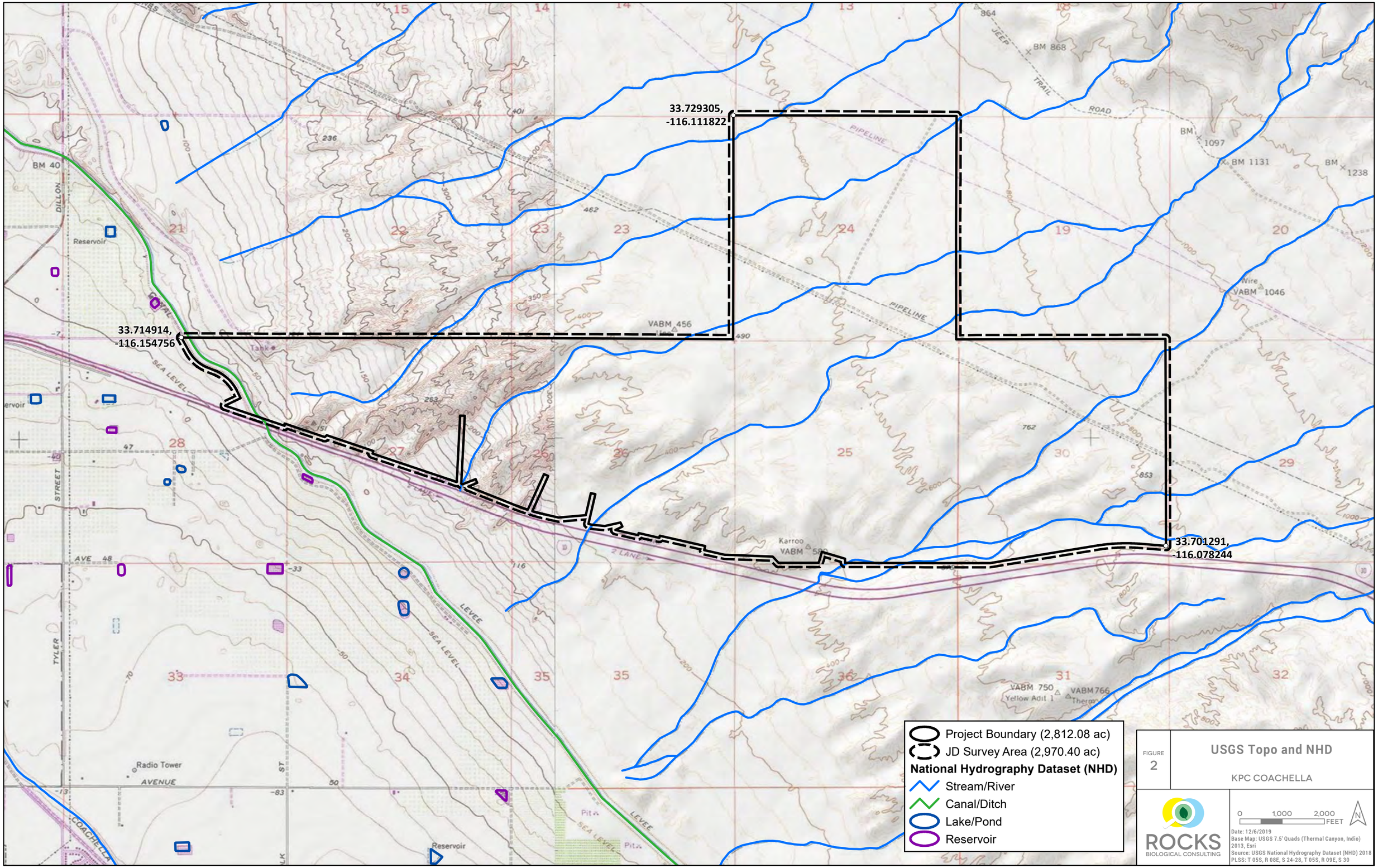
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INDIO
RIVERSIDE COUNTY
Dillon Rd
33.729305,
-116.111822
33.714914,
-116.154756
33.701291,
-116.078244
10
COACHELLA
50th Ave
86
111
52nd Ave
RIVERSIDE COUNTY
62
Desert Hot Springs
Palm Springs
Cathedral City
Palm Desert
Indio
La Quinta
Mecca
Project Site
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
FIGURE
1
Project Location
KPC COACHELLA
ROCKS
BIOLOGICAL CONSULTING
0
0.5
1
MILES
N
Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri


33.729305,
-116.111822
33.714914,
-116.154756
33.701291,
-116.078244
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
National Hydrography Dataset (NHD)
Stream/River
Canal/Ditch
Lake/Pond
Reservoir
FIGURE
2
USGS Topo and NHD
KPC COACHELLA
ROCKS
BIOLOGICAL CONSULTING
0 1,000 2,000 FEET
N
Date: 12/6/2019
Base Map: USGS 7.5' Quads (Thermal Canyon, Indio) 2013, Esri
Source: USGS National Hydrography Dataset (NHD) 2018
PLSS: T 05S, R 08E, S 24-28, T 05S, R 09E, S 30

NHD Watershed 8-digit HUC
NHD Watershed 10-digit HUC
NHD Watershed 12-digit HUC

Santa Ana
HUC 8 - 18070203

Headwaters Whitewater River
HUC 10 - 1810020103

Little Morongo Creek-Morongo Wash
HUC 10 - 1810020104

Southern Mojave
HUC 8 - 18100100

San Gorgonio River
HUC 10 - 1810020101

Upper Whitewater River
HUC 10 - 1810020106

Whitewater River
HUC 8 - 18100201

Berdoo Canyon
HUC 12 - 181002010702

See Detail

Indio Canyon
HUC 12 - 181002010703

Fargo Canyon
HUC 12 - 181002010704

San Jacinto
HUC 8 - 18070202

Middle Whitewater River
HUC 10 - 1810020107

City of Indio-Whitewater River
HUC 12 - 181002010705

Project Site

Palm Canyon Wash
HUC 10 - 1810020102

Bear Creek
HUC 12 - 181002010701

Deep Canyon
HUC 10 - 1810020105

Lower Whitewater River
HUC 10 - 1810020108

Salton Sea
HUC 8 - 18100204

Santa Margarita
HUC 8 - 18070302

San Felipe Creek
HUC 8 - 18100203

Salton Sea

FIGURE 3

Watershed

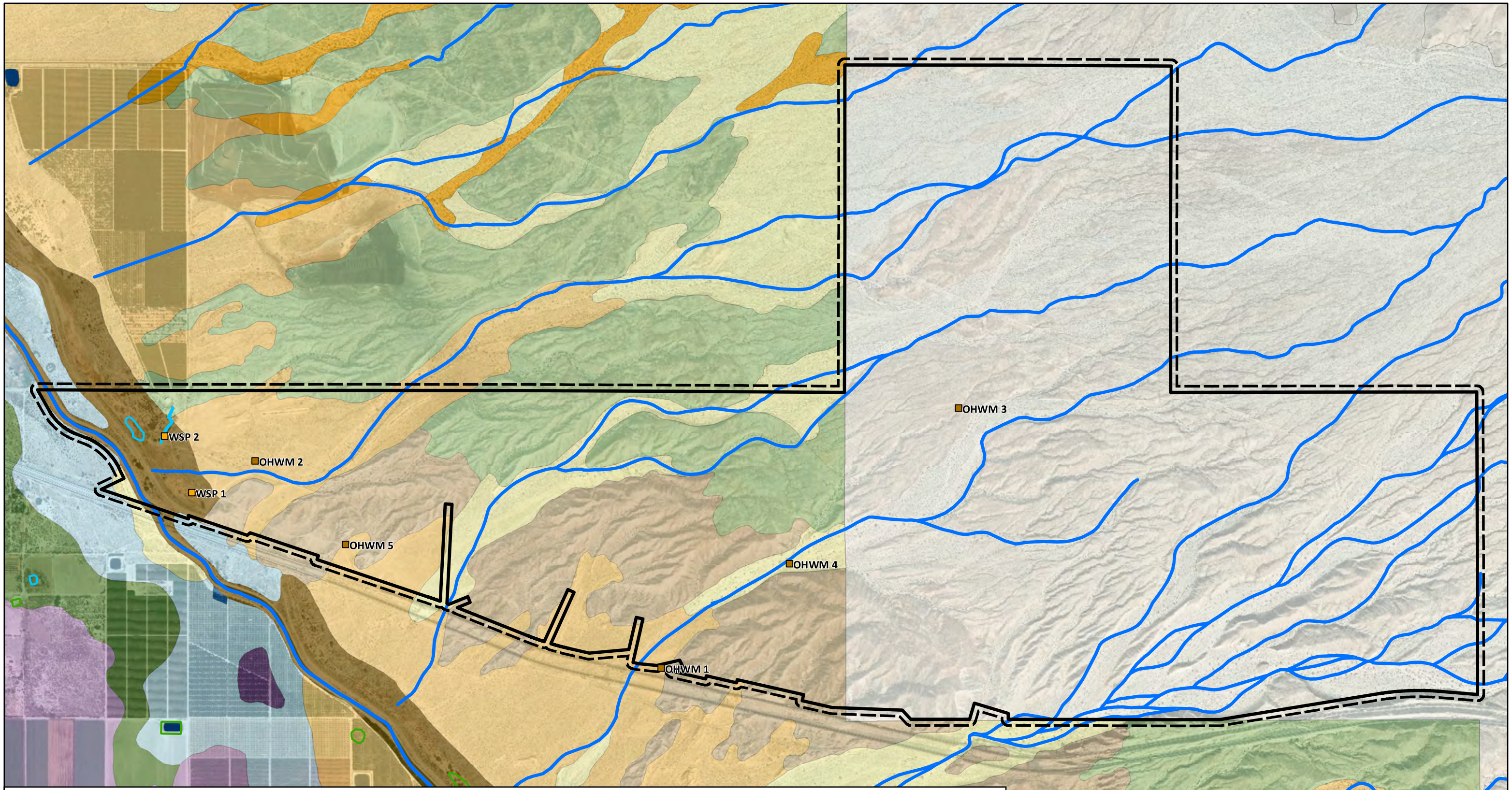
KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 2.5 5 MILES

N

Date: 12/6/2019
Aerial Photo: Digital Globe 2017, Esri
Source: USGS WBD, NHD 2018



Project Boundary
JD Survey Area
Wetland Sample Point
OHWM Data Point

National Wetlands Inventory

Freshwater Forested/Shrub Wetland
Freshwater Pond
Riverine

Soils

Badland
Borrow pits
Carrizo stony sand, 2 to 9 percent slopes
Carsitas gravelly sand, 0 to 9 percent slopes
Carsitas cobbly sand, 2 to 9 percent slopes
Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes
Coachella fine sand, wet, 0 to 2 percent slopes
Gilman loamy fine sand, 0 to 5 percent slopes
Gilman fine sandy loam, wet, 0 to 2 percent slopes
Myoma fine sand, 0 to 5 percent slopes
Water
Unmapped

FIGURE 4

NRCS Soils Survey Data and National Wetlands Inventory

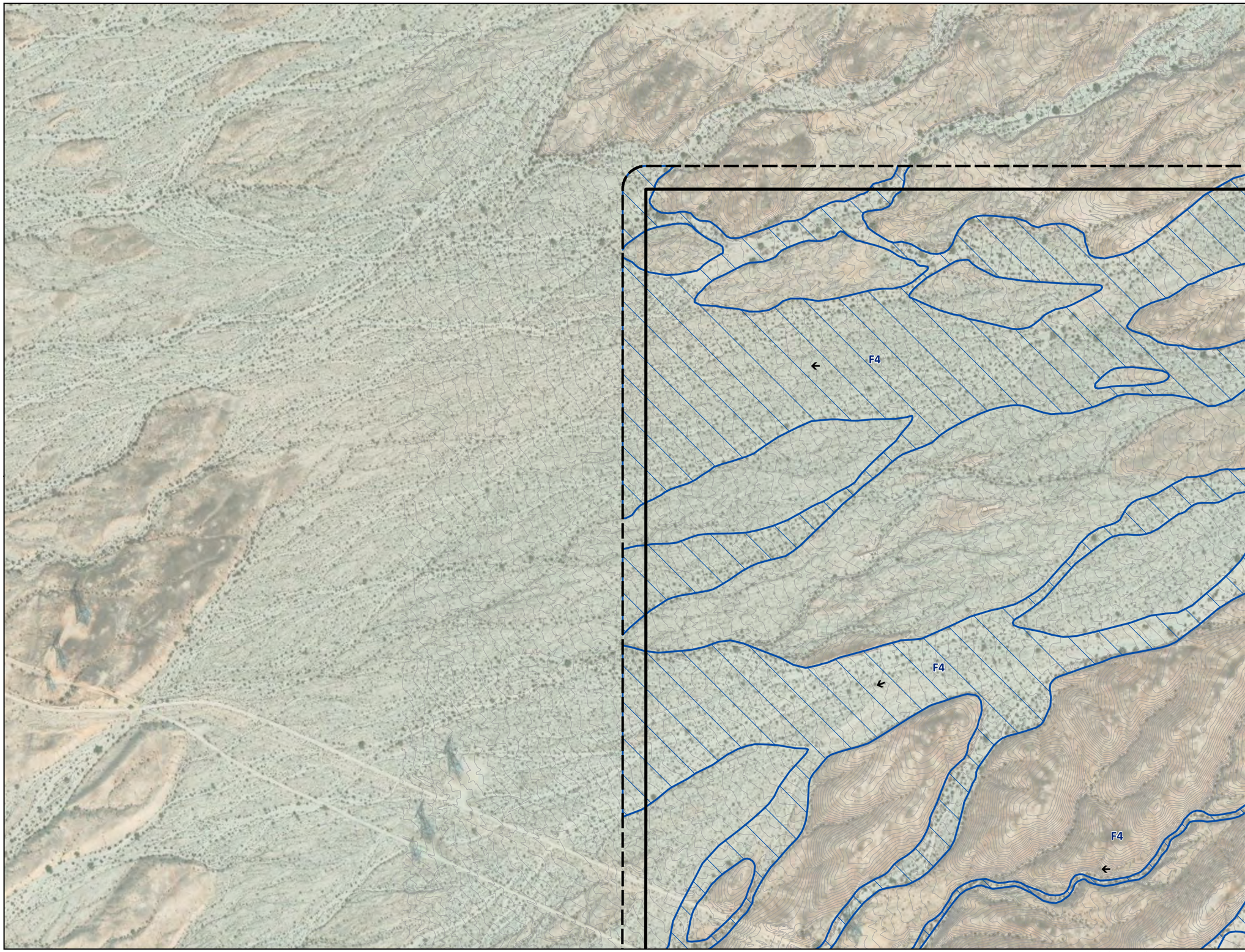
KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: USFWS National Wetlands Inventory (NWI) 2018, USDA NRCS 2013



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

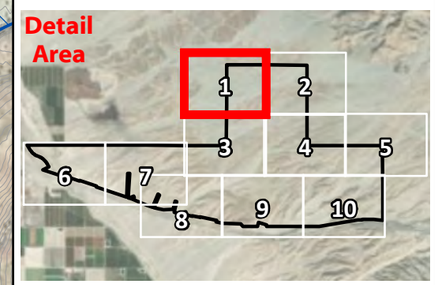


FIGURE 5A

Jurisdictional Delineation/Impacts Sheet 1 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

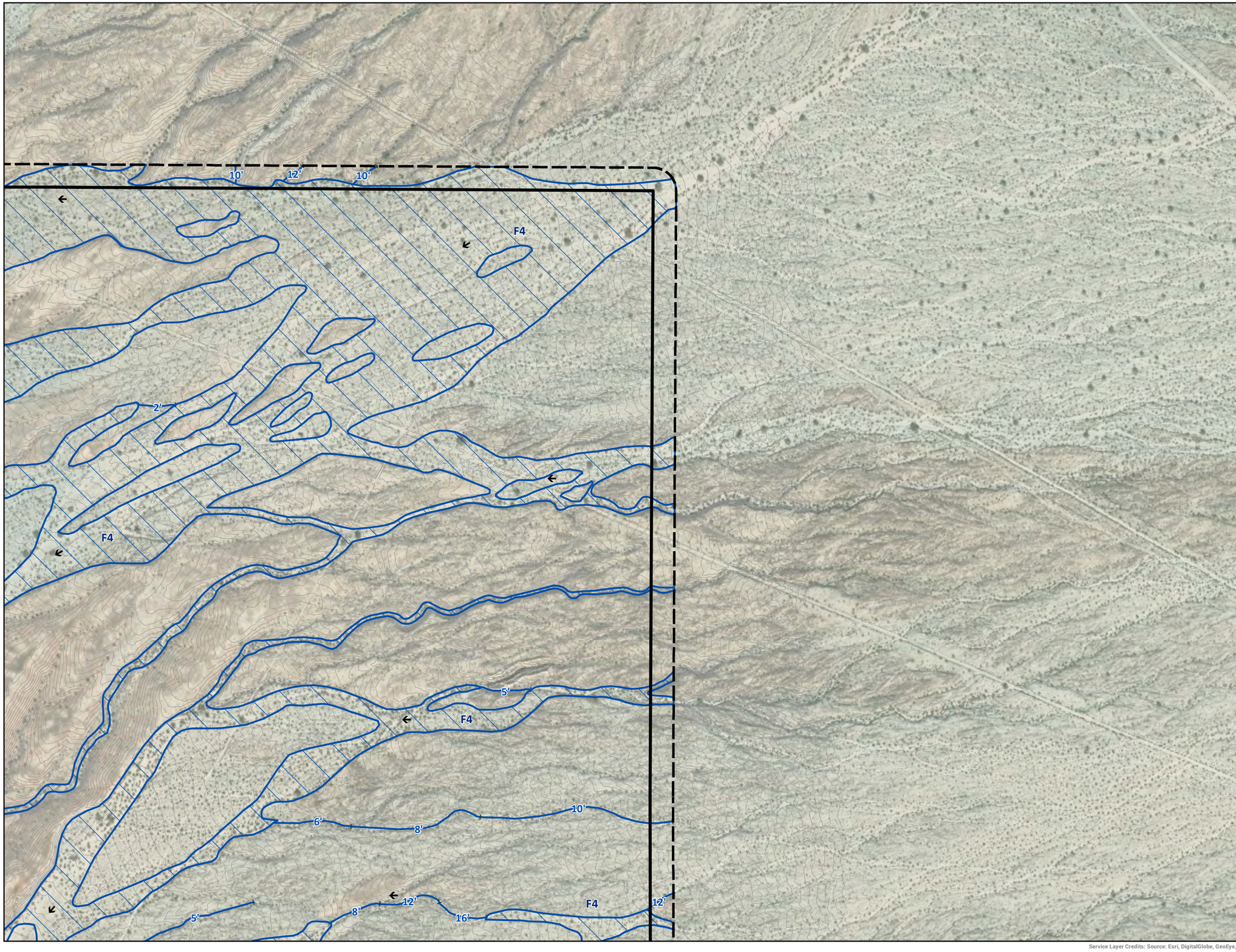
N

Date: 12/6/2019

Aerial Photo: DigitalGlobe 2018, Esri

Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

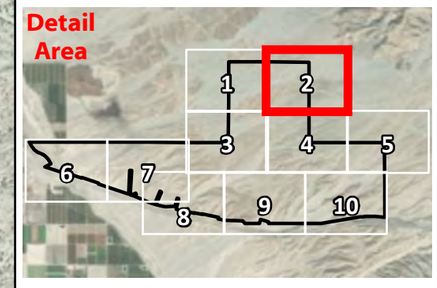


FIGURE 5B

Jurisdictional Delineation/Impacts Sheet 2 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
OHWM Data Point
Flow Direction

RWQCB and CDFW
Jurisdictional Features*
Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

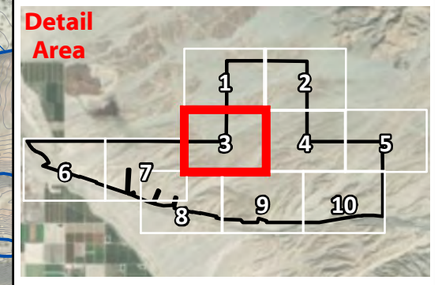


FIGURE 5C

Jurisdictional Delineation/Impacts
Sheet 3 of 10

KPC COACHELLA

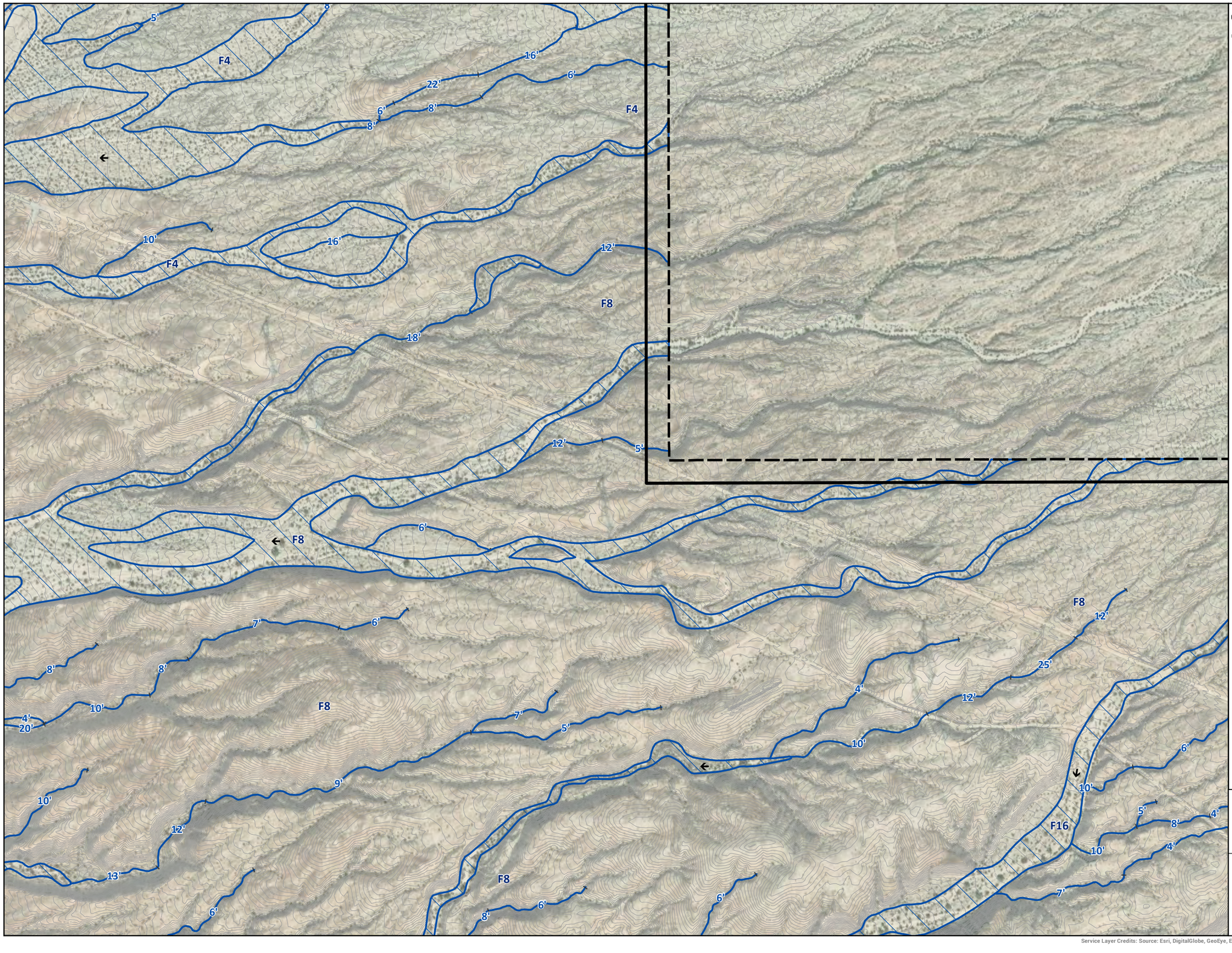
ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

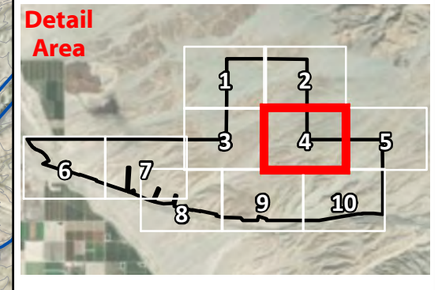


FIGURE 5D

Jurisdictional Delineation/Impacts Sheet 4 of 10

KPC COACHELLA

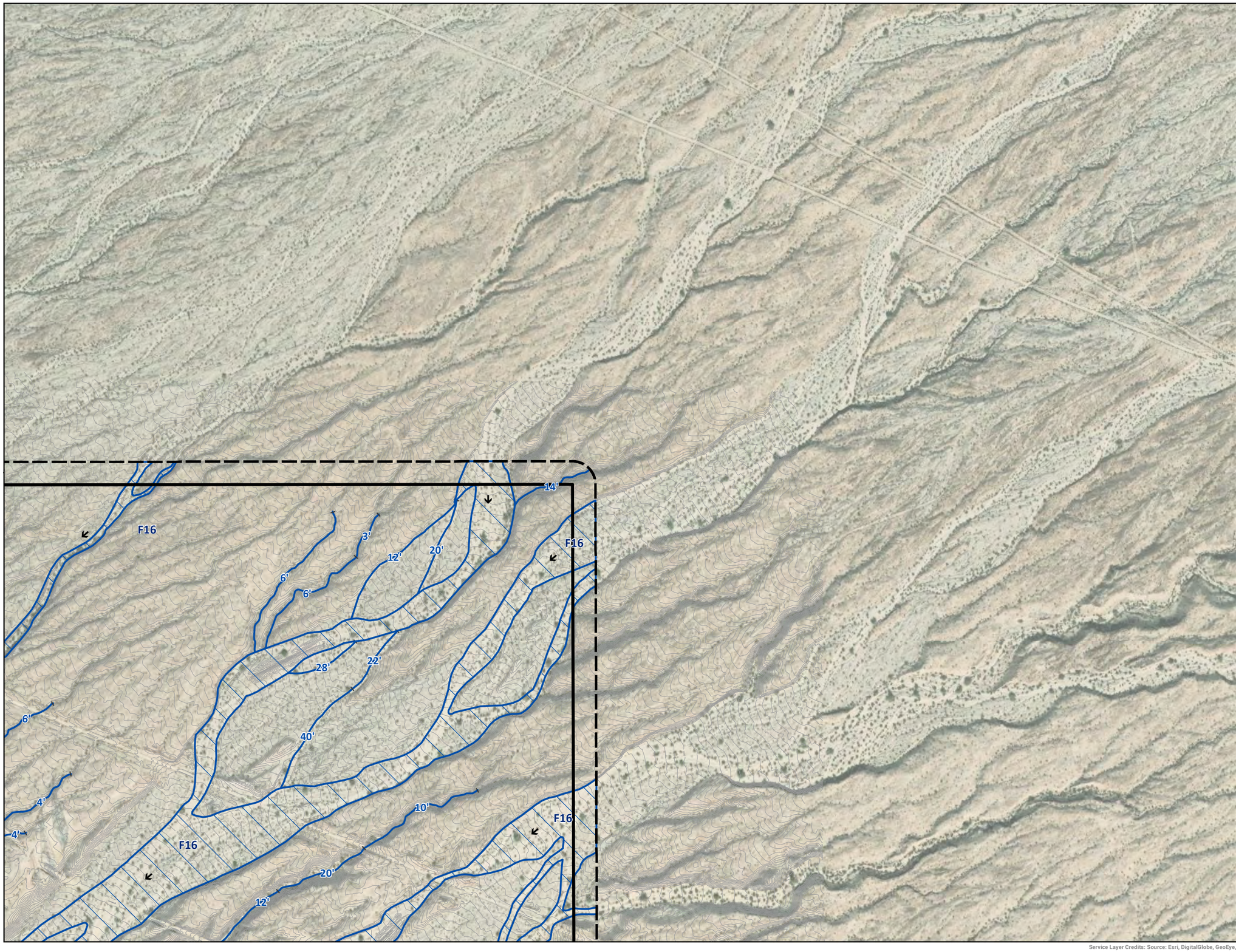
ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

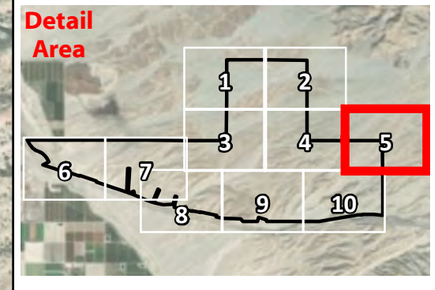


FIGURE 5E

Jurisdictional Delineation/Impacts
Sheet 5 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

F1 Tamarisk Scrub

F1 Tamarisk Scrub/ Ephemeral Drainage

WSP 2

40'

F1 Disturbed Ephemeral Drainage Area

WSP 1

F2

F1

OHWM 2

F1

OHWM 5

15'

F3

15'

10

Avenue 47

Polk St

Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Wetland Sample Point
OHWM Data Point
Culvert
Storm Drain Outfall
Flow Direction
Berm - Earthen
Levee - Earthen

Corps/RWQCB/CDFW Jurisdictional Features

Coachella Canal (2.72 ac)

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)

CDFW Jurisdictional Features*

Tamarisk Scrub (0.20 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

Detail Area

1 2 3 4 5 6 7 8 9 10

FIGURE 5F

Jurisdictional Delineation/Impacts Sheet 6 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Culvert
Highway Undercrossing
Flow Direction
Berm - Earthen

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

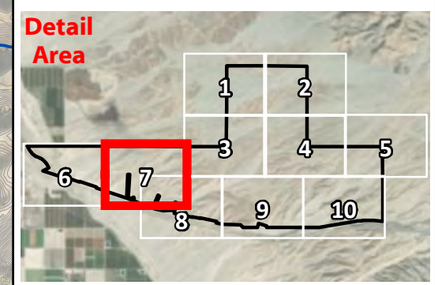


FIGURE 5G

Jurisdictional Delineation/Impacts
Sheet 7 of 10

KPC COACHELLA

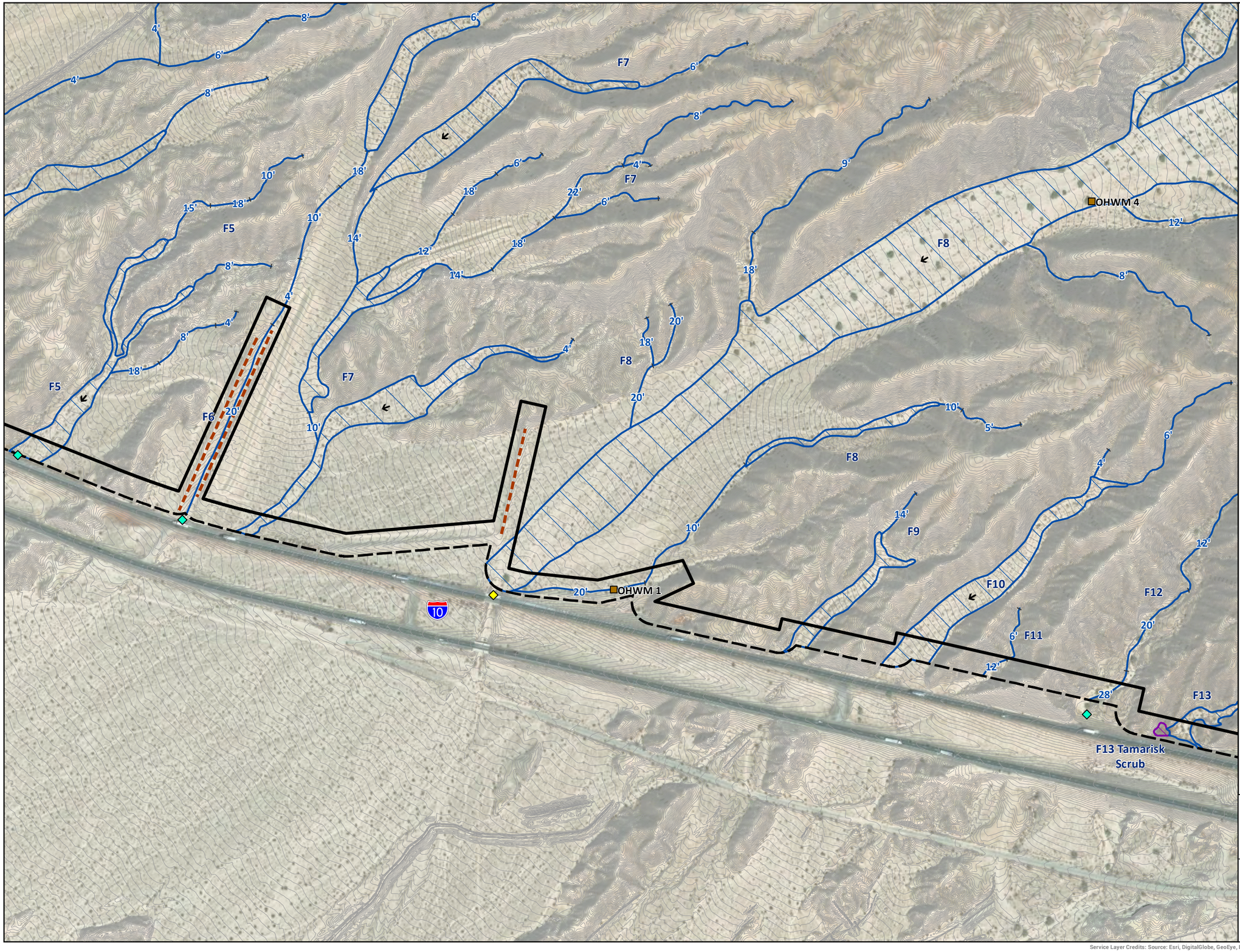
ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
OHWM Data Point
Culvert
Highway Undercrossing
Flow Direction
Berm - Earthen

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

CDFW Jurisdictional Features*

Tamarisk Scrub (0.20 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

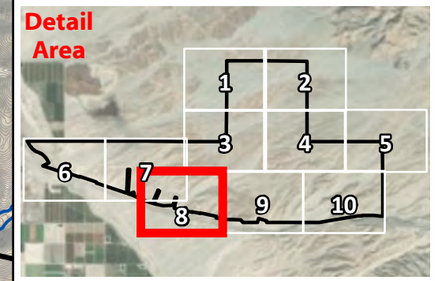


FIGURE 5H

Jurisdictional Delineation/Impacts
Sheet 8 of 10

KPC COACHELLA

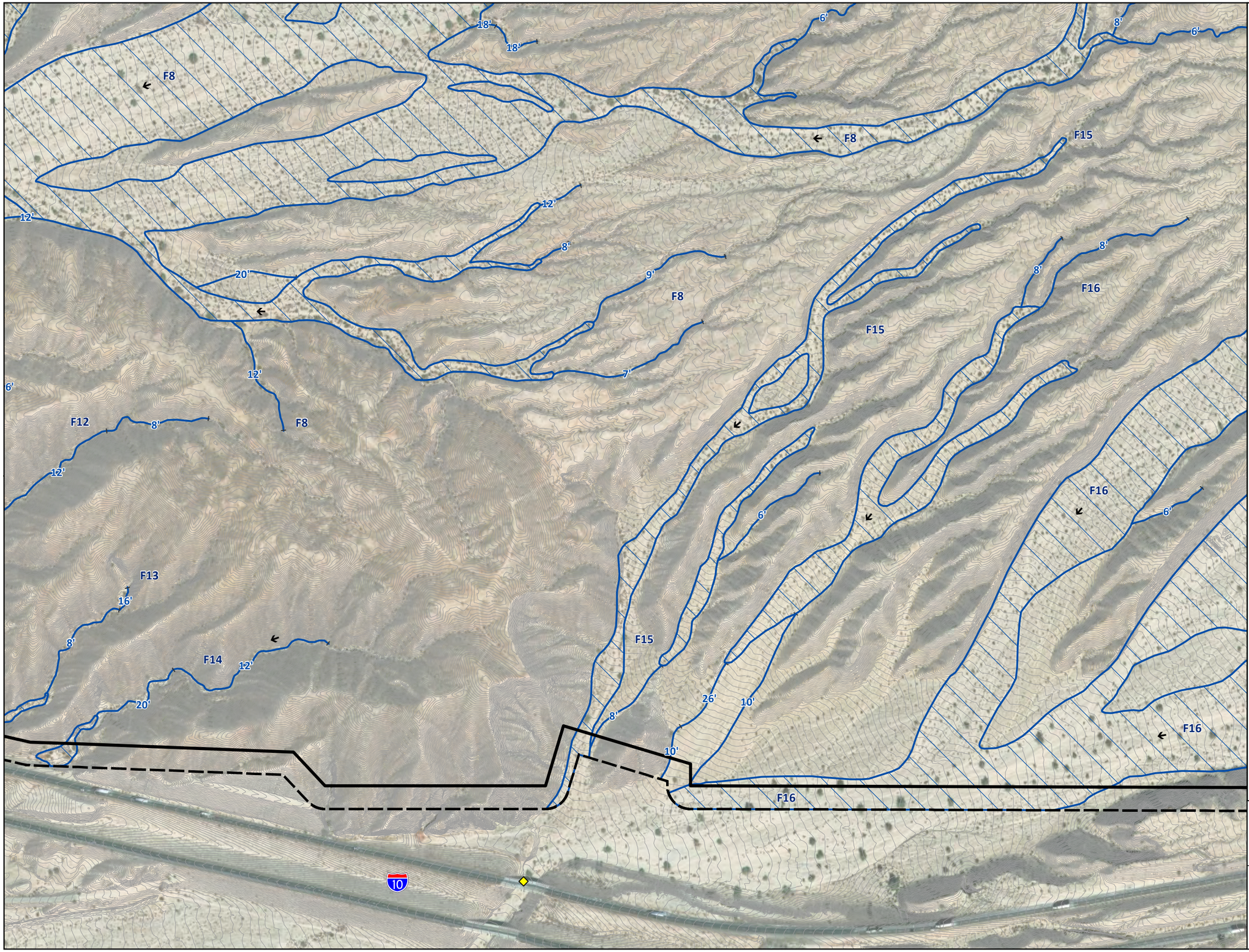
ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Highway Undercrossing

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

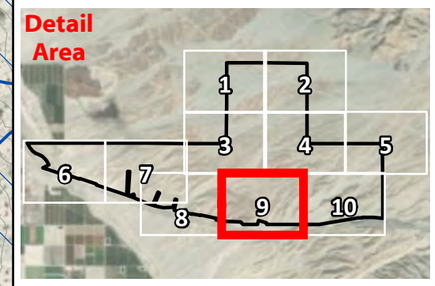


FIGURE 5I

Jurisdictional Delineation/Impacts Sheet 9 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

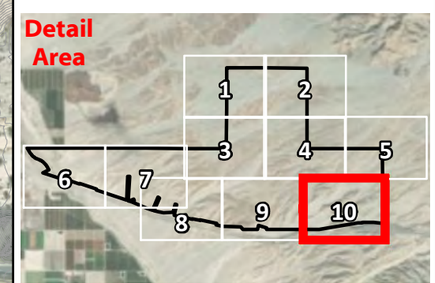


FIGURE 5J

Jurisdictional Delineation/Impacts Sheet 10 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

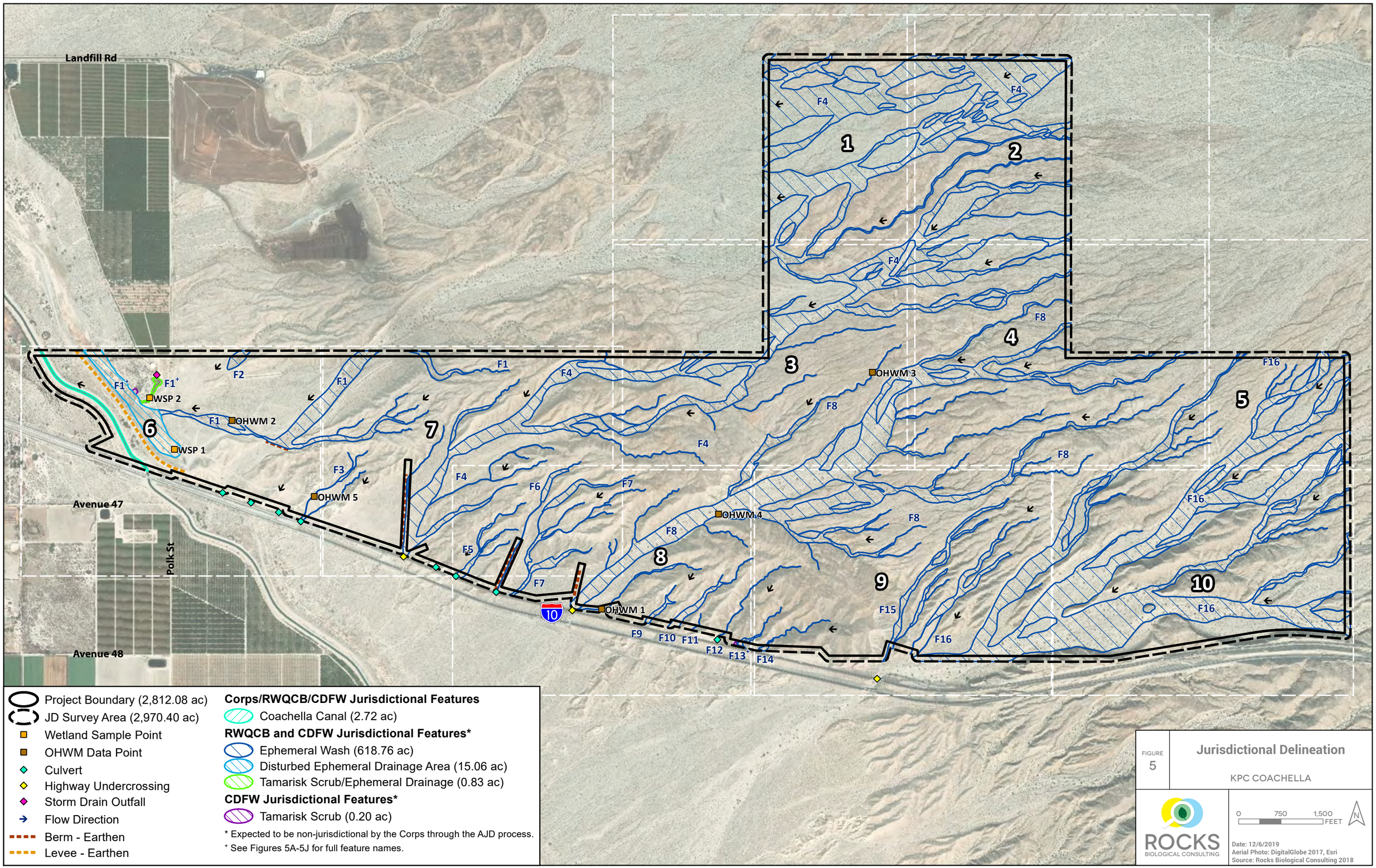
N

Date: 12/6/2019

Aerial Photo: DigitalGlobe 2018, Esri

Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Landfill Rd
Avenue 47
Avenue 48
Polk St
1
2
3
4
5
6
7
8
9
10
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
F13
F14
F15
F16
WSP 1
WSP 2
OHWM 1
OHWM 2
OHWM 3
OHWM 4
OHWM 5
10
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Wetland Sample Point
OHWM Data Point
Culvert
Highway Undercrossing
Storm Drain Outfall
Flow Direction
Berm - Earthen
Levee - Earthen
Corps/RWQCB/CDFW Jurisdictional Features
Coachella Canal (2.72 ac)
RWQCB and CDFW Jurisdictional Features*
Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)
CDFW Jurisdictional Features*
Tamarisk Scrub (0.20 ac)
* Expected to be non-jurisdictional by the Corps through the AJD process.
+ See Figures 5A-5J for full feature names.
FIGURE 5
Jurisdictional Delineation
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 750 1,500 FEET
N
Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: Rocks Biological Consulting 2018
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Landfill Rd

Avenue 47

Polk St

Avenue 48

10

Project Boundary

JD Survey Area

Vegetation

- Desert Wash Scrub/Sonoran Creosote Bush Scrub
- Sonoran Creosote Bush Scrub
- Mesquite Hummocks
- Tamarisk Scrub
- Agricultural Land
- Disturbed Habitat

FIGURE 6

Biological Resources

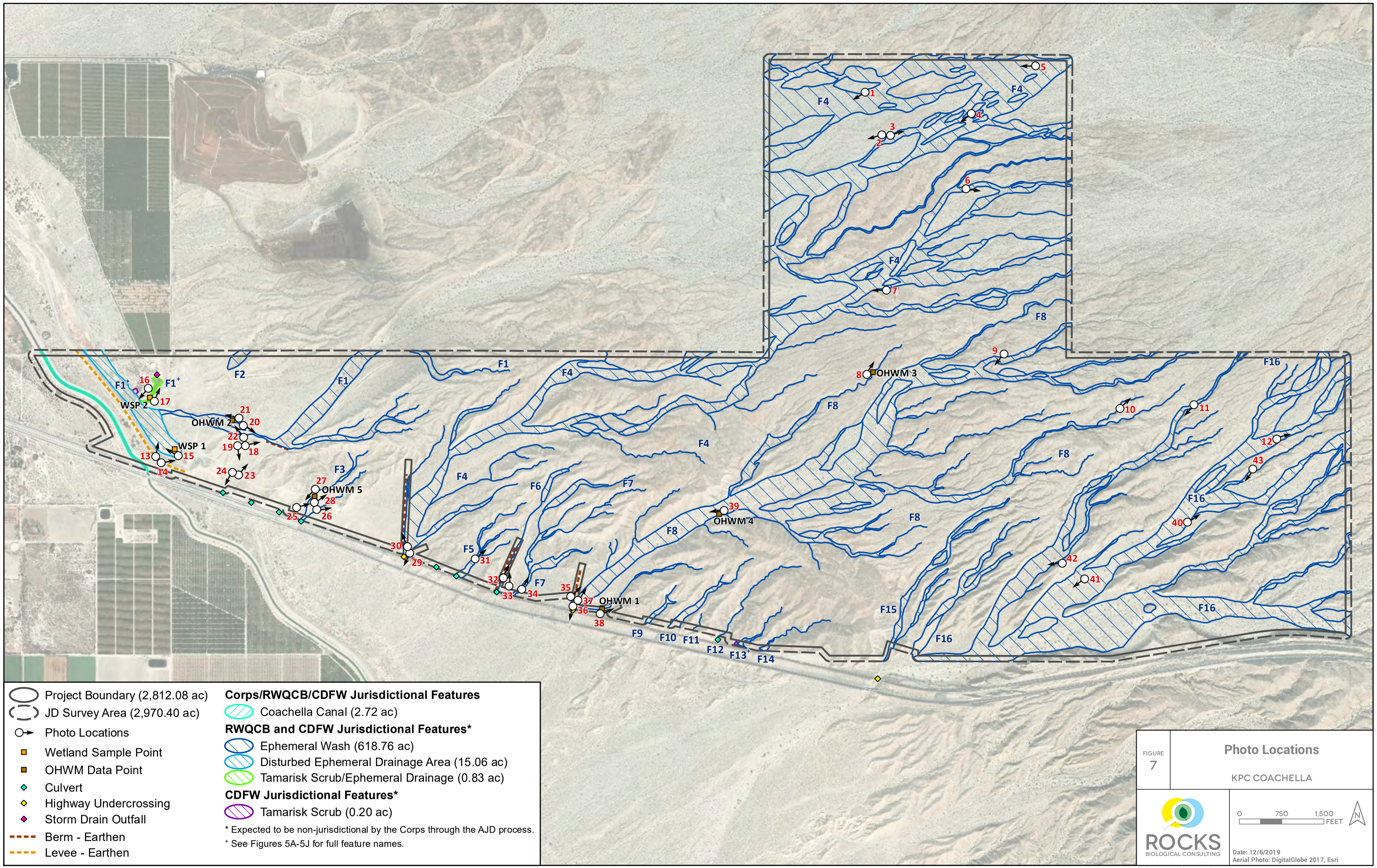
KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: Rocks Biological Consulting 2019



Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Photo Locations
Wetland Sample Point
OHWM Data Point
Culvert
Highway Undercrossing
Storm Drain Outfall
Berm - Earthen
Levee - Earthen

Corps/RWQCB/CDFW Jurisdictional Features
Coachella Canal (2.72 ac)

RWQCB and CDFW Jurisdictional Features*
Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)

CDFW Jurisdictional Features*
Tamarisk Scrub (0.20 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.
* See Figures 5A-5J for full feature names.

FIGURE 7

Photo Locations

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

APPENDIX A

CHECKLIST: MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS, LOS ANGELES DISTRICT REGULATORY DIVISION, CORPS

CHECKLIST: MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS, LOS ANGELES DISTRICT REGULATORY DIVISION, USACE, MARCH 16, 2017

REPORT SECTION/ PAGE NUMBER	MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS	ADDITIONAL NOTES
Section 1; Appendix J	JD REQUEST AND FORMS: A cover letter indicating whether you are requesting a jurisdictional determination (JD). If you are requesting a JD, you must complete, sign, and return the Request for Corps Jurisdictional Determination (JD) sheet. For preliminary jurisdictional determinations the Preliminary Jurisdictional Determination Form must be signed and submitted.	
Section 1.4	CONTACT INFORMATION: Contact information for the applicant(s), property owner(s), and agent(s).	
N/A	SITE ACCESS: If the property owner or their representatives will not accompany the Corps to the site, a signed statement from the property owner(s) allowing Corps personnel to enter the property and to collect samples during normal business hours. If the property lacks direct access by public roads (in other words, access requires passage through private property not owned by the applicant), the owner or proponent must obtain permission from the adjacent property owner(s) to provide access for Corps personnel.	Property owner and/or representatives will accompany the Corps for a site visit upon request.
Section 1.1	LOCATION: Directions to the survey area, an address (if available) and one or more set of geographic coordinates expressed in decimal degrees.	
Section 2, Paragraphs 3 and 7	DELINEATION MANUAL CONFIRMATION: A statement confirming the delineation has been conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and applicable regional supplement(s). The regional supplement(s) used must be identified. For OHWM delineations, a statement must be included confirming the use of the OHWM field guide or that it is not applicable.	
Section 3.6	AQUATIC RESOURCE(S) DESCRIPTION: A narrative describing all aquatic resources on-site and an explanation of the mapped boundaries and any complex transition zones. If the site contains resources that only meet one or two of the three wetland criteria or do not exhibit a clear OHWM, describe the rationale for their inclusion or exclusion from the delineation. Also explain if any erosional features, upland swales, ditches and other potential aquatic features were considered but not included in the delineation.	
Figure 5; Appendix G, Table G-1; Appendix I, Tables I-1, I-2, I-3, I-4, I-5	AQUATIC RESOURCE MAPPING AND ACREAGE: Map the outside survey boundary, total extent of aquatic and proposed non-aquatic features, type of feature(s) (waters of the United States or wetland), and include the total acreage for each polygon.	
Section 2, Paragraph 2; Table 1	FIELD WORK DATES: Date(s) field work was completed.	
Appendix G, Table G-1; Appendix I, Tables I-1, I-2, I-3, I-4, I-5	AQUATIC RESOURCE TABLE: A table listing all aquatic resources. The table must include the name of each aquatic resource (actual or arbitrary), its Cowardin type, acreage, summary of OHWM/wetland presence, dominant vegetation for each, and location (latitude/longitude in decimal degrees). For linear features, the table must show both acreage and linear feet as well as channel measurements (active channel width).	

ROCKS BIOLOGICAL CONSULTING

Section 1.1 and 2; Table 1	FIELD CONDITIONS: A description of existing field conditions, including current land use, normal conditions, flood/drought conditions, irrigation practices, past or recent manipulation to the site, and characteristics considered atypical (for criteria see OHWM and wetland supplement guides). Include WETS tables or pre-site visit precipitation data as appropriate: https://www.wcc.nrcs.usda.gov/climate/wets_doc.html.	
Section 3.3	HYDROLOGY: A discussion of the hydrology at the site, including all known surface or subsurface sources, drainage gradients, downstream connections to the nearest traditional navigable waterway or interstate water, and any influence from manmade water sources such as irrigation.	
N/A	REMOTE SENSING: If remote sensing was used in the delineation, provide an explanation of how it was used and include the name, date and source of the tools and data used and copies of the maps/photographs.	
Section 3.4; Figure 4; Appendix H	SOILS: Soil descriptions, soil map(s), soil photos, and a discussion of hydric soils (for wetland delineations only).	
Figure 2	USGS QUADRANGLE: A site location map on a 7.5-minute USGS quadrangle. The map must provide the name of the USGS quadrangle, Section, Township, Range, and the latitude and longitude in decimal degree format.	
Appendix L	BULK UPLOAD FORM: For sites with 3 or more separate aquatic features a completed copy of the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet must be submitted.	
Figure 5	FIGURES: Map(s) of all delineated aquatic resources in accordance with the Final Map and Drawing Standards for the South Pacific Division Regulatory Program, available at: http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/	
Figure 7 and Appendix H	SITE PHOTOGRAPHS: Ground photographs showing representative aquatic resource sites (or lack of), as well as an accompanying map of photo-points and table of photographic information (see Final Map and Drawing Standards for the South Pacific Division Regulatory Program item no. 8 a-c).	
Appendix E	DATA FORMS: Completed data forms including all essential information to make a jurisdictional determination [e.g. 2006 Wetland Determination Data Form -- Arid West Supplement; 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet].	
Section 2	METHODS: A description of the methods used to survey the aquatic resource boundaries. If GPS data is used, the level of accuracy must be included. Ideally, the GPS equipment should have the capability of sub-meter (<=1 meter) level horizontal accuracy.	
Appendix K	GIS DATA: Digital data for the site, aquatic resource boundaries, and data point locations must be provided in a geographic information system (GIS) format, preferably either ESRI shapefiles or Geodatabase format, but GoogleEarth KMZ or KML files may be acceptable non-complex projects. Each GIS data file must be accompanied by a metadata file containing the appropriate geographic coordinate system, projection, datum, and labeling description. If GIS data is unavailable or otherwise cannot be produced and the Corps determines a site visit is necessary, the aquatic resource boundaries should be physically marked with numbered flags or stakes to facilitate verification by the Corps.	

APPENDIX B

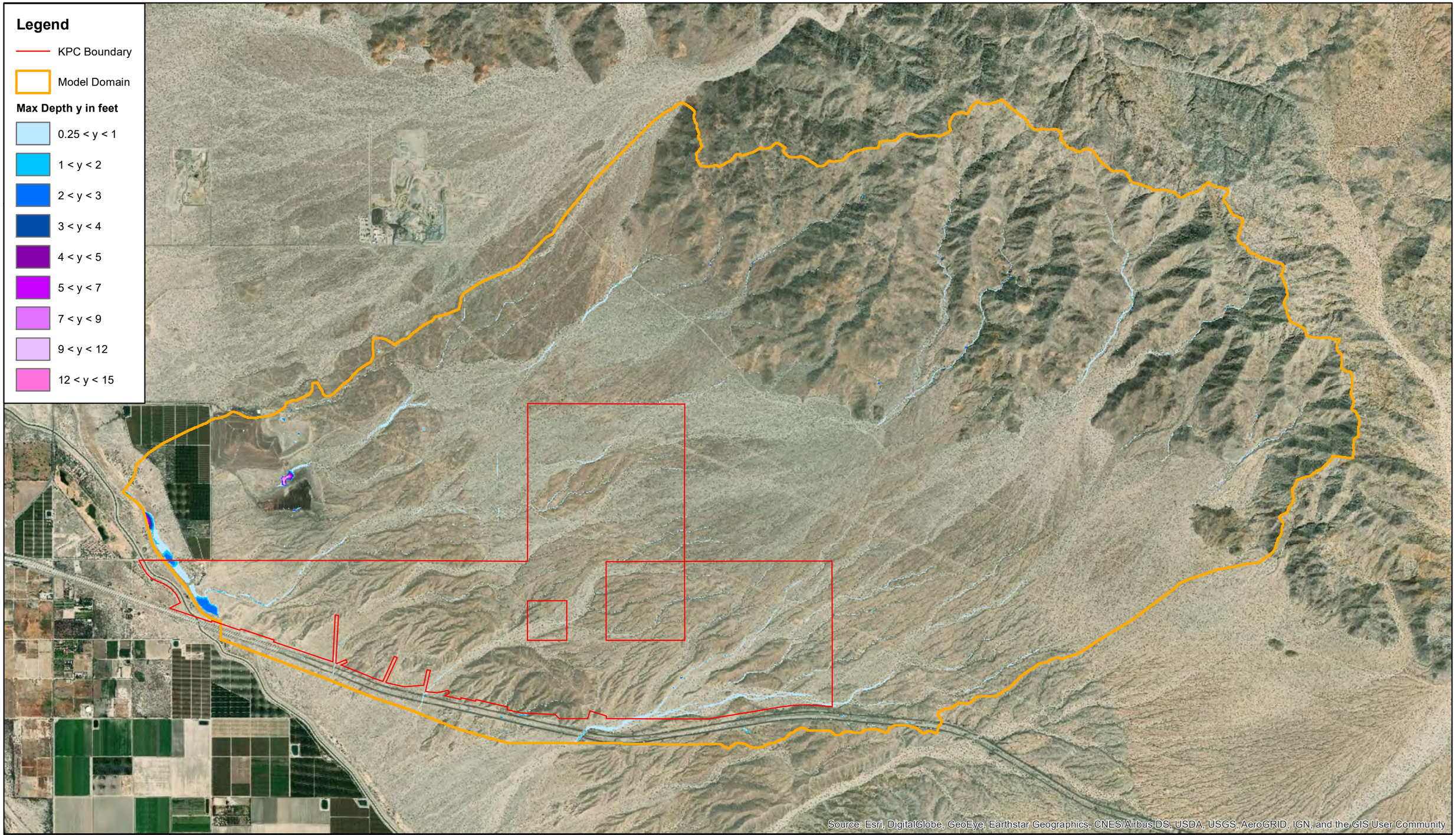
HYDROLOGY DATA

Legend

- KPC Boundary
- Model Domain

Max Depth y in feet

- 0.25 < y < 1
- 1 < y < 2
- 2 < y < 3
- 3 < y < 4
- 4 < y < 5
- 5 < y < 7
- 7 < y < 9
- 9 < y < 12
- 12 < y < 15



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Q3 Consulting

N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Flood Depth
Existing Condition - 2 Year

Exhibit 1

Legend

- KPC Boundary
- Model Domain

Max Velocity v in fps

- 1 < v < 2
- 2 < v < 3
- 3 < v < 4
- 4 < v < 5
- 5 < v < 6

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Q3 Consulting

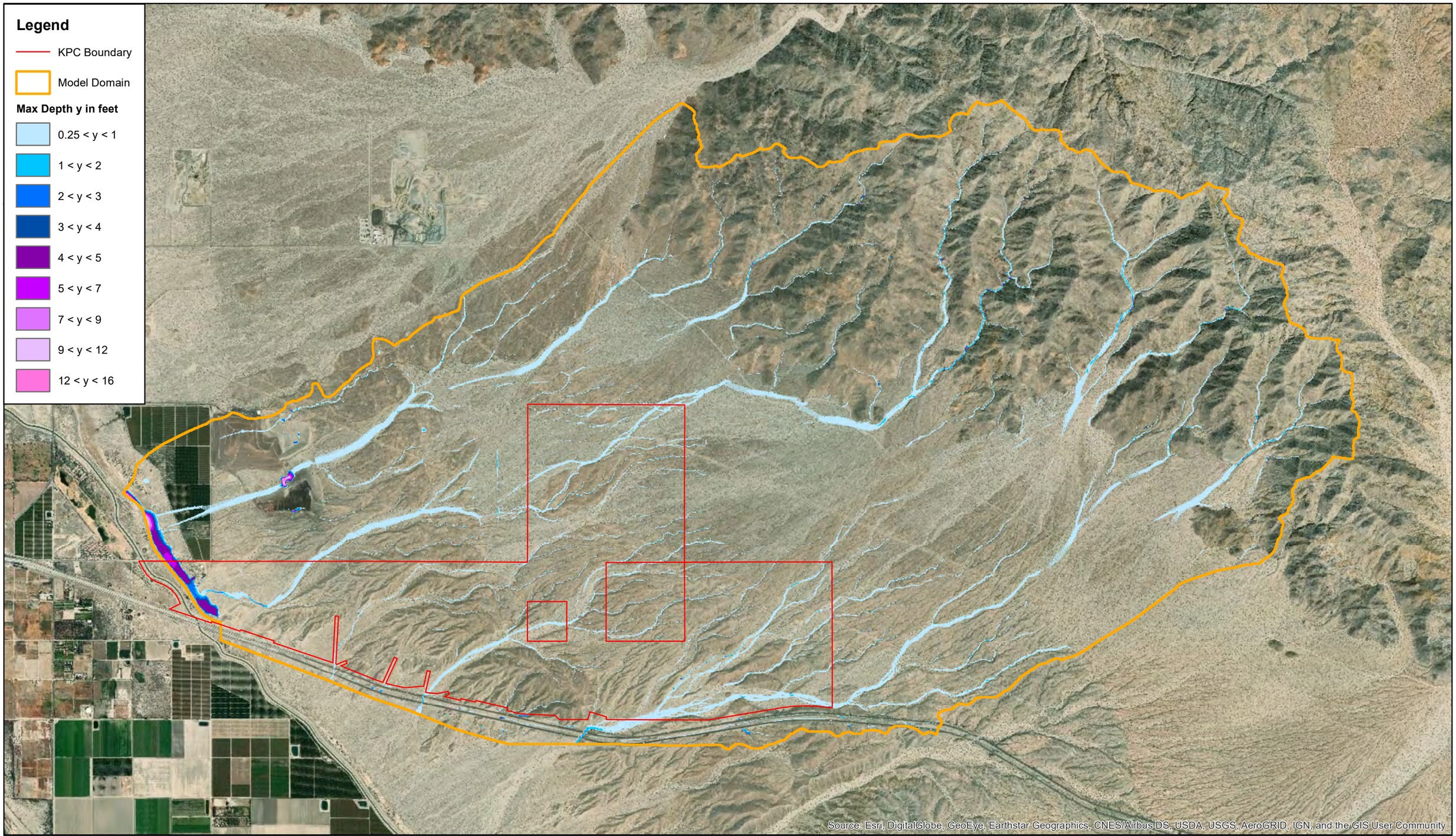
N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Velocity
Existing Condition - 2 Year

Exhibit 2



Q3 Consulting

N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Flood Depth
Existing Condition - 5 Year

Exhibit 3

Legend

KPC Boundary

Model Domain

Max Velocity v in fps

- 1 < v < 2
- 2 < v < 3
- 3 < v < 4
- 4 < v < 5
- 5 < v < 6
- 6 < v < 7
- 7 < v < 10

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Q3 Consulting

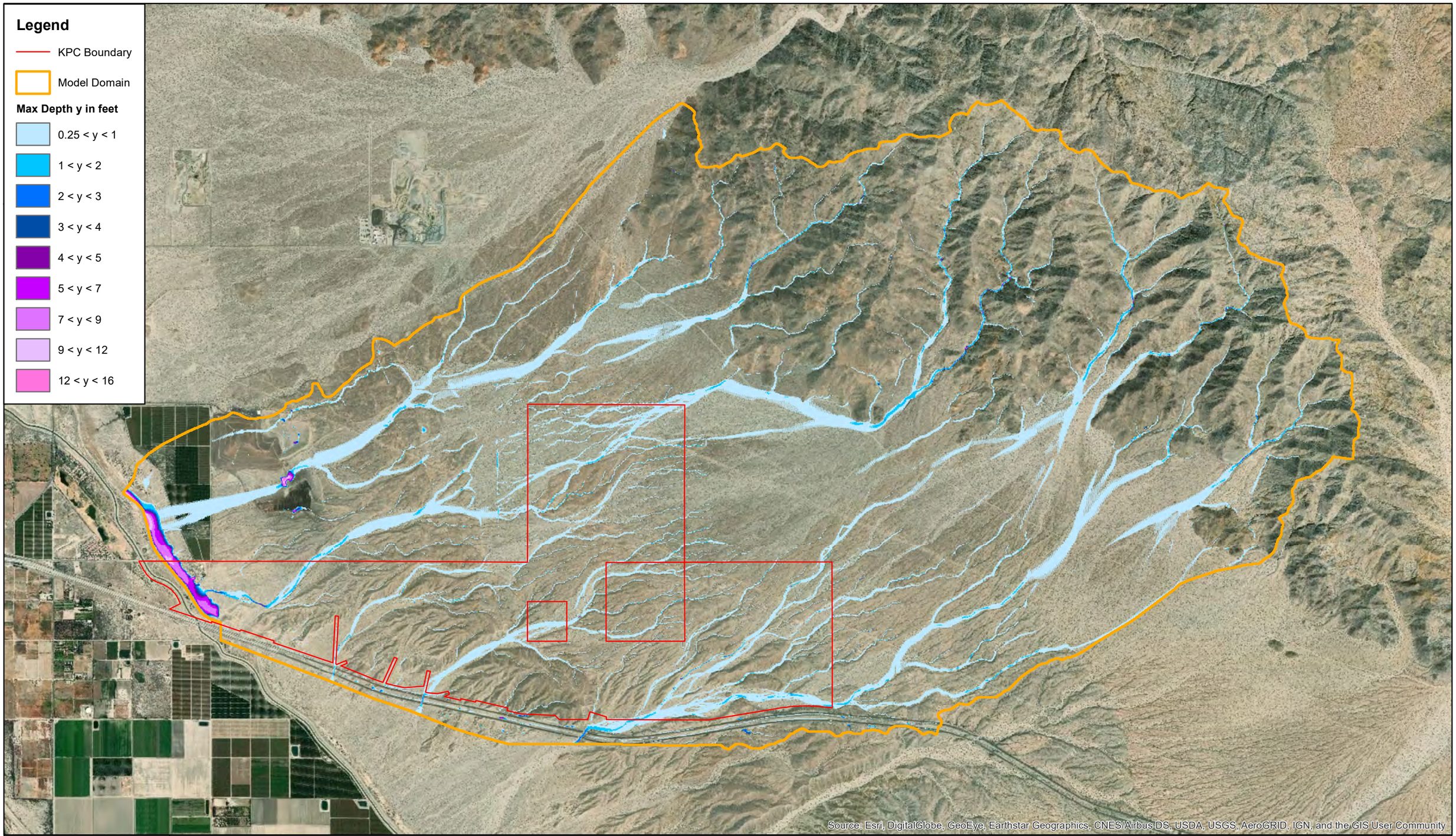
N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Velocity
Existing Condition - 5 Year

Exhibit 4



Q3 Consulting

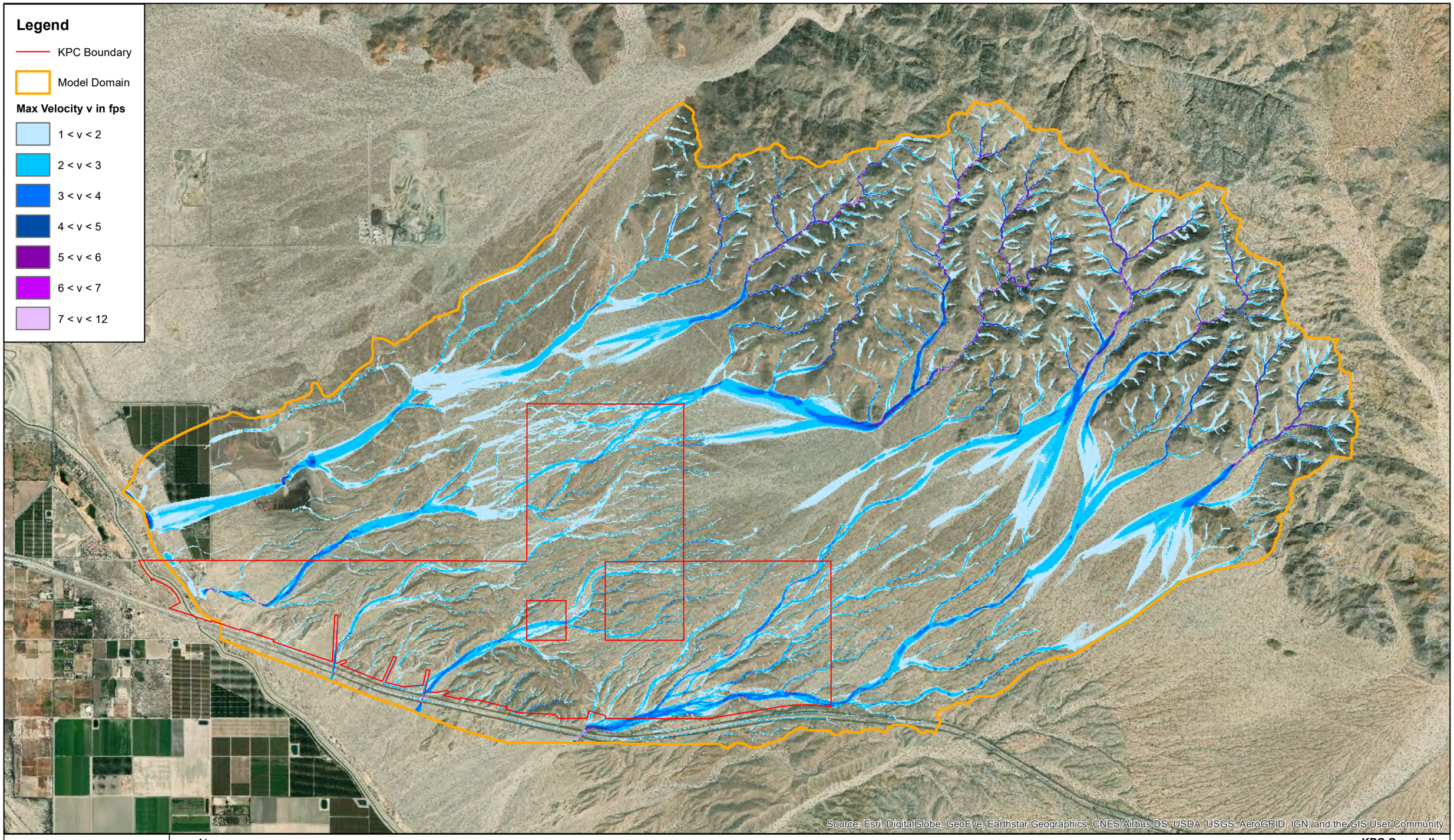
N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Flood Depth
Existing Condition - 10 Year

Exhibit 5



Consulting

N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Velocity
Existing Condition - 10 Year

Exhibit 6

Figure 4-1. Baseline watershed conditions 1-percent annual chance maximum flood depths

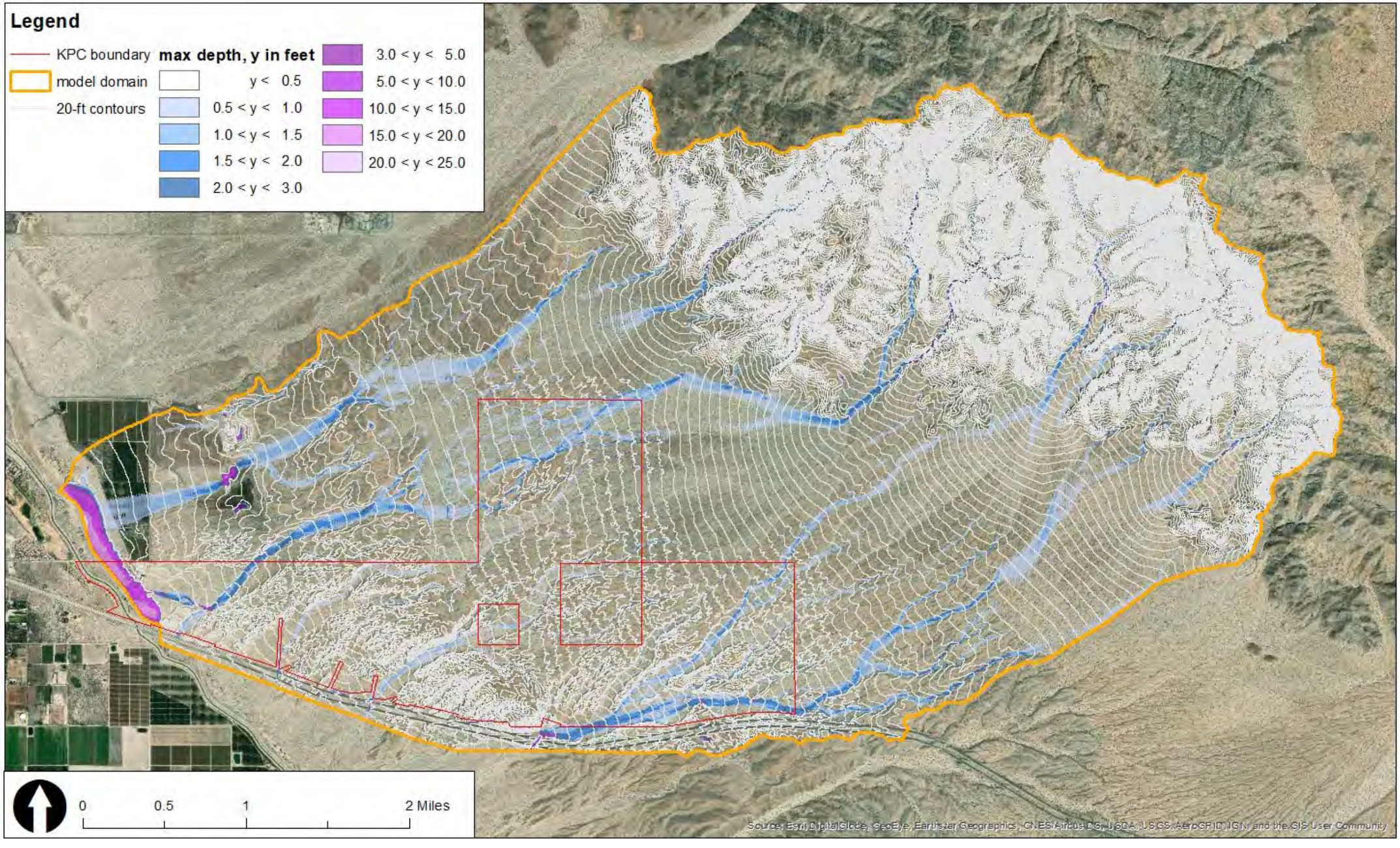


Figure 4-2. Baseline watershed conditions 1-percent annual chance maximum flood velocities

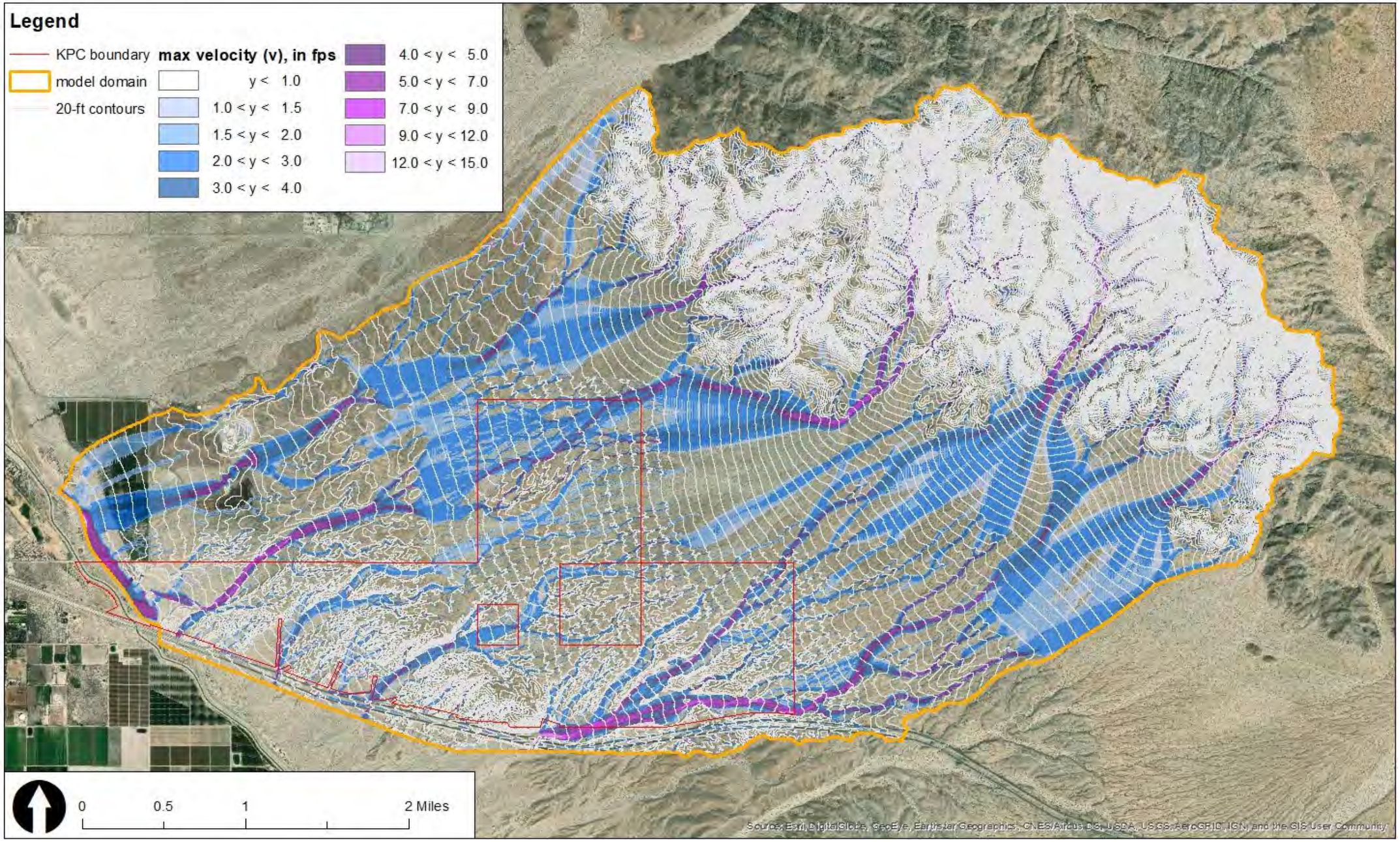
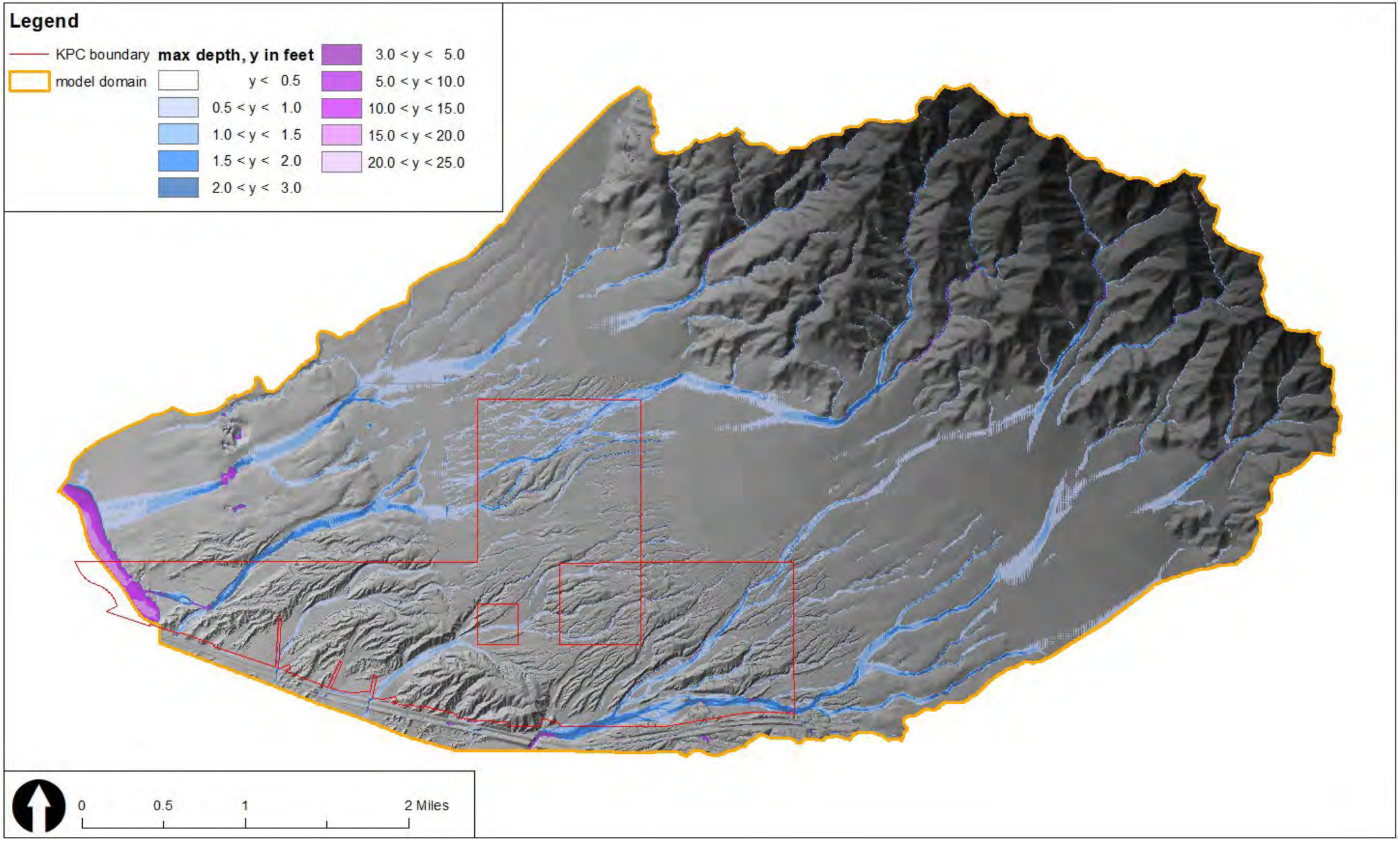


Figure 4-3. Baseline watershed conditions 1-percent annual chance maximum flood depths on relief



APPENDIX C

PLANT SPECIES OBSERVED AND WETLAND INDICATOR STATUS WITHIN PROJECT SURVEY AREA

Appendix C – Plant Species Observed and Wetland Indicator Status within Project Survey Area

KPC Coachella Project Jurisdictional Delineation

Family	Scientific Name	Common Name	National Wetland Plant List Indicator Status
Amaranthaceae	*Tidestromia suffruticosa* var. *oblongifolia*	Salton Sea honeysweet	*NL*
Apocynaceae	*Asclepias subulata*	rush milkweed	*NL*
Apocynaceae	*Funastrum hirtellum*	trailing townula	*NL*
Arecaceae	*Phoenix dactylifera**	edible date palm	*NL*
Asteraceae	*Ambrosia dumosa*	white bur-sage	*NL*
Asteraceae	*Ambrosia salsola* var. *salsola*	cheesebush	*NL*
Asteraceae	*Bebbia juncea* var. *aspera*	rush sweetbush	*NL*
Asteraceae	*Chaenactis carphoclinia* var. *carphoclinia*	pebble pincushion	*NL*
Asteraceae	*Encelia farinosa*	brittlebush	*NL*
Asteraceae	*Geraea canescens*	desert sunflower	*NL*
Asteraceae	*Isocoma acradenia* var. *bracteosa*	bracted alkali goldenbush	*FACU*
Asteraceae	*Lactuca serriola**	prickly lettuce	*FACU*
Asteraceae	*Monoptilon bellioides*	Mohave Desert star	*NL*
Asteraceae	*Palafoxia arida* var. *arida*	desert Spanish-Needle	*NL*
Asteraceae	*Peucephyllum schottii*	pigmy-cedar	*NL*
Boraginaceae	*Cryptantha barbigera*	bearded cryptantha	*NL*
Boraginaceae	*Cryptantha maritima*	white-hair cryptantha	*NL*
Brassicaceae	*Brassica tournefortii**	Sahara mustard	*NL*
Brassicaceae	*Lepidium lasiocarpum* ssp. *lasiocarpum*	sand peppergrass	*NL*
Brassicaceae	*Sisymbrium irio**	London rocket	*NL*
Cactaceae	*Cylindropuntia bigelovii*	teddy-bear cholla	*NL*
Cactaceae	*Cylindropuntia ramosissima*	diamond cholla	*NL*
Cactaceae	*Ferocactus cylindraceus*	California barrel cactus	*NL*
Cactaceae	*Opuntia basilaris* var. *basilaris*	beavertail cactus	*NL*
Caryophyllaceae	*Achyronychia cooperi*	onyx flower	*NL*
Chenopodiaceae	*Atriplex canescens*	four-wing saltbush	*NL*
Chenopodiaceae	*Atriplex hymenelytra*	desert-holly	*NL*
Chenopodiaceae	*Atriplex polycarpa*	many-fruit saltbush	*NL*
Chenopodiaceae	*Chenopodium murale**	nettle-leaf goosefoot	*FACU*

Cleomaceae	*Peritoma arborea* var. *angustata*	desert bladderpod	*NL*
Cucurbitaceae	*Brandegea bigelovii*	desert star vine	*NL*
Ehretiaceae	*Tiquilia plicata*	plicate tiquilia	*NL*
Euphorbiaceae	*Croton californicus*	California croton	*NL*
Euphorbiaceae	*Ditaxis lanceolata*	desert silverbush	*NL*
Euphorbiaceae	*Euphorbia peplus**	petty spurge	*NL*
Fabaceae	*Hoffmannseggia microphylla*	desert bird-of-paradise	*NL*
Fabaceae	*Lupinus concinnus*	bajada lupine	*NL*
Fabaceae	*Parkinsonia florida*	blue palo verde	*NL*
Fabaceae	*Prosopis glandulosa* var. *glandulosa*	mesquite	*FACU*
Fabaceae	*Psorothamnus arborescens*	California dalea	*FACU*
Fabaceae	*Psorothamnus emoryi* var. *emoryi*	white dalea	*NL*
Fabaceae	*Psorothamnus schottii*	indigo bush	*NL*
Fabaceae	*Psorothamnus spinosus*	smoke tree	*NL*
Fabaceae	*Senegalia greggii*	catclaw acacia	*FACU*
Fouquieriaceae	*Fouquieria splendens* ssp. *splendens*	ocotillo	*NL*
Hydrophyllaceae	*Emmenanthe penduliflora* var. *penduliflora*	whispering bells	*NL*
Hydrophyllaceae	*Phacelia crenulata*	notch-leaf phacelia	*NL*
Krameriaceae	*Krameria bicolor*	white rhatany	*NL*
Lamiaceae	*Condea emoryi*	desert-lavender	*NL*
Lamiaceae	*Salvia columbariae*	chia	*NL*
Loasaceae	*Mentzelia involucrata*	sand blazing star	*NL*
Loasaceae	*Petalonyx thurberi* ssp. *thurberi*	Thurber's sandpaper plant	*NL*
Malvaceae	*Eremalche rotundifolia*	desert five-spot	*NL*
Malvaceae	*Hibiscus denudatus*	rock hibiscus	*NL*
Namaceae	*Nama demissa*	purple mat	*NL*
Nyctaginaceae	*Abronia villosa* var. *villosa*	desert sand-verbena	*NL*
Nyctaginaceae	*Allionia incarnata* var. *villosa*	hairy trailing windmills	*NL*
Nyctaginaceae	*Mirabilis laevis* var. *villosa*	hairy wishbone plant	*NL*
Onagraceae	*Chylismia brevipes*	yellow cups	*NL*
Onagraceae	*Chylismia claviformis*	clavate fruited primrose	*NL*
Onagraceae	*Eremothera boothii*	Booth's sun cup	*NL*

Onagraceae	*Eulobus californicus*	false-mustard	*NL*
Papaveraceae	*Eschscholzia mintifolra*	pygmy gold-poppy	*NL*
Plantaginaceae	*Plantago ovata var. fastigiata*	woolly plantain	*FACU*
Poaceae	*Aristida adscensionis*	six-weeks three-awn	*NL*
Poaceae	*Phalaris minor**	little-seed canary grass	*NL*
Poaceae	*Schismus barbatus**	Mediterranean schismus	*NL*
Polemoniaceae	*Aliciella latifolia ssp. latifolia*	broad-leaf gilia	*NL*
Polemoniaceae	*Eriastrum eremicum ssp. eremicum*	desert woolly-star	*NL*
Polemoniaceae	*Langloisia setosissima ssp. setosissima*	bristly langloisia	*NL*
Polemoniaceae	*Loeseliastrum schottii*	Schott's calico	*NL*
Polygonaceae	*Chorizanthe brevicornu var. brevicornu*	brittle spineflower	*NL*
Polygonaceae	*Chorizanthe rigida*	rigid spineflower	*NL*
Polygonaceae	*Eriogonum inflatum*	desert trumpet	*NL*
Polygonaceae	*Eriogonum thomasii*	Thomas's buckwheat	*NL*
Resedaceae	*Oligomeris linifolia*	narrow-leaf oligomeris	*NL*
Solanaceae	*Datura wrightii*	western jimson weed	*UPL*
Solanaceae	*Nicotiana quadrivalvis*	Indian tobacco	*FACU*
Solanaceae	*Physalis crassifolia*	greene's ground-cherry	*NL*
Tamaricaceae	*Tamarix ramosissima*[*+]	saltcedar	*NL*
Viscaceae	*Phoradendron californicum*	desert mistletoe	*NL*
Zygophyllaceae	*Fagonia laevis*	California fagonia	*NL*
Zygophyllaceae	*Larrea tridentata*	creosote bush	*NL*

**: Non-native species*
[+]: Saltcedar is understood to hybridize and function similar to five-stamen tamarisk (Tamarix chinensis; FAC); therefore, saltcedar was treated as a FAC species in determining hydrophytic vegetation indicators.
FAC: Facultative
FACU: Facultative Upland
NL: Not Listed
UPL: Upland

APPENDIX D

NRCS WETS TABLE

Appendix D. NRCS WETS Table

KPC Coachella Project Jurisdictional Delineation

WETS Station: INDIO FIRE STATION, CA

Requested years: 1988 - 2019

Month	Avg Max Temp (°F)	Avg Min Temp (°F)	Avg Mean Temp (°F)	Avg Precip (inch[es])	30% chance precip less than (inch[es])	30% chance precip more than (inch[es])	Avg number days precip 0.10 inch or more	Avg Snowfall (inch[es])
Jan	71.7	45.4	58.6	0.67	0.00	0.56	2	-
Feb	75.6	49.2	62.4	0.36	0.00	0.34	1	-
Mar	82.1	55.9	69.0	0.18	0.00	0.12	0	-
Apr	87.6	61.4	74.5	0.04	0.00	0.00	0	-
May	94.2	67.6	80.9	0.02	0.00	0.00	0	-
Jun	102.9	74.7	88.8	0.01	0.00	0.00	0	0.0
Jul	106.9	81.0	94.0	0.05	0.00	0.04	0	0.0
Aug	106.5	81.3	93.9	0.16	0.00	0.00	0	-
Sep	101.9	75.0	88.4	0.11	0.00	0.14	0	-
Oct	92.0	64.2	78.1	0.11	0.00	0.08	0	-
Nov	79.1	51.9	65.5	0.10	0.00	0.12	0	-
Dec	70.5	44.2	57.3	0.38	0.00	0.28	1	0.0
Annual	-	-	-	-	-	-	-	-
Average	89.3	62.7	76.0	-	-	-	-	-
Total	-	-	-	2.18	-	-	5	-

GROWING SEASON DATES

Years with missing data:	24 deg = 15	28 deg = 16	32 deg = 17
Years with no occurrence:	24 deg = 17	28 deg = 14	32 deg = 10
Data years used:	24 deg = 17	28 deg = 16	32 deg = 15
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent*	Insufficient data	Insufficient data	Insufficient data
70 percent*	Insufficient data	Insufficient data	Insufficient data

*Percentage chance of the growing season occurring at the Beginning and Ending dates.

APPENDIX E

ARID WEST WETLAND DELINEATION DATA FORMS AND EPHEMERAL AND INTERMITTENT STREAMS ORDINARY HIGH WATER MARK (OHWM) DATASHEETS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: KPC Coachella City/County: Coachella Valley/Riverside Sampling Date: 5/08/2019

Applicant/Owner: JDP Development State: CA Sampling Point: 1

Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino Section, Township, Range: T 5S, R 8E, S 24-28; T 5S, R 9E, S 30

Landform (hillslope, terrace, etc.): disturbed depression Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): LRR-D Lat: 33.710345 Long: -116.146570 Datum: WGS 1984

Soil Map Unit Name: Borrow pits NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation ✔, Soil ✔, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Highly disturbed depressional area that sits at base of levee. Flows from surrounding ephemeral washes collect and sit in this general area, based on review of aerial photos.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 10')			
1. Chenopodium murale	20	Y	FACU
2. Parkinsonia florida	15	Y	NL
3. Sisymbrium irio	10	Y	NL
4.			
5.			
6.			
7.			
8.			
	45 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. N/A			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 55 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 20	x 4 =	80
UPL species 25	x 5 =	125
Column Totals: 45 (A)		205 (B)

Prevalence Index = B/A = 4.6

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

No hydrophytic vegetation present. Evidence of tire tracks/disturbance.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/2	100	N/A				clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✔

Remarks:

Uniform, no redox features present. Extremely dry soils; used spray bottle to moisten soils and record soil color.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): ___

Water Table Present? Yes ___ No ✔ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): ___

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Shallow soil surface cracks in highly disturbed depressional area that sits at base of levee. No secondary indicators. Area does not appear to pond enough to create wetland conditions.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: KPC Coachella City/County: Coachella Valley/Riverside Sampling Date: 5/10/2019

Applicant/Owner: JDP Development State: CA Sampling Point: 2

Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino Section, Township, Range: T 5S, R 8E, S 24-28; T 5S, R 9E, S 30

Landform (hillslope, terrace, etc.): disturbed drainage Local relief (concave, convex, none): concave Slope (%): 5

Subregion (LRR): LRR-D Lat: 33.712861 Long: -116.148010 Datum: WGS 1984

Soil Map Unit Name: Borrow pits NWI classification: shrub wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation ✔, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Tamarix sp. dominated drainage; hydrology appears to be from an upstream stormdrain outfall which appeared damaged.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. Tamarix sp.	20	Y	FAC
2.			
3.			
4.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Tamarix sp. likely Tamarix ramosissima (NL) but functioning similar to Tamarix chinensis (FAC). Dead Tamarix sp. drift abundant. Whole sample plot composed of dead/diedback Tamarix sp. not included in absolute cover. Cryptantha sp. present but not present at 5% or more.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10 YR 4/2	100	N/A				LS	loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✔

Remarks:

Soil uniform throughout. No indicators of hydric soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): ___

Water Table Present? Yes ___ No ✔ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Heavy presence of dead Tamarix sp. drift. Only 1 secondary hydrology indicator observed.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 1
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/07/2019
Town: Coachella Valley
Photo begin file#:

Time: 1258
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

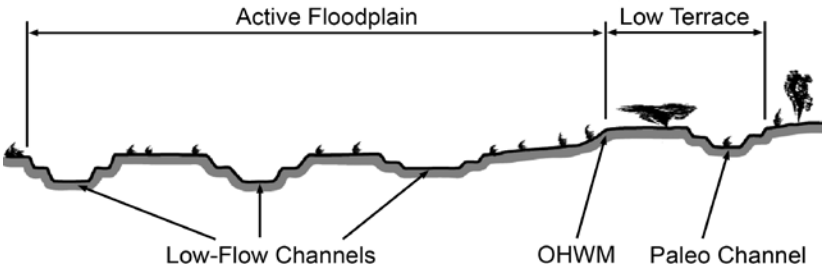
Brief site description:
Receives surface flows from higher elevation, foothills

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

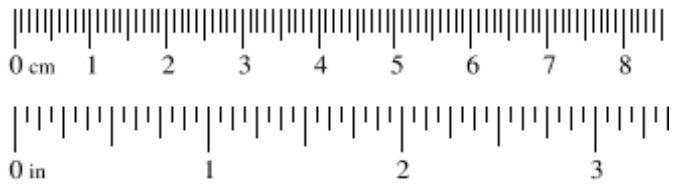


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

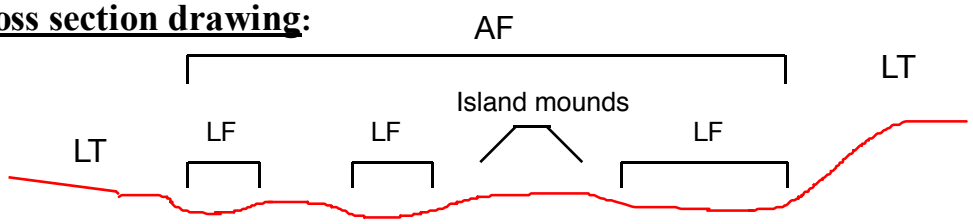
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 1 **Date:** 5/07/2019 **Time:** 1258

Cross section drawing:



OHWM

GPS point: 33.702525, -116.121639

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:
Several low-flow channels ranging from 2 to 5 feet within 20-foot wide active floodplain. Small islands interspersed but seem to have flows present within.

Floodplain unit:

- [x] Low-Flow Channel
- [ ] Active Floodplain
- [ ] Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: medium sand

Total veg cover: 0 % Tree: 0 % Shrub: 0 % Herb: 0 %

Community successional stage:

- [x] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [ ] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [x] Other: change in sediment texture
- [ ] Other: _____
- [ ] Other: _____

Comments:
Low-flow channels range from 2 to 5 feet and dispersed throughout.

Project ID: KPC Coachella **Cross section ID:** OHWM 1 **Date:** 5/07/2019 **Time:** 1258

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: coarse sand

Total veg cover: 35 % Tree: 0 % Shrub: 25 % Herb: 10 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

20-foot wide active floodplain; coarse sand with pebbles and cobbles interspersed. Vegetation dominated by Chaenactis carphoclinia var. carphoclinia, Ambrosia dumosa, and Plantago ovata var. fastigiata. Island mounds present within active floodplain.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Just above OHWM

Characteristics of the floodplain unit:

Average sediment texture: pebble

Total veg cover: 50 % Tree: 0 % Shrub: 10 % Herb: 40 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Very compacted soil; pebble with larger rocks and cobbles. Vegetation dominated by Larrea tridentata.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 2
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/08/2019
Town: Coachella Valley
Photo begin file#:

Time: 0837
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

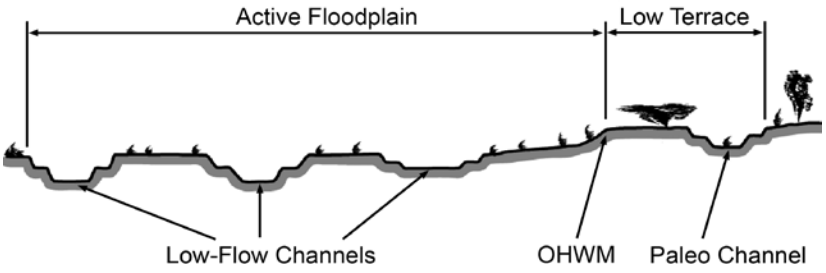
Brief site description:
Receives surface flows from higher elevation, foothills

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
  - ☐ History of recent effective discharges
  - ☐ Results of flood frequency analysis
  - ☐ Most recent shift-adjusted rating
  - ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

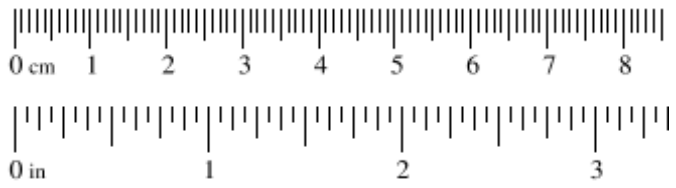


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
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   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

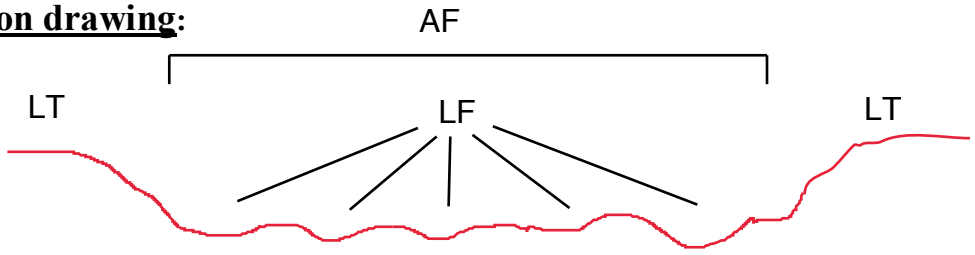
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 2 **Date:** 5/08/2019 **Time:** 0837

Cross section drawing:



OHWM

GPS point: 33.711963, -116.143138

Indicators:

- ☑ Change in average sediment texture
- ☑ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
Large system with range of low-flow channels from 2 to 6 feet within 183-foot active floodplain.

Floodplain unit:

☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: coarse sand

Total veg cover: 2 % Tree: 0 % Shrub: 0 % Herb: 2 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☑ Other: undulations in sand
- ☐ Other: _____

Comments:
Low-flow channels range from 2 to 6 feet. Vegetation dominated by Chaenactis carphclinia var. carphoclinia and Plantago ovata var. fastigiata.

Project ID: KPC Coachella **Cross section ID:** OHWM 2 **Date:** 5/08/2019 **Time:** 0837

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: pebble

Total veg cover: 40 % Tree: 5 % Shrub: 0 % Herb: 35 %

Community successional stage:

- ☐ NA
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☑ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

183-foot wide active floodplain; pebble mixed with cobbles and fine silt. Vegetation dominated by Parkinsonia florida.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Just above OHWM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 60 % Tree: 0 % Shrub: 2 % Herb: 58 %

Community successional stage:

- ☐ NA
- ☑ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Vegetation dominated by Chaenactis carphoclinia var. carphoclinia and Psorothamnus spinosus.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 3
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/08/2019
Town: Coachella Valley
Photo begin file#:

Time: 1145
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

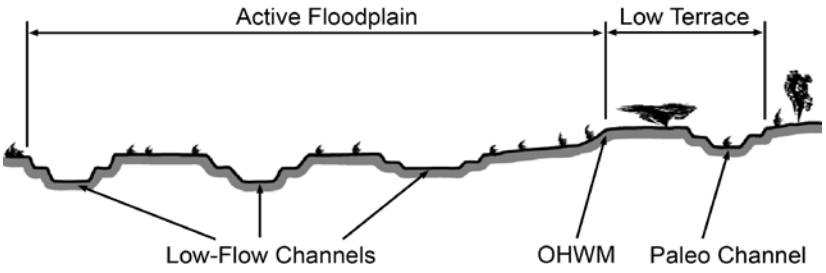
Brief site description:
Receives surface flows from higher elevation.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

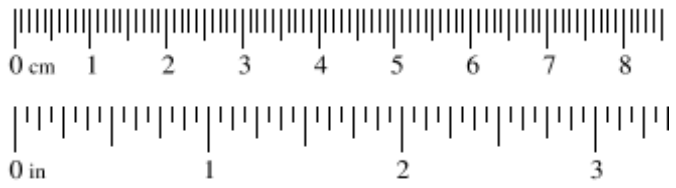


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
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   - ☑ GPS
   - ☐ Other:

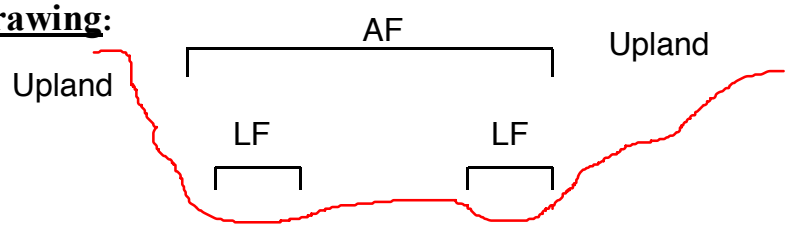
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 3 **Date:** 5/08/2019 **Time:** 1145

Cross section drawing:



OHWM

GPS point: 33.714063, -116.105813

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:
Two braided 2-foot wide low-flow channels within 8-foot wide active floodplain. Steep adjacent slopes.

Floodplain unit:

- [x] Low-Flow Channel
- [ ] Active Floodplain
- [ ] Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 4 % Tree: 0 % Shrub: 0 % Herb: 4 %

Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [ ] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [x] Other: change in sediment texture
- [ ] Other: _____
- [ ] Other: _____

Comments:
Two braided 2-foot wide low-flow channels; granules with boulders interspersed. Vegetation dominated by Plantago ovata var. fastigiata.

Project ID: KPC Coachella **Cross section ID:** OHWM 3 **Date:** 5/08/2019 **Time:** 1145

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: cobble

Total veg cover: 45 % Tree: 0 % Shrub: 40 % Herb: 5 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☑ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

8-foot wide active floodplain; cobbles with granules interspersed. Vegetation dominated by Bebbia juncea var. aspera.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Above OHWM

Characteristics of the floodplain unit:

Average sediment texture: boulder

Total veg cover: 35 % Tree: 0 % Shrub: 2 % Herb: 33 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

Low terrace defined as upland; boulders with cobbles and pebbles present. Vegetation dominated by Plantago ovata var. fastigiata and Larrea tridentata.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 4
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/08/2019
Town: Coachella Valley
Photo begin file#:

Time: 1233
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

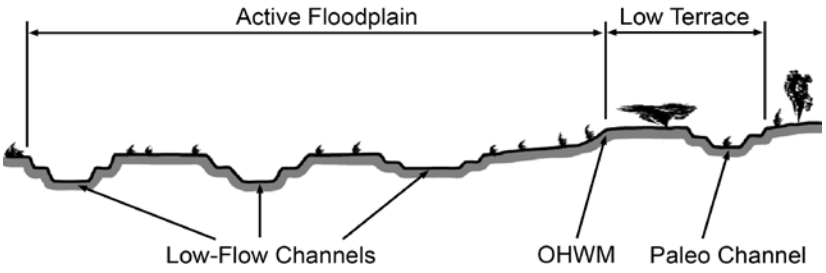
Brief site description:
Receives surface flows from higher elevation.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

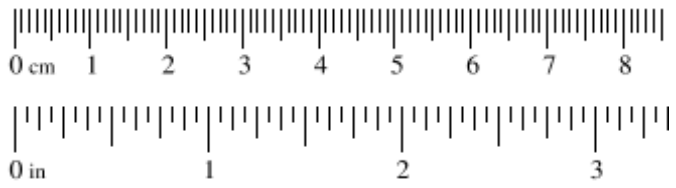


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

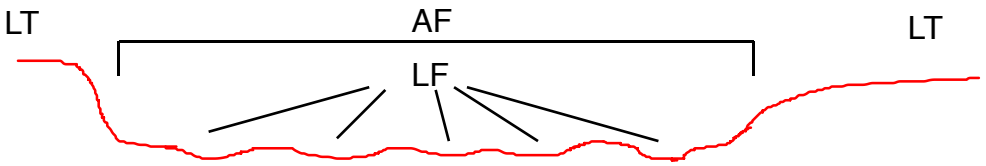
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 4 **Date:** 5/08/2019 **Time:** 1233

Cross section drawing:



OHWM

GPS point: 33.711963, -116.143138

Indicators:

- ☑ Change in average sediment texture
- ☑ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
Large system with range of low-flow channels from 2 to 6 feet within 100-foot active floodplain.

Floodplain unit:

☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: coarse sand

Total veg cover: 2 % Tree: 0 % Shrub: 0 % Herb: 2 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☑ Other: undulations in sand
- ☐ Other: _____

Comments:
Low-flow channels range from 2 to 6 feet. Vegetation dominated by Chaenactis carphoclinia var. carphoclinia and Plantago ovata var. fastigiata.

Project ID: KPC Coachella **Cross section ID:** OHWM 4 **Date:** 5/08/2019 **Time:** 1233

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: pebble

Total veg cover: 50 % Tree: 5 % Shrub: 30 % Herb: 15 %

Community successional stage:

- ☐ NA
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☑ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

100-foot wide active floodplain; pebble mixed with cobbles and fine silt. Vegetation dominated by Parkinsonia florida, Bebbia juncea, Ambrosia salsola var. salsola, Chaenactis carphoclinia var. carphoclinia, and Plantago ovata var. fastigiata.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Above OWHM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 60 % Tree: 0 % Shrub: 5 % Herb: 55 %

Community successional stage:

- ☐ NA
- ☑ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Vegetation dominated by Chaenactis carphoclinia var. carphoclinia and Psorothamnus spinosus.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 5
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/10/2019
Town: Coachella Valley
Photo begin file#:

Time: 0745
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

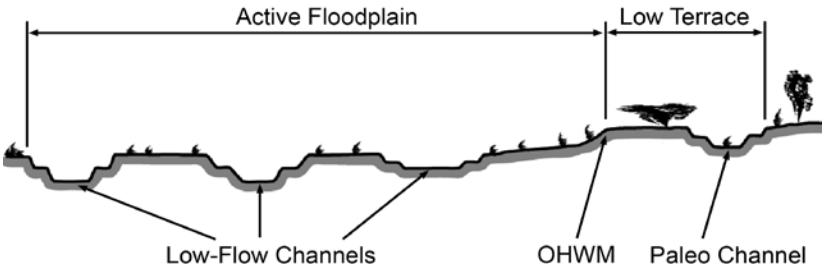
Brief site description:
Receives surface flows from higher elevation.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

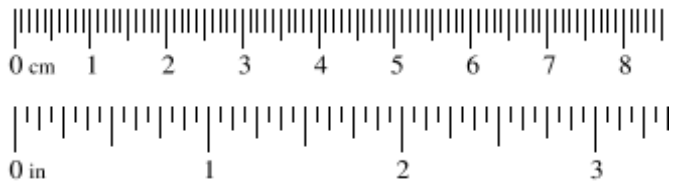


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

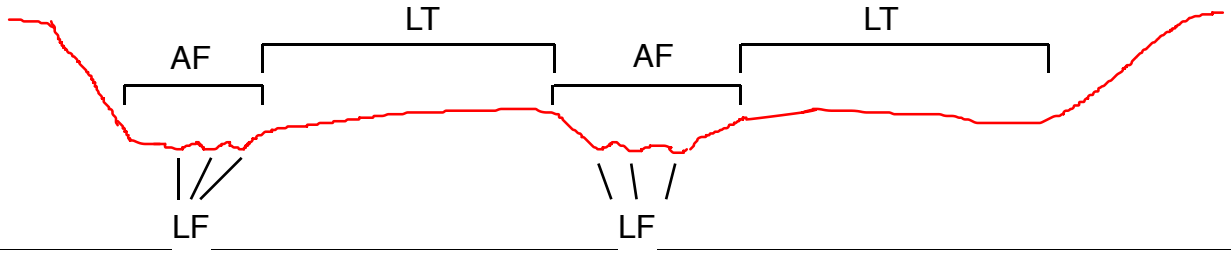
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 5 **Date:** 5/10/2019 **Time:** 0745

Cross section drawing:



OHWM

GPS point: 33.708038, -116.138406

Indicators:

- ☑ Change in average sediment texture
- ☑ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
2-foot wide braided low-flow channels within 15-foot wide active floodplains.

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: very coarse sand

Total veg cover: 0 % Tree: 0 % Shrub: 0 % Herb: 0 %

Community successional stage:

- ☑ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☑ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:
2-foot wide braided low-flow channels; finer sediment than active floodplain.

Project ID: KPC Coachella **Cross section ID:** OHWM 5 **Date:** 5/10/2019 **Time:** 0745

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 10 % Tree: 0 % Shrub: 7 % Herb: 3 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: coarser sediment than LT
- ☐ Other: _____
- ☐ Other: _____

Comments:

15-foot wide active floodplains. Vegetation dominated by Plantago ovata var. fastigiata and Croton californicus.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Just above OHWM

Characteristics of the floodplain unit:

Average sediment texture: medium sand

Total veg cover: 50 % Tree: 0 % Shrub: 49 % Herb: 1 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Sheet flow area that does not appear to have active flows. Vegetation dominated by Cryptantha sp., Plantago ovata var. fastigiata, and Chaenactis carphoclinia var. carphoclinia.

APPENDIX F

RECENT AND HISTORIC AERIAL IMAGERY ANALYSIS

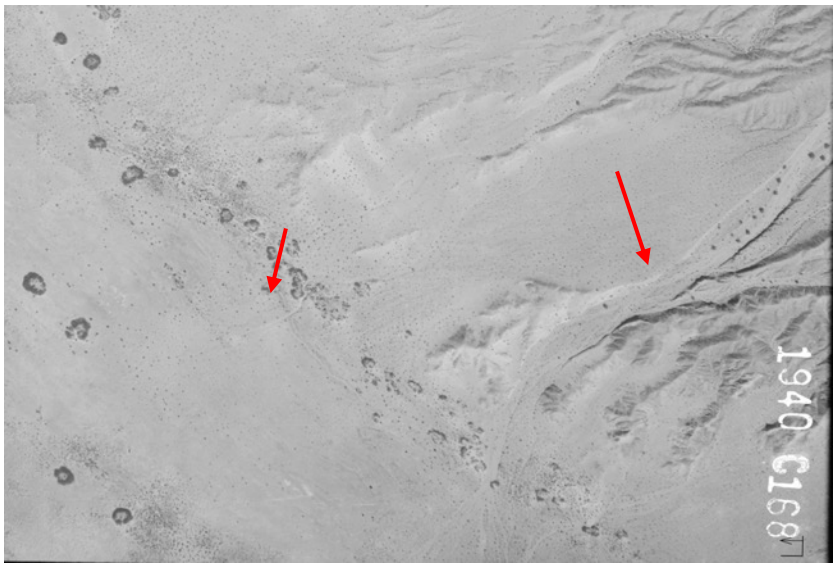
Appendix F – Recent and Historic Aerial Imagery Analysis

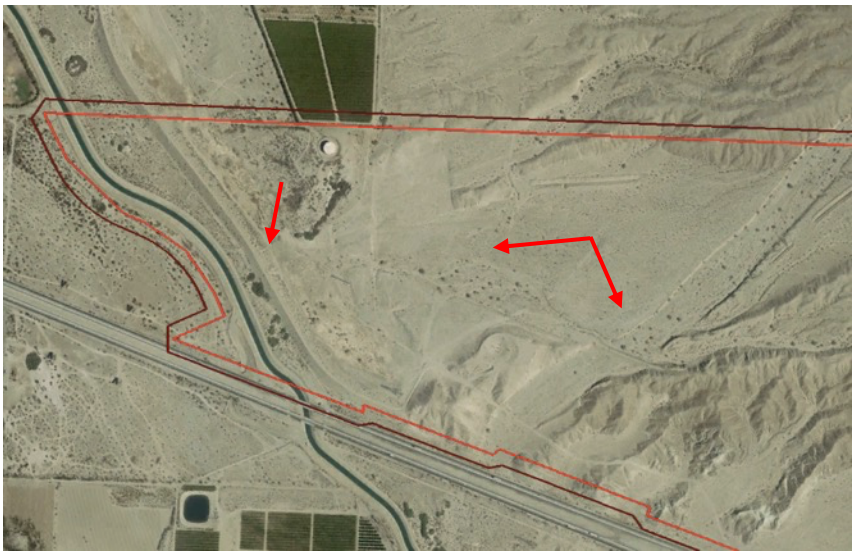
KPC Coachella Jurisdictional Delineation

Sources: Google Earth and University of California-Santa Barbara

The following is a review of recent and historic aerial images of select portions of the project area. RBC reviewed the images to gain a better understanding of the current site conditions observed during the May 2019 jurisdictional delineation site visit (JD site visit).

Western Corner – Area shows Feature 1 (F1) and the Disturbed Ephemeral Drainage Area. As shown through the aerials below, the area was heavily manipulated between 1940 and 1953, during which the earthen berm was placed to divert F1 flows and the earthen levee was constructed, likely to obstruct flows from entering the newly constructed Coachella Canal. After 1953, the area remains relatively unchanged, apart from the addition of agriculture to the north, which likely contributed to flows into the Disturbed Ephemeral Drainage Area.

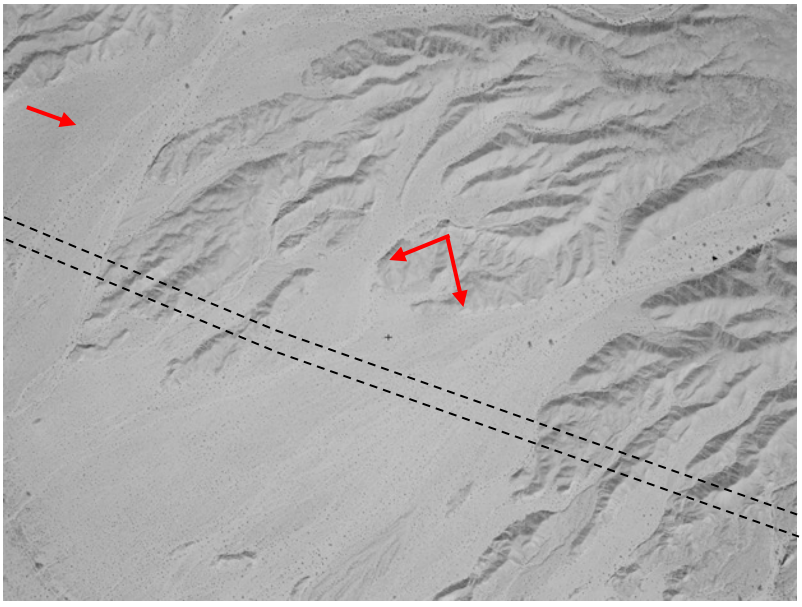
	1940 Aerial shows the Disturbed Ephemeral Drainage Area prior to the construction of the earthen levee, as well as an unobstructed F1.
	1953 Aerial shows area after the construction of the Coachella Canal and the adjacent earthen levee. The aerial also displays the first occurrence of the earthen berm obstructing F1 flows. The earthen berm and earthen levee are still present, observed during the JD site visit.



2018

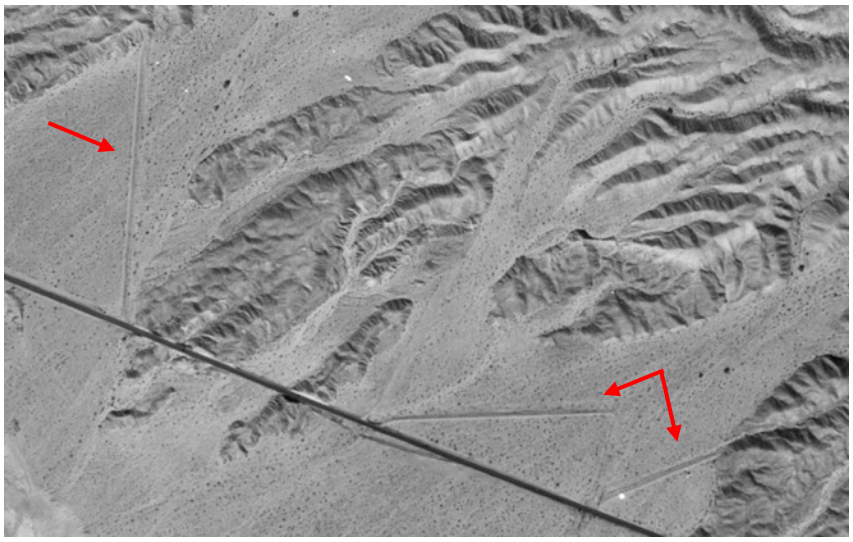
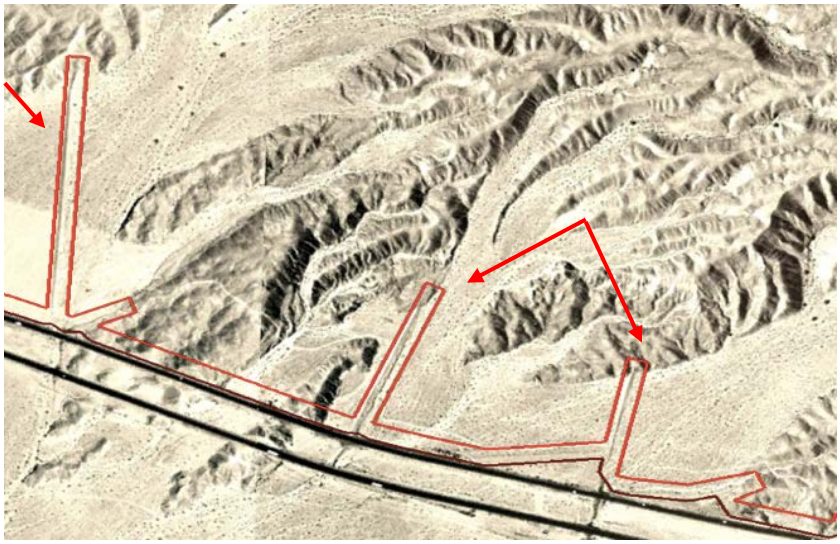
Aerial shows area remains relatively unchanged from 1953 aerial; the earthen levee and berm are still present. Upstream agriculture now contributes to flows entering the Disturbed Ephemeral Drainage Area. F1 diverted flows have marked the area west of the feature, as observed and mapped during the JD site visit.

Western Portion, Southern Boundary – Aerial shows the various earthen berms along the southern boundary of the project which runs parallel to Interstate 10 (I-10). As shown through the aerials below, this area was also heavily manipulated between 1940 and 1953, during which the various earthen berms were constructed although not in their current locations. The earthen berms appear in their present-day location on aerials in 2002 as seen in the 2018 aerial and during the JD site visit.



1940

Aerial shows the area prior to the construction of the earthen berms. Arrows and dashed lines indicate general area of the future berms and I-10, respectively, for reference.

	1953 Aerial shows first appearance of the earthen berms. The two easternmost berms were originally oriented towards the northeast, as opposed to their present-day locations, which are oriented to the north.
	2002 Aerial shows the earthen berms have been relocated to their present-day locations.
	2018 Aerial shows the earthen berms in the same locations they have been since 2002 and in the locations they were observed during the JD site visit.

APPENDIX G

GENERAL CHARACTERISTICS OF FEATURES OBSERVED

Appendix G – General Characteristics of Features Observed

KPC Coachella Project Jurisdictional Delineation

Table G-1. Observed Aquatic Resources within Project Survey Area

Feature Name	Width Range (Min-Max) (feet)	General Characteristics	Location (Lat, Long)
Coachella Canal	40	Concrete-lined canal running through western project area; continues off site to northwest and southeast	33.712633, -116.151001
Feature 1 (F1)	4-315	Large ephemeral watercourse with several secondary channels within area mapped overall as desert wash scrub/Sonoran creosote brush scrub; continues southwest until directed west by earthen berm into F1 – Disturbed Ephemeral Drainage Area	33.712184, -116.134043
Feature 1 (F1) – Disturbed Ephemeral Drainage Area	3-418	Disturbed drainage area; receives flows from F1 and bounded by earthen levee along western extent	33.712184, -116.134043
Feature 1 (F1) – Tamarisk Scrub	N/A	Small area of tamarisk scrub abutting F1 – Disturbed Ephemeral Drainage Area	33.712184, -116.134043
Feature 1 (F1) – Tamarisk Scrub/Ephemeral Drainage	7-144	Small, distinct area of tamarisk scrub abutting F1 – Disturbed Ephemeral Drainage Area; receives flows from storm drain outfall	33.712184, -116.134043
Feature 2 (F2)	4-218	Ephemeral watercourse with some unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; receives flows from off site; terminates on site	33.714861, -116.142743
Feature 3 (F3)	8-56	Small ephemeral watercourse with several unvegetated secondary channels in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues off site to southwest through culvert	33.707087, -116.138759
Feature 4 (F4)	5-1,650	Large ephemeral watercourse with numerous unvegetated secondary channels and numerous unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; covers majority of the northern “panhandle” area; originates off site, then continues southwest before flows diverted to south by earthen berm to direct flows through highway undercrossing	33.718604, -116.106239

Feature Name	Width Range (Min-Max) (feet)	General Characteristics	Location (Lat, Long)
Feature 5 (F5)	4-130	Ephemeral watercourse with three unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues off site to southwest through culvert	33.707413, -116.126579
Feature 6 (F6)	4-110	Ephemeral watercourse with portions of unvegetated channel in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continue southwest along eastern edge of earthen berm before continues off site through culvert	33.705788, -116.126407
Feature 7 (F7)	4-180	Ephemeral watercourse with several unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues southwest before flows likely travel southeast to culvert	33.705569, -116.125701
Feature 8 (F8)	4-540	Large ephemeral watercourse with numerous unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub;; originates off site, then continues southwest before flows diverted to south by earthen berm to direct flows through highway undercrossing	33.711449, -116.094034
Feature 9 (F9)	14-145	Ephemeral watercourse with one unvegetated secondary channel and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues southwest before flows likely travel southeast to culvert	33.702045, -116.118858
Feature 10 (10)	4-150	Ephemeral watercourse with unvegetated secondary channel and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues southwest before flows likely travel southeast to culvert	33.703574, -116.114962
Feature 11 (F11)	6-12	Small ephemeral channel in area mapped overall as Sonoran creosote bush scrub; originates on site and briefly continues south before flows likely travel southeast to culvert	33.701773, -116.115920

Feature Name	Width Range (Min-Max) (feet)	General Characteristics	Location (Lat, Long)
Feature 12 (F12)	8-28	Small ephemeral watercourse with several unvegetated braids in area mapped overall as Sonoran creosote bush scrub; originates on site and continues off site to southwest through culvert	33.704402, -116.109675
Feature 13 (F13)	8-100	Small ephemeral watercourse with one unvegetated secondary channel and several unvegetated braids in area mapped overall as Sonoran creosote bush scrub; originates on site and continues southwest before flows likely travel southeast to highway undercrossing	33.700930, -116.113503
Feature 13 (F13) – Tamarisk Scrub	N/A	Small area of tamarisk scrub abutting F13	33.700930, -116.113503
Feature 14 (F14)	12-75	Small ephemeral watercourse with one unvegetated secondary channel and several unvegetated braids in area mapped overall as Sonoran creosote bush scrub; originates on site and continues southwest before flows likely travel southeast to highway undercrossing	33.701403, -116.110071
Feature 15 (F15)	6-128	Ephemeral watercourse with several unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote bush scrub; originates on site and continues off site to southwest through highway undercrossing	33.706900, -116.098967
Feature 16 (F16)	3-1,340	Large ephemeral watercourse with numerous secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote bush scrub; originates off site and continues off site to southwest through highway undercrossing	33.705345, -116.094437

APPENDIX H

SITE PHOTOGRAPHS

Appendix H – Site Photographs*

KPC Coachella Project Jurisdictional Delineation
May 7-10, 2019

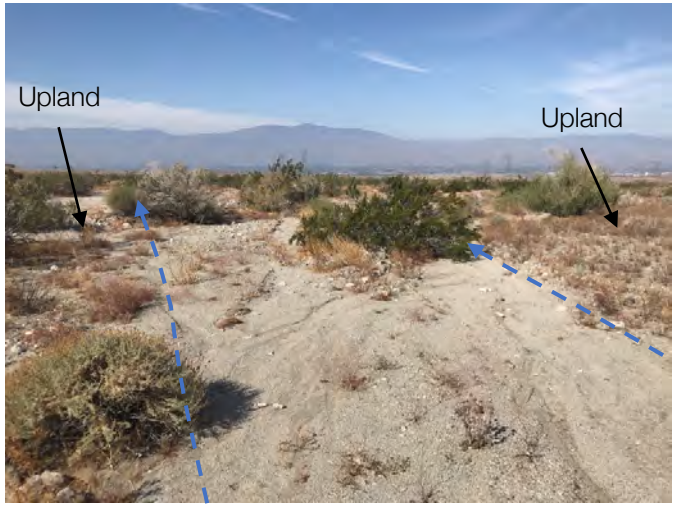


Photo 1. Downstream view of Feature 4 within the watercourse showing associated low-flow channels, active floodplain (within blue lines), vegetated islands within the floodplain, and upland areas. Photo taken facing southwest. May 9, 2019.



Photo 2. West facing view of large upland area lacking evidence of flows located between active braids of the larger Feature 4. May 9, 2019.



Photo 3. Upstream view of a Feature 4 single channel between upland areas. Photo taken facing east. May 9, 2019.

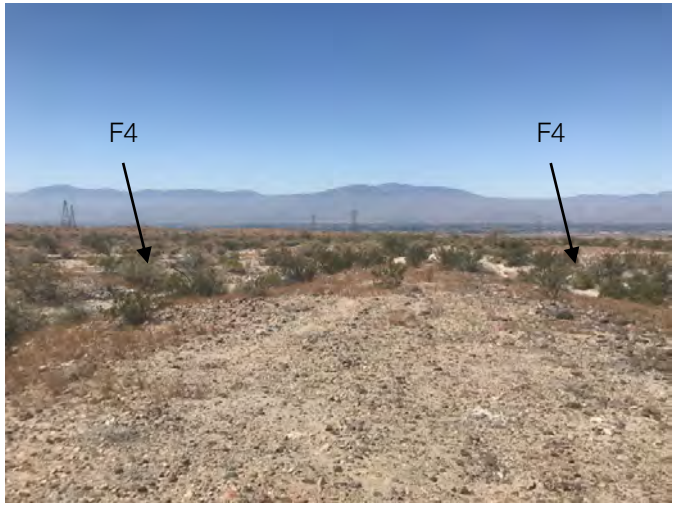


Photo 4. Southwest facing view of upland with Feature 4 active watercourse surrounding to the east and south. May 8, 2019.

* See corresponding Figure 7 for Photo Point Locations. See Jurisdictional Delineation Report Sections 3.7 and 3.8 for a discussion of jurisdictional status of each feature.



Photo 5. Downstream view of Feature 4 near the northern project boundary. Photo taken facing west. May 8, 2019.



Photo 6. Upstream view of Feature 4. Photo taken facing east. May 8, 2019.



Photo 7. Downstream overview of Feature 4 taken from upland/interfluve area. Photo taken facing west. May 8, 2019.



Photo 8. Upstream view of Ordinary High Water Mark (OHWM) 3. OHWM 3 consists of two, low-flow channels and is defined by a break in slope, a change in average sediment texture, and a change in vegetation species and cover. Photo taken facing northeast. Blue lines indicate extent of active floodplain and streambed. May 8, 2019.



Photo 9. Downstream view of Feature 8. Blue lines indicate general extent of Feature 8. Photo taken facing southwest. May 9, 2019.



Photo 10. Upstream view of Feature 8. Photo taken facing northeast. May 9, 2019



Photo 11. Downstream view of Feature 16. Photo taken facing southwest. May 9, 2019.



Photo 12. Upstream view of Feature 16 in the northeastern corner of the project survey area. Photo taken facing east. May 9, 2019.



Photo 13. Overview of Feature 1 – Disturbed Ephemeral Drainage Area, as generally indicated by the blue lines above. Photo taken facing north from on top of the earthen levee. May 9, 2019.



Photo 14. Overview of Feature 1 – Disturbed Ephemeral Drainage Area, as generally indicated by the blue lines. Wetland Sample Point (WSP) 1 was taken within this area. Photo taken facing east. May 9, 2019.

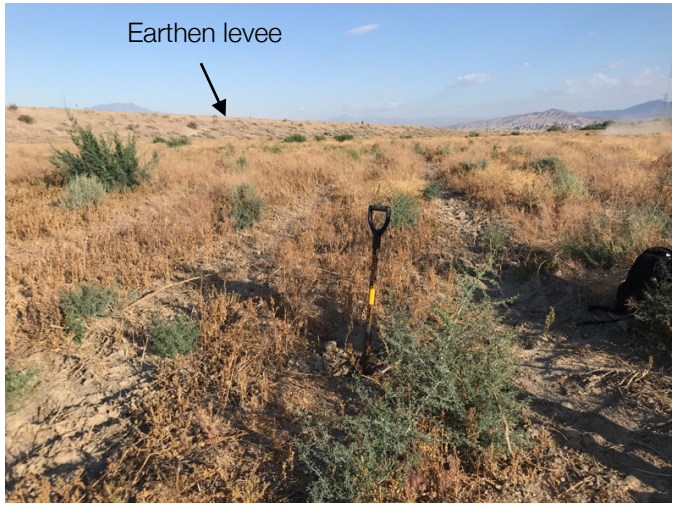


Photo 15. View of WSP 1. WSP 1 met the parameters for wetland hydrology; however, WSP 1 did not meet the hydrophytic vegetation or hydric soil parameters. Photo taken facing northwest. May 8, 2019.



Photo 16. Downstream view of Feature 1 – Tamarisk Scrub/Ephemeral Drainage and WSP 2 area. Photo taken facing southwest. May 10, 2019.



Photo 17. View of WSP 2. WSP 2 met the hydrophytic vegetation parameter; however, WSP 2 did not meet the hydric soil or wetland hydrology parameters. Photo taken facing northeast. May 10, 2019.

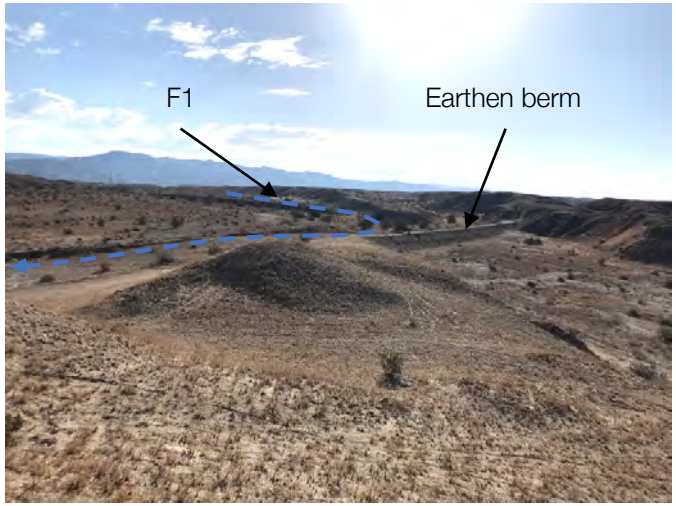


Photo 18. Eastern view of earthen berm cutting off and diverting Feature 1 flows west, as generally indicated by the blue line. Photo taken facing east. May 8, 2019



Photo 19. View of the abandoned watercourse south of the earthen berm along Feature 1. The berm appears on aerial imagery as early as 1953 (Appendix F). Photo taken facing south. May 8, 2019.



Photo 20. Upstream view of Feature 1, near the earthen berm historically disconnecting flows. Photo taken facing east. May 8, 2019.



Photo 21. Downstream view of OHWM 2. OHWM 2 is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing west. Blue lines indicate general flow direction and location of low-flow channels within larger active floodplain. May 8, 2019.



Photo 22. Overview of Feature 1, downstream (disconnected by earthen berm). Photo taken facing northwest. May 8, 2019



Photo 23. Upstream view within the abandoned channel south of the earthen berm adjacent to Feature 1. Photo taken facing northeast. May 7, 2019.



Photo 24. Downstream view within the abandoned channel south of the earthen berm adjacent to Feature 1. Photo taken facing southwest. May 7, 2019.

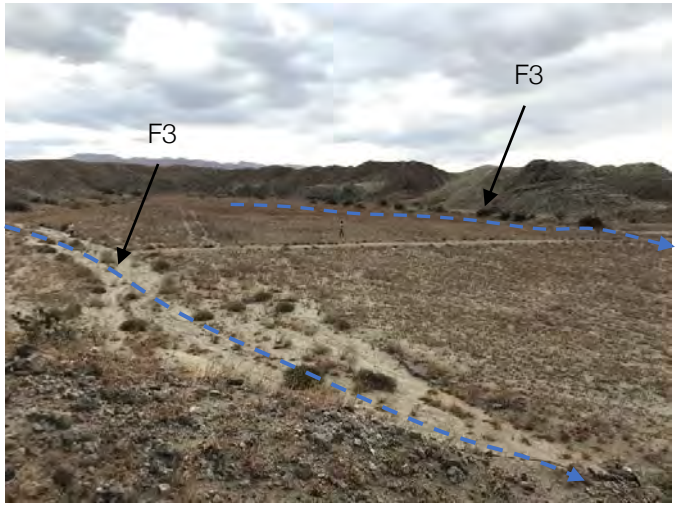


Photo 25. Overview of OHWM 5 area showing two active floodplain areas with a large low terrace/upland area in between. Photo taken facing east. May 10, 2019.



Photo 26. Upstream view of the easternmost active floodplain within Feature 3. The area is depicted in OHWM 5 (Photo 25). OHWM 5 consists of two, 15-foot wide active floodplains with braided 2-foot wide, low-flow channels. Photo taken facing east. May 7, 2019.



Photo 27. Downstream view of westernmost active floodplain within Feature 3 OHWM 5 (Photo 25). The OHWM is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing south. May 10, 2019.



Photo 28. Upstream view of low terrace/upland area near Feature 3. The area is further depicted in OHWM 5. Photo taken facing northeast. May 7, 2019.



Photo 29. Downstream view of Feature 4. Feature 4 flows towards a highway undercrossing at the edge of the project survey area boundary. Photo taken facing south. May 7, 2019.

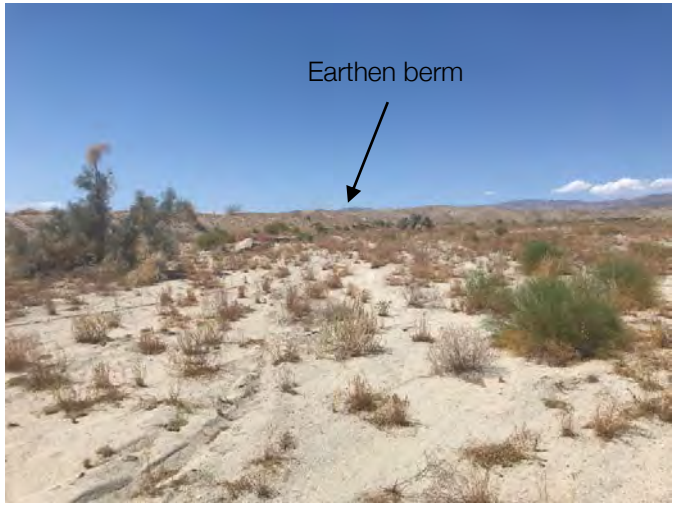


Photo 30. Upstream view of segment of Feature 4 adjacent to an earthen berm. Photo taken facing north. May 7, 2019.



Photo 31. Upstream view of Feature 5. Photo taken facing northeast. May 7, 2019.

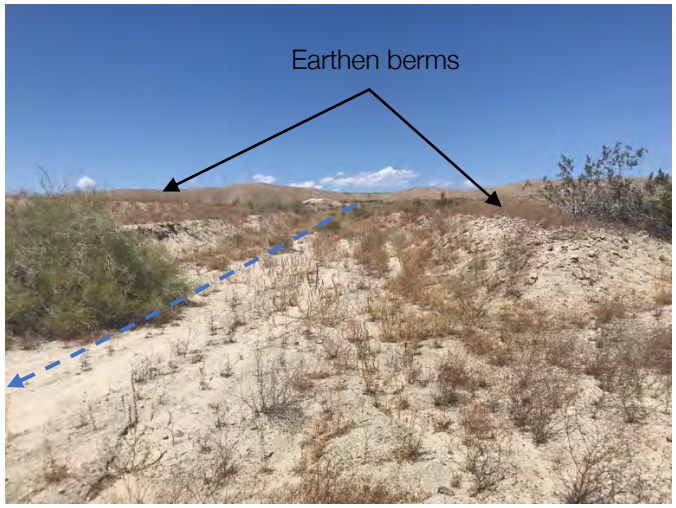


Photo 32. Upstream view of Feature 6 located in between two earthen berms. Photo taken facing north upstream. Blue line indicates general flow direction and location of a low-flow channel. May 7, 2019.

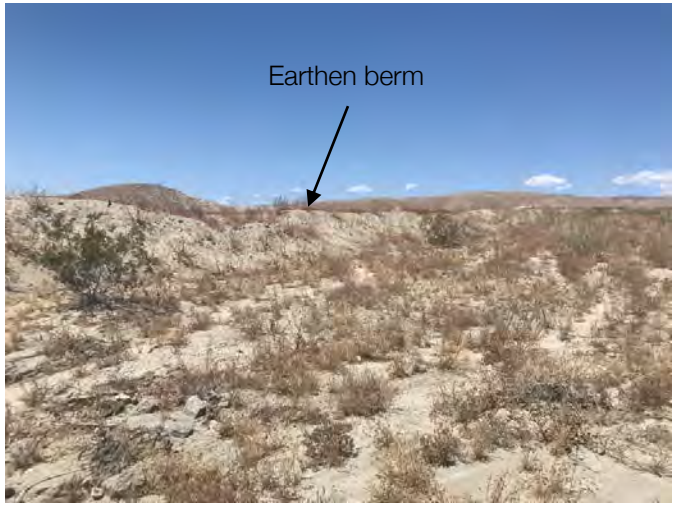


Photo 33. View of earthen berm. Photo taken facing north. May 7, 2019.



Photo 34. Upstream view of Feature 7. Photo taken facing north. Blue line indicates general flow direction and location of a low-flow channel. May 7, 2019.



Photo 35. Upstream view of Feature 8 flowing south parallel to the earthen berm, which stops flows from continuing further west and instead directs them south towards a highway undercrossing. Photo taken facing northeast. May 7, 2019.



Photo 36. Downstream view of Feature 8 continuing towards a highway undercrossing along the southern boundary of the project survey area. Photo taken facing south. May 7, 2019.



Photo 37. Upstream view of Feature 8 from a highway undercrossing. Photo taken facing northeast. May 7, 2019.



Photo 38. Upstream view of OHWM 1. OHWM 1 is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing east. Blue line indicates approximate extent of active floodplain/jurisdictional area. May 7, 2019.



Photo 39. Downstream view of OHWM 4. OHWM 4 is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing west. May 8, 2019.



Photo 40. Upstream view of Feature 16. Photo taken facing east showing the feature's eastern boundary indicated by cut banks to an upland area. Photo taken facing northeast. May 9, 2019.



Photo 41. Downstream view of Feature 16. Photo taken facing southwest. May 9, 2019.



Photo 42. Overview of Feature 16 from upland/interfluve facing downstream. Photo taken facing west. Blue lines indicate general extent of Feature 16. May 9, 2019.



Photo 43. Downstream view of Feature 16. Photo taken facing south. May 9, 2019.

APPENDIX I

JURISDICTIONAL AND NON-JURISDICTIONAL RESOURCES BY AGENCY

Appendix I – Jurisdictional and Non-Jurisdictional Resources by Agency

KPC Coachella Project Jurisdictional Delineation

Table I-1. Corps Jurisdictional Resources within Project Survey Area

Feature Name	Acreage	Linear Feet	Cowardin Code	Presence of OHWM/ Average Width (feet)	Wetland Presence	Dominant Vegetation	Location (Lat, Long)
Coachella Canal	2.72	2,957	R5	Yes/40	No	Concrete-lined	33.709279, -116.148089
Total	**2.72**	**2,957**					

Table I-2. RWQCB Jurisdictional Resources within Project Survey Area*

Feature Name	Acreage	Linear Feet*	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
Coachella Canal	2.72	2,957	R5	Yes/No	Concrete-lined	33.709279, -116.148089
F1	25.92	11,924	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.710963, -116.141306
F1 – Disturbed Ephemeral Drainage Area	15.06	2,401	R6	Yes/No	Disturbed Habitat	33.710963, -116.141306
F1 – Tamarisk Scrub/ Ephemeral Drainage	0.83	670	R6	Yes/No	Tamarisk Scrub	33.710963, -116.141306
F2	1.66	452	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.715129, -116.142096
F3	1.26	3,746	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708460, -116.136597
F4	257.16	98,058	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.719869, -116.100948
F5	2.36	3,535	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705889, -116.127943

Feature Name	Acreage	Linear Feet*	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
F6	2.10	2,882	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708149, -116.125132
F7	7.57	8,767	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.706363, -116.124264
F8	121.76	64,102	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.709951, -116.107698
F9	1.03	1,021	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.701783, -116.119132
F10	2.77	2,147	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.702425, -116.116863
F11	0.07	389	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701773, -116.115920
F12	0.73	2,212	R6	Yes/No	Sonoran Creosote Bush Scrub	33.703503, -116.112915
F13	0.66	1,262	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701028, -116.113432
F14	0.86	1,610	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701847, -116.109069
F15	7.82	7,387	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.706205, -116.100397
F16	185.05	66,849	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705133, -116.097707
Total	637.37	282,372				

*Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

Table I-3. CDFW Jurisdictional Resources within Project Survey Area

Feature Name	Acreage	Linear Feet**	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
Coachella Canal	2.72	2,957	R5	Yes/No	Concrete-lined	33.709279, -116.148089
F1	25.92	11,924	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.710963, -116.141306
F1 – Disturbed Ephemeral Drainage Area	15.06	2,401	R6	Yes/No	Disturbed Habitat	33.710963, -116.141306
F1 – Tamarisk Scrub/ Ephemeral Drainage	0.83	670	R6	Yes/No	Tamarisk Scrub	33.710963, -116.141306
F1 – Tamarisk Scrub	0.14	0	R6	Yes/No	Tamarisk Scrub	33.710963, -116.141306
F2	1.66	452	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.715129, -116.142096
F3	1.26	3,746	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708460, -116.136597
F4	257.16	98,058	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.719869, -116.100948
F5	2.36	3,535	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705889, -116.127943
F6	2.10	2,882	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708149, -116.125132
F7	7.57	8,767	R6	Yes/No	Desert Wash Scrub/Sonoran	33.706363, -116.124264

Feature Name	Acreage	Linear Feet**	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
					Creosote Bush Scrub	
F8	121.76	64,102	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.709951, -116.107698
F9	1.03	1,021	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.701783, -116.119132
F10	2.77	2,147	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.702425, -116.116863
F11	0.07	389	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701773, -116.115920
F12	0.73	2,212	R6	Yes/No	Sonoran Creosote Bush Scrub	33.703503, -116.112915
F13	0.66	1,262	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701028, -116.113432
F13 – Tamarisk Scrub	0.06	0	R6	Yes/No	Tamarisk Scrub	33.701028, -116.113432
F14	0.86	1,610	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701847, -116.109069
F15	7.82	7,387	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.706205, -116.100397
F16	185.05	66,849	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705133, -116.097707
Total	637.57	282,372				

*Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

Table I-4. Corps Non-Jurisdictional Resources within Project Survey Area*

Feature Name	Acreage	Linear Feet**	Cowardin Code	Location (Latitude, Longitude)
F1	25.92	11,924	R6	33.710963, -116.141306
F1 – Disturbed Ephemeral Drainage Area	15.06	2,401	R6	33.710963, -116.141306
F1 – Tamarisk Scrub	0.83	670	R6	33.710963, -116.141306
F1 – Tamarisk Scrub/Ephemeral Drainage	0.14	0	R6	33.710963, -116.141306
F2	1.66	452	R6	33.715129, -116.142096
F3	1.26	3,746	R6	33.708460, -116.136597
F4	257.16	98,058	R6	33.719869, -116.100948
F5	2.36	3,535	R6	33.705889, -116.127943
F6	2.10	2,882	R6	33.708149, -116.125132
F7	7.57	8,767	R6	33.706363, -116.124264
F8	121.76	64,102	R6	33.709951, -116.107698
F9	1.03	1,021	R6	33.701783, -116.119132
F10	2.77	2,147	R6	33.702425, -116.116863
F11	0.07	389	R6	33.701773, -116.115920
F12	0.73	2,212	R6	33.703503, -116.112915
F13	0.66	1,262	R6	33.701028, -116.113432
F13 – Tamarisk Scrub	0.06	0	R6	33.701028, -116.113432
F14	0.86	1,610	R6	33.701847, -116.109069
F15	7.82	7,387	R6	33.706205, -116.100397

Feature Name	Acreage	Linear Feet**	Cowardin Code	Location (Latitude, Longitude)
F16	185.05	66,849	R6	33.705133, -116.097707
Total	**634.86**	**279,414**		

*Pending an approved jurisdictional determination from the Corps.
**Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

Table I-5. RWQCB Non-Jurisdictional Resources within Project Survey Area

Feature Name	Acreage	Linear Feet*	Cowardin Code	Location (Latitude, Longitude)
F1 – Tamarisk Scrub	0.14	0	R6	33.710963, -116.141306
F13 – Tamarisk Scrub	0.06	0	R6	33.701028, -116.113432
Total	**0.20**	**0**		

*Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

APPENDIX J

JD REQUEST FORM

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: District Name Here

- I am requesting a JD on property located at: north of I-10, east of Coachella Canal Rd
  (Street Address)
  City/Township/Parish: Coachella County: Riverside State: CA
  Acreage of Parcel/Review Area for JD: 2970
  Section: 24-28, 30 Township: 5 S Range: 8 E, 9 E
  Latitude (decimal degrees): 33.711629 Longitude (decimal degrees): -116.108462
  (For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ___ I currently own this property. ___ I plan to purchase this property.
  ___ I am an agent/consultant acting on behalf of the requestor.
  ✔ Other (please explain): The KPC Group owns the majority of the property except for areas depicted as "Not A Part" per the land use plan.
- Reason for request: (check as many as applicable)
  ___ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
  ___ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
  ___ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
  ___ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
  ___ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
  ___ A Corps JD is required in order to obtain my local/state authorization.
  ✔ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
  ___ I believe that the site may be comprised entirely of dry land.
  ___ Other: _____
- Type of determination being requested:
  ✔ I am requesting an approved JD.
  ___ I am requesting a preliminary JD.
  ___ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
  ___ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: _____ Date: _____

- Typed or printed name: Stan McNaughton
  Company name: The KPC Group
  Address: 9 KPC Parkway, Suite #301
  Corona, CA 92879
  Daytime phone no.: 949-374-8830
  Email address: stanleymcnaughton@gmail.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

APPENDIX K

GIS DATA

(PROVIDED ELECTRONICALLY)

APPENDIX L

ORM BULK UPLOAD AQUATIC RESOURCES OR CONSOLIDATED EXCEL SPREADSHEET

Waters_Name	State	Cowardin_Code	M_Co	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude
Coachella Canal	CALIFORNIA	R5		Area	2.7156	ACRE	DELINEATE	33.70927901	-116.14808884
F1	CALIFORNIA	R6		Area	25.9159	ACRE	ISOLATE	33.71096281	-116.14130592
F1 - Dist Ephem Drainage Area	CALIFORNIA	R6		Area	15.06	ACRE	ISOLATE	33.71096300	-116.14130600
F1 - Tam Scrub/Ephem Drainage	CALIFORNIA	R6		Area	0.83	ACRE	ISOLATE	33.71096300	-116.14130600
F2	CALIFORNIA	R6		Area	1.6607	ACRE	ISOLATE	33.71512898	-116.14209612
F3	CALIFORNIA	R6		Area	1.2562	ACRE	ISOLATE	33.70845959	-116.13659675
F4	CALIFORNIA	R6		Area	257.1609	ACRE	ISOLATE	33.71986904	-116.10094833
F5	CALIFORNIA	R6		Area	2.356	ACRE	ISOLATE	33.70588870	-116.12794317
F6	CALIFORNIA	R6		Area	2.0965	ACRE	ISOLATE	33.70814909	-116.12513235
F7	CALIFORNIA	R6		Area	7.5664	ACRE	ISOLATE	33.70636325	-116.12426375
F8	CALIFORNIA	R6		Area	121.7639	ACRE	ISOLATE	33.70995119	-116.10769752
F9	CALIFORNIA	R6		Area	1.0262	ACRE	ISOLATE	33.70178300	-116.11913209
F10	CALIFORNIA	R6		Area	2.7718	ACRE	ISOLATE	33.70242549	-116.11686323
F11	CALIFORNIA	R6		Area	0.0717	ACRE	ISOLATE	33.70177259	-116.11592002
F12	CALIFORNIA	R6		Area	0.7314	ACRE	ISOLATE	33.70350341	-116.11291496
F13	CALIFORNIA	R6		Area	0.6574	ACRE	ISOLATE	33.70102818	-116.11343229
F14	CALIFORNIA	R6		Area	0.8566	ACRE	ISOLATE	33.70184729	-116.10906933

F15	CALIFORNIA	R6	Area	7.8226	ACRE	ISOLATE	33.70620548	-116.10039739
F16	CALIFORNIA	R6	Area	185.0508	ACRE	ISOLATE	33.70513300	-116.09770706

Appendix C3: Off-Site Improvements – Biological and Aquatic Resources Assessment Memo

MEMORANDUM

To: Ms. Meghan Karadimos, Kimley-Horn

From: Mr. Ian Hirschler, Rocks Biological Consulting

Date: February 8, 2023

Subject: KPC Coachella Project Off-site Improvements – Biological and Aquatic Resources Assessment Memo

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This memorandum provides a constraints-level summary of the biological and aquatic resources assessment conducted by Rocks Biological Consulting (RBC) for the proposed off-site improvements for the KPC Coachella Project (project). This memorandum also discusses potential impacts on biological and aquatic resources that may result from the proposed project as well as potential mitigation considerations based on the results of the literature review and field survey.

Exact locations of the project components and impact footprint within the project site have not been established at this time, therefore, discussions of potential impacts on biological and aquatic resources are intended to be general. Impact quantification and conclusive determinations of the significance of potential impacts are not provided within this memorandum.

1 INTRODUCTION

1.1 PROJECT LOCATION AND DESCRIPTION

The project site is in the City of Coachella, Riverside County, California (Figure 1). The project site occurs along Vista Del Norte, Dillon Road, Tyler Street, Avenue 48, Polk Street, and 50th Avenue located southwest of the Interstate 10 (I-10) Freeway and northeast of the State Route 86 (SR-86) Highway. An additional area occurs south of the I-10 Freeway on the north side of the Coachella Canal (Figure 1).

The KPC Coachella Project consists of a Specific Plan for a new master planned community located at the eastern entrance to the City of Coachella which will provide a mixture of land uses intended to create a cohesive entrance to the City, with residential components that will be compatible with the surrounding existing and planned neighboring areas, and additional commercial, residential, educational, employment, and recreational opportunities for residents and visitors within the City.

2 METHODS

2.1 LITERATURE REVIEW

2.1.1 BIOLOGICAL RESOURCES

The review of background information for biological resources included documented observations of special-status plant and wildlife species, natural communities, and habitats of concern in California with the potential to occur within and around the project site. This review included the following:

- United States Fish and Wildlife Service (USFWS) Information for Planning and Consultation (IPaC) database[1]
- USFWS Listed Species Database (Figure 2a) [2]
- California Natural Diversity Database (CNDDB)[3] (Figure 2b)
- California Native Plant Society (CNPS) Online Inventory of Rare and Endangered Plants of California Electronic Inventory[4]
- Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP) [5]

2.1.2 AQUATIC RESOURCES

RBC reviewed the USFWS National Wetland Inventory (NWI, Figure 3a)[6] and the United States Geological Survey (USGS) National Hydrography Dataset (NHD, Figure 3b)[7] for areas within the project site that may be potentially jurisdictional under the United States Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act (CWA) (33 U.S. Code § 1344), the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the CWA (33 U.S. Code § 1341) and the Porter-Cologne Water Quality Control Act (California Water Code § 13000 et seq.), and the California Department of Fish and Wildlife (CDFW) pursuant to Section 1602 of the California Fish and Game Code.

2.2 FIELD SURVEY

On January 13, 2023, RBC Senior Biologist Ian Hirschler conducted a field survey that included vegetation mapping, a general biological survey, habitat assessments for special-status species,

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[1] IPaC: Information for Planning and Consulting, Powered by ECOS – the Environmental Conservation Online System. Website https://ecos.fws.gov/ipac/ (accessed January 2023).

[2] United States Fish and Wildlife Service. Occurrence Information for Multiple Species with Jurisdiction of the Carlsbad Fish and Wildlife Office (CFWO). https://www.fws.gov/carlsbad/gis/cfwogis.html (accessed January 2022)

[3] California Department of Fish and Wildlife (CDFW). January 2023. California Natural Diversity Data Base (CNDDB) – Electronic Format.

[4] California Native Plant Society (CNPS), Rare Plant Program. 2023. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Accessed January 2023. http://www.rareplants.cnps.org

[5] Coachella Valley Conservation Commission (CVCC). 2007. Final Recirculated Coachella Valley Multiple Species Habitat Conservation Plan and Natural Community Conservation Plan. Information obtained from http://www.cvmshcp.org/plan-documents/

[6] National Wetlands Inventory website. 2023. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C. http://www.fws.gov/wetlands/

[7] The National Map, Advanced Viewer. 2023 U.S. Department of Interior. https://viewer.nationalmap.gov/advanced-viewer/

and a constraints-level assessment for potentially jurisdictional aquatic resources within the project site plus a 50-foot buffer (survey area). Focused or protocol surveys for special-status species were not conducted during the survey.

Vegetation was mapped to determine the type and condition of habitats/land uses that occur within the survey area. Habitats were classified based on the dominant and characteristic plant species in accordance with vegetation community classifications outlined in *A Manual of California Vegetation*[8] and *Preliminary Descriptions of the Terrestrial Natural Communities of California*[9]. The potential for special-status plant and wildlife species to occur in the survey area was based on habitat suitability and documented occurrences (e.g., CNDDB and USFWS records) in the vicinity.

Areas with depressions, drainage patterns, wetland vegetation, or riparian vegetation within the survey area were assessed for potential jurisdictional status under the Corps, RWQCB, and CDFW, with focus on the presence of defined channels, mapped hydric soils, and hydrology. RBC did not conduct a formal jurisdictional aquatic resources delineation pursuant to state and federal regulations during the constraints-level assessment.

3 RESULTS

The following includes a summary of the biological resources and potentially jurisdictional aquatic resources within the survey area based on the results of the preliminary literature review, vegetation mapping, general biological survey, special-status species habitat assessments, and constraints-level aquatic resources assessment.

Please note that the buffer was included in the analysis in order to assess the potential for sensitive biological resources in areas immediately adjacent the project site that could be indirectly impacted by the project analyzed herein. Additionally, the findings outlined in this memo regarding aquatic and biological resources are based on the currently applicable agency regulations and guidance. Determinations outlined in this section are subject to change given the uncertainty of future regulatory changes.

3.1 VEGETATION COMMUNITIES AND LAND COVER TYPES

The survey area ranges in elevation between -92 to 260 feet above mean sea level (amsl). The vegetation communities/land covers in the survey area consist primarily of developed land and disturbed habitat dominated by tumbleweed (*Salsola australis*) and arrow weed (*Pluchea sericea*), but also include agriculture, creosote bush (*Larrea tridentata*) scrub, creosote bush scrub – disturbed and fourwing saltbush (*Atriplex canescens*) scrub (Figure 4). The vegetation communities within the survey area are not considered sensitive by the CDFW.

The survey area also supports a small, isolated patch of cattail marsh – disturbed on the south side of Vista Del Norte within the northern portion of the survey area (Figure 4). The cattail marsh – disturbed includes cattail (*Typha* sp.), whispering bells (*Emmenanthe penduliflora*), and arrow

[8] Sawyer, John O., et al. 2009. The Manual of California Vegetation. Second edition, California Native Plant Society Press.

[9] Holland, R. F. 1986. Preliminary descriptions of the terrestrial natural communities of California. State of California, The Resources Agency, Department of Fish and Game.

weed. However, the habitat is disturbed by the presence of several non-native species, including tamarisk (*Tamarix* sp.), Saharan mustard (*Brassica tournefortii*), and common sow thistle (*Sonchus oleraceus*) as well as trash and debris. The cattail marsh – disturbed within the survey area is ranked by CDFW[10] as G5/S5 and is therefore not considered a sensitive natural community.

3.2 SPECIAL-STATUS SPECIES

No special status plant species, including federally or state-listed as threatened or endangered plant species, were observed within the survey area during the general field survey and none have a moderate or high potential to occur based on the disturbed nature of the site and the lack of suitable habitat. One special-status plant species with a California Rare Plant Rank (CRPR) of 1B.2, Mecca aster (*Xylorhiza cognata*), has been documented within one mile of the survey area but has low potential to occur within the creosote bush scrub on site as the survey area is below the documented elevation range of this species (Figure 2a). Please note that plant species with a CRPR of 3 or 4 were not assessed for their potential to occur due to their lower sensitivity ranking. Additionally, the survey area does not occur within any USFWS Critical Habitat for federally listed plant species.

No federally and state-listed wildlife species, including Coachella Valley fringe-toed lizard (*Uma inornata*; federally threatened [FT], state endangered [SE]) and desert tortoise (*Gopherus agassizii*; FT, state threatened [ST]) were observed within the survey area. Desert tortoise has low potential to occur within the creosote bush scrub habitat on site. Coachella Valley fringe-toed lizard is not anticipated to occur due to the lack of suitable dune habitat within the project site.

Several special-status wildlife species have been documented within one mile of the project site and have low to moderate potential to occur within the creosote bush scrub habitat on site including black-tailed gnatcatcher (*Polioptila melanura*; Species of Special Concern [SSC]), burrowing owl (*Athene cunicularia*; SSC), crissal thrasher (*Toxostoma crissale*; SSC), ferruginous hawk (*Buteo regalis*; watch list [WL] when wintering), Palm Springs pocket mouse (*Perognathus longimembris bangsi*; SSC), and the Palm Springs round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*; SSC). Two additional special-status species, western yellow bat (*Lasiurus xanthinus*; SSC) and western mastiff bat (*Eumops perotis californicus*; SSC) have been documented within one mile of the project site but are not anticipated to occur on site due to the lack of suitable habitat. Additionally, the project site does not occur within any USFWS Critical Habitat for federally listed wildlife species.

3.3 AQUATIC RESOURCES

RBC performed a constraints-level assessment of the survey area for the presence of potential Corps-, RWQCB-, and CDFW-jurisdictional aquatic resources. Based on the constraints-level assessment, two potentially jurisdictional aquatic resources occur within the northern portion of the survey area, consisting of an unvegetated linear feature and a disturbed area of cattail marsh as shown on Figure 4 and discussed below.

[10] CDFW. 2023. California Sensitive Natural Communities. Accessed February 1, 2023.

The unvegetated linear feature commences within the survey area, south of Vista del Norte before continuing off site and dissipating in disturbed uplands (Figure 4). The disturbed cattail marsh occurs on the south side of Vista Del Norte within the survey area (Figure 4) and is primarily composed of cattail and tamarisk, both of which are wetland indicator plant species per the Corps' *Arid West 2020 Regional Wetland Plant List*[11]*.* According to the NRCS Online Soil Map[12], both features are located in Myoma fine sand, which is classified as a hydric soil per the NRCS Soil Data Access Hydric Soils List.[13] USFWS NWI and USGS NHD do not map the linear feature or the disturbed cattail marsh, and standing water was not observed in either feature. Please note, three features mapped as "freshwater pond" by NWI (Figure 3a) and "reservoir" by NHD (Figure 3b) occur immediately adjacent to, but outside of, the survey area.

A formal, project-specific aquatic resources delineation and reporting per Corps, RWQCB, and CDFW standards and guidelines; a review of historic aerial imagery; and further coordination with the Corps, RWQCB, and CDFW would be required to assess the anticipated jurisdictional status and extent of the aquatic resources within the survey area. Section 10 navigable waters of the U.S. did not occur within the survey area based on field observations.

3.4 WILDLIFE CORRIDORS

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat. Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Corridors can consist of large, linear stretches of connected habitat (such as riparian vegetation) or as a sequence of stepping-stones across the landscape (discontinuous areas of habitat such as wetlands and ornamental vegetation), or corridors can be larger habitat areas with known or likely importance to local fauna.

The survey area does not occur within a wildlife corridor. The survey area occurs along existing roads, is adjacent to existing development, and does not represent a wildlife travel route, crossing, or regional movement corridor between large open space habitats.

3.5 COACHELLA VALLEY MULTIPLE SPECIES HABITAT CONSERVATION PLAN

The project site is located within the Coachella Valley MSHCP boundary but is not located within a MSHCP Conservation Area, which are mapped areas with conservation obligations, that require additional review by the Coachella Valley Conservation Commission (CVCC).

4 POTENTIAL IMPACTS AND MITIGATION CONSIDERATIONS

This section discusses the potential impacts on biological and aquatic resources resulting from the project. Mitigation considerations to avoid and minimize potential impacts on biological and aquatic

[11] U.S. Army Corps of Engineers (Corps). 2020. National Wetland Plant List. https://wetland-plants.usace.army.mil/nwpl_static/v34/home/home.html

[12] NRCS. 2023. Web Soil Survey. Online Map. https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

[13] NRCS. No date. Soil Data Access (SDA) Hydric Soils List. Last accessed January 2023. https://www.nrcs.usda.gov/publications/query-by-ssa.html

resources are also discussed below. A comprehensive impact analysis, including quantification of impacts, is not included in this report.

4.1 SENSITIVE HABITAT

No vegetation communities considered sensitive by CDFW occur within the survey area. Although impacts on native vegetation communities such as cattail marsh – disturbed, creosote bush scrub, creosote bush scrub – disturbed, and fourwing saltbush scrub would occur with project implementation, such impacts will be offset through payment of MSHCP Local Development Mitigation Fees, that would be used to acquire and maintain high-quality habitat within the CVMSHCP Boundary. Please refer to the current fee schedule[14] for the appropriate fees required for the development of the project site.

4.2 SPECIAL-STATUS SPECIES

No special-status plant species have moderate or high potential to occur within the project site. The project site is highly developed, and the undeveloped areas are subject to frequent disturbance from human activity, resulting in low suitability for special-status plant species. Mitigation related to potential impacts on special-status plants is not anticipated.

Burrowing owl and desert tortoise have moderate and low potential to occur, respectively, within the creosote bush scrub on the north side of the Coachella Channel. Pre-construction surveys for burrowing owl and desert tortoise may be required prior to any ground disturbance activities. If either species is documented on site, further coordination with USFWS and/or CDFW may be required. Additional special-status wildlife species have low potential to occur within the project site. The majority of the project site's proximity to developed land makes it highly unlikely to support special-status wildlife species. Additionally, impacts on wildlife resulting from the proposed project aren't likely to increase substantially from the existing amount of development and human-caused disturbance to the project site.

The project site has potential to support avian nests, which would be protected by the Migratory Bird Treaty Act (MBTA). Therefore, pre-construction presence/absence surveys for birds are recommended. To avoid direct impacts on raptors and/or native/migratory birds, vegetation removal, ground-breaking activities, and other site disturbances should occur outside of the general avian breeding season (generally February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, a qualified biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. Adequate avoidance buffers, as determined by a qualified biologist, shall be required around active nests, if observed during pre-construction surveys.

4.3 AQUATIC RESOURCES

The project site supports two potentially jurisdictional aquatic resources, in the form of a linear feature and disturbed cattail marsh within the northern portion of the survey area (Figure 4). This

[14] CVCC. 2023. Local Development Mitigation Fee. https://cvmshcp.org/ldmf/

section provides more detail about the permitting and mitigation associated with the potentially jurisdictional resource.

4.3.1 PERMITTING

The applicant would need to obtain permits through the Corps, RWQCB, and CDFW for impacts on jurisdictional aquatic resources (i.e., the potentially jurisdictional linear feature and area of disturbed cattail marsh). Additionally, a formal, project-specific aquatic resources delineation and reporting per Corps' standards and guidelines and further coordination would be required to receive an official determination from the Corps related to potential aquatic resources on site. Similarly, additional coordination with the RWQCB and CDFW would be required to receive concurrence regarding the jurisdictional status of on-site potential aquatic resources. Should the on-site aquatic resources not meet the Corps' definition of waters of the U.S. based on the results of a formal aquatic resource delineation and associated jurisdictional analysis, an approved jurisdictional determination (AJD) may be requested from the Corps to confirm no waters of the U.S. occur on site and therefore no Corps permit would be required for the project.

4.3.2 MITIGATION

The applicable regulatory agencies may require compensatory mitigation to offset proposed project impacts associated with the project site. Final mitigation ratios would be determined in consultation with the Corps, RWQCB, and/or CDFW, based on agency evaluation of current resource functions and values. A minimum 1:1 ratio is typically required, though ratios may be higher depending on the functions lost at the impact site in comparison to the functions gained at the proposed mitigation site, as well as mitigation type and location. Potential compensatory mitigation to offset impacts on jurisdictional aquatic resources may be implemented through off-site, permittee-responsible mitigation, in-lieu fee program or mitigation bank credit purchase, or a combination of these options depending on availability. The proposed mitigation strategy would prioritize in-kind and in-watershed options per the regulatory agencies' preferences. The regulatory agencies would make the final determination of the final compensatory mitigation requirements during the permit evaluation process.

4.4 WILDLIFE CORRIDORS

The project site is not within a wildlife corridor. Therefore, potential impacts on wildlife corridors and their associated mitigation considerations are not anticipated for this project.

4.5 COACHELLA VALLEY MSHCP

The project site is not located within a Conservation Area; therefore, it is not subject to the Required Avoidance, Minimization and Mitigation Measures set forth in Section 4.4 of the MSHCP. Although the project will result in impacts on habitat that could support MSHCP-covered species, impacts on habitat will be offset by the payment of the MSHCP Local Development Mitigation Fee. The Local Development Mitigation Fee is a component of the MSHCP which provides funding of the acquisition and long-term management of conservation land within the MSHCP boundary.

The proposed project represents a Covered Activity under the MSHCP. As described in Section 7.1 of the MSHCP, take authorization will be provided for Covered Activities outside of Conservation areas including "*development permitted or approved by Local Permittees. This includes, but is not limited to, new projects approved pursuant to county and city general plans".*

5 CONCLUSIONS

Although the project is anticipated to mostly impact disturbed habitat and developed land, the project could impact small areas of native habitat. Potential impacts on native vegetation may be offset through the payment of MSHCP Local Development fees which would be used to acquire and maintain high-quality habitat within the MSHCP Reserve. Since there is moderate potential for burrowing owl to occur within the project site, pre-construction surveys for burrowing owl should be conducted. Since there is low potential for desert tortoise to occur within the project site, pre-construction surveys for desert tortoise may be required, and consultation with the agencies is recommended.

Pre-construction nesting bird surveys, as detailed in Section 4.2 above, will likely be required should work occur during the avian breeding season. Potentially jurisdictional aquatic resources were documented within the project site. If impacts are proposed on or near the mapped potentially jurisdictional aquatic resources, a formal, project-specific aquatic resources delineation and reporting per Corps, RWQCB, and CDFW standards and guidelines and further coordination with the Corps, RWQCB, and CDFW would be required to receive a determination from the regulatory agencies of their concurrence with the findings related to potential aquatic resources on site. The applicant would need to obtain permits through the Corps, RWQCB, and/or CDFW for any impacts on jurisdictional aquatic resources, as described in Sections 4.3.1 and 4.3.2 above.

This memo is intended to be a general, constraints-level summary of the biological and aquatic resources within the project site. Conclusive determinations of potential impacts and mitigation measures to reduce potential impacts to a level below significant should be determined once the impact footprint is established and, if impacts on potential aquatic resources are proposed, a formal, project-specific aquatic resources delineation and reporting is completed.

ATTACHMENTS

Figure 1 – Project Location

Figure 2a – CNDDB Plants and Wildlife

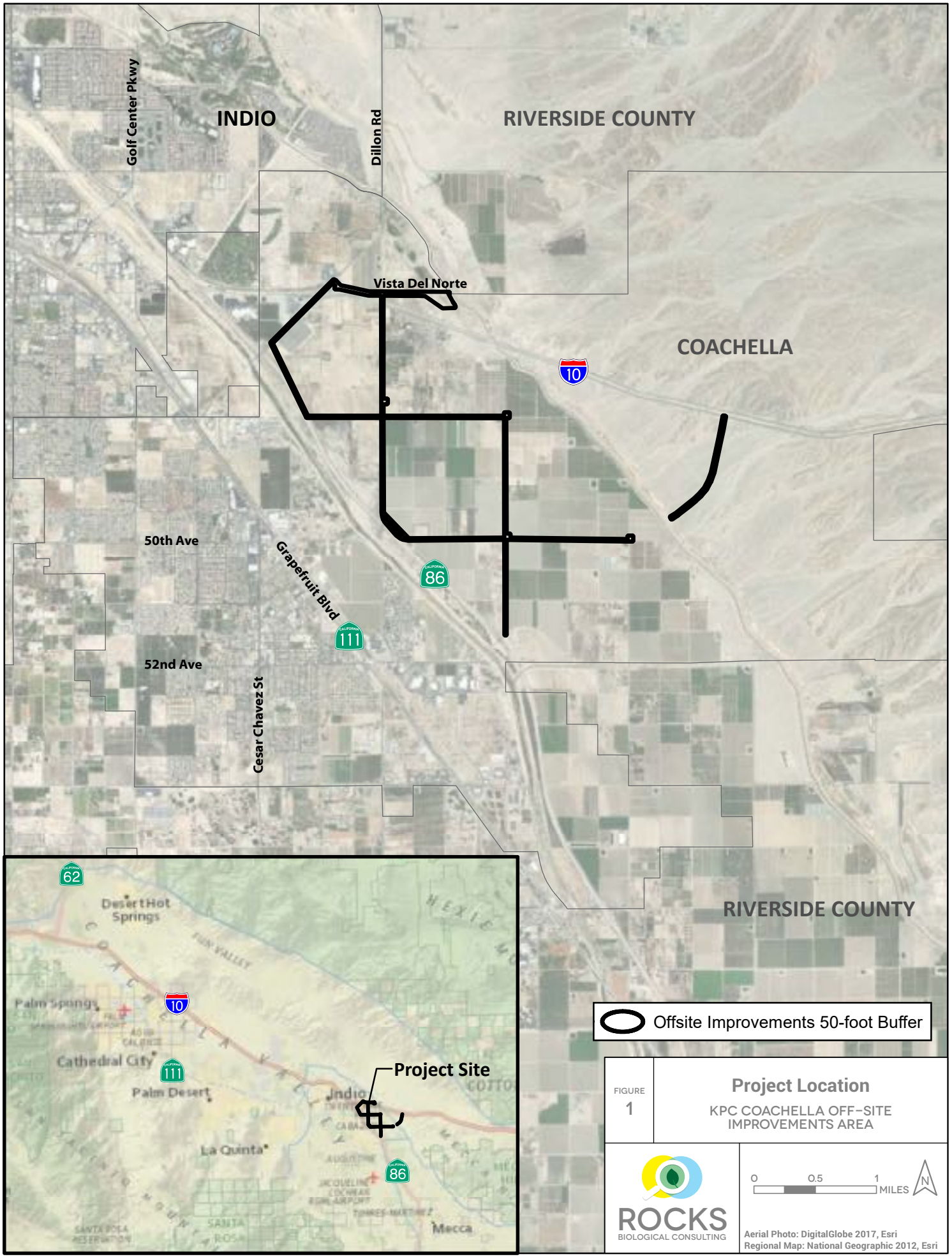
Figure 2b – USFWS Plants and Wildlife

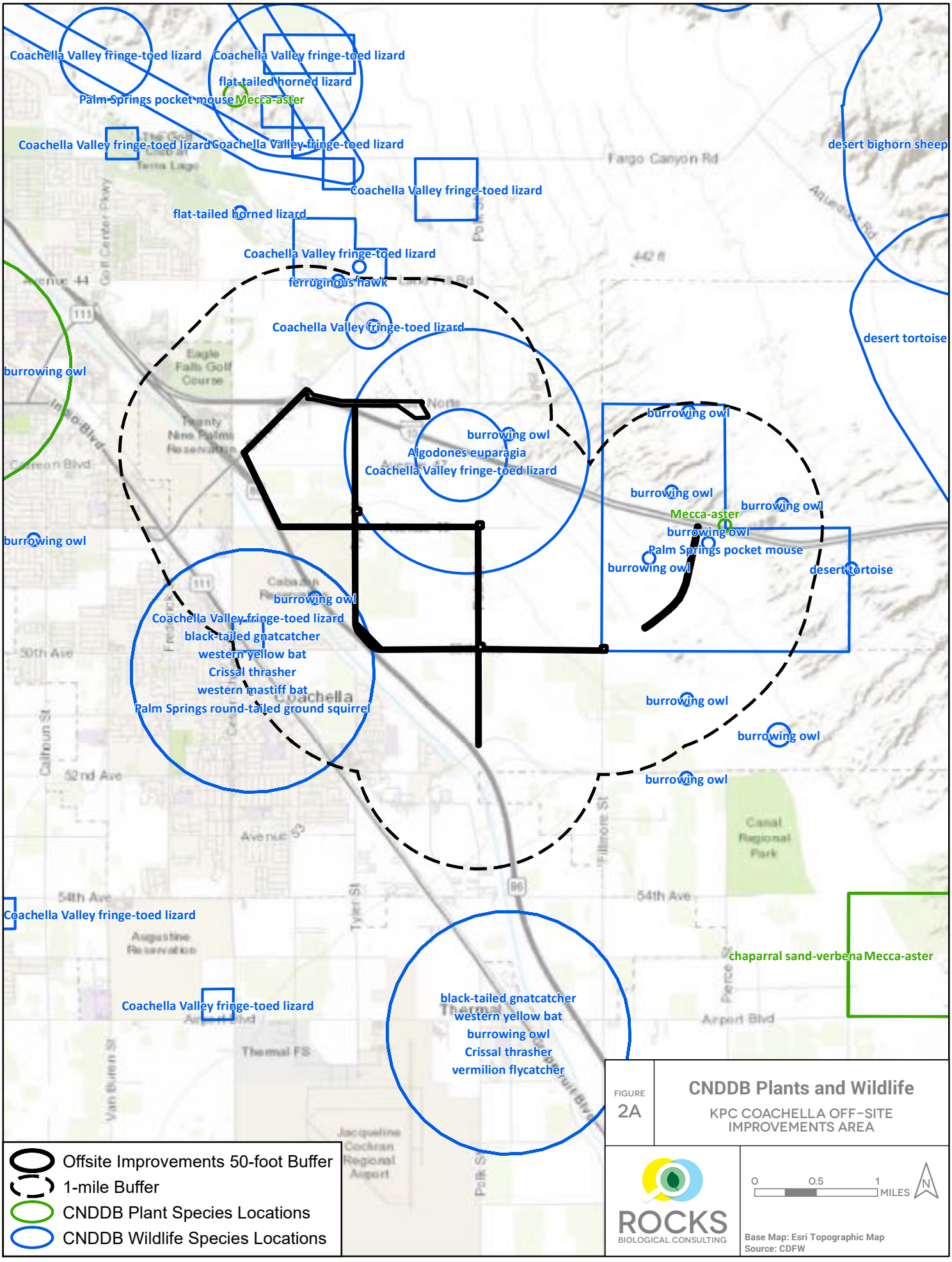
Figure 3a – National Wetland Inventory

Figure 3b – National Hydrography Dataset

Figure 4 – Biological Resources and Estimated Potential Aquatic Resource Boundaries

Attachment A – Site Photographs


INDIO
RIVERSIDE COUNTY
Golf Center Pkwy
Dillon Rd
Vista Del Norte
COACHELLA
10
50th Ave
Grapefruit Blvd
86
111
52nd Ave
Cesar Chavez St
RIVERSIDE COUNTY
62
Desert Hot Springs
Palm Springs
10
Cathedral City
111
Palm Desert
Indio
Project Site
La Quinta
86
Mecca
Offsite Improvements 50-foot Buffer
FIGURE
1
Project Location
KPC COACHELLA OFF-SITE IMPROVEMENTS AREA
ROCKS
BIOLOGICAL CONSULTING
0
0.5
1
MILES
N
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri



Offsite Improvements 50-foot Buffer
1-mile Buffer
CNDDB Plant Species Locations
CNDDB Wildlife Species Locations

FIGURE 2A

CNDDB Plants and Wildlife

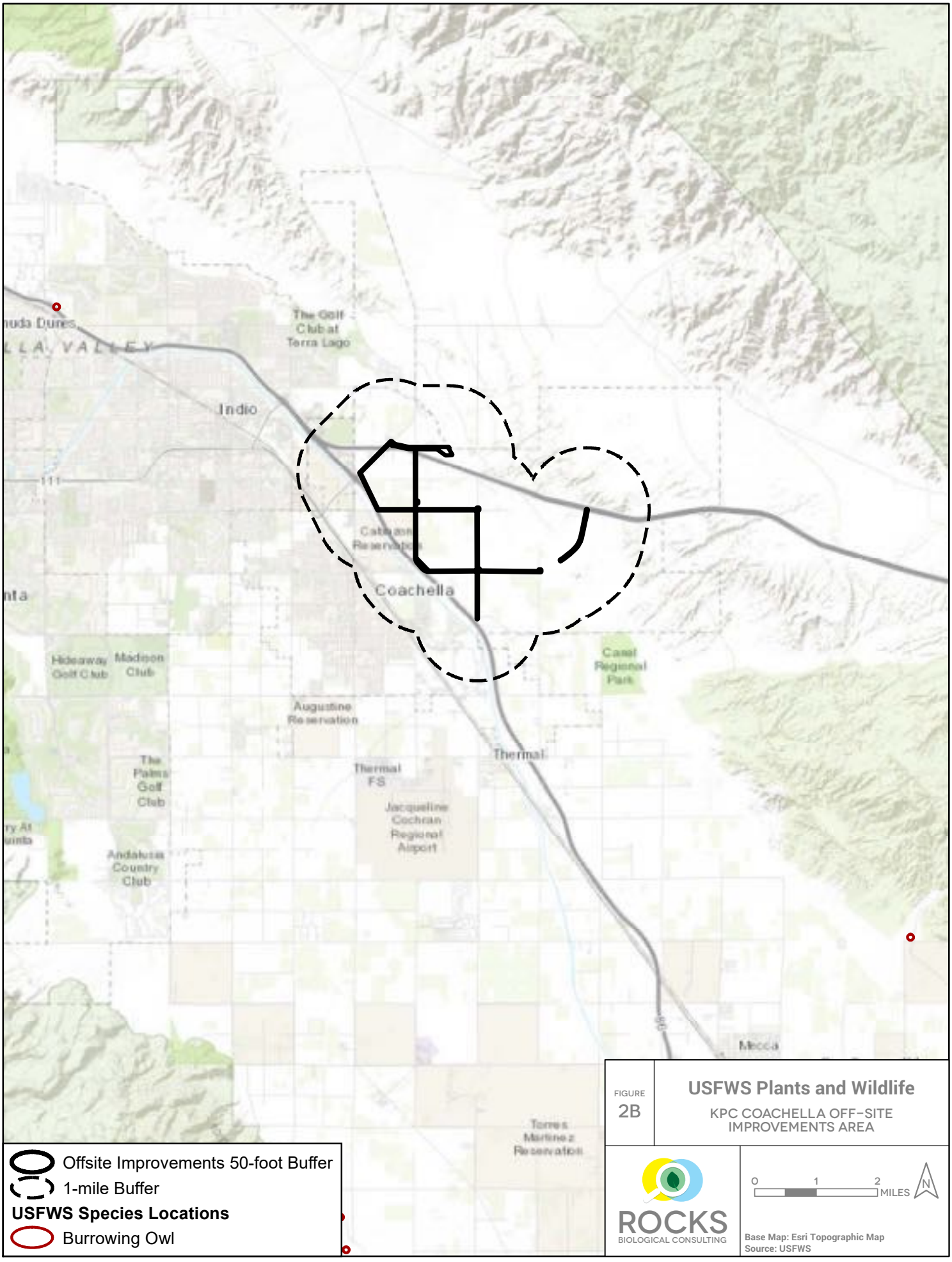
KPC COACHELLA OFF-SITE IMPROVEMENTS AREA

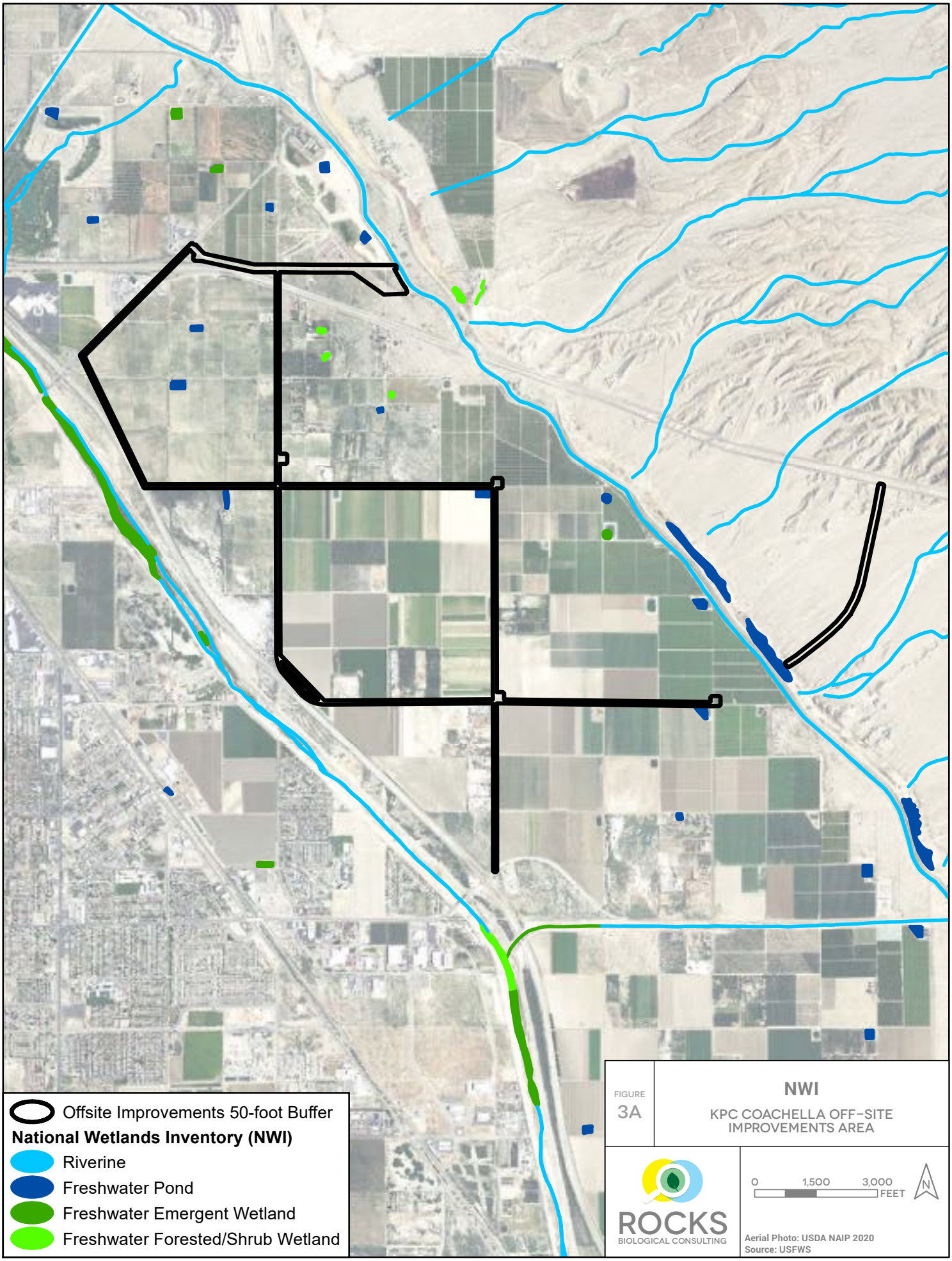
ROCKS BIOLOGICAL CONSULTING

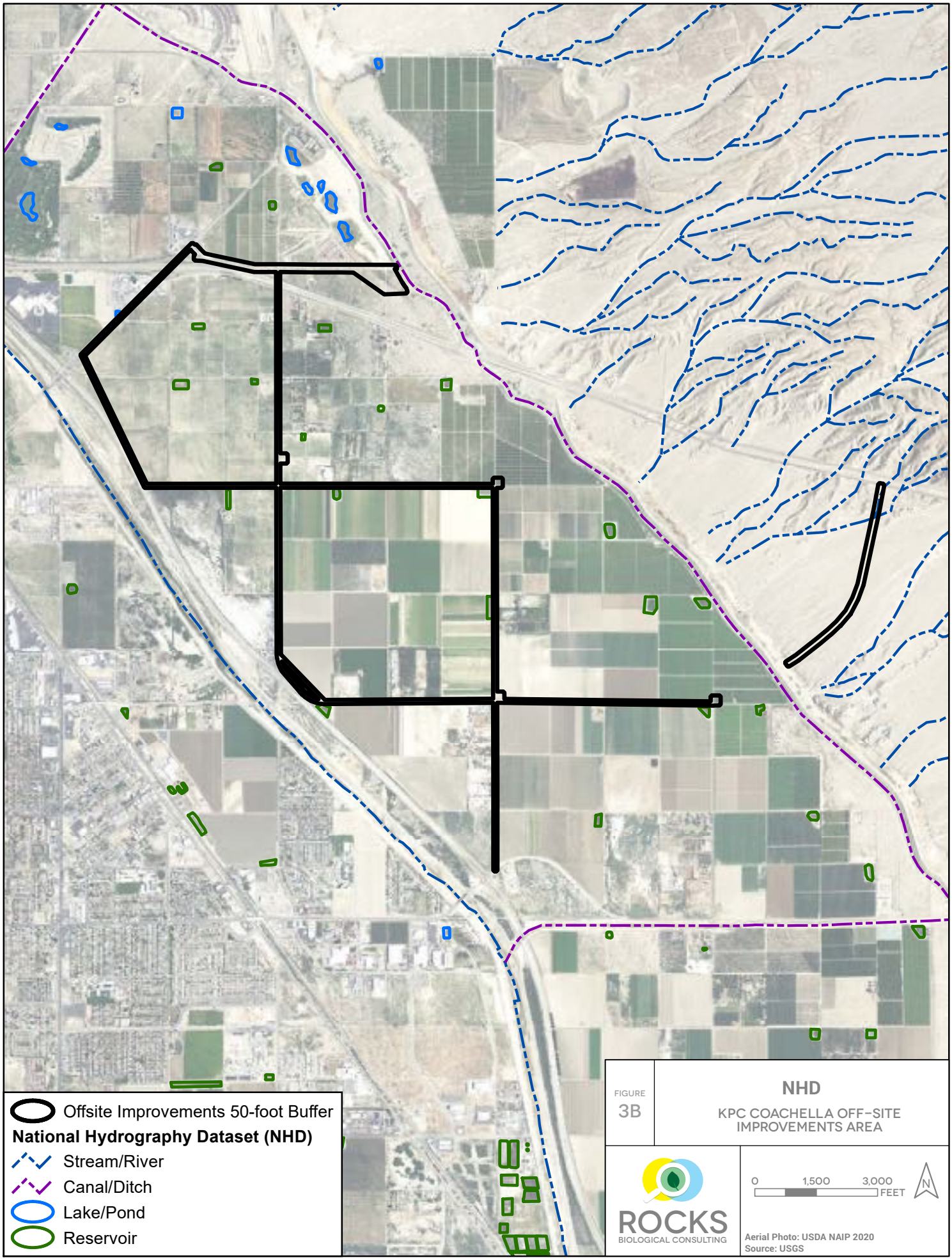
0 0.5 1 MILES

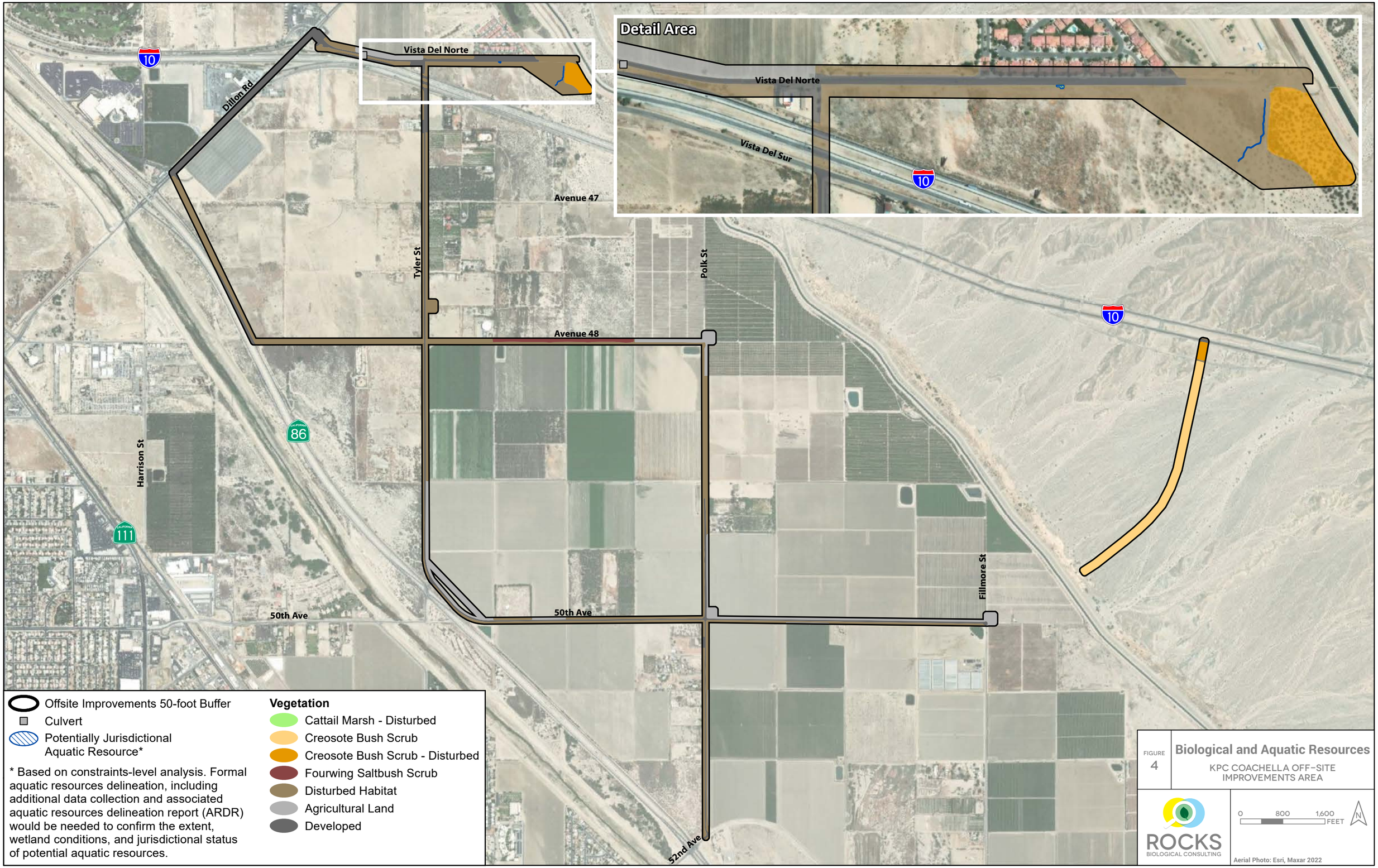
N

Base Map: Esri Topographic Map
Source: CDFW


The Golf Club at Terra Lago
Indio
111
Coachella
Hideaway Golf Club
Madison Club
Augustine Reservation
Thermal
Thermal FS
Jacqueline Cochran Regional Airport
The Palms Golf Club
Andalusia Country Club
Coral Regional Park
Mecca
Torres Martinez Reservation
Offsite Improvements 50-foot Buffer
1-mile Buffer
USFWS Species Locations
Burrowing Owl
FIGURE 2B
USFWS Plants and Wildlife
KPC COACHELLA OFF-SITE IMPROVEMENTS AREA
ROCKS BIOLOGICAL CONSULTING
0 1 2 MILES
N
Base Map: Esri Topographic Map
Source: USFWS


Offsite Improvements 50-foot Buffer
National Wetlands Inventory (NWI)
Riverine
Freshwater Pond
Freshwater Emergent Wetland
Freshwater Forested/Shrub Wetland
FIGURE
3A
NWI
KPC COACHELLA OFF-SITE
IMPROVEMENTS AREA
ROCKS
BIOLOGICAL CONSULTING
0
1,500
3,000
FEET
N
Aerial Photo: USDA NAIP 2020
Source: USFWS


Offsite Improvements 50-foot Buffer
National Hydrography Dataset (NHD)
Stream/River
Canal/Ditch
Lake/Pond
Reservoir
FIGURE
3B
NHD
KPC COACHELLA OFF-SITE IMPROVEMENTS AREA
ROCKS
BIOLOGICAL CONSULTING
0
1,500
3,000
FEET
N
Aerial Photo: USDA NAIP 2020
Source: USGS


Detail Area
Vista Del Norte
Vista Del Sur
10
Vista Del Norte
Dillon Rd
Tyler St
Avenue 47
Polk St
Avenue 48
10
86
Harrison St
111
50th Ave
50th Ave
Fillmore St
52nd Ave
Offsite Improvements 50-foot Buffer
Culvert
Potentially Jurisdictional Aquatic Resource*
* Based on constraints-level analysis. Formal aquatic resources delineation, including additional data collection and associated aquatic resources delineation report (ARDR) would be needed to confirm the extent, wetland conditions, and jurisdictional status of potential aquatic resources.
Vegetation
Cattail Marsh - Disturbed
Creosote Bush Scrub
Creosote Bush Scrub - Disturbed
Fourwing Saltbush Scrub
Disturbed Habitat
Agricultural Land
Developed
FIGURE 4
Biological and Aquatic Resources
KPC COACHELLA OFF-SITE IMPROVEMENTS AREA
ROCKS BIOLOGICAL CONSULTING
0 800 1,600 FEET
N
Aerial Photo: Esri, Maxar 2022

Attachment A

Site Photographs – January 13, 2023



Photo 1. View of disturbed creosote bush (*Larrea tridentata*) scrub in the northeast portion of the survey area.



Photo 2. Representative view of the linear feature within disturbed habitat on the east end of Vista Del Norte, facing downstream.



Photo 3. View of the disturbed cattail marsh with cattail (*Typha* sp.) and tamarisk (*Tamarix* sp.) along Vista Del Norte.



Photo 4. View facing south along Tyler Street.



Photo 5. View facing west from 50th Avenue towards Tyler Street.



Photo 6. View facing east of the agriculture and disturbed habitat on Polk Street.



Photo 7. View facing west of the fourwing saltbush (*Atriplex canescens*) scrub along Avenue 48.



Photo 8. View facing north along Polk Street within the survey area.

Appendix C4: Coachella Valley MSHCP Like Exchange

KPC COACHELLA SPECIFIC PLAN

CITY OF COACHELLA, RIVERSIDE COUNTY, CALIFORNIA

Coachella Valley Multiple Species Habitat Conservation Plan Like Exchange

Prepared For:

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On Behalf of:

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October 2024

KPC COACHELLA SPECIFIC PLAN

CITY OF COACHELLA, RIVERSIDE COUNTY, CALIFORNIA

Coachella Valley Multiple Species Habitat Conservation Plan Like Exchange

The undersigned certify that the statements furnished in this report and exhibits present data and information required for this biological evaluation, and the facts, statements, and information presented is a complete and accurate account of the findings and conclusions to the best of our knowledge and beliefs.



Travis J. McGill
Director



Thomas J. McGill, Ph.D.
Managing Director

October 2024

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APPENDIX

Appendix A Site Plan
Appendix B KPC Circulation
Appendix C Vista del Norte – Plan and Profile
Appendix D Biological Resources Assessment
Appendix E Delineation of State and Federal Jurisdictional Waters

Executive Summary

KPC Development Company, LLC (KPC) proposes the development of the KPC Coachella Specific Plan Project in the northeast portion of the City of Coachella, Riverside County, California. To provide westerly access from the community to existing portions of the City, the project proposes the installation of the Vista Del Norte Crossing over the All American Canal (refer to Appendix A, *Site Plan* and Exhibit 3, *Project Site*) through the East Indio Hills Conservation Area (EIHCA).

The entire project site is located within the Plan Area for the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP). Specifically, the land proposed for the Vista Del Norte Crossing occurs within the southern terminus of the EIHCA (refer to Exhibit 2). Therefore, the installation of the crossing is subject to the Coachella Valley Conservation Commission's (CVCC) Joint Project Review (JPR) process. Since the Vista Del Norte Crossing, as planned, is wider than the maximum road width to be considered a Covered Activity under the CVMSHP, this Like Exchange has been prepared to compensate for the loss of habitats within the EIHCA. Development of the project would result in both positive and negative impacts to habitat and natural communities. The Vista Del Norte Crossing is not located within any CVMSHCP designated sand transport/sand source area or mapped biological corridor/linkage. Therefore, no impacts to CVMSHCP mapped biological corridors or essential ecological processes (i.e., sand transport/sand source areas) are expected to occur. It should be noted that all impacts to the EIHCA will be mitigated.

The proposed development of the Vista Del Norte Crossing will result in a total of approximately 64.67 acres of impact to the EIHCA (refer to Exhibit 3). The physical development of the Vista Del Norte Crossing within the EIHCA will result in 3.42 acres of permanent impacts and 4.5 acres of temporary impacts, totaling 7.92 acres of impacts. Additionally, approximately 56.75 acres of indirect impacts will occur to the southern terminus of the EIHCA from the development of the crossing. The area of impact associated with the physical development of the crossing within the EIHCA has been minimized to the maximum extent practicable.

To offset impacts related to biological resources (64.67 acres) within the EIHCA, KPC proposes to donate 100 acres of land, under private ownership by the Applicant, to be included in the Dos Palmas Conservation Area (DPCA). These 100 acres are located adjacent to the DPCA. The 100 acres will be used to offset the 64.67 acres of impacts to land within the City of Coachella's portion of the EIHCA from implementation of the proposed project, resulting in a net increase of 35.33 acres of land being added to the DPCA (refer to Exhibit 4). The 100 acres of land that will be added to the DPCA is surrounded by undeveloped/vacant land that is under a mix of both private and government/non-profit organization management.

This proposed modification to CVMSHCP conservation within the EIHCA (reduction) and DPCA (addition) will result in biologically superior conservation acreage and value using the mandatory categories for equivalency analysis listed in MSHCP Section 6.12.2, summarized as follows:

- The conservation of suitable habitat and level of take of MSHCP covered species with the proposed modifications to the EIHCA and DPCA would be biologically superior to what would otherwise occur;
- The proposed modification would result in greater benefits to natural communities as compared to those benefits analyzed under the MSHCP;
- The function and values of existing biological corridors and essential ecological processes are not expected to be reduced by the proposed modification;
- The proposed modification would result in biologically superior conservation configuration, and management requirements are not expected to significantly differ compared to what would have occurred under the MSHCP;
- Ecotones and overall species diversity are expected to be increased by the proposed modification;
- The additional conservation parcels are greater in size, resulting in a greater acreage in MSHCP Conservation Areas; and
- The three parcels that constitute the additional conservation land have been acquired by the Applicant and, therefore, will be under the direct ownership of the applicant before being deeded to CVCC.

Based on this analysis, the proposed modification of conservation within the EIHCA and DPCA will result in biologically superior conservation value compared with implementation of the CVMSHCP without the proposed project and additional conservation that will be added as a result of the project.

Section 1 Introduction

KPC Development Company, LLC (KPC) proposes the development of the KPC Coachella Specific Plan Project in the northeast portion of the City of Coachella, Riverside County, California. To provide westerly access from the community to existing portions of the City, the project proposes the installation of the Vista Del Norte Crossing above the All American Canal. The land proposed for the Vista Del Norte Crossing occurs within the southern terminus of the EIHCA that will result in a greater level of impact to the EIHCA than what has been authorized by the CVMSHCP.

This report presents an equivalency analysis of the Vista Del Norte Crossing and the accompanying conservation measures and demonstrates how the approved biological goals and objectives for the CVMSHCP Conservation Areas will be accomplished.

As required by the Coachella Valley Multiple Species Habitat Conservation Plan (MSHCP or Plan), the equivalency analysis for the requested modification contains the following information:

1. Clear delineation of the proposed boundary adjustment;
2. Description of the proposed project;
3. Description of biological information available, including vegetation mapping, core habitat and appropriate species surveys, land identified as part of a biological corridor or linkage, and land identified as part of an essential ecological process area;
4. Description of the project's efforts to be consistent with the MSHCP Conservation Area Conservation Objectives and rationale of why consistency has been determined to be infeasible; and;
5. Description of the effects/benefits of the proposed action on habitats for covered species, natural communities, biological corridors and linkages, essential ecological processes, and MSHCP Conservation Area design and function.

The proposed KPC Coachella Specific Plan Project is located within the City of Coachella, who, as the lead agency, is a Permittee to the CVMSHCP and is subject to the rules and regulations set forth in the Plan. As a result, the proposed project will need to be consistent with the Plan. Specifically, only the Vista Del Norte Crossing portion of the project is located within the City of Coachella's portion of the EIHCA, which list specific Take Authorization for CVMSHCP listed species. The CVMSHCP was approved in 2008 to conserve 240,000 acres of open space and to protect 27 plant and wildlife species. Through its implementation, the Plan provides the Coachella Valley with a regional vision for balanced growth while meeting the requirements of the federal and state endangered species acts. As part of its conservation obligations under the CVMSHCP, CVAG has designated 21 Conservation Areas.

The primary conservation goals for the EIHCA include (1) maintaining "Core Habitat" within the EIHCA; (2) conserving core habitat for Covered Species and conserving Covered Species where they occur; (3) conserve active desert dunes habitat; (4) conserve stabilized and partially stabilized desert sand fields; and (5) conserve mesquite hummocks. Species- and habitat-specific conservation goals for

the EIHCA vary by location based on portions of the EIHCA that occur within specific Cities or within unincorporated County land. Specifically, on-site portions of the EIHCA, within the City of Coachella, contain CVMSHCP core habitat for flat-tailed horned lizard (*Phrynosoma mcallii*), Le Conte's thrasher (*Toxostoma lecontei*), Coachella Valley round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), and Palm Springs pocket mouse (*Perognathus longimembris bangsi*). In addition, while there are no habitat-specific conservation goals for the Coachella portion of the EIHCA, on-site portions of the EIHCA support several mesquite (*Prosopis glandulosa* var. *glandulosa*) hummocks. The EIHCA is part of the watershed for mesquite hummocks and provides potential habitat connectivity with the Thousand Palms Conservation Area through the Indio Hills Palms Conservation Area to the west (refer to Exhibit 1, *CVMSHCP Conservation Areas*).

Section 6.12, *Modifications, Like Exchanges to Conservation Areas, and Amendments to the MSHCP*, in the MSHCP acknowledges that in some instances it may be possible to achieve the Plan's conservation goals through modification or a different configuration of one or more conservation areas if it can be demonstrated that the proposed modification to a conservation area will provide biologically equivalent preservation. Through this process, impacts allowed within a conservation area may be modified in exchange for increasing the available conservation opportunities elsewhere in the conservation area. Two key conditions for determining whether the equivalency requirements are met is by demonstrating that the project will (1) result in equal or greater benefits to MSHCP covered species and conserved natural communities as compared to those benefits analyzed in the MSHCP (existing conservation area), and (2) the level of take of (impact to) MSHCP covered species must be no greater than that analyzed in the Plan.

The opportunity for proposed modifications to the existing EIHCA is provided in the CVMSHCP, which acknowledges that in some instances it may be possible to achieve the CVMSHCP's conservation goals through a different configuration of one or more Conservation Areas. Through this process, the boundary of a conservation area may be modified as determined and/or approved by the CVCC, CDFW, and the USFWS if the resulting conservation is biologically superior to that approved under the Plan.

The proposed project site overlaps with the southern terminus of the approximately 4,274-acre EIHCA (refer to Exhibit 2, *East Indio Hills Conservation Area*). The EIHCA encompasses the southern foothills of the eastern portion of the Indio Hills. Portions of the EIHCA that will be impacted by project activities support the All American Canal, undeveloped open space, and earthen flood control berms.

Approximately 64.67 acres of habitat within the southern terminus of the EIHCA will be impacted from the development of the Vista Del Norte Crossing. Most of the impacts to the EIHCA will not be permanent impacts from the installation of the Vista Del Norte Crossing, but rather indirect impacts from the fragmentation of existing habitat and reduction in local connectivity to the southern terminus of the EIHCA due to the road crossing (80 feet) exceeding the width dimensions approved in the CVMSHCP (74 feet). The project proposes to donate 100 acres of natural habitat to be incorporated into the DPCA of the CVMSHCP to compensate for the loss of habitat within the EIHCA.

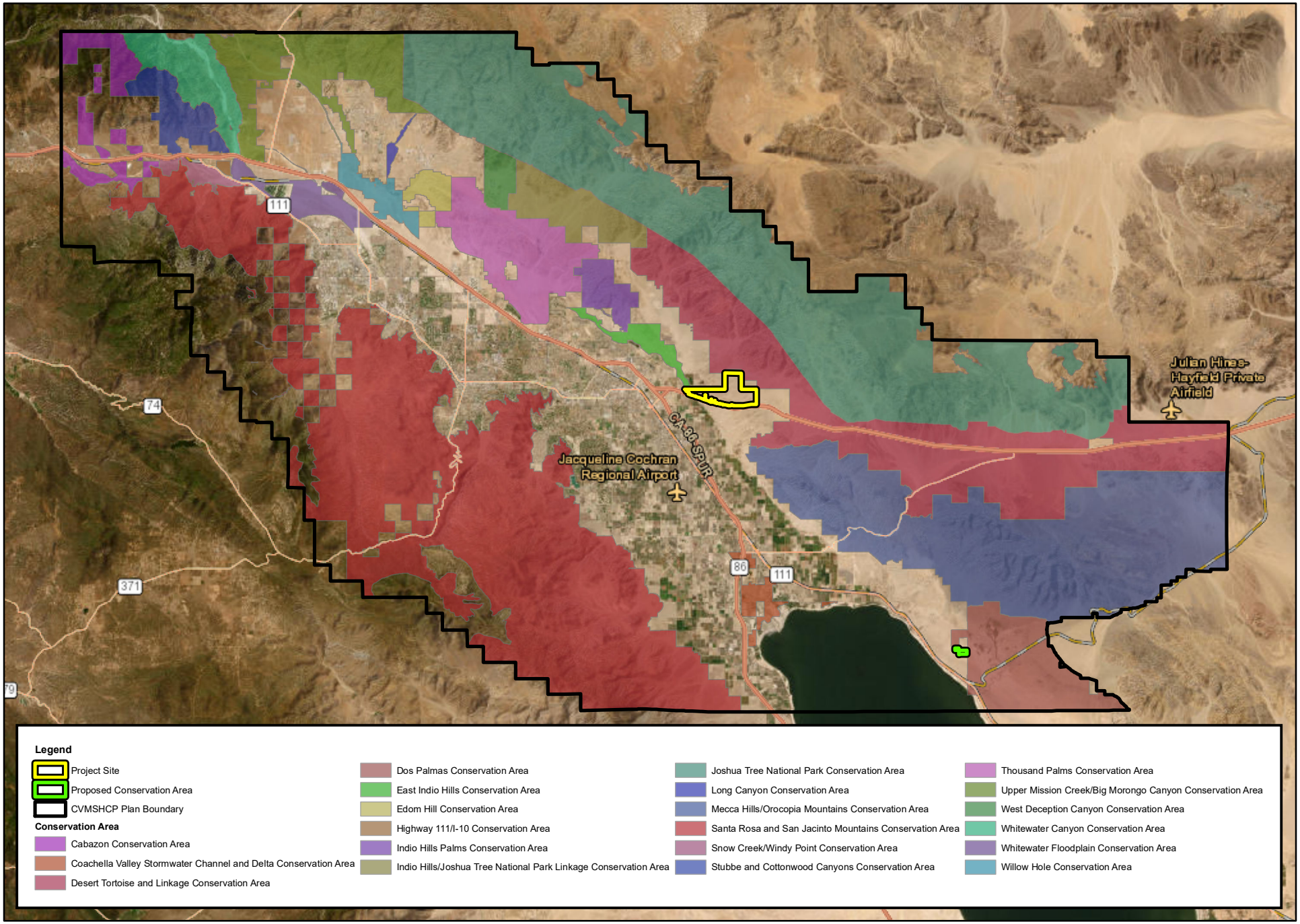
The table below shows that maximum acreages of disturbance on private lands within the City of Coachella's portion of the EIHCA. Land within the project site is considered privately-owned under

the CVMSHCP and the proposed development shall be consistent with this requirement. As noted above, the proposed development of the Vista Del Norte Crossing will result in a total of approximately 64.67 acres of impact to the EIHCA (refer to Exhibit 3). The physical development of the Vista Del Norte Crossing within the EIHCA will result in 3.42 acres of permanent impacts and 4.5 acres of temporary impacts, totaling 7.92 acres of impacts. Additionally, approximately 56.75 acres of indirect impacts will occur to the southern terminus of the EIHCA from the development of the crossing. The area of impact associated with the physical development of the crossing within the EIHCA has been minimized to the maximum extent practicable.

Table 1: Conservation and Take Authorization for EIHCA within City of Coachella

Conservation Objective	**Total Acres in Conservation Area**	**Existing Conservation Lands**	**Acres of Disturbance Authorized** (threshold)	**Remaining Acres to be Conserved**	**Acres of Impact from Vista Del Norte Crossing** bridge(direct) /total(indirect)
Conserve Other Cons. Habitat for flat-tailed horned lizard	6	0	1	5	1.32 / 6.43
Conserve Other Cons. Habitat for Le Conte's thrasher	62	0	6	56	7.19 / 54.99
Conserve Other Cons. Habitat for CV round-tailed ground squirrel	6	0	1	5	1.43 / 6.51
Conserve Other Cons. Habitat for Palm Springs pocket mouse	8	0	1	7	1.43 / 8.3

To offset impacts related to biological resources (64.67 acres) within the EIHCA, KPC proposes to donate 100 acres of land, under private ownership by the Applicant, to be included in the Dos Palmas Conservation Area (DPCA). These 100 acres are located adjacent to the DPCA. The 100 acres will be used to offset the 64.67 acres of impacts to land within the City of Coachella's portion of the EIHCA from implementation of the proposed project, resulting in a net increase of 35.33 acres of land being added to the DPCA (refer to Exhibit 4).



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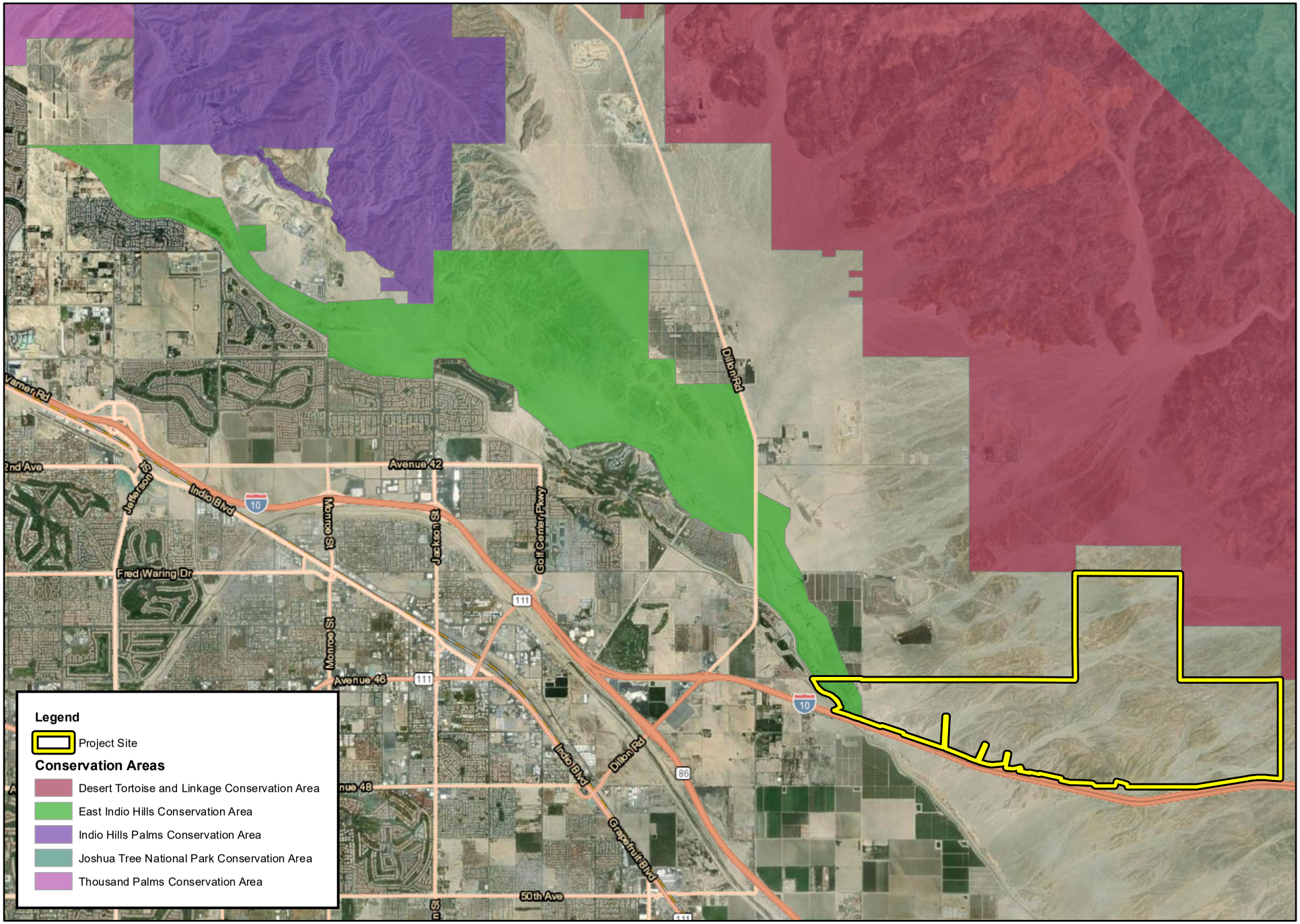
0 5 10 20 Miles

Source: ESRI Aerial Imagery, CVMSHCP, Riverside County

KPC COACHELLA SPECIFIC PLAN

CVMSHCP Conservation Areas

Exhibit 1



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0 1.25 2.5 5 Miles

Source: ESRI Aerial Imagery, CVMSHCP, Riverside County

KPC COACHELLA SPECIFIC PLAN

East Indio Hills Conservation Area

Exhibit 2

Section 2 Definition of Planning Area

The proposed project consists of 2 distinct elements: (1) the proposed development of the KPC Coachella Specific Plan Area (and Vista Del Norte Crossing), and (2) the proposed conservation measures that are an integral part of the proposed project and will contribute to overall conservation within CVMSHCP Conservation Areas. Both of these elements are important factors in determining whether the proposed modification to the conservation area would result in equal or greater biological values, compared to implementation of the CVMSHCP without the proposed project.

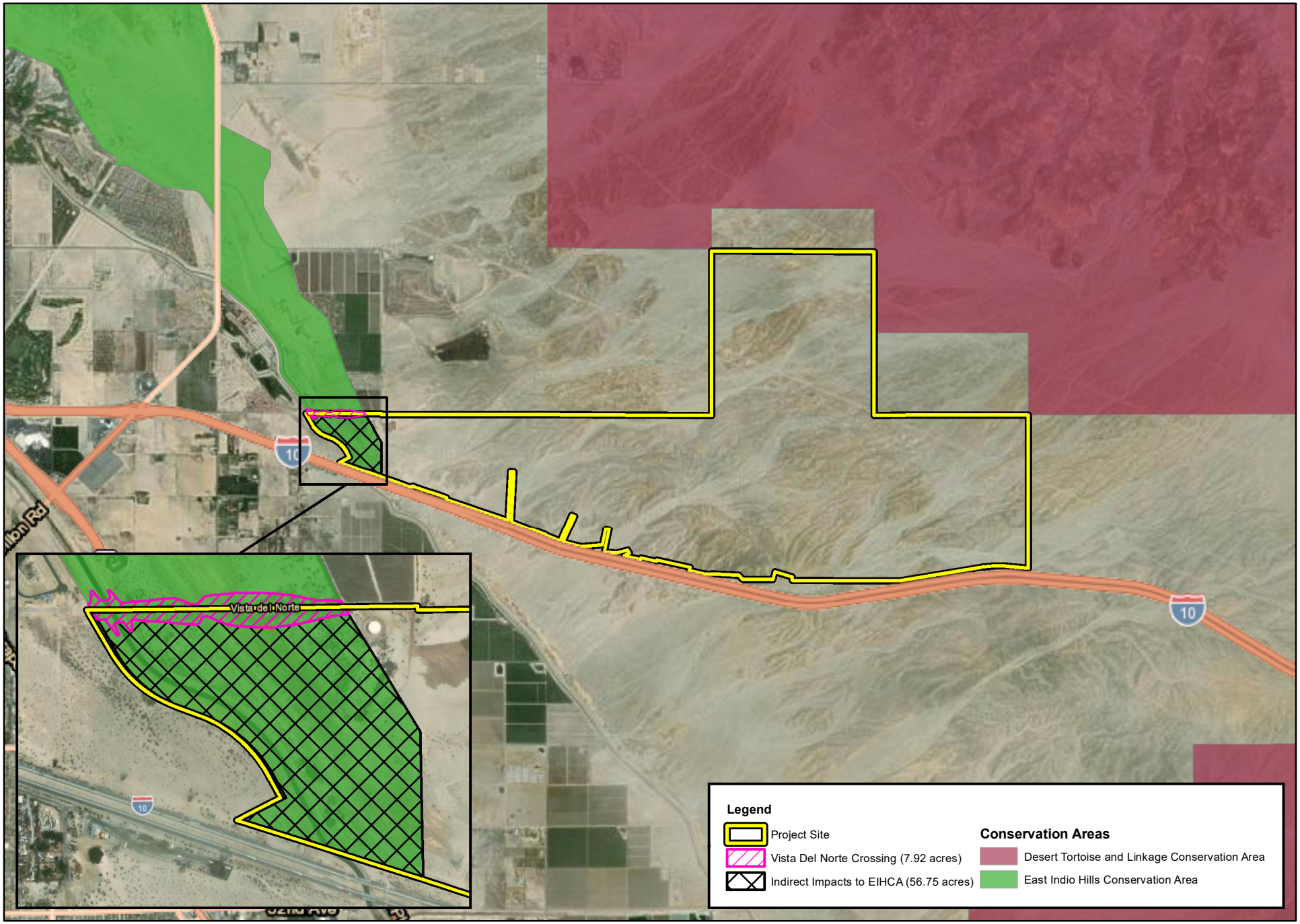
2.1 PROJECT LOCATION

The KPC Coachella Specific Plan Project site is generally located north of Interstate 10, south of State Route 62, west of State Route 177, and east of State Route 74 within the City of Coachella, Riverside County, California. The site is depicted on the Thermal Canyon and Indio quadrangles of the United States Geological Survey's (USGS) 7.5-minute topographic map series within Sections 24, 25, 26, 27, and 28 of Township 5 South, Range 8 East, and Section 30 of Township 5 South, Range 9 East. Specifically, KPC Coachella is located along the western foothills of the Little San Bernardino Mountains and immediately north of Interstate 10, and the western limits of the site coincide with the All American Canal (Exhibit 3, *Project Site*). The Vista Del Norte Crossing site is located within the overlap between the western terminus of KPC Coachella and the southern terminus of the EIHCA, extending eastward from the existing western terminus of Vista Del Norte.

2.2 PROPOSED CONSERVATION AREA

The proposed conservation area that will be used for the Like Exchange will include three parcels: APN 733-190-010, 733-190-012, and 733-190-01 (refer to Exhibit 4, *Proposed Conservation Area*).

1) APN 733-190-010 (totaling 80 acres) is located adjacent to the Dos Palmas Conservation Area (located approximately 20 miles southeast of the project site). The 80 acres of proposed conservation land abuts the existing Dos Palmas Conservation Area on its eastern boundary.
2) APN 733-190-012 (totaling 10 acres) is located adjacent to the Dos Palmas Conservation Area (located approximately 20 miles southeast of the project site). The 10 acres of proposed conservation land is adjacent/connected to APN 733-190-010 that abuts the existing Dos Palmas Conservation Area on its eastern boundary.
3) APN 733-190-013 (totaling 10 acres) is located adjacent to the Dos Palmas Conservation Area (located approximately 20 miles southeast of the project site). The 10 acres of proposed conservation land is immediately north of APN 733-190-012 that is adjacent/connected to APN 733-190-010 that abuts the existing Dos Palmas Conservation Area on its eastern boundary.



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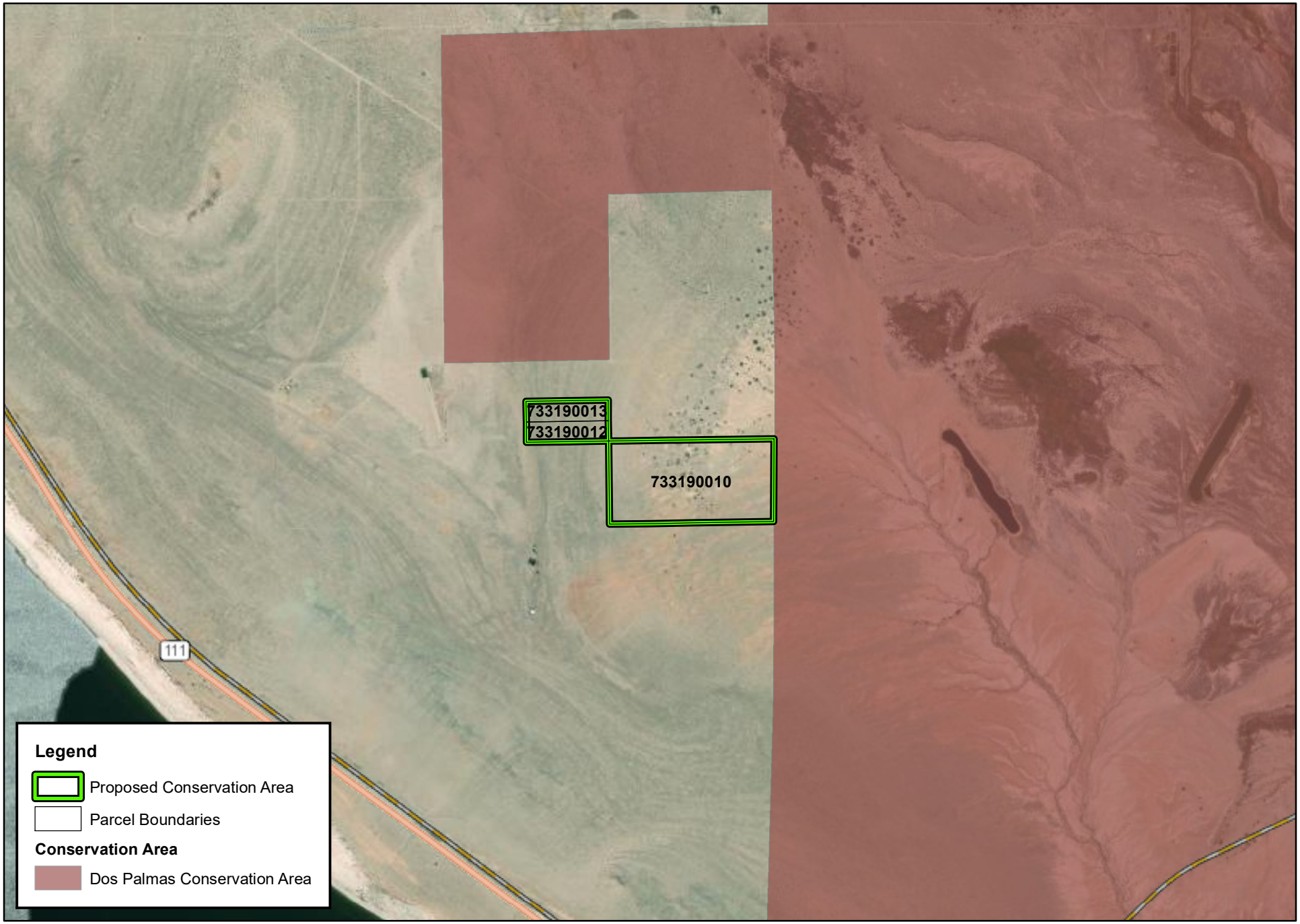
0 0.5 1 2 Miles

Source: ESRI Aerial Imagery, CVMSHCP, Riverside County

KPC COACHELLA SPECIFIC PLAN

Project Site

Exhibit 3



ELMT CONSULTING

0 0.5 1 2 Miles

Source: ESRI Aerial Imagery, CVMSHCP, Riverside County

KPC COACHELLA SPECIFIC PLAN

Proposed Conservation Area

Exhibit 4

Section 3 Project Description

3.1 PROJECT OVERVIEW

The proposed project consists of a Specific Plan for a new master planned community located at the eastern entrance to the City of Coachella (City). The 2,807-acre project site will provide a mixture of land uses intended to create a cohesive entrance to the City, with residential components that will be compatible with the surrounding existing and planned neighboring areas. The proposed project will provide additional commercial, residential, educational, employment, entertainment, and recreational opportunities for residents and visitors within the City.

The Project site has been contemplated for development over the years, including a previous specific plan concept referred to as "Desert Lakes." The Project site has a current General Plan land use designation of Resort District. The proposed Project is the KPC Coachella Specific Plan and related approvals, which proposes a master planned mixed-use community on approximately 2,807 (conceptual) acres of currently undeveloped land, entirely located within the City of Coachella. The Specific Plan proposes the following land uses (refer to Appendix A):

- A mixture of residential product types, including an active adult/senior-oriented village, totaling approximately 9,538 dwelling units;
- Approximately 305 acres of mixed-use areas, which include commercial retail, high-density residential, resort, and entertainment uses;
- A college/university overlay to allow for institutions of higher learning with an emphasis on healthcare;
- Approximately 71 acres of school (3 elementary schools and 1 middle school);
- Approximately 395 acres of parks, greenways, and amenity centers;
- Approximately 179 acres of circulation uses, including arterials, major, and secondary roadways;
- Approximately 68 acres of Agricultural Production areas;
- Approximately 754 acres of natural open space, including drainage channels and trails;
- A potential multi-story, high-rise building; and
- A proposed entertainment center/venue and performing arts theater

The Project will also require various on-site and off-site infrastructure improvements, including water, wastewater, dry utilities, roadway, and a non-vehicular trail connection under the I-10 to connect with the La Entrada Specific Plan. The Project includes other appurtenant facilities and uses typical of a master planned community.

A total of five Planning Villages are proposed within the KPC Coachella Specific Plan. The KPC Coachella Specific Plan identifies a variety of residential and non-residential designations. A discussion of each of the five proposed Villages are presented below:

Village A – Wellness District

Village A is the westernmost village within the plan area and acts as the entry point to the community from surrounding neighborhoods on Vista del Norte. This village is a mixture of lower and medium density residential uses located off the main circulation route on smaller collector roads. Village A would be served by two elementary schools. Village A also contains a Wellness University Overlay District on top of the proposed medium-density residential designation. The Overlay District is intended to allow for a small-scale public or private institution for higher education as a conditional use within the plan area. The area is shown as an overlay due to the uncertain nature of the potential future institution.

Village B – Entertainment Center

Village B is the primary entrance to the plan area from the new Avenue 50 Interchange and is characterized by the prominent entertainment center, hotel, and other commercial retail uses. This village also has a large mixed-use component, part of which is focused on health and wellness-related industries. Village B is also, the densest in terms of housing, with all residential parcels designated as high-density.

Village C – Active Recreation

Village C is centrally located within the plan area and defined by active recreation opportunities and a mixture of low- and medium-density residential. A large community-serving Sports Complex and Cycling Park is accessible from the surrounding villages through the larger trail connections as well as the primary roadway loop. A proposed elementary and middle school directly adjacent to the Sports Complex parcel allows for an emphasis on outdoor play and exercise. At the northern edge of the village, sports fields within the power line easement create opportunities for organized sporting events and practice space.

Village D – Active Adult Community

Village D is in the northern portion of the plan area and extends down to the edge of the east/west running utility easement. This area is planned as an Active Adult-Oriented Community and located away from the more intense mixed-use and entertainment areas. Village D is composed of a variety of different residential densities that allow for different housing types to be built. This diversity creates opportunities to accommodate residents with different living styles and income capabilities. Pedestrian promenades along the proposed roadways promote walking, biking, and other forms of exercise and connect to the larger trail system.

Village E –Agricultural Estates

Village E is in the eastern portion of the plan area and is defined by larger residential lots and agricultural production areas such as vineyards. An agricultural education center is proposed in the southeast portion of the village to provide opportunities for residents, especially school-age children, to learn about agricultural practices and where the food they eat comes from. Village E also contains an elementary school to serve families within Villages B and E.

Circulation

Regional circulation will be provided by the new Avenue 50 Interchange, and the extension of Avenue 50 into the site. Avenue 50 within the Project is planned as a six-lane divided arterial with a landscaped median and off-street bike/NEV lanes. Additional site access will be provided by an extension of Vista del Norte across the All-American Canal into the Project. The extension of Vista del Norte is planned as a four-lane divided arterial.

The project proposes the development of the Vista Del Norte Crossing to provide westerly access from the greater KPC Coachella site to adjacent portions of the City of Coachella (refer to Appendix A). The western and eastern portions of the crossing are located within existing road right-of-way, while the middle southern portion is located within a KPC owned parcel (APN 603-140-013), and the middle northern portion is located within a government owned parcel (APN 697-350-002). The Vista Del Norte Crossing includes an approximately 80-foot (ft) wide earthen fill section crossing over the existing canal and levee with 2:1 slopes daylighting at each side. The fill section extends eastward from the current eastern terminus of Vista Del Norte to the project site being approximately 3,300 lineal feet. There will be 6 large culverts on the east side of the existing levee, each being approximate 8 ft x 10 ft wide for mitigation of regional flood flows running along the existing eastern levee edge. The roadway will traverse the All American Canal via two 12 ft x 9 ft RCB culverts.

Internal circulation is defined by several loop roads providing access to the various neighborhoods and planning areas of the Project (refer to Appendix B). Two primary backbone road types are planned: a four-lane divided major roadway, which comprises the primary loop road and access point from Vista del Norte, and a two-lane secondary roadway. Vista Del Norte is proposed as a four-lane major roadway with an 80-foot right-of-way (refer to Appendix C). Due to the sloping topography and road curves, the two-lane collectors are designed with a center continuous turn lane to allow for turning movements in areas with potentially limited sight distance. The planned roads cross on-site drainages via arch-culvert bridges, although the intent is to minimize disturbance to the drainage channels to be retained. Where roads cross drainages or the All-American Canal, off-street trails are placed on-street to reduce the width of bridges.

Open Space

The Specific Plan Area has approximately 1,217 acres of open space, including parks, greenways, amenity centers, agricultural production, and drainage. These spaces create opportunities for both active and passive recreation as well as programmed sport courts and fields to host local leagues and tournaments. As mentioned previously, Village C contains a large sports complex and cycling park which connects to the plan-wide network of walking and cycling trails. New agricultural production areas are in Village E and are intended to provide opportunities for growing fruits, vegetables, nuts, or other goods for consumption within the community. An agricultural education center will teach residents, visitors, and school groups the importance of agricultural practices within the region. Several drainage channels needed to facilitate the movement of water throughout the site run diagonally from northeast to southwest as well as along the perimeter of the plan area. These are undisturbed open space areas that allow for hiking, walking, cycling, and other activities such as nature photography or educating residents and visitors on the local ecosystem through signage programs.

Lastly, miles of interconnected trails run through most planning areas and facilitate movement throughout the community without the need for a vehicle. These trails are in addition to sidewalks and nodes within each planning area that provide more walking opportunity. Walkability is particularly important within the active adult focused Village D, where large pedestrian promenades are proposed adjacent to local roadways.

3.2 CONSERVATION MEASURES

The proposed development of the Vista Del Norte Crossing will result in a total of approximately 64.67 acres of impact to the EIHCA (refer to Exhibit 3). The physical development of the Vista Del Norte Crossing within the EIHCA will result in 3.42 acres of permanent impacts and 4.5 acres of temporary impacts, totaling 7.92 acres of impacts. Additionally, approximately 56.75 acres of indirect impacts will occur to the southern terminus of the EIHCA from the development of the crossing. The area of impact associated with the physical development of the crossing within the EIHCA has been minimized to the maximum extent practicable.

Additionally, per Section 7.3.1, *Covered Activities*, of the CVMSHCP, local roadways need to be less than 74 feet in width with no more than one through travel lane in each direction to be considered a Covered Activity under the CVMSHCP. The Vista Del Norte Crossing is currently planned as a 4-lane roadway that will be wider than "approved" 74-foot-wide road, which has the potential to indirectly impact the southern terminus of the EIHCA. In order to meet the traffic/circulation requirements for the project, a 4-lane road is required. The width of the road was reduced to the maximum extent practicable, which is still over the maximum width described in the CVMSHP. The Vista Del Norte Crossing will provide one of two access points to the Project site. A two-lane roadway would not be sufficient to accommodate the traffic volumes projected for the Vista Del Norte Crossing. In addition, should an event arise that compromises access via the 2nd access point, a two-lane roadway would again, not be sufficient to accommodate the traffic volumes in said situation, nor would it adequately accommodate emergency response vehicles as they attempt to access/exit the Project site. A four-lane roadway would provide for sufficient movement into and out of the Project. In addition, per Figure 5-1: The Future Roadway Network of the General Plan Mobility Element shows that the Vista Del Norte Crossing is classified as a collector with bicycle facility. Per Table 5-1: Street Typologies of the Mobility Element, a collector with bicycle facility includes two travel lanes in each direction separated by a median lane with outside bicycle lanes and pedestrian sidewalks within a 90-foot ROW. This demonstrates that the City identified the need for a four-lane Vista Del Norte Crossing east of Dillon Road to accommodate future traffic. As a result, the proposed project, specifically the Vista Del Norte Crossing, would result in a total of approximately 64.67 acres of impacts within the EIHCA. The remainder of the project site is not located within any CVMSHCP Conservation Areas.

The area of impact within the EIHCA has been minimized to the maximum extent practicable. The project footprint includes the minimum impacts to the EIHCA required to provide sufficient access between the Specific Plan area and the City of Coachella via the Vista Del Norte Crossing. Most of the impacts to the EIHCA will not be permanent impacts from the installation of the crossing, but rather indirect impacts from the fragmentation of existing habitat and reduction in local connectivity to the southern terminus of the EIHCA due to the road exceeding the width dimensions approved in the CVMSHCP.

To compensate for the direct and indirect impacts to approximately 64.67 acres of habitat within the EIHCA, the project Applicant proposes to incorporate/designate 100 acres of natural habitat into the Dos Palmas Conservation Area. The proposed conservation areas will provide an overall increase to conserved modeled species habitat and lands conserved under the CVMSHCP. Additionally, post construction, the two large culverts within the All American Canal and associated access roads and the 6 large culverts on the east side of the existing levee, will continue to provide local wildlife movement opportunities both along the All American Canal under the expanded Vista Del Norte crossing to and from the southern terminus of the EIHCA that will not be directly impacted by the road crossing.

As noted above, the proposed location for the Vista Del Norte Crossing is located within the EIHCA of the MSHCP. Alternative locations were considered for the western access to the Project site; however, the Vista Del Norte extension was determined to provide the most direct and safe access to the Project site. The proposed alignment is the least intrusive alternative that meets the circulation requirements.

Alternative routes to the current Vista Del Norte crossing alignment were considered; located both north and south of the proposed alignment. The alternative alignments, like the current alignment, would bisect the EIHCA, and would also include geometric design features (90 degree angles) which provide for unsafe traffic conditions. Additionally, a northern alternative alignment would result in more impacts to habitat within the EIHCA and would result in more indirect impacts to the southern terminus of the EIHCA. A southern alternative alignment might result in lesser impacts to the EIHCA, but is not feasible from a design perspective.

Based on the MSHCP, on-site portions of the EIHCA are located within the core habitat for flat-tailed horned lizard, Le Conte's thrasher, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse. On-site portions of the EIHCA support two natural plant communities, Sonoran creosote bush scrub and mesquite hummocks, one non-native plant community, Tamarisk Scrub, and disturbed and developed land associated with the All American Canal and adjacent areas (refer to Exhibit 5, *Vegetation*).

To offset impacts to 64.67 acres, KPC proposes to transfer the fee title of the 100 acres of land to the CVCC for inclusion into the existing DPCA, southeast of the project site (refer to Exhibit 4). 64.67 acres will be used to offset impacts within the City of Coachella's portion of the EIHCA by the proposed project, resulting in a net increase of 35.33 acres of conservation area land being added to the DPCA.

Land Use Adjacency Guidelines

The purpose of Land Use Adjacency Guidelines (Section 4.5 of the CVMSHCP) is to avoid or minimize indirect effects from development adjacent to or within the Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators such as dogs and cats. The proposed Vista Del Norte Crossing and KPC Coachella Specific Plan is currently located within and adjacent to the EIHCA, and as such the following Land Use Adjacency Guidelines shall be considered and implemented where applicable. Once the Like Exchange is approved, the Vista Del Norte Crossing and KPC Coachella Specific Plan will be located adjacent of the EIHCA.

Drainage

Proposed Development adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared with existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.

The proposed project would not alter the flow direction of surface water flowing out of the Indio Hills to the north. There would be no changes to the quantity or quality of runoff or other water discharged to the Conservation Area. All water coming from onsite, including the crossing will be treated prior to release in the individual regional channels. The culverts are being designed along the levee edge where the water would collect during large storm events. The storm flows passing through the project are being modeled and reviewed by CVWD in concept as part of this approval. This design is in conceptual stage only and more detailed design and hydraulics will be provided in the future.

Toxics

Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.

The proposed project would not generate toxic bioproducts or use toxic chemicals. Any spills of hazardous materials from project vehicles or equipment would be contained, cleaned up, and disposed of immediately.

The use, storage, transport, and disposal of hazardous materials would be governed by existing regulations of several agencies, including the U.S. EPA, U.S. Department of Transportation, California OSHA, and the Riverside County Fire Protection District. Compliance with applicable laws and regulations governing the use, storage, transportation, and disposal of hazardous materials would ensure that all potentially hazardous materials are used and handled in an appropriate manner and would minimize the potential for safety impacts. All spills or leakage of petroleum products are required to be immediately contained, the hazardous material identified, and the material remediated in compliance with applicable regulations, such as RCRA, for the cleanup and disposal of that contaminant. Should a spilled hazardous material reach the storm drain, it would be directed to the onsite stormwater system before being released into the individual regional channels.

Lighting

For proposed Development adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize the effects of lighting adjacent to or within the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.

The proposed project would install lighting that will be shielded and directed away from the conservation area. The Project is a Program EIR, therefore detailed design as it pertains to streetlight placement has not been conducted. However, lighting shall be placed in adherence to the Land Use Adjacency Guidelines in Section 4.5 of the CVMSHCP.

Vehicles would travel in an east-west direction along Vista Del Norte, not in a north-south direct, directly protruding light into the conservation area. Vehicles and associated headlights would also be elevated above the conservation area, again, not directly protruding light into the conservation area. Project lighting would adhere to the Design Guidelines presented in the KPC Coachella Specific Plan which would require lighting to minimize uncontrolled nighttime light and glare, light trespass, and night sky pollution with low brightness lighting fixtures utilizing warm, color corrected light sources and appropriate beam cut-off. Project lighting would also adhere to the requirements contained in the City's Zoning Code: Section 16.28.150(L) (Improvements and Grading); Section 17.56.010(J)(2)(e); (Signs); Section 17.54.010 (Off-Street Parking and Loading); Section 17.36.030(F) and (H); Section 17.36.140(7) (Specific Plan District); and Section 17.62.010(17) (Site Plans). These measures are uniformly applied to all development in the City. Project-related lighting would be consistent with the City Zoning Code and would be shielded to avoid light spillage and glare off the Project site. As such, adherence to these measures would be mandatory and enforceable upon approval of the Project plans. Adherence to the City's Zoning Code would ensure that any building or parking lighting would not significantly impact adjacent uses. Additionally, Draft EIR MM AES-1 would eliminate all nonessential lighting and MM AES-2 would require a photometric study.

Noise

Proposed Development adjacent to or within a Conservation Area that generates noise in excess of 75 dBA Leq hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.

An acoustical assessment was conducted for the project in 2024. The assessment found that on-site and off-site construction and operations noise levels would be less than significant with mitigation incorporated. Mitigation Measure (MM) NOI-1 is required to ensure compliance with General Plan Policy 1.2 and Policy 5.20 which requires a detailed acoustical study demonstrating that new residential units would meet the City's Normally Compatible standard by incorporating architectural features instead of excessive setbacks or sound walls. MM NOI-2 requires that prior to the issuance of building permits, detailed project-specific Noise Assessment for projects with Villages A through E shall be prepared, for submittal and approval of the City of Coachella Development Services Department, which demonstrates on-site placement of stationary noise sources at commercial uses would not exceed noise standards established in the City of Coachella General Plan and City of Coachella Municipal Code Section 7.04.030. The Noise Assessment shall verify that stationary noise sources (e.g., loading dock facilities, mechanical equipment, and parking lots) are adequately shielded and/or located at an adequate distance from on-site and off-site sensitive receptors and residences in order to comply with noise regulations established by the City of Coachella.

A detailed noise analysis has not been conducted for traffic noise impacts along the Vista Del Norte Crossing adjacent the EIHCA as this is Program level EIR. However, analysis will be conducted at the

Project level in the future and shall adhere to the Land Use Adjacency Guidelines pertaining to Noise in Section 4.5 of the CVMSHCP.

Invasives

Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials to the maximum extent Feasible; recommended native species are listed in Table 4-112. The plants listed in Table 4-113 shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency Concurrence.

The proposed project will not incorporate non-native plants adjacent to the conservation area. According to the Specific Plan, Typical Street Sections exhibit, landscaping is not proposed on the Vista Del Norte crossing, so as to minimize right-of-way impacts. Should it be determined at a later date (at the Project level) to include landscaping along the Vista Del Norte Crossing, invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to the EIHCA in accordance with the Land Use Adjacency Guidelines in Section 4.5 of the CVMSHCP.

Barriers

Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

The proposed project will need to install a fence or barrier between the proposed development and the adjacent conservation area. The Project is a Program EIR, therefore detailed design as it pertains to guardrail placement has not been conducted. However, for pedestrian safety, a barrier (i.e., guardrail or wall) shall be place along the Vista Del Norte crossing.

The Project would adhere to the both the CVMSHCP Adjacency Guidelines and the Project's Specific Plan guidelines. The type and exact location of the fence/barrier is not known at this time as it's a Program Level EIR. However, the SP does specify:

- Prohibited Fences: The following materials and fence types are prohibited from use on any parcel of property in the Specific Plan area that is used for residential purposes:
    - Barbed wire
    - Razor wire
    - Electric fences
    - Other sharp materials

Grading/Land Development

Manufactured slopes associated with site Development shall not extend into adjacent land in a Conservation Area.

The project will include grading/contouring for the installation of the Vista Del Norte crossing. Impacts associated with this development are accounted for in the Like Exchange.

Section 4 Biological Information

4.1 VEGETATION MAPPING

Two (2) natural plant communities, Sonoran creosote bush scrub and mesquite hummocks, were documented within on-site portions of the EIHCA during the initial survey conducted on April 16, 2024. In addition, on-site portions of the EIHCA support a narrow swathe of Tamarisk Scrub and two land cover types that would be classified as disturbed and developed. Refer to Exhibit 5, *Vegetation Map*. Descriptions of the plant communities within the EHICA are provided below:

Sonoran Creosote Bush Scrub

A Sonoran creosote bush scrub plant community is the dominant habitat within the project site and on-site portions of the EIHCA. This plant community occurs on upland slopes, hills, bajadas, and alluvial fans and washes within the site. This plant community is dominated by widely-spaced stands of creosote bush (*Larrea tridentata*) with other shrubs, annual species, and open soils present between the stands of creosote bush. Other common shrubs supported within this plant community include white bursage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), desert holly (*Atriplex hymenelytra*), desert-lavender (*Condea emoryi*), smoke tree (*Psorothamnus spinosus*), indigo bush (*Psorothamnus schottii*), desert bird-of-paradise (*Hoffmannseggia microphylla*), sweet bush (*Bebbia juncea*), and catclaw acacia (*Senegalia greggii*).

Mesquite Hummocks

Mesquite hummocks are supported in the southern portion of the on-site portions of the EIHCA and consist solely of mesquite on raised hummocks of windblown sand.

Tamarisk Scrub

Tamarisk scrub occurs in the eastern portion of on-site portions of the EIHCA in areas disturbed by both agriculture and construction of a water tower. This introduced plant community consists primarily of dense tamarisk (*Tamarix ramosissima*) shrubs and typically occurs on sandy or gravelly soils within, or in close proximity to, washes or streams and often follows major anthropogenic disturbance.

Disturbed/Developed Land

Disturbed land within on-site portions of the EIHCA consist primarily of bare soils and non-native species resulting from human disturbance. Disturbed lands have been graded, cleared, or used to the point where the land cannot support native vegetation. Developed land is supported within on-site portions of the All American Canal and relevant infrastructure.

4.2 COVERED SPECIES

On-site portions of the EIHCA provide core habitat for Flat-tailed horned lizard, Le Conte's thrasher, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse (refer to Exhibit 6, EIHCA Core Habitat, and Table 1). Please refer to Appendix D, *Biological Resources Assessment,* for a summary of the biological surveys that have been conducted for the project. Based on the results of

the Biological Resources Assessment, the KPC Coachella Specific Plan project site supports sensitive biological resources including jurisdictional waters of the state, two non-listed special-status bird species (i.e., loggerhead shrike and black-tailed gnatcatcher), moderate potential to support the state and federally-threatened desert tortoise, low potential to support the federally endangered Coachella Valley milk-vetch, and moderate to high potential to support numerous non-listed special-status species including burrowing owl. Descriptions of covered species with core habitat within the project site are provided below. Additionally, the CVMSHCP requires the conservation of mesquite hummocks, which occur within the proposed Vista Del Norte Crossing and are described below.

It should be noted that the northwest portion of the Vista Del Norte Crossing, within the EIHCA, is also located within CVMSHCP modeled habitat for yellow warbler (*Setophaga petechia*), yellow-breasted chat (*Icteria virens*), Crissal thrasher (*Toxostoma crissale*), summer tanager (*Piranga rubra*), least Bell's vireo (*Vireo bellii pusillus*), and desert tortoise (*Gopherus agassizii*). However, there are no conservation objectives for these species within the EIHCA.

The species described in further detail below are for those species with modeled habitat within the EIHCA, within the City of Coachella, that have conservation objectives that need to be met.

Additionally, the proposed donation area in the DPCA is modeled to support the same habitat types and same covered species as those identified as occurring in the EIHCA. However, the DPCA is larger in size and biologically less disturbed/constrained, providing higher quality habitat of each modeled habitat type and is expected to support a greater number of the covered species. General biological surveys were conducted on the proposed donation area in June 2024 to document the type and the quality of the habitat(s) onsite, and the site's exposure to anthropogenic disturbances.

4.2.1 Flat-tailed Horned Lizard

Flat-tailed horned lizard is designated by the CDFW as a species of special concern. It is covered under the CVMSHCP. This species is typically found in open, sandy habitats, usually sparsely vegetated with creosote bush and burrobush, where it feeds on harvester ants. While fine, windblown sands are preferred, excessively loose and unstable sand may also discourage this species from occurring in an area. Adults are typically active anywhere from mid-February to mid-November but are most active between April and September. Mating occurs in May and June, with eggs hatching between July and October.

Approximately 6 acres of core habitat are mapped within the EIHCA within the City of Coachella for this species. Of the 6 acres, 1 acre has been authorized for disturbance, and 5 acres are described for conservation. The proposed project will directly impact 1.32 acres and will indirectly impact 6.43 acres of mapped habitat for flat-tailed horned lizard.

4.2.2 Le Conte's Thrasher

Le Conte's thrasher is designated by the CDFW as a species of special concern. It is covered under the CVMSHCP. It is a year-round resident of southern California. This species is typically found in sparsely vegetated desert flats, dunes, alluvial fans, or gently rolling hills with a high proportion of

saltbush (*Atriplex* spp.) or cholla (*Cylindropuntia* spp.) but may still utilize areas without these plants. Water is rarely present, and leaf litter under shrubs is required for insect buildup. This species primarily nests in thorny shrubs and cholla. The general nesting season extends from mid-February to late June.

Approximately 62 acres of core habitat are mapped within the EIHCA within the City of Coachella for this species. Of the 62 acres, 6 acres have been authorized for disturbance, and 56 acres are described for conservation. The proposed project will directly impact 7.19 acres and will indirectly impact 63.96 acres of mapped habitat for Le Conte's thrasher.

4.2.3 Coachella Valley Round-tailed Ground Squirrel

Coachella Valley round-tailed ground squirrel is designated by the CDFW as a species of special concern. This species is typically found in scrub and wash habitats including mesquite- and creosote-dominated sand dunes, creosote bush scrub, creosote-palo verde scrub, and saltbush/alkali scrub, particularly in sandy floodplains. Ideal habitat seems to be areas where hummocks of sand accumulate at the base of large shrubs, and according to current data as described in the CVMSHCP, this species seems to particularly favor hummocks that form around mesquite. It is inactive and in its burrows from August until January.

Approximately 6 acres of core habitat are mapped within the EIHCA within the City of Coachella for this species. Of the 6 acres, 1 acre has been authorized for disturbance, and 5 acres are described for conservation. The proposed project will directly impact 1.43 acres and will indirectly impact 6.51 acres of mapped habitat for Coachella Valley round-tailed ground squirrel.

4.2.4 Palm Springs Pocket Mouse

The Palm Springs pocket mouse is designated by the CDFW as a species of special concern and is also covered under the CVMSHCP. It is endemic to the Coachella Valley, and while its current distribution is not well-known, it was historically present from the San Gorgonio Pass to Joshua Tree National Park and south to Borrego Springs. This species generally occurs in creosote scrub, desert scrub, and grasslands with loose and/or sandy soils and sparse to moderate vegetative cover. Areas dominated by creosote bush, brittlebush (*Encelia farinosa*), burrobush, and ephedra (*Ephedra californica*). They are likely dormant generally between October and March but may emerge periodically to feed on seed caches.

Approximately 8 acres of core habitat are mapped within the EIHCA within the City of Coachella for this species. Of the 8 acres, 1 acre has been authorized for disturbance, and 7 acres are described for conservation. The proposed project will directly impact 1.43 acres and will indirectly impact 8.3 acres of mapped habitat for Palm Springs pocket mouse.

4.2.5 Mesquite Hummocks

This plant community is composed of large clumps of low growing honey mesquite (*Prosopis glandulosa*) shrubs. The mesquite shrubs may form hummocks over sand dunes. The hummocks also occur on level terrain, at the margins of palm oases or in the area south and east of Indio to the north

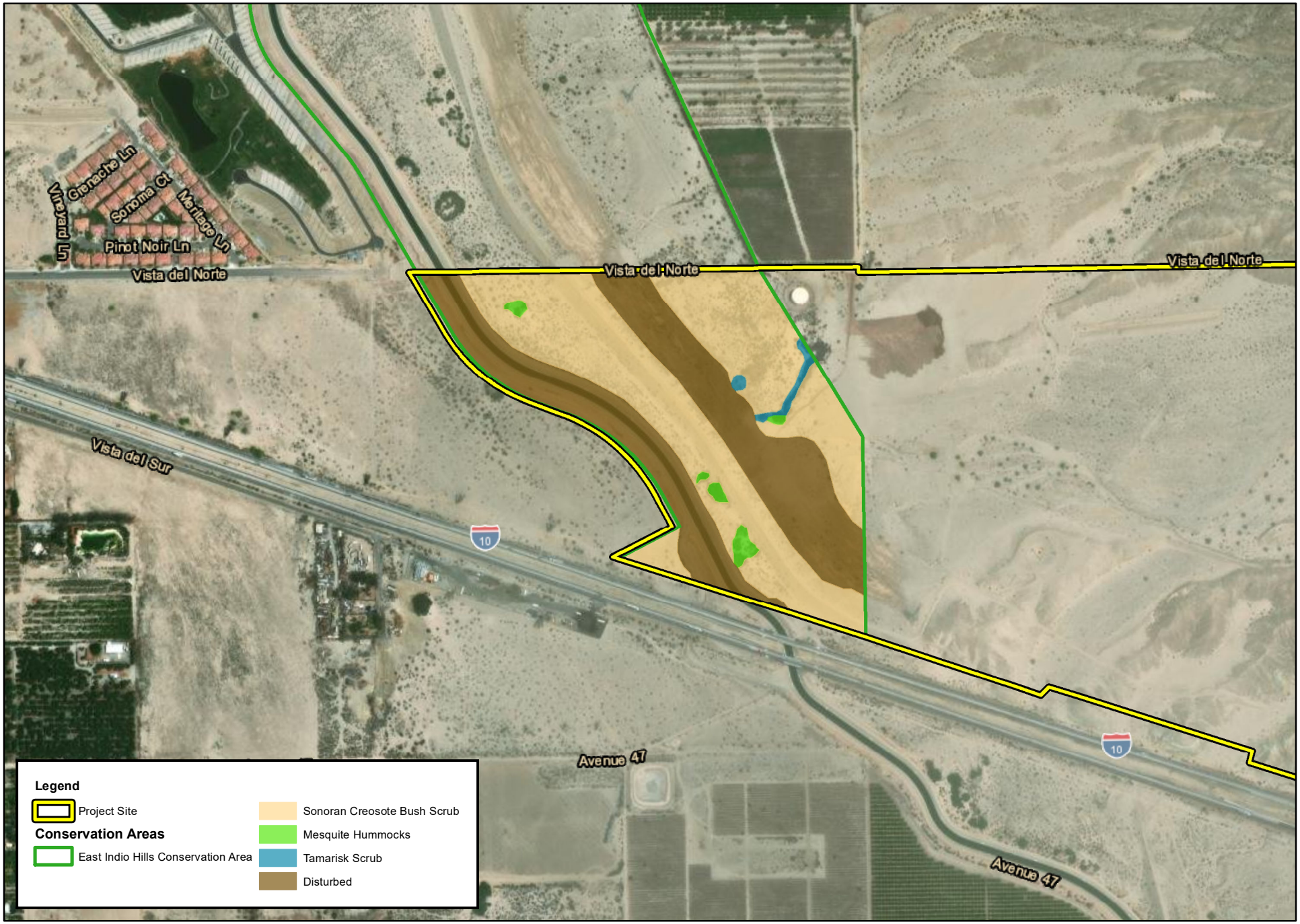
end of the Salton Sea. These mesquite hummocks are typically associated with high soil moisture, often associated with fault areas or springs. This community occurs in the Plan Area at one location south of Cabazon, in the vicinity of Willow Hole, on the Thousand Palms Preserve, and along the southern base of the Indio Hills, associated with the San Andreas Fault. Mesquite hummocks also occur around the northern end of the Salton Sea and at Dos Palmas. Remaining mesquite hummocks are highly fragmented and often senescent, perhaps due to lack of groundwater.

There are approximately 43 acres of mesquite hummocks mapped within the EIHCA. Of the 43 acres, 39 acres are proposed to be conserved, meaning only 4 acres has been authorized for disturbanceThe Vista Del Norte crossing will result in the direct impacts to 0.18 acre of mesquite hummocks, and 0.79 acre of indirect impacts to mesquite hummocks, totaling 0.97 acre of impacts. No net loss of Mesquite Hummocks will occur with the conservation of approximately 4 acres of Mesquite Hummocks within the DPCA to that would not otherwise be conserved.

4.3 BIOLOGICAL CORRIDOR OR LINKAGE

While no designated corridors occur within on-site portions of the EIHCA, the EIHCA as a whole serves as a biological corridor and linkage to the Indio Hills Conservation Area through the Thousand Palms Conservation Area, which ultimately links with Joshua Tree National Park (refer to Exhibit 2). In the southern portion of the EIHCA, the All American Canal serves as the primary corridor for local wildlife movement. However, since the southern terminus of the EIHCA is bordered by Interstate 10 to the south, a mix of developed and undeveloped land to the west, undeveloped and agricultural land to the north and undeveloped land to the east, this portion of the EIHCA is constrained by edge effects.

The installation of box culverts (two 12 ft x 9 ft RCB sections) in the canal and 6 large culverts (each being approximate 8 ft x 10 ft wide) on the east side of the levee, with soft “natural” bottoms composed of sandy substrate, will ensure the regular functionality of the All American Canal is maintained, flows will be maintained within the Canal and its function as a biological corridor will be maintained (refer to Appendix C). The culverts will provide line of site from one side to the other, allowing wildlife to visually see across the culvert, which allows wildlife to more readily use the culverts as a corridor. Access roads along each side of the All American Canal will continue to provide access to the south for terrestrial and aerial wildlife species. Note that drainage structure design in only in the preliminary phase as the Project is a Program EIR and Specific Plan. During final design there is the potential for culvert dimensions to change, potentially reducing the number of and increasing the size of required culverts.



ELMT CONSULTING

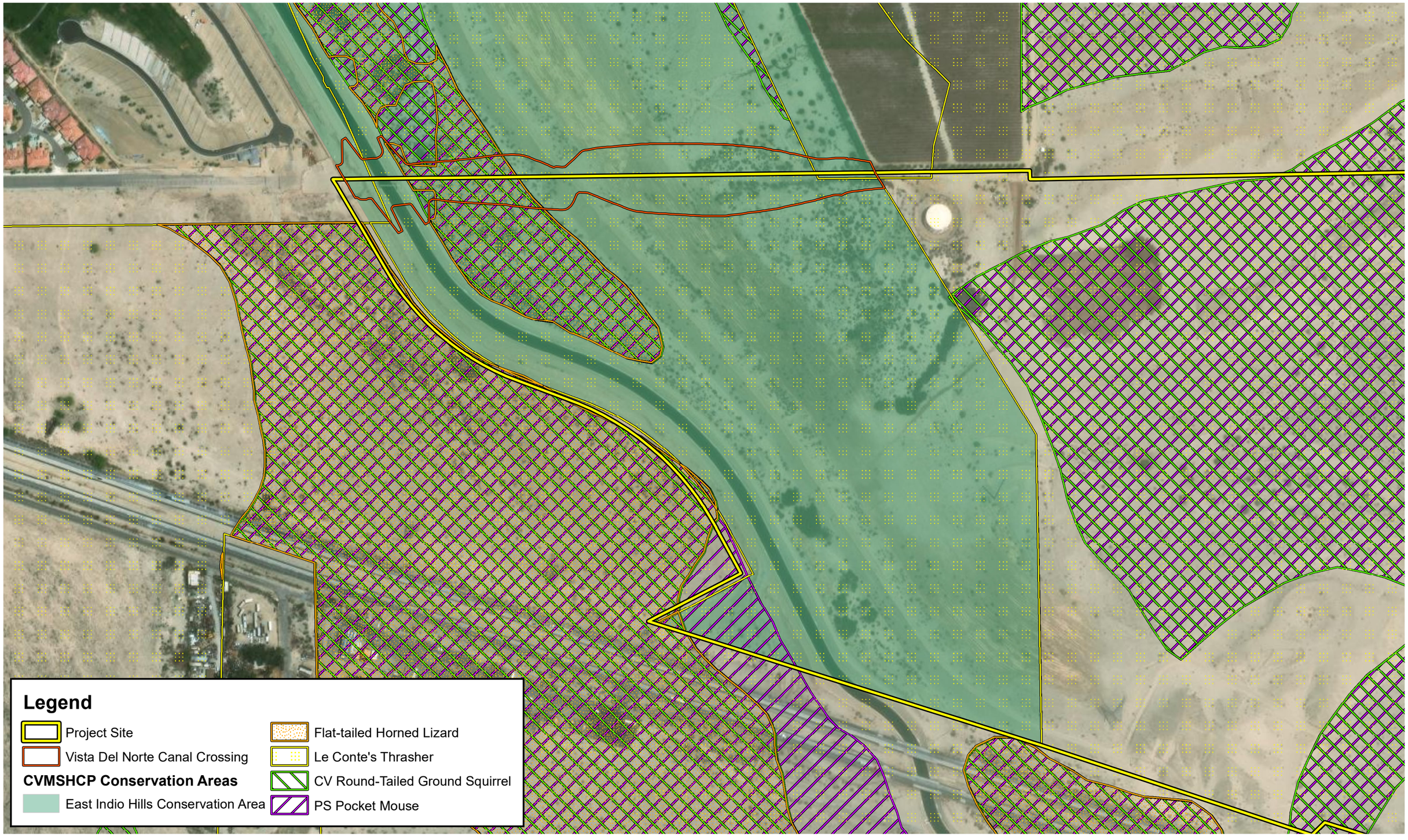
0 250 500 1,000 Feet

Source: ESRI Aerial Imagery, CVMSHCP, Riverside County

KPC COACHELLA SPECIFIC PLAN

Vegetation (within EIHCA)

Exhibit 5



ELMT CONSULTING

0 2,500 5,000 10,000 Feet

Source: ESRI Aerial Imagery, Riverside County

KPC COACHELLA SPECIFIC PLAN

EIHCA Core Habitat

Exhibit 6

Section 5 Equivalency Analysis for the Proposed Modification to the East Indio Hills Conservation Area

As shown in Table 4-81a of the MSHCP, disturbance or habitat loss is limited within the City of Coachella's portion of the EIHCA. In order to authorize the proposed 64.67 acres of impacts in the existing EIHCA, a modification supported by an equivalency analysis is proposed. The equivalency analysis for the proposed modification will ensure consistency with the MSHCP and will result in a net increase of 35.33 acres of conserved modeled habitat.

The rationale for the equivalency analysis is based on:

- The CVMSHCP's acknowledgement that it may be possible to achieve the Plan's conservation goals through a different configuration or modification of the EIHCA;
- The proposed modification or Like Exchange will result in equal or greater benefits to Covered Species and conserved natural communities as compared to those benefits analyzed in the CVMSHCP (existing Conservation Area boundaries);
- The level of take of (impact to) Covered Species is no greater than that analyzed in the Plan; and
- The ecological processes associated with the project will improve the ecological processes associated with the EIHCA from what was assumed when the CVMSHCP was adopted.

This section presents the above rationale, identifies the proposed modification or Like Exchange acreage requirements, describes the baseline against which the modification or Like Exchange is compared, and summarizes the required equivalency findings. Additionally, this section compares the effects/benefits of the proposed project with the proposed modification, and a project on the same site not deviating from the Conservation Area Conservation Objectives.

5.1 COVERED SPECIES HABITAT AND LEVEL OF TAKE

As explained in detail below, the conservation of suitable habitat and level of take of Covered Species with the proposed modification provides an increase in additional conserved land that is biologically superior in terms of habitat quality and the number of covered species it supports. The net result is an increase in conservation area and covered species beyond that would occur without the like exchange. Impacts to the EIHCA and donation of the 100-acres to the DPCA will not increase Take within the CVMSHCP, but will increase areas for conservation. This section addresses the specific habitat requirements of the species of concern on the site. Development of the Vista Del Norte Crossing will result in a total of 64.67 acres of impacts to the EIHCA. The Plan allows for various impacts to core habitat within the City of Coachella's portion of the EIHCA. KPC has acquired 100 acres of private land to the southeast, immediately adjacent to DPCA (refer to Exhibit 5 and Exhibit 7, *DPCA Core Habitat*), to be added to the DPCA, to compensate for the loss of habitat within the EIHCA.

The habitat within the EHICA has been disturbed by the installation of the All American Canal and grading activities to the east. Additionally, this section of the EIHCA is constrained by developments to the west, agricultural activities to the east, and Interstate 10 to the south. These surrounding land uses, combined with onsite anthropogenic disturbances, have degraded the habitat quality and restricted wildlife movement within the southern terminus of the EIHCA, thereby reducing its long-term conservation value.

In contrast, the habitat within the DPCA and its surrounding area remains undeveloped within minimal anthropogenic disturbances. The undisturbed habitats within and around the 100-acre area proposed for inclusion in the DPCA are of higher quality than those in the impacted areas of the EIHCA, as they are not constrained by surrounding development and have not experienced significant anthropogenic disturbances. As a result, the 100-acre area to be included in the DPCA offers greater long-term conservation value than the habitats being impacted in the EIHCA.

Core habitat for each of the Covered Species addressed in the EIHCA will be conserved at a higher acreage with higher quality habitats throughout the CVMSHCP Conservation Areas because of the proposed modification. As previously noted, the proposed donation site provides habitat that is not as constrained as the habitats within the EIHCA, and is subject to less anthropogenic disturbances which provides higher quality habitats for the core species.

Conservation Objective	**Total Acres in Conservation Area**	**Existing Conservation Lands**	**Acres of Disturbance Authorized** (threshold)	**Remaining Acres to be Conserved**	**Acres of Impact from Vista Del Norte Crossing** bridge(direct) /total(indirect)	**Acres Proposed for Conservation within the DPCA**	**Net Increase of Conservation Lands**
Conserve Other Cons. Habitat for flat-tailed horned lizard	6 ac	0	1 ac	5 ac	1.32 / 6.43 ac	87.01 ac	79.26 ac
Conserve Other Cons. Habitat for Le Conte's thrasher	62 ac	0	6 ac	56 ac	7.19 / 54.99 ac	69.61 ac	7.43 ac
Conserve Other Cons. Habitat for CV round-tailed ground squirrel	6 ac	0	1 ac	5 ac	1.43 / 6.51 ac	18.38 ac	10.44 ac
Conserve Other Cons. Habitat for Palm Springs pocket mouse	8 ac	0	1 ac	7 ac	1.43 / 8.3 ac	46.40	36.67 ac

5.1.1 Flat-tailed Horned Lizard

Of the 100 acres proposed for conservation, 87.01 acres are considered core habitat for flat-tailed horned lizard. This will result in a net increase of 79.26 acres of conservation of potential and predicted flat-tailed horned lizard habitat to compensate for the 1.32 acres of direct and 6.43 acres of indirect impacts to flat-tailed horned lizard core habitat within the EIHCA. Based on the information provided

above, the proposed mitigation for flat-tailed horned lizard habitat will be biologically superior to what would otherwise occur.

5.1.2 Le Conte's Thrasher

Of the 100 acres proposed for conservation, 69.61 acres are considered core habitat for Le Conte's thrasher. This will result in a net increase of 7.43 acres of conservation of predicted and potential Le Conte's thrasher habitat to compensate for the 62.18 acres of impacts to Le Conte's thrasher core habitat in the EIHCA. Based on the information provided above, the level of take of Le Conte's thrasher habitat will be biologically superior to what would otherwise occur.

5.1.3 Coachella Valley Round-tailed Ground Squirrel

Of the 100 acres proposed for conservation, 18.38 acres are considered core habitat for Coachella Valley round-tailed ground squirrel. This will result in a net increase of 10.44 acres of conservation of predicted and potential Coachella Valley round-tailed ground squirrel habitat to compensate for the 1.43 acres of direct and 6.51 acres of indirect impacts to Coachella Valley round-tailed ground squirrel core habitat in the IEHCA. Based on the information provided above, the level of take of Coachella Valley round-tailed ground squirrel habitat will be biologically superior to what would otherwise occur.

5.1.4 Palm Springs Pocket Mouse

Of the 100 acres proposed for conservation, 46.40 acres are considered core habitat for Palm Springs pocket mouse. This will result in a net increase of 36.67 acres of conservation of predicted and potential Palm Springs pocket mouse habitat to compensate for the 1.43 acres of direct and 8.3 acres of indirect impacts to Palm Springs pocket mouse core habitat associated with the project in the EIHCA. Based on the information provided above, the level of take of Palm Springs pocket mouse habitat will be biologically superior to what would otherwise occur.

5.2 NATURAL COMMUNITIES

On-site portions of the EIHCA support Sonoran creosote bush scrub and mesquite hummocks in addition to Tamarisk Scrub and disturbed and developed land. The proposed additional conservation areas support Sonoran creosote bush scrub, mesquite hummocks and desert sink scrub, absent the Tamarisk Scrub and disturbed and developed land supported in on-site portions of the EIHCA. In addition, while no habitat-specific conservation goals are identified for the Coachella portion of the EIHCA, the conservation goals of the DPCA do include conservation of mesquite hummocks, which are present within the proposed conservation land additions. Therefore, based on the information provided in Section 5.1 above, the proposed modification will result in an increase in acreage of conserved Sonoran creosote bush scrub and mesquite hummocks with improved overall habitat function and values.

Further, while the Coachella portions of the EIHCA do not specify conservation goals for mesquite hummocks, the mesquite hummocks supported in the conservation land additions will contribute to the habitat conservation goals of the DPCA.

According to Table 10-8 of the CVMSHCP*, Summary of Natural Community within Conservation Areas: Mesquite Hummocks*, a total of 43 acres of mesquite hummocks occur within the EIHCA. A total of 4 acres are subject to impacts. As a result, a total of 39 acres are to be conserved within the CVMSHCP Reserve System.

As previously noted, the Vista Del Norte crossing will result in the direct impacts to 0.18 acre of mesquite hummocks, and 0.79 acre of indirect impacts to mesquite hummocks, totaling 0.97 acre of impacts. The proposed mitigation will result in the conservation of approximately 4 acres of Mesquite Hummocks within the DPCA to that would not otherwise be conserved, resulting in a net increase of 3.03 acres of mesquite hummocks being added to the Reserve System on conservation.

5.3 BIOLOGICAL CORRIDORS AND LIKANGES

While no official corridors or linkages are mapped within on-site portions of the EIHCA, the All American Canal, its adjacent access roads and habitat on either side of the Canal are expected to provide a linkage or biological corridor between the EIHCA and the Indio Hills Conservation Area through the Thousand Palms Conservation Area (refer to Exhibit 2). Project impacts in the vicinity of the All American Canal will be limited to the Vista Del Norte Crossing, which is designed to maintain flows through the All American Canal, ultimately preserving its function as a biological corridor in the long-term. The proposed conservation that the project will preserve a biologically superior corridor than that analyzed in the MSHCP because the habitats within the EIHCA are constrained by existing development and anthropogenic disturbances.

Inclusion of the 100 acre area into the DPCA would provide additional local wildlife movement opportunities to the Dos Palmas Preserve to the north and Salt Creek to the southeast. The addition of the 100 acres to the DPCA will enhance local wildlife movement opportunities by adding additional undeveloped habitat to the DPCA that will act as an additional habitat buffer/refugia habitat to the Dos Palmas Preserve to the north and Salt Creek.

5.4 ESSENTIAL ECOLOGICAL PROCESSES

No key ecological processes are indicated by the MSHCP as occurring within or adjacent to on-site portions of the EIHCA, nor are any located within or adjacent to the proposed conservation land additions. Project activities would ensure the continued functionality of the All American Channel and surrounding flood control infrastructure via the installation of culverts, and regular flows will be maintained within all on-site portions of the EIHCA. Therefore, the proposed project would result in overall superior conditions affecting essential ecological processes.

5.5 CONSERVATION AREA CONFIGURATION AND MANAGEMENT

None of the three proposed conservation land additions occur within the existing boundaries of a Conservation Area. The largest of the three parcels occurs adjacent to the western boundary of the DPCA and the remaining two parcels occur adjacent to each other and share an adjoining corner with

the largest parcel. The inclusion of these adjacent parcels will add 100 acres to the overall DPCA (refer to Exhibit 4). While the overall addition exhibits some fragmentation compared to the existing boundary of the DPCA, the land adjacent to these areas primarily consists of privately-owned parcels of similar habitats and topography as the additions and no adjacent development is present. Furthermore, this addition will help connect the larger DPCA with the smaller area extending from it, enhancing habitat continuity. Therefore, the proposed mitigation is not expected to create any new or additional concerns regarding the configuration and/or management of existing DPCA boundary adjustment.

The likelihood of development occurring on the parcels surrounding the 100-acre area is currently unknown. However, there are approximately eleven property owners of these surrounding parcels, and there have been no past or recent attempts to develop the land. This desolate area would require significant infrastructure to support development, making it unviable for large-scale development.

Based on a review of recent and historic aerial images and field surveys, the 100-acre area has not been subject to routine or high levels of off-road vehicle activity. Due to the site's remote nature, off-road vehicle activities is limited to Line Road, outside of the proposed 100 acre area, and areas immediately adjacent to the road. The 100 acre area has been subject to minimal off-road vehicle use since it is not easily accessible. Additionally, the Desert Air Sky Ranch 63-CA, is located approximately 0.3 mile southwest of the 100 acre area. The airstrip along with utility lines in the area does not pose additional management concerns. The airstrip is confined to its boundaries west of the 100 acre area, and utility line maintenance would be minimal.

The primary conservation goals for Coachella's portion of the EIHCA include conserving up to 73 acres of "Core Habitat" for the four species discussed above, as well as conserving Covered Species where they occur. The proposed modification will support this objective by conserving 100 acres of modeled core habitat for the Covered Species in the DPCA, which will increase the overall acreage of conserved habitat than would occur without the Like Exchange.

The Conservation Objectives for EIHCA are as follows (the conservation objectives are listed first followed by the rationale of how the conservation area objectives are still being met with the proposed conservation):

1. In total, 2,790 acres of the East Indio Hills Conservation Area shall be conserved. (This may be less than the sum of acres indicated in the following objectives because there can be overlap among areas covered by the objectives. For example, Core Habitat for two or more species may overlap, or Core Habitat and an Essential Ecological Process area may overlap. The individual acreage figures will be used in compliance monitoring.)

The proposed Vista Del Norte Crossing is located at the southern terminus of the EIHCA, an area affected by edge effects from surrounding anthropogenic disturbances. The majority of the EIHCA lies west of the project site, beyond Dillon Road, and will not be impacted from the Vista Del Norte Crossing. The conservation of land within the Indio Hills, west of the project site, within the EIHCA, ensures ample habitat is preserved as part of the CVMSHCP.

2. Conserve Habitat, as set forth below, for Mecca aster, flat-tailed horned lizard, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse, allowing evolutionary processes and natural population fluctuations to occur. Minimize fragmentation, human-caused disturbance, and edge effects by conserving contiguous Habitat patches and effective Linkages.

    a. Conserve at least 1,045 acres of Other Conserved Habitat for the Mecca aster in the Riverside County portion of the area.

There are not conservation requirements for Mecca aster within the City of Coachella's portion of the EIHCA. No impacts to Mecca aster will occur from development of the Vista Del Norte Crossing.

    b. Conserve at least 415 acres of Other Conserved Habitat for the flat-tailed horned lizard in the Riverside County portion of the area, at least 5 acres in the City of Coachella portion, and at least 100 acres in the City of Indio portion. Conservation of species Habitat in the City of Indio is subject to the conditions in measure 1 of the Required Measures for the Conservation Area section below.

Approximately 6 acres of core habitat are mapped within the EIHCA within the City of Coachella for flat-tailed horned lizard. Of the 6 acres, 1 acre has been authorized for disturbance, and 5 acres are described for conservation. The proposed project will directly impact 1.32 acres and will indirectly impact 6.43 acres of mapped habitat for flat-tailed horned lizard. Adding the 100-acre area to the DPCA will contribute 87.1 acres of additional habitat for the flat-tailed horned lizard to the overall CVMSHCP. This will more than compensate for the take within the City of Coachella's portion of the EIHCA and exceeds the conservation objectives of the EIHCA.

    c. Conserve at least 1,253 acres of Other Conserved Habitat for Le Conte's thrasher in the Riverside County portion of the area, at least 56 acres in the City of Coachella portion, and at least 105 acres in the City of Indio portion. Conserve Le Conte's thrasher nesting sites in the area as described in Section 4.4 for avoidance, minimization, and mitigation measures. Conservation of species Habitat in the City of Indio is subject to the conditions in measure 1 of the Required Measures for the Conservation Area section below.

Approximately 62 acres of core habitat are mapped within the EIHCA within the City of Coachella for Le Conte's thrasher. Of the 62 acres, 6 acres have been authorized for disturbance, and 56 acres are described for conservation. The proposed project will directly impact 7.19 acres and will indirectly impact 63.96 acres of mapped habitat for Le Conte's thrasher. Adding the 100-acre area to the DPCA will contribute 69.6 acres of additional habitat for the Le Conte's thrasher to the overall CVMSHCP. This will compensate for the additional take within the City of Coachella's portion of the EIHCA and meet the conservation objectives of the EIHCA.

    d. Conserve at least 896 acres of Other Conserved Habitat for the Coachella Valley round-tailed ground squirrel in the Riverside County portion of the area, at least 5 acres in the City of Coachella portion, and at least 103 acres in the City of Indio portion.

Conservation of species Habitat in the City of Indio is subject to the conditions in measure 1 of the Required Measures for the Conservation Area section below.

Approximately 6 acres of core habitat are mapped within the EIHCA within the City of Coachella for Coachella Valley round-tailed ground squirrel. Of the 6 acres, 1 acre has been authorized for disturbance, and 5 acres are described for conservation. The proposed project will directly impact 1.43 acres and will indirectly impact 6.51 acres of mapped habitat for Coachella Valley round-tailed ground squirrel. Adding the 100-acre area to the DPCA will contribute 18.4 acres of additional habitat for the Coachella Valley round-tailed ground squirrel to the overall CVMSHCP. This will compensate for the additional take within the City of Coachella's portion of the EIHCA and meet the conservation objectives of the EIHCA.

e. Conserve at least 944 acres of Other Conserved Habitat for the Palm Springs pocket mouse in the Riverside County portion of the area, at least 7 acres in the City of Coachella portion, and at least 103 acres in the City of Indio portion. Conservation of species Habitat in the City of Indio is subject to the conditions in measure 1 of the Required Measures for the Conservation Area section below.

Approximately 8 acres of core habitat are mapped within the EIHCA within the City of Coachella for Palm Springs pocket mouse. Of the 8 acres, 1 acre has been authorized for disturbance, and 7 acres are described for conservation. The proposed project will directly impact 1.43 acres and will indirectly impact 8.3 acres of mapped habitat for Palm Springs pocket mouse. Adding the 100-acre area to the DPCA will contribute 46.4 acres of additional habitat for the Palm Springs pocket mouse to the overall CVMSHCP. This will compensate for the additional take within the City of Coachella's portion of the EIHCA and meet the conservation objectives of the EIHCA.

3. Conserve at least 4 acres of active desert dunes in the Riverside County portion; at least 295 acres of stabilized and partially stabilized desert sand fields in the Riverside County portion of the area; at least 100 acres of stabilized shielded desert sand fields in the City of Indio portion of the area and at least 256 acres in the Riverside County portion; at least 2 acres of mesquite hummocks in the City of Indio portion of the area and at least 39 acres in the Riverside County portion; and at least 7 acres of desert saltbush scrub in the Riverside County portion of the area to conserve these natural communities. Conservation of natural communities in the City of Indio is subject to the conditions in measure 1 of the Required Measures for the Conservation Area section below.

The Vista Del Norte Crossing is located within the City of Coachella’s portion of the EIHCA; therefore, these conservation objectives to no apply to the project.

4. Consistent with the research program described in Section 8.4.1.2, restore 80 acres of mesquite hummocks if 80% of the mesquite hummocks natural community in the south half of Section 17, T5S, R8E, is not conserved under the Plan. If the 80% is conserved, the Conservation Objective shall be to restore 40 acres of mesquite hummocks.

The Vista Del Norte Crossing is not located within Section 17, T5S, R8E; therefore, these conservation objectives to no apply to the project.

Overall, considering the configuration of the additional conservation areas in the DPCA and the lack of changes in otherwise allowable uses in the EIHCA, the proposed modification would result in biologically superior conservation configuration and management requirements as compared to what was analyzed under the CVMSHCP.

5.6 ECOTONES AND OTHER CONDITIONS AFFECTING SPECIES DIVERSITY

On-site portions of the EIHCA are mapped as Sonoran creosote bush scrub and mesquite hummocks, in addition to Tamarisk Scrub and disturbed and developed land and occur in a larger area of similar habitats and land uses with topographic relief in the form of rolling hills and desert washes. Existing development, flood control infrastructure, and land uses that surround on-site portions of the EIHCA limit the presence of ecotones within or adjacent to on-site portions of the EIHCA. The proposed conservation land additions to the DPCA are mapped as supporting the same natural plant communities as impacted areas within the EIHCA, in addition to desert sink scrub and presumed intergrade areas and are not isolated by existing development. As such, the potential for ecotones and improved diversity in the proposed conservation additions is higher than the impacted areas within the EIHCA. The proposed modification would result in overall superior conditions affecting species diversity as that analyzed under the CVMSHCP.

5.7 ACREAGE CONTRIBUTED TO THE CONSERVATION AREAS

Development of the proposed project will result in a total of 64.67 acres of impacts to the EIHCA. KPC has agreed to acquire 100 acres of private land adjacent to the existing western boundary of the DPCA which will be added to the DPCA. The proposed additional conservation land results in a net contribution of 35.33 acres of conserved habitat.

5.8 CONTROL OVER MITIGATION PROPERTY

The mitigation properties are presently privately owned parcels that have been acquired by the Project Applicant and will be donated over to CVCC for inclusion in the DPCA. This will allow these properties to be managed as part of the existing DPCA.

5.9 EQUIVALENCY FINDINGS

The proposed modification would result in biologically superior conservation acreage and value, as summarized here using the mandatory categories for equivalency analysis listed in CVMSHCP Section 6.12. A more complete analysis is provided in above Section 6 of this report:

- **Level of Habitat Conservation and Take of Covered Species**(The Level of Take is No Greater than that Analyzed in the Plan) The conservation of suitable habitat and level of take of covered species with the proposed modification would be greater in size and biologically superior to what

would otherwise occur for all potentially occurring species. On-site portions of the EIHCA, including areas of permanent and temporary impacts, are within core habitat for flat-tailed horned lizard, Le Conte's thrasher, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse. While impacts will be limited to the Vista Del Norte crossing within the City of Coachella's portion of the EIHCA, the Project Applicant has acquired 100 acres of habitat that is within CVMSHCP modeled habitat for the aforementioned wildlife species immediately adjacent to the DCPA. This will result in the net increase of 35.33 acres to modeled habitats that would not otherwise be conserved. The level of habitat conservation and take of covered species will be biologically superior to what would otherwise occur without the proposed modification. The points below further describe potential habitat conservation and take of covered species. The installation of the Vista Del Norte Crossing will reduce core habitat within the EIHCA, but will increase core habitat within the DPCA, resulting in a net overall increase in protected core habitat.

In accordance with Section 4.6 of the CVMSHCP, the CVMSHCP anticipated Take for Listed Species (animal species) both outside and within the Conservation Areas. In addition, a small percentage of Take can occur within the Conservation Areas under the Plan.

The table below provides compares the acreages of core habitats for species and plant communities within the EIHCA and DPCA. As previously noted, the Vista Del Norte Crossing will impact core habitat for several species. However, similar habitat types that are biologically superior are proposed to be conserved within the donation site that connects with the DPCA. Even thought the project will impact core habitat for several species, the donation site generally provides more core habitat for species, including species not included in the EIHCA. As the project may result in some habitat loss, the donation site compensates by providing a larger or more diverse area of core habitat. This includes support for additional species not covered by the EIHCA, helping to offset the project's impacts.

MSHCP Species	Acres in EIHCA	Acres in DPCA
Crissal thrasher	0.25	4.01
CV round-tailed ground squirrel	6.34	17.64
Desert tortoise	55.20	0
flat-tailed horned lizard	6.21	89.41
Least Bell's vireo	0.25	4.01
Le Conte's thrasher	60.79	69.50
Palm Springs pocket mouse	7.75	45.95
Summar tanager	0.25	36.59
Southwestern willow flycatcher	0.25	0
Yellow breasted chat	0.25	36.60
Yellow warbler	0.25	36.60
Sonoran creosote bush scrub	60.54	65.49

Mesquite Hummocks	0.25	4.01
Desert Sinks	0	32.56

Flat-Tailed Horned Lizard

Focusing on the City of Coachella's portion of the EIHCA, approximately 6 acres of core habitat are mapped for flat-tailed horned lizard. Of the 6 acres, 1 acre has been authorized for disturbance, and 5 acres are described for conservation.

Adding the 100-acre area to the DPCA will contribute 87.1 acres of additional habitat for the flat-tailed horned lizard to the overall CVMSHCP. This will more than compensate for the additional take within the City of Coachella's portion of the EIHCA to ensure that the level of Take is no greater than that analyzed in the CVMSHCP.

Le Conte's Thrasher

Focusing on the City of Coachella's portion of the EIHCA, approximately 62 acres of core habitat are mapped for Le Conte's thrasher. Of the 62 acres, 6 acres have been authorized for disturbance, and 56 acres are described for conservation.

Adding the 100-acre area to the DPCA will contribute 69.6 acres of additional habitat for the Le Conte's thrasher to the overall CVMSHCP. This will more than compensate for the additional take within the City of Coachella's portion of the EIHCA to ensure that the level of Take is no greater than that analyzed in the CVMSHCP.

Coachella Valley Round Tailed Ground Squirrel

Focusing on the City of Coachella's portion of the EIHCA, approximately 6 acres of core habitat are mapped for Coachella Valley round-tailed ground squirrel. Of the 6 acres, 1 acre has been authorized for disturbance, and 5 acres are described for conservation.

Adding the 100-acre area to the DPCA will contribute 18.4 acres of additional habitat for the Coachella Valley round-tailed ground squirrel to the overall CVMSHCP. This will more than compensate for the additional take within the City of Coachella's portion of the EIHCA to ensure that the level of Take is no greater than that analyzed in the CVMSHCP.

Palm Springs Pocket Mouse

Focusing on the City of Coachella's portion of the EIHCA, approximately 8 acres of core habitat are mapped for Palm Springs pocket mouse. Of the 8 acres, 1 acre has been authorized for disturbance, and 7 acres are described for conservation.

Adding the 100-acre area to the DPCA will contribute 46.4 acres of additional habitat for the Palm Springs pocket mouse to the overall CVMSHCP. This will more than compensate for the additional take within the City of Coachella's portion of the EIHCA to ensure that the level of Take is no greater than that analyzed in the CVMSHCP.

Mesquite Hummocks

Within the City of Coachella's portion of the EIHCA, the extension of Vista Del Norte will result in the direct impacts to 0.18 acre of mesquite hummocks, and 0.79 acre of indirect impacts to mesquite hummocks, totaling 0.97 acre of impacts.

To ensure no net loss of mesquite hummocks, approximately 4 acres of mesquite hummocks will be conserved within the proposed 100 acre area, that would not otherwise be conserved and subject to development. The conservation of the 4 acres of mesquite hummocks will compensate for the take within the City of Coachella's portion of the EIHCA to ensure that the level of Take is no greater than that analyzed in the CVMSHCP.

- **Potential Habitat fragmentation** The area of impact within the EIHCA has been minimized to the maximum extent practicable. The project footprint includes the minimum impacts to the EIHCA required to provide sufficient access between the Specific Plan area and the City of Coachella via the Vista Del Norte Crossing. Most of the impacts to the EIHCA will not be permanent impacts from the installation of the crossing, but rather indirect impacts from the fragmentation of existing habitat and reduction in local connectivity to the southern terminus of the EIHCA due to the road exceeding the width dimensions approved in the CVMSHCP.

  The proposed conservation areas will provide an overall increase to conserved modeled species habitat and lands conserved under the CVMSHCP. Additionally, post construction, the two large culverts within the All American Canal and associated access roads and the 6 large culverts on the east side of the existing levee, will continue to provide local wildlife movement opportunities both along the All American Canal under the expanded Vista Del Norte crossing to and from the southern terminus of the EIHCA that will not be directly impacted by the road crossing. The habitat within the southern terminus of the EIHCA, once the project is completed, will continue to provide local wildlife movement opportunities similar to those in its current condition.

- **Effects on Natural Communities.** Both the impact area and the additional conservation land are part of the same natural Sonoran creosote bush scrub community and support natural mesquite hummocks. The extension of Vista Del Norte will result in the direct impacts to 0.18 acre of mesquite hummocks, and 0.79 acre of indirect impacts to mesquite hummocks, totaling 0.97 acre of impacts; while approximately 4 acres of mesquite hummocks will be conserved within the proposed 100 acre area. Additionally, the impact area also supports an introduced tamarisk scrub community and disturbed and developed land, which are absent in the conservation land additions. Therefore, the additional conservation land provides overall superior biological functions and values.

  Two (2) natural plant communities occur within the Vista Del Norte Crossing; Sonora creosote bush scrub and mesquite hummocks. Additionally, the Vista Del Norte Crossing supports a narrow swathe of Tamarisk Scrub and two land cover types that would be classified as disturbed and developed. The natural plant communities within the EHICA has been disturbed by the installation of the All American Canal and grading activities to the east, and are constrained by developments to the west, agricultural activities to the east, and Interstate 10 to the south.

These surrounding land uses, combined with onsite anthropogenic disturbances, have degraded the natural plant communities within the southern terminus of the EIHCA. These existing edge effects have already fragmented the southern terminus of the EIHCA where the Vista Del Norte Crossing will be installed. As a result, the development of the Vista Del Norte Crossing will have limited effects on natural communities within the southern terminus of the EIHCA, and is not anticipated to result in increased edge effects.

The DPCA supports two natural plant communities: Sonora creosote bush scrub and mesquite hummocks, which have experienced minimal anthropogenic disturbances. Adding the 100 acres to the DPCA will provide additional undeveloped habitat, acting as a buffer for the Dos Palmas Preserve to the north and Salt Creek to the east. Furthermore, this addition will help connect the larger DPCA with the smaller area extending from it, enhancing habitat continuity.

- **Effects on Biological Corridors and Linkages.** Per Section 4.3.15 of the CVMSHCP, the EIHCA has potential habitat connectivity with the Thousand Palms Conservation Area through the Indio Hills Palms Conservation Area, which is located northwest of the Vista Del Norte crossing. As previously noted, the Vista Del Norte crossing is located at the southern terminus of the EIHCA and only has the potential to provide local wildlife movement opportunities. The majority of the biological corridors/linkages associated with EIHCA are located northwest of the project site, west of Dillon Road, within the undeveloped Indio Hills.

  Approximately 64.67 acres of impact will occur at the southern terminus of the EIHCA along the All American Canal, which functions as local wildlife movement corridor, but is not formally recognized as a regional corridor in the CVMSHCP. Permanent impacts to on-site portions of the EIHCA include measures to maintain the function of the All American Canal and will not impact flows or wildlife movement in the long-term. Therefore, the overall local wildlife movement activities within this portion of the EIHCA where the crossing will be installed will remain intact with the installation of the box culverts over the All American Canal and 6 large culverts on the east side of the levee. Additionally, the crossing is not expected to impact the larger corridor/linkage within the EIHCA as the majority of wildlife movement is expected to occur in the Indio Hills west of the site, and will not fragment habitat since the culverts will continue to provide local wildlife movement in the southern terminus of the EIHCA. The functionality of the biological corridors and linkage within this portion of the EIHCA will remain biologically equivalent.

  Further, as documented in Section 4.3.19 of the CVMSHCP, biological corridors and linkages within the DPCA have been disrupted by the Coachella Canal which has disrupted connectivity with the Orocopia Mountains to the north. The 100-acre area is located south of the Coachella Canal and provides local wildlife movement opportunities to the Dos Palmas Preserve to the north and Salt Creek to the southeast. The addition of the 100 acres to the DPCA will enhance local wildlife movement opportunities by adding additional undeveloped habitat to the DPCA that will act as an additional habitat buffer to the Dos Palmas Preserve to the north and Salt Creek.

- **Effects on Essential Ecological Processes.** No areas indicated to support essential ecological processes will be impacted by project activities (i.e., sand movement/transportation). The

proposed project would result in the provision of essential ecological processes that are biologically equivalent to what would occur without the proposed modification.

Per the CVMSHCP, the Essential Ecological Processes within the EIHCA (Section 4.3.15) include the Indio Hills which are part of the watershed for mesquite hummocks. As previously noted, the extension of Vista Del Norte will result in direct impacts to 0.18 acre of mesquite hummocks, and 0.79 acre of indirect impacts to mesquite hummocks. Direct impacts to mesquite hummocks will be mitigated by the conservation of approximately 4 acres of mesquite hummocks within the 100 acre area being added to the DPCA. Once construction of the crossing is complete, the box culverts over the All American Canal and 6 large culverts on the east side of the levee will continue to support the watershed that supports the 0.79 acre of mesquite hummocks.

The Essential Ecological Processes within the DPCA, as listed in the CVMSHCP (Section 4.3.19), have been impacted by the Coachella Canal, which has blocked some of the natural drainage patterns from the Orocopia Mountains. It should be noted that Salt Creek remains largely intact within the DPCA. The 100 acres that will be included in the DPCA are located approximately 0.25 mile southwest of a drainage feature that is tributary to Salt Creek (approximately 2 miles southwest). The 100 acre area will conserve additional upstream habitat that supports mesquite hummocks and undisturbed CVMSHCP modeled habitat.

- **Effects on Conservation Area Configuration and Management.** The installation of the Vista Del Norte crossing will have both permanent and temporary impacts to the EIHCA. However, the box culverts over the All American Canal and 6 large culverts on the east side of the levee (with soft "natural" bottoms) will maintain local wildlife movement opportunities within the southern terminus of the EIHCA after installation of the Vista Del Norte Crossing. Additionally, the acquisition of conservation lands that would be added to the DPCA, will result in additional lands being added to the DPCA that are biologically superior to the habitats being impacted within the EIHCA, which will result in a biologically superior configuration and management of CVMSHCP Conservation Areas The 100 acre area to be added to the DPCA will decrease potential edge effects on Salt Creek, the major wildlife corridor in the DPCA, by adding additional buffer/refugia habitat to the overall DPCA that will be protected in perpetuity. .

- **Effects on Ecotones and Other Conditions Affecting Species Diversity**. On-site portions of the EIHCA are part of a larger mapped area of Sonoran creosote scrub but are mostly surrounded by existing development and infrastructure. The EIHCA, within the Vista Del Norte Crossing, provides core habitat for Flat-tailed horned lizard, Le Conte's thrasher, Coachella Valley round-tailed ground squirrel, and Palm Springs pocket mouse. Additionally, the on-site portions of the EIHCA supports CVMSHCP modeled habitat for yellow warbler, yellow-breasted chat, Crissal thrasher, summer tanager, least Bell's vireo, desert tortoise, as well as mesquite hummocks.

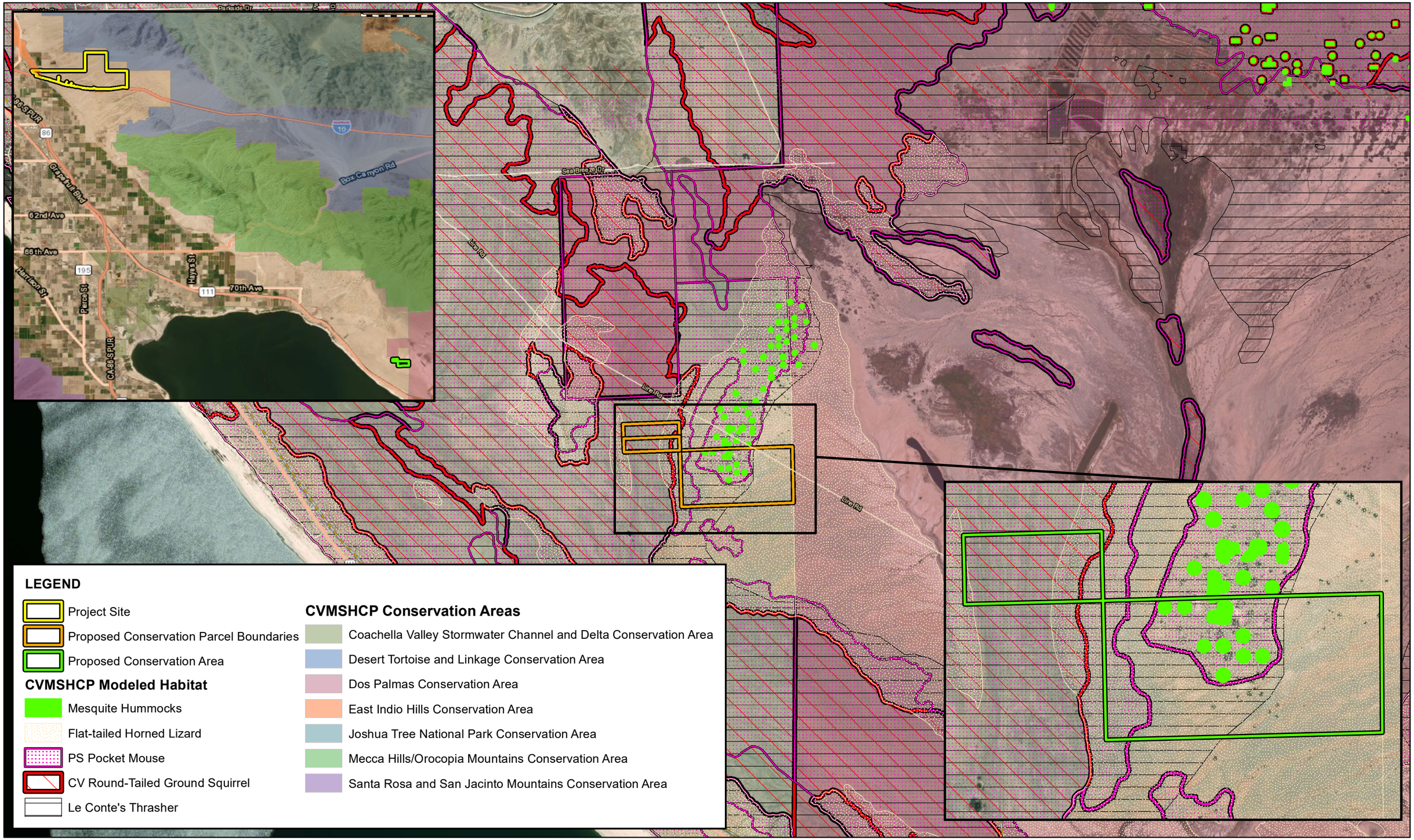
  As previously noted, the habitat within the EHICA has been disturbed by the installation of the All American Canal and grading activities to the east, and is constrained by developments to the west, agricultural activities to the east, and Interstate 10 to the south, thereby limiting the presence of ecotones or transitional habitats associated with on-site portions of the EIHCA. These surrounding land uses, combined with onsite anthropogenic disturbances, have degraded the

habitat quality and restricted wildlife movement within the southern terminus of the EIHCA, thereby reducing its long-term conservation value and overall species diversity.

The proposed conservation area, adjacent to the DPCA, supports CVMSHCP modeled habitat for all the same species listed in the EIHCA, as well as mesquite hummocks. Additionally, the habitat within the DPCA and its surrounding area remains undeveloped with minimal anthropogenic disturbances. The undisturbed habitats within and around the 100-acre area proposed for inclusion in the DPCA are of higher quality than those in the impacted areas of the EIHCA, as they are not constrained by surrounding development and have not experienced significant anthropogenic disturbances. As a result, the 100-acre area to be included in the DPCA offers greater long-term conservation value than the habitats being impacted in the EIHCA. Overall species diversity is not expected to be reduced by the proposed modification.

- **Equivalent or Greater Acreage**. The proposed project, with the contribution of 3 parcels of additional conservation land totaling 100 acres of Core Habitat, will result in greater conservation acreage (35.33 additional acres of like habitat) than would otherwise occur without the proposed modification.

Control Over Mitigation Property. The applicant has control over all mitigation property for the proposed project and will deed all properties to the CVCC for inclusion into the DPCA. The three parcels of mitigation property are presently privately owned parcels by the Applicant.



ELMT CONSULTING

0 2,500 5,000 10,000 Feet

Source: ESRI Aerial Imagery, Riverside County

KPC COACHELLA SPECIFIC PLAN

DPCA Core Habitat

Exhibit 7

Section 7 Conclusion

The proposed modification, addition of 100 acres of land to the DPCA, is anticipated to allow for the construction of the Vista Del Norte Crossing over the All American Canal through the EIHCA. Besides providing necessary access for the future KPC Coachella master planned community, the inclusion of 100 acres of land into the DPCA will result in a net increase of like habitats with higher suitability or quality for covered species within the overall CVMSHCP Conservation Areas.

As noted above, the habitat within the EIHCA has been disturbed by the installation of the All American Canal and grading activities to its east. Additionally, this section of the EIHCA that is being impacted is constrained by developments to the west, agricultural activities to the east, and Interstate 10 to the south. These surrounding land uses, combined with onsite anthropogenic disturbances, have degraded the habitat quality and restricted wildlife movement within the southern terminus of the EIHCA, thereby reducing its long-term conservation value. In contrast, the habitat within the DPCA and its surrounding area remains undeveloped within minimal anthropogenic disturbances. The undisturbed habitats within and around the 100-acre area proposed for inclusion in the DPCA are of higher quality than those in the impacted areas of the EIHCA, as they are not constrained by surrounding development and have not experienced significant anthropogenic disturbances. As a result, the 100-acre area to be included in the DPCA offers greater long-term conservation value than the habitats being impacted in the EIHCA.

The rationale for this equivalency analysis in support of the proposed modification is based on:

- The CVMSHCP's acknowledgement that it may be possible to achieve the Plan's conservation goals through a modification or different configuration of 1 or more conservation areas;
- The proposed modification will result in equal or greater benefits to Covered Species and conserved natural communities as compared to those benefits analyzed in the CVMSHCP (existing Conservation Area boundaries);
- The level of take of (impact to) Covered Species is no greater than that analyzed in the Plan;

The proposed modification would result in biologically superior conservation acreage and value using the mandatory categories for equivalency analysis listed in CVMSHCP Section 6.12, summarized as follows:

- The conservation of suitable habitat and level of take of MSHCP covered species with the proposed modifications to the EIHCA and DPCA would be biologically superior to what would otherwise occur;
- The proposed modification would result in greater benefits to natural communities as compared to those benefits analyzed under the CVMSHCP;
- The function and values of existing biological corridors and essential ecological processes are not expected to be reduced by the proposed modification;

- The proposed modification would result in biologically superior conservation configuration and management requirements are not expected to significantly differ compared to what would have occurred under the CVMSHCP;
- Ecotones and overall species diversity are expected to be increased by the proposed modification;
- The additional conservation parcels are greater in size, resulting in a greater acreage in MSHCP Conservation Areas; and
- The three parcels that constitute the additional conservation land have been acquired by the Applicant and, therefore, will be under the direct ownership of the applicant before being deeded to CVCC.

Based on this analysis, the proposed modification would result in biologically superior conservation value compared with implementation of the CVMSHCP without the proposed modification for this project.

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Appendix A Site Plan

LEGEND:

- Very Low Density Residential
- Low Density Residential
- Medium Density Residential
- High Density Residential
- Mixed Use
- Institutional (Schools)
- Entertainment Center/Hotels
- Parks, Greenways, and Amenity Centers
- New Agricultural Production
- Drainage and Other Open Space
- Bridges
- Roundabouts
- Pedestrian / Bicycle Trail
- Electrical/Gas Easement

NTS

Vista del Norte

VILLAGE A

DR-1 99.5 AC
OS-1 33.5 AC
A-1 32.0 AC
OS-2 25.8 AC
A-2 48.8 AC
OS-3 14.6 AC
A-3 15.6 AC
ELEM. SCHOOL
A-4 24.5 AC
A-5 51.0 AC
WELLNESS UNIVERSITY (OVERLAY DISTRICT)
OS-4 13.5 AC
DR-2 93.3 AC
A-6 28.5 AC
A-7 100.0 AC
OS-5 8.9 AC
A-8 23.0 AC
A-9 10.2 AC
A-10 24.2 AC
A-11 16.7 AC
A-12 18.0 AC

All American Canal

DR-4 2.0 AC
C-4 5.0 AC
C-5 7.8 AC
C-2A 23.4 AC
C-3 22.4 AC
VILLAGE C
SPORTS COMPLEX
OS-11 A 48.2 AC
CYCLING PARK
C-1 23.4 AC
PERFORMING ARTS AMPHITHEATER
C-2B 8.7 AC
DR-9B 25.9 AC
DR-9A 15.0 AC
DR-9C 20.0 AC
NAP
B-4 30.8 AC
B-2 27.1 AC
HOTEL/ ENTERTAINMENT CENTER
B-1 32.0 AC
OS-6 52.1 AC
B-3 29.6 AC
MIXED USE AND WELLNESS COMPLEX
OS-7 37.8 AC
B-7 13.5 AC
OS-8A 16.8 AC
B-6A 31.9 AC
B-5 71.5 AC
OS-8B 1.9 AC
OS-8C 0.5 AC
B6-B 35.3 AC
NAP
OS-9B 4.1 AC
B-9 12.4 AC
OS-10 4.9 AC
B-8 50.6 AC

Avenue 50

Future Interchange

DR-5A 166.8 AC
POTENTIAL ACTIVE ADULT COMMUNITY
D-2 54.4 AC
OS-14 42.1 AC
D-5 22.0 AC
Pedestrian Promenade
D-3 36.2 AC
DR-6 4.3 AC
D-1 57.0 AC
D-6 25.3 AC
D-4 43.2 AC
D-8 6.5 AC
OS-12 10.5 AC
VILLAGE D
OS-15 14.7 AC
D-7 49.5 AC
OS-13 34.7 AC
C-6 32.6 AC
DR-7 5.1 AC
ELEM/ MIDDLE SCHOOL
SPORTS FIELD AND TRAIL CONNECTORS
C-7 50.0 AC
DR-8 57.6 AC
OS-9A 8.6 AC
DR-5B 4.7 AC

VILLAGE E

E-4 35.0 AC
E-3 12.4 AC ELM. SCHOOL
DR-7 4.2 AC
OS-16 42.6 AC
E-5 22.0 AC
AGRICULTURE VINEYARD ESTATES
OS-17 25.8 AC
OS-9C 1.5 AC
E-2 39.0 AC
E-1 31.2 AC
E-6 40.2 AC
OS-18 17.0 AC
E-7 38.0 AC
DR-5C 222.5 AC

Agricultural Educational Center

Appendix B KPC Circulation

LEGEND:

- ARTERIAL (A)
- MAJOR (C+D)
- COLLECTOR (D)

NTS

VISTA DEL NORTE

DR-1 99.5 AC

OS-1 33.5 AC

A-1 32.0 AC

A LOOP

OS-3 14.6 AC

A-3 15.6 AC

ELEM. SCHOOL

A-4 24.5 AC

OS-2 25.8 AC

A-2 48.8 AC

All American Canal

A LOOP WEST

A-5 51.0 AC

A LOOP EAST

WELLNESS UNIVERSITY (OVERLAY DISTRICT)

OS-4 13.5 AC

DR-2 93.3 AC

B LOOP

A-7 100.0 AC

OS-5 8.9 AC

A-6 28.5 AC

A-12 18.0 AC

DR-4 2.0 AC

C-4 5.0 AC

A-9 10.2 AC

1ST ST

A-10 24.2 AC

A-8 23.0 AC

2ND ST

SPORTS COMPLEX

OS-11 A 48.2 AC

CYCLING PARK

C-1 23.4 AC

PERFORMING ARTS AMPHITHEATER

A-11 16.7 AC

DR-9A 15.0 AC

B-2 27.1 AC

HOTEL/ ENTERTAINMENT CENTER

B-1 32.0 AC

OS-6 52.1 AC

C LOOP

B-3 29.6 AC

OS-7 37.8 AC

MIXED USE AND WELLNESS COMPLEX

AVENUE 50

Future Interchange

DR-5A 166.8 AC

POTENTIAL ACTIVE ADULT COMMUNITY

OS-14 42.6 AC

D-2 54.4 AC

D-5 22.0 AC

Pedestrian Promenade

D-3 36.2 AC

DR-6 4.3 AC

D-1 57.0 AC

D-6 25.3 AC

D-4 43.2 AC

D-8 6.5 AC

OS-12 10.5 AC

OS-15 14.7 AC

D-7 49.5 AC

C-6 32.6 AC

OS-13 34.7 AC

DR-7 5.1 AC

ELEM/ MIDDLE SCHOOL

SPORTS FIELD AND TRAIL CONNECTORS

C-5 7.8 AC

C-7 50.0 AC

3RD ST

F LOOP

21.9 AC

C-3 22.4 AC

D LOOP

DR-8 57.6 AC

OS-9A 8.6 AC

DR-5B 4.7 AC

E LOOP NORTH

OS-8A 16.8 AC

B-6A 31.9 AC

OS-9B 4.1 AC

DR-9C 20.0 AC

C-2B 8.7 AC

DR-9B 25.9 AC

B-5 71.5 AC

B6-B 35.3 AC

OS-8B 1.9 AC

OS-8C 0.5 AC

B-4 30.8 AC

B-9 12.4 AC

OS-10 4.9 AC

B-8 50.6 AC

G STREET

B-7 13.5 AC

DR-5C 222.5 AC

E LOOP SOUTH

E-3 2.38 AC

ELM. SCHOOL

E-4 35.0 AC

DR-7 4.2 AC

OS-16 42.6 AC

E-5 22.0 AC

OS-9C 1.5 AC

E-2 39.0 AC

AGRICULTURE VINEYARD ESTATES

OS-17 25.8 AC

E-1 31.2 AC

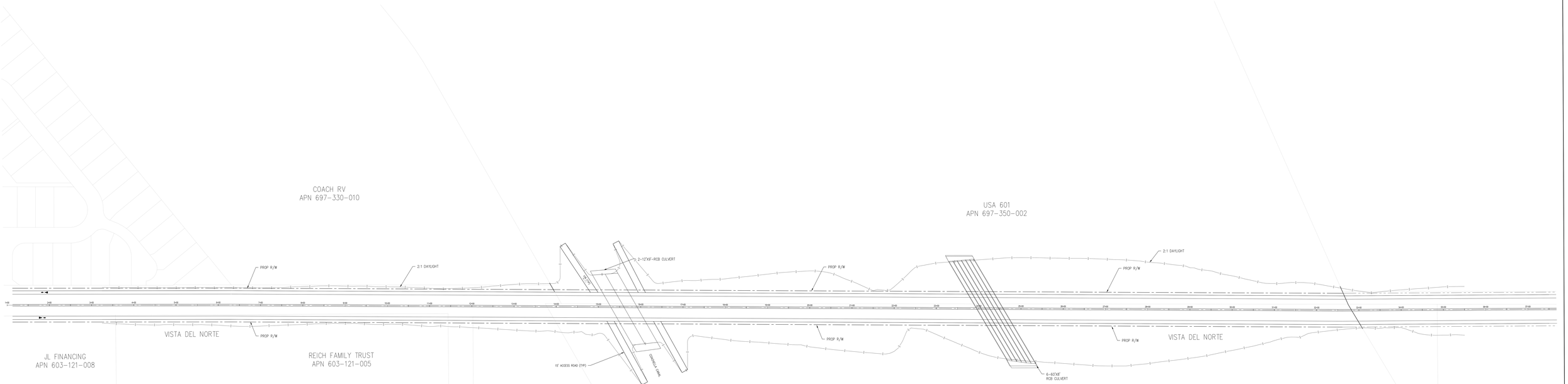
E-6 40.2 AC

OS-18 17.0 AC

E-7 38.0 AC

Agricultural Educa⊠onal Center

Appendix C Vista del Norte – Plan and Profile



NORTH

GRAPHIC SCALE IN FEET
0 30 60

VISTA DEL NORTE - EXHIBIT
KPC COACHELLA
8/6/2024

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Appendix D Biological Resources Assessment

ROCKS
BIOLOGICAL CONSULTING





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KPC COACHELLA BIOLOGICAL RESOURCES ASSESSMENT AND COACHELLA VALLEY MSHCP CONSISTENCY REPORT

Riverside County, California

April 2020

Prepared for:
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1 INTRODUCTION

Rocks Biological Consulting (RBC) has prepared this Biological Resources Assessment and Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) Consistency Report for the proposed Desert Lakes Project (project). This report has been prepared to evaluate potential impacts on biological resources within the project site and to assess project conformance with the California Environmental Quality Act (CEQA; Public Resources Code § 21000 et seq.), the federal Endangered Species Act (ESA; 16 U.S. Code [USC] § 1531 et seq.) and the state Endangered Species Act (CESA; California Fish and Game Code [Cal. Fish and Game Code] § 2050 et seq.), and applicable federal, state, and local laws.

RBC conducted a formal aquatic resources delineation for the project site to identify areas that may be considered jurisdictional under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act; the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Act; and streambed and riparian habitats under California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code (§1602). The complete analysis of jurisdictional features is included in the *Desert Lakes Project Jurisdictional Delineation Report* (RBC 2019) under separate cover. The results of the aquatic resources delineation are summarized in this report.

The project site is entirely within the CVMSHCP area and partially within the East Indio Hills Conservation Area (EIHCA). As such, RBC conducted a CVMSHCP consistency analysis to determine whether the project conforms with the Conservation Goals and Objectives of the CVMSHCP.

1.1 PROJECT LOCATION

The project site is located along the western foothills of the Little San Bernardino Mountains on the eastern flank of the Coachella Valley, north of the Salton Sea. The site is immediately north of Interstate 10 (I-10) and east of Coachella Canal Road in the City of Coachella, Riverside County, California (Figure 1). A portion of the Coachella Canal runs north to south through the westernmost portion of the project site. State Route 86 is located approximately two miles west of the project site.

The project site lies within the northeast portion of the United States Geological Survey (USGS) *Indio* 7.5-minute topographic quadrangle in Sections 24, 25, 26, 27, and 28; Township 5 South; Range 8 East; and within the northwestern portion of *Thermal Canyon* quadrangle in Section 30, Township 5 South, Range 9 East, San Bernardino Base Meridian.

1.2 PROJECT DESCRIPTION

The proposed project consists of a Specific Plan for a new master planned community located at the eastern entrance to the City of Coachella (City). The 2812-acre project site will provide a mixture of land uses intended to create a cohesive entrance to the City, with residential components that will be compatible with the surrounding existing and planned neighboring areas.

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The proposed project will provide additional commercial, residential, educational, employment, and recreational opportunities for residents and visitors within the City, including a hotel and casino.

1.3 REGULATORY FRAMEWORK

Several regulations have been established by federal, state, and local agencies to protect and conserve biological resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project. The final determination as to what types of permits are required is made by the regulating agencies.

1.3.1 FEDERAL REGULATIONS

Federal Endangered Species Act

The ESA provides for the listing of endangered and threatened species of plants and animals and the designation of critical habitat for listed species. The ESA regulates the "taking" of any endangered fish or wildlife species, per Section 9 of the ESA. As development is proposed, the responsible agency or individual landowner is required to consult with the USFWS to assess potential impacts to listed species (including plants) or its critical habitat, pursuant to Sections 7 and 10 of the ESA. USFWS is required to determine the extent of impact a project would have to a particular species. If it is determined that potential impacts to a species would likely occur, measures to avoid or reduce such impacts must be identified. USFWS may issue an incidental take statement, following consultation and the issuance of a Biological Opinion. This allows for take of the species that is incidental to another authorized activity, provided that the action will not adversely affect the existence of the species. Section 10 of the ESA provides for issuance of incidental take permits to non-federal parties with the development of a habitat conservation plan (HCP). Section 7 of the ESA provides for permitting of projects where interagency cooperation is necessary to ensure that a federal action/decision does not jeopardize the existence of a listed species.

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA; 16 USC § 703 et seq.) is a federal statute that implements treaties with several countries on the conservation and protection of migratory birds. The number of bird species covered by the MBTA is extensive and listed at 50 Code of Federal Regulations (CFR) 10.13. USFWS enforces the MBTA, which prohibits "by any means or in any manner, to pursue, hunt, take, capture, [or] kill" any migratory bird, or attempt such actions, except as permitted by regulation.

Rivers and Harbors Appropriation Act of 1899

The Rivers and Harbors Appropriation Act of 1899 (Rivers and Harbors Act; 33 USC § 403) prohibits the discharge of any material into navigable waters, or tributaries thereof, of the United States without a permit. The Rivers and Harbors Act also makes it a misdemeanor to excavate, fill, or alter the course, condition, or capacity of any port, harbor, or channel; or to dam navigable streams without a permit.

Many activities originally covered by the Rivers and Harbors Act are now regulated under the Clean

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Water Act of 1972 (CWA; 33 USC § 1251 et seq.), discussed below. However, the 1899 act retains relevance and created the structure under which the Corps oversees CWA Section 404 permitting.

Clean Water Act

Pursuant to Section 404 of the CWA, the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 CFR 328.3 (as amended at 80 Federal Register (FR) 37104, June 29, 2015). The Corps, with oversight from the U.S. Environmental Protection Agency (USEPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The Regional Water Quality Control Board (RWQCB), a division of the State Water Resources Control Board, provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that a proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

1.3.2 STATE REGULATIONS

California Environmental Quality Act

CEQA was established in 1970 as California's counterpart to the National Environmental Policy Act (NEPA; 42 USC § 4321 et seq.). CEQA requires state and local agencies to identify significant environmental impacts of their actions and to avoid or mitigate those impacts, where feasible.

CEQA applies to certain activities of state and local public agencies. A public agency must comply with CEQA when it undertakes an activity defined by CEQA as a "project." A project is an activity undertaken by a public agency or a private activity, which must receive some discretionary approval (meaning that the agency has the authority to deny the requested permit or approval) from a government agency that may cause either a direct physical change in the environment or a reasonably foreseeable indirect change in the environment.

California Endangered Species Act and Natural Community Conservation Planning Act

The CESA, in combination with the Native Plant Protection Act of 1977 (NPPA; Cal. Fish and Game Code § 1900 et seq.), regulates the listing and take of plant and animal species designated as endangered, threatened, or rare within the state. California also lists species of special concern based on limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, or educational value. CDFW is responsible for assessing development projects for

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their potential to impact listed species and their habitats. State listed special-status species are addressed through the issuance of a 2081 permit (Memorandum of Understanding).

In 1991, the California Natural Community Conservation Planning Act (NCCP Act; Cal. Fish and Game Code § 2800 et seq.) was approved and the NCCP Coastal Sage Scrub program was initiated in Southern California. California law established the NCCP program "to provide for regional protection and perpetuation of natural wildlife diversity while allowing compatible land use and appropriate development and growth." The NCCP Act encourages preparation of plans that address habitat conservation and management on an ecosystem basis rather than one species or habitat at a time.

California Fish and Game Code Sections 1600 -1602

Pursuant to Division 2, Chapter 6, Section 1602 of the Cal. Fish and Game Code, CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Lake or Streambed Alteration Agreement Application must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses. Jurisdictional waters are delineated by the outer edge of riparian vegetation or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and the applicant is the Lake or Streambed Alteration Agreement.

California Fish and Game Code Sections 3503, 3511, 3513, 3800, 4700, 5050, and 5515

Within California, fish, wildlife, and native plant resources are protected and managed by CDFW. The California Fish and Game Commission and/or CDFW are responsible for issuing permits for the take or possession of protected species. The following sections of the Cal. Fish and Game Code address protected species: Section 3511 (birds), Section 4700 (mammals), Section 5050 (reptiles and amphibians), and Section 5515 (fish). In addition, the protection of birds of prey is provided for in Sections 3503, 3513, and 3800 of the Cal. Fish and Game Code.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act; Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to surface waters under the federal CWA. In addition, the RWQCB is responsible for administering the Porter-Cologne Act.

Pursuant to the Porter-Cologne Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. "Waste" is partially

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defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

1.3.3 REGIONAL AND LOCAL PLANS

Coachella Valley Multiple Species Habitat Conservation Plan

The County of Riverside developed the CVMSHCP (Coachella Valley Association of Governments [CVAG] 2007) to enhance and maintain biological diversity and ecosystem processes while allowing future economic growth. The CVMSHCP sets Conservation Goals and Objectives to ensure conservation of the Covered Species and conserved natural communities in the CVMSHCP Reserve System. In addition to setting Conservation Goals and Objectives for the Covered Species and conserved natural communities, the CVMSHCP has designated Core Habitat, Other Conserved Habitat, Essential Ecological Processes, and Biological Corridors and Linkages. The CVMSHCP area is divided into Conservation Areas based on a combination of ecological and jurisdictional factors.

2 METHODS

2.1 BIOLOGICAL RESOURCES ASSESSMENT

Prior to commencing field surveys, RBC conducted a literature and database review to assist in determining the existence or potential occurrence of special-status biological resources on and within the vicinity of the project site. RBC queried the CVMSHCP database (Figure 2; CVAG 2019), California Natural Diversity Database (CNDDB; Figure 3; CDFW 2019), USFWS database for special-status species, and USFWS database for endangered species and critical habitat (USFWS 2019a) within a five-mile radius of the project site. RBC also queried the California Native Plant Society Inventory of Rare and Endangered Plants of California (CNPS Inventory; CNPS 2019) within the nine USGS quadrangles surrounding the project site. These databases contain records of reported occurrences of state- and federally listed species or otherwise sensitive species and habitats that may occur within or within vicinity of the project site. RBC also reviewed other available technical information on the biological resources of the area, including previous surveys and recent findings on adjacent project sites.

In April and May 2019, RBC biologists conducted vegetation mapping, habitat assessments, and a general biological survey within the project site. Survey dates, times, and environmental conditions during the field surveys are presented in Table 1.

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Table 1. Survey Dates and Conditions

Date	Biologists	Time (Start-End)	Temperature (ºF) (Start-End)	Cloud Cover (%) (Start-End)	Wind Range (mph) (Start; End)
4/13/19	LR	1400-1630	92-95	10-10	2-4; 2-4
5/1/19	LR, TS	0615-1145	60-80	0-0	2-6; 2-4
5/2/19	LR, TS	0620-1130	63-80	20-20	0-2; 2-4
5/8/19	LR, BB	0630-1300	55-93	0-0	3-6 (8); 2-5
5/9/19	LR, BB	0630-1230	66-92	5-40	0-2; 2-4
BB = Brenda Bennett, LR = Lee Ripma, TS = Taku Shiozaki					

During the field surveys biologists took notes on existing site conditions, vegetation, and suitability of habitat for special-status species with potential to occur on site. Wildlife species were documented during field surveys by sight, calls, tracks, or scat. Plant species were recorded and mapped in the field and, if necessary, species identification was confirmed in the lab. In addition to species observed, expected wildlife usage of the project site was determined by known habitat preferences of regional wildlife species and knowledge of their relative distributions in the area.

2.2 AQUATIC RESOURCES DELINEATION

RBC conducted a formal aquatic resources delineation between May 7 and May 10, 2019 in order to identify areas that may be considered jurisdictional under the Corps pursuant to Section 404 of the CWA; jurisdictional under the RWQCB pursuant to Section 401 of the CWA and the Porter-Cologne Act, and streambed and riparian habitats under the CDFW pursuant to Cal. Fish and Game Code (§1602). Complete methods and results are presented in the *Desert Lakes Project Jurisdictional Delineation Report* (RBC 2019).

3 RESULTS

3.1 EXISTING SITE CONDITIONS

The project site is located within the Coachella Valley within the Sonoran Desert region, a subdivision of the Colorado Desert. The site is mostly undeveloped land, consisting of gently-sloped terrain within the broad alluvial fan derived from the Little San Bernardino Mountains to the north, with the bedrock highlands of the Little San Bernardino and Orocopia Mountains to the northeast, east, and southeast. The project site includes several southwest-trending ridges of relatively low relief with alluvial drainages that drain into a larger alluvial fan. The western extent of the project site (adjacent to the Coachella Canal) has been subject to historic human disturbance, including previous agricultural use. On-site disturbances include unpaved roads, power lines, illegal dumping, and Off Highway Vehicle (OHV) use.

The project site lies within the boundary of the CVMSHCP planning area and a small portion of the EIHCA is present at the far western boundary of the site. The site is also in the immediate vicinity of the Desert Tortoise Linkage and Conservation Area (Figure 2).

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3.2 TOPOGRAPHY AND SOILS

Elevations on the project site range from approximately 35 to 758 feet above mean sea level (amsl). Surface drainage generally runs from the northeast to the southwest. Per soils data from the National Resource Conservation Service (NRCS), the soils onsite consist of the following types: Badland; Borrow pits; Carrizo stony sand (2 to 9 percent slopes); Carsitas gravelly sand (0 to 9 percent slopes); Carsitas cobbly sand (2 to 9 percent slopes); Chuckwalla very gravelly sand clay loam (2 to 5 percent slopes); and Myoma fine sand (0 to 5 percent slopes). Soil types within the project site are presented on Figure 4.

3.3 VEGETATION COMMUNITIES AND LAND USES

There are six vegetation communities and/or land uses within the project site. The site is primarily comprised of Sonoran creosote bush scrub. The numerous ephemeral washes on site generally contain a mix of desert wash scrub and Sonoran creosote bush scrub. A list of vegetation communities and land uses and their size within the project site is provided in Table 2. A list of plants observed during the field surveys is provided in Appendix B. A map of the vegetation and land uses is presented on Figure 5.

Table 2. Vegetation Communities and Land Uses

Vegetation Community	Acres
Sonoran Creosote Bush Scrub	1855.20
Desert Wash Scrub/Sonoran Creosote Bush Scrub	916.00
Mesquite Hummocks	0.99
Agricultural Land	2.43
Disturbed Habitat	36.48
Tamarisk Scrub	0.99
TOTAL	2812.08

Sonoran Creosote Bush Scrub

Sonoran creosote bush scrub (1855.20 acres) is the dominant habitat type within the project site. This community occurs on upland slopes, hills, bajadas, and alluvial fans, and within the ephemeral washes on site. Sonoran creosote bush scrub is dominated by widely-spaced stands of creosote bush (*Larrea tridentata*) with open soil, annual plants, and other shrubs occurring between creosote bush shrubs. Other common shrubs within this community include white bursage (*Ambrosia dumosa*), brittlebush (*Encelia farinosa*), and desert-holly (*Atriplex hymenelytra*). Observations of short-lived annual plant species was limited due to the timing of the field survey.

Desert Wash Scrub/Sonoran Creosote Bush Scrub

An intermixing of two vegetation types; desert wash scrub and Sonoran creosote bush scrub occur across large areas of the project site (916.00 acres) most often within, but not limited to, the numerous ephemeral washes on site. These washes contain a mix of species associated with both vegetation types including desert-lavender (*Condea emoryi*), smoke tree (*Psorothamnus spinosus*),

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indigo bush (*Psorothamnus schottii*), desert bird-of-paradise (*Hoffmannseggia microphylla*), rush sweet-bush (*Bebbia juncea* var. *aspera*), catclaw acacia (*Senegalia greggii*), and occasional blue palo verde (*Parkinsonia florida*), as well as creosote bush and white bursage.

Mesquite Hummocks

Mesquite hummocks (0.99 acre) occur only on the western portion of the project site within the EIHCA. Mesquite hummocks consist solely of mesquite (*Prosopis glandulosa* var. *glandulosa*) on a raised hummock of blown sand. These habitats are important habitat for wildlife and have a stabilizing effect on sand dunes.

Agricultural Land

Agricultural land within the project site (2.43 acres) consists of grapevines under active cultivation. Agricultural areas are both disturbed and irrigated and provide little habitat for native plant and wildlife species.

Disturbed Habitat

Disturbed habitat within the project site (36.48 acres) consists primarily of bare soils and non-native species resulting from human disturbance. Disturbed lands have been graded, cleared, or used to the point where the land cannot support native vegetation. Disturbed areas occur mostly in the western portion of the site adjacent to agricultural land.

Tamarisk Scrub

Tamarisk scrub (0.99 acre) within the project site consists primarily of dense tamarisk (*Tamarix ramosissima*) shrubs. Tamarisk scrub typically occurs on sandy or gravelly soils within, or in close proximity to washes or streams and often follows major anthropogenic disturbance. Tamarisk scrub occurs in the western portion of the site in areas disturbed by both agriculture and construction of a water tower.

3.4 WILDLIFE

Avian species observed in the project site include mourning dove (*Zenaida macroura*), red-tailed hawk (*Buteo jamaicensis*), common raven (*Corvus corax*), house finch (*Haemorphus mexicanus*), loggerhead shrike (*Lanius ludovicianus*), northern mockingbird (*Mimus polyglottos*), verdin (*Auriparus flaviceps*), black-tailed gnatcatcher (*Polioptila melanura*), black-throated sparrow (*Amphispiza bilineata*), Wilson's warbler (*Cardellina pusilla*), barn swallow (*Hirundo rustica*), and turkey vulture (*Cathartes aura*).

Reptile species observed within the project site include desert iguana (*Dipsosaurus dorsalis*) and common-side blotched lizard (*Uta stansburiana*). No amphibian species were observed or heard within the project site and none are expected to occur.

Mammal species observed in the project site include black-tailed jackrabbit (*Lepus californicus*), coyote (*Canis latrans*), white-tailed antelope squirrel (*Ammospermophilus leucurus*), and desert cottontail (*Sylvilagus audubonii*). A complete list of animal species observed, heard, or inferred from sign or scat is provided in Appendix C.

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Butterfly species observed in the project site include striated queen (*Danaus gilippus strigosus*) and western pygmy blue (*Brephidium exilis exilis*).

3.5 SPECIAL-STATUS BIOLOGICAL RESOURCES

Special-status biological resources are those defined as follows: 1) Species that have been given special recognition by federal, state, or local conservation agencies and organizations due to limited, declining, or threatened/endangered population sizes; 2) Species and habitat types recognized by local and regional resource agencies as sensitive; 3) Habitat areas or vegetation communities that are unique, are of relatively limited distribution, or are of particular value to wildlife; 4) Wildlife corridors and habitat linkages; and/or 5) Biological resources that may or may not be considered sensitive, but are regulated under local, state, and/or federal laws.

For purposes of this report, species are considered to have special status if they meet one or more of the following criteria:

- Listed under the federal or state Endangered Species Act
- USFWS Birds of Conservation Concern
- CDFW Species of Special Concern
- CDFW Fully Protected Species
- Covered as a state protected furbearing mammal (14 California Code of Regulations [14 CCR Section 460])
- Listed as having a California Rare Plant Rank (CRPR; exc. CRPR 4)
- Record reported in the CNDDB and/or USFWS database

The literature review revealed 43 special-status species (13 plants, 30 animals) with the potential to occur within or immediately adjacent to the project site. The following addresses threatened/endangered species and other non-listed special-status species identified as potentially present on the project site. A list of these species and a discussion of their potential to occur within the project site is included in Appendix D.

No state- and/or federally listed threatened or endangered species were observed onsite during the general biological field survey. However, the search of the CNDDB and USFWS databases shows three listed species have been documented within a five-mile radius of the project site as follows:

- Desert tortoise (*Gopherus agassizii*); federally listed threatened and state-listed threatened; CVMSHCP covered species
- Coachella Valley fringe-toed lizard (*Uma inornata*); federally listed threatened and state-listed endangered; CVMSHCP covered species
- Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*); federally listed endangered; CVMSHCP covered species

Habitat on the project site is moderately suitable for Coachella Valley milk vetch and desert tortoise. No suitable habitat for the Coachella Valley fringe-toed lizard is present on the project site.

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Additionally, the project site is not within any USFWS-designated Critical Habitat for the Coachella Valley milk-vetch, desert tortoise, or Coachella Valley fringe-toed lizard.

Two non-listed special-status species; loggerhead shrike and black-tailed gnatcatcher were observed during the general biological surveys (Figure 5). Based on review of the CNDDB, USFWS database, and CNPS Inventory, 39 non-listed special-status species (12 plants and 27 animals) have been documented within a five-mile radius of the project site or have the potential to occur on the project site.

An analysis of the likelihood for occurrence of each special-status species documented within a 5-mile radius of the project site or potential to occur is provided in Appendix D. This analysis considers species range as well as documentation within the vicinity of the project area and includes the habitat requirements for each species and the potential for their occurrence on the site, based on required habitat elements and range relative to the current site conditions.

3.6 BURROWING OWL AND NESTING BIRDS

Highly suitable habitat for burrowing owl (*Athene cunicularia*) and other special-status species such as Le Conte's thrasher (*Toxostoma lecontei*), loggerhead shrike (observed), and black-tailed gnatcatcher (observed), as well as numerous more common bird species is present within the project site and adjacent areas. These birds (common and special-status) are protected by Cal. Fish and Game Code, which make it unlawful to take, possess, buy, sell, purchase, or barter any migratory bird listed under 50 CFR 10.13, including feathers or other parts, nests, eggs, or products, except as allowed by implementing regulations (50 CFR 21). The MBTA prohibits 'take' of nearly all native birds.

3.7 JURISDICTIONAL WATERS AND STREAMBEDS

The aquatic resources delineation determined that the project site supports Corps-jurisdictional non-wetland waters of the U.S., RWQCB-jurisdictional non-wetland waters of the State, and CDFW-jurisdictional non-wetland streambed, associated riparian habitat, and/or watercourse (RBC 2019). The total acreage and linear feet of each resource type is summarized in Table 3 below.

Table 3. Jurisdictional Resources within Project Site

Agency	Resource Type	Total Acreage	Total Linear Feet
Corps	Non-wetland waters of the U.S.	2.72	2,957
RWQCB	Non-wetland waters of the U.S./State	637.37	282,372
CDFW	Streambed (Bank)	637.37	282,372
	Riparian Vegetation	0.20	n/a

Estimated jurisdictional features observed within the project survey area during the formal jurisdictional delineation field effort include Feature (F) 1 to F16 and the Coachella Canal (Figure 6). Each named/numbered feature represents a separate watercourse, and as such, includes all functionally related and connected single-thread channels, compound channels, braided channels,

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and floodplains. Features that may connect outside of the project survey boundary were not deemed to be functionally related or connected for purposes of naming each on-site feature.

The Coachella Canal would be considered a Corps-jurisdictional non-wetland waters of the U.S. as a tributary (i.e., 33 CFR 328.3(a)(5)) to the Whitewater River and ultimately the Salton Sea. The Coachella Canal and F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) would be considered non-wetland waters of the State/surface waters per the RWQCB. RBC also expects the Coachella Canal and F1 to F16 would be considered CDFW streambed, associated riparian habitat, and/or watercourse as defined by the *Mapping Episodic Stream Activity (MESA) Field Guide* (Vyverberg et. al. 2013). Generally, areas deemed as jurisdictional by the RWQCB and CDFW consist of watercourses comprised of ephemeral desert wash.

3.8 CVMSHCP CONSERVATION AREAS

As shown in Figure 2, the western portion of the project site is within the EIHCA and the project site shares a common boundary along the north and northeastern frontage with the Desert Tortoise and Linkage Conservation Area. Approximately 61 acres of the project site are within the EIHCA. This area within the EIHCA consists of Sonoran creosote bush scrub, mesquite hummocks, tamarisk scrub, disturbed habitat, and agricultural land. This portion of the project site is mapped as Other Conserved Habitat for LeConte's thrasher, Coachella Valley round-tailed ground squirrel (*Spermophilus tereticaudus chlorus*), and flat-tailed horned lizard (*Phrynosoma mcallii*), which are all Covered Species under the CVMSHCP. The EIHCA is part of the watershed for mesquite hummocks and provides potential habitat connectivity with the Thousand Palms Conservation Area through the Indio Hills Palms Conservation Area to the west.

3.9 CVMSHCP MODELED HABITAT

The project site supports modeled habitat (CVAG 2019) for the following special-status species:

- desert tortoise; federally and state endangered, CVMSHCP Covered Species
- Coachella Valley [Palm Springs] round-tailed ground squirrel; CDFW SSC, CVMSHCP Covered Species
- crissal thrasher; CDFW SSC, CVMSHCP Covered Species
- flat-tailed horned lizard; CDFW SSC, CVMSHCP Covered Species
- least Bell's vireo; federally and state endangered, CVMSHCP Covered Species
- LeConte's thrasher; USFWS BCC, CDFW SSC, CVMSHCP Covered Species
- Palm Springs pocket mouse; CDFW SSC, CVMSHCP Covered Species
- summer tanager; CDFW SSC, CVMSHCP Covered Species
- yellow warbler; USFWS BCC, CDFW SSC, CVMSHCP Covered Species
- yellow-breasted chat; CDFW SSC, CVMSHCP Covered Species

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4 IMPACTS

4.1 THREATENED AND ENDANGERED SPECIES

No state- or federally threatened or endangered species were observed during the general biological field survey. There is moderate potential for the federally and state-threatened desert tortoise to occur within the project site and low potential for the federally endangered Coachella Valley milk-vetch and the federally endangered and state-threatened Coachella Valley fringe-toed lizard to occur. In addition, suitable migration habitat for the federally and state-endangered least Bell's vireo is present onsite, but no breeding habitat is present, and this species is unlikely to nest within the project site. All four of these species are covered by the CVMSHCP. Any potential impacts on these species will be covered through compliance with the CVMSHCP.

Please note that while impacts on desert tortoise and their habitat are covered through participation in the CVMSHCP (and pre-established mitigation measures), the USFWS Permit Conditions for the CVMSHCP require that the USFWS be notified 45 days prior to the issuance of a grading permit to allow for the potential salvage of adult tortoises within the notification time period or that desert tortoise clearance surveys be conducted per USFWS protocol.

4.2 NON-LISTED SPECIAL STATUS SPECIES

Two non-listed special-status species; loggerhead shrike and black-tailed gnatcatcher were observed during the general biological field survey. RBC identified 39 non-listed special-status species that have a low, moderate, or high potential to occur within the project site (Appendix D). These species have no official state or federal protection status; however, they are required to be considered under CEQA. Of the non-listed special status species with potential to occur on the project site 13 are covered by the CVMSHCP while 26 species are not covered.

Through implementation of the CVMSHCP Reserve System and conservation objectives, the covered species are considered protected and adequately conserved through the CVMSHCP's pre-established Conservation Areas and avoidance, minimization, and mitigation measures. The non-listed special status species that are not covered by the CVMSHCP occur within the same habitats as the covered species and still considered relatively common within the Reserve System and across the Coachella Valley. Therefore, the project would not have significant impacts on any of the non-listed special species that could potentially occur onsite.

4.3 SPECIAL-STATUS PLANT COMMUNITIES/CALIFORNIA DESERT NATIVE PLANTS ACT

There will be no impacts on special-status plant communities as no such habitats occur on the project site.

4.4 BURROWING OWL AND MIGRATORY BIRDS

The burrowing owl, a species protected under the MBTA and the Cal. Fish and Game Code and covered under the CVMSHCP has high potential to occur on the project site. Impacts on burrowing owl would be considered less than significant through participation in the CVMSHCP;

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however, under the MBTA, project-related impacts on burrowing owl will require mitigation to ensure compliance with the MBTA and Cal. Fish and Game Code. Activities that cause destruction of active nests, or that cause nest abandonment and subsequent death of eggs or young may constitute violations of one or both of these laws. In order to comply with these state and federal regulations, a pre-construction survey for the burrowing owl is required on the project site 30 days prior to site disturbance. If burrowing owl is found to be present, avoidance measures will be required following accepted protocols. If burrowing owl is found to be present during the breeding season (February 1 to August 31), no ground disturbance can begin within the occupied area until after the breeding season (i.e., after August 31) and/or until the burrowing owl have completed their nesting activities. Any relocation efforts must be coordinated with CDFW and/or USFWS.

Additionally, the project has the potential to impact active bird nests if vegetation is removed or ground disturbing activities are initiated during the nesting season (February 1 to August 31). The existing habitat on site supports special-status species loggerhead shrike and black-tailed gnatcatcher and has potential to support nesting bird species such as Le Conte's thrasher and several raptor species. Impacts on nesting birds are prohibited by the MBTA and Cal. Fish and Game Code, as such, ground-disturbing activities, including vegetation clearing, should be conducted outside of the nesting season. If avoidance of the nesting season is not feasible then a qualified biologist should conduct a nesting bird survey within three days prior to any disturbance of the project site, including disking, excavation, and grading. If active nests are identified, the qualified biologist shall establish suitable buffers around the nests depending on the level of activity within the buffer and sensitivity of the species observed. The buffer areas shall be avoided until the nests are no longer occupied and juvenile birds can survive independently from the nest.

4.5 JURISDICTIONAL WATERS AND STREAMBEDS

RBC expects that the Corps, RWQCB, and CDFW would take jurisdiction over aquatic resources on the project site as follows:

- *Corps Jurisdiction* - one non-wetland waters of the U.S., the Coachella Canal, totaling 2.72 acres (2,957 linear feet)
- *RWQCB Jurisdiction* - the Coachella Canal and non-wetland waters of the State/surface waters F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub), totaling 637.37 acres (282,372 linear feet)
- *CDFW Jurisdiction* - the Coachella Canal and non-wetland streambed, associated riparian habitat, and/or watercourse F1 to F16, totaling 637.57 acres (282,372 linear feet)

Assuming the Corps finalizes the Approved Jurisdictional Determination (AJD) and concludes that F1 to F16 are not jurisdictional, no Corps permitting would be required for the project assuming the proposed project will not impact the Coachella Canal. Impacts on jurisdictional features per other agencies (if deemed jurisdictional) would require Waste Discharge Requirements (WDR) from RWQCB and a Streambed Alteration Agreement (SAA) from CDFW. The RWQCB and/or CDFW may also require a functional assessment (e.g., California Rapid Assessment Method [CRAM]) to quantitatively estimate the stream condition for the evaluation of the proposed project. Additionally,

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compensatory mitigation would be required by the regulatory agencies to offset the proposed project impacts.

4.6 WILDLIFE CORRIDORS

The western-most area of the project site lies within the EIHCA which serves as a biological corridor and linkage to the Indio Hills Conservation Area through the Thousand Palms Conservation Area, which ultimately links with Joshua Tree National Park. The adjacent Desert Tortoise Linkage and Conservation Area provides biological corridors and linkages to the Little San Bernardino Mountains and their associated canyon mouths and alluvial fans, which provide a linkage to the central part of the Plan Area.

A wildlife corridor can be defined as a physical feature that links wildlife habitat, often consisting of native vegetation that joins two or more larger areas of similar wildlife habitat. Corridors enable migration, colonization, and genetic diversity through interbreeding and are therefore critical for the movement of animals and the continuation of viable populations. Through avoidance of impacts on the portion of the EIHCA that occurs on site and compliance with the CVMSHCP the project will not have a significant impact on regional wildlife movement.

4.7 LOCAL POLICIES AND ORDINANCES

The project would not conflict with local policies or ordinances because the project will adhere to CVMSHCP guidelines and procedures. The project will be required to adhere to CVMSHCP Section 4.5 *Lan Use Adjacency Guidelines* (Guidelines; CVAG 2007), which state:

> *The purpose of [Guidelines] is to avoid or minimize indirect effects from [d]evelopment adjacent to or within the Conservation Areas. Adjacent means sharing a common boundary with any parcel in a Conservation Area. Such indirect effects are commonly referred to as edge effects, and may include noise, lighting, drainage, intrusion of people, and the introduction of non-native plants and non-native predators, such as dogs and cats. Edge effects will also be addressed through reserve management activities such as fencing.*
>
> These Guidelines include:
>
> *Drainage – Proposed [d]evelopment adjacent to or within a Conservation Area shall incorporate plans to ensure that the quantity and quality of runoff discharged to the adjacent Conservation Area is not altered in an adverse way when compared to existing conditions. Stormwater systems shall be designed to prevent the release of toxins, chemicals, petroleum products, exotic plant materials or other elements that might degrade or harm biological resources or ecosystem processes within the adjacent Conservation Area.*
>
> *Toxics – Land uses proposed adjacent to or within a Conservation Area that use chemicals or generate bio-products such as manure that are potentially toxic or may adversely affect wildlife and plant species, Habitat, or water quality shall incorporate measures to ensure that application of such chemicals does not result in any discharge to the adjacent Conservation Area.*

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Lighting – For proposed [d]evelopment adjacent to or within a Conservation Area, lighting shall be shielded and directed toward the developed area. Landscape shielding or other appropriate methods shall be incorporated in project designs to minimize effects of lighting adjacent to or within the adjacent Conservation Area in accordance with the guidelines to be included in the Implementation Manual.

Noise – Proposed [d]evelopment adjacent to or within a Conservation Area that generates noise in excess of 75 dBA L_{eq} hourly shall incorporate setbacks, berms, or walls, as appropriate, to minimize the effects of noise on the adjacent Conservation Area in accordance with the guidelines included in the Implementation Manual.

Invasives – Invasive, non-native plant species shall not be incorporated in the landscape for land uses adjacent to or within a Conservation Area. Landscape treatments within or adjacent to a Conservation Area shall incorporate native plant materials listed in Table 4-112 of the CVMSHCP to the maximum extent [f]easible. The plants listed in Table 4-113 of the CVMSHCP are considered invasive and shall not be used within or adjacent to a Conservation Area. This list may be amended from time to time through a Minor Amendment with Wildlife Agency Concurrence.

Barriers – Land uses adjacent to or within a Conservation Area shall incorporate barriers in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass, or dumping in a Conservation Area. Such barriers may include native landscaping, rocks/boulders, fencing, walls and/or signage.

Grading/Land Development – Manufactured slopes associated with site [d]evelopment shall not extend into adjacent land in a Conservation Area.

4.8 CUMULATIVE IMPACTS

Cumulative impacts refer to incremental individual environmental effects of two or more projects when considered together. Such impacts taken individually may be minor but are collectively significant in light of regional impacts. The CVMSHCP has analyzed cumulative effects within the region of the project under CEQA, NEPA, CESA, and ESA. Because the project will comply with the CVMSHCP any cumulative project impacts would be less than significant.

5 REQUIRED AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES

The following discussion provides project-specific avoidance, minimization, and mitigation measures that may be required by the lead agency for impacts on special-status resources.

5.1 DESERT TORTOISE

Moderately suitable habitat for the desert tortoise is present on the project site and modeled habitat per the CVMSHCP GIS data is present across the entire project site. While impacts on desert tortoise and their habitat will be covered through participation in the CVMSHCP, the USFWS Permit Conditions for the CVMSHCP require that the USFWS be notified 45 days prior to the

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issuance of a grading permit to allow for the potential salvage of adult tortoises within this notification time period or that desert tortoise clearance surveys are conducted per USFWS protocol.

5.2 BURROWING OWL

Suitable habitat for the CDFW SSC burrowing owl is present on site and the potential for this species to occur is high. The direct take of a burrowing owl, or any raptor, must be avoided. In accordance with CDFW's *Staff Report on Burrowing Owl Mitigation* (CDFG 2012) two preconstruction take avoidance surveys should be conducted prior to any vegetation removal, ground disturbance, or similar activity as follows:

> *No less than thirty days prior to the onset of ground disturbance, a qualified biologist shall survey the construction limits of the Project and 500-foot buffer for the presence of burrowing owls and occupied nest burrows, in accordance with the Staff Report on Burrowing Owl Mitigation (CDFG 2012). A final survey shall be conducted within 24 hours prior to ground disturbance.*
>
> *If nesting and/or activity is present at any burrow site, then the active burrow shall be protected until nesting activity has ended to ensure compliance with Section 3503.5 of the California Fish and Game Code. Nesting activity for burrowing owls normally occurs from February 1 to August 31. To protect any burrow site, the following restrictions on construction are required between February 1 to August 31:*
>
> 1) *Clearing limits will be established a minimum of 300 feet in any direction from any occupied burrow; and*
> 2) *Access and surveying will not be allowed within 50 feet of any occupied burrow. Any occupied burrows found during the survey efforts shall be mapped on the construction plans and an ESA avoidance buffer shall be established. Construction during the non-nesting season can occur only at the sites if a qualified biologist has determined that the burrows are no longer active. If an active burrow is observed during the non-nesting period, the burrow site will be monitored by a qualified biologist, and when the owl is outside the burrow entrance, the biologist will flush any owl to open space areas. The biologist will then excavate the burrow site with tools or fill the burrow with soil so owls cannot return to the burrow site.*

Note that any relocation efforts must be coordinated with the CDFW and/or USFWS. If a burrowing owl is found to be present during the breeding season (February 1 to August 31), no ground disturbance can begin within the occupied area until after the breeding season (i.e., after August 31) and/or until the burrowing owl have completed their nesting activities. Generally, a 300- to 500-foot buffer is required around nesting owls during construction activities.

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5.3 NESTING BIRDS

To avoid direct impacts to raptors and/or native/migratory birds, removal of habitat that supports active nests in the proposed area of disturbance should occur outside of the breeding season for these species (February 1 to September 15). If removal of habitat in the proposed area of disturbance must occur during the breeding season, a qualified avian biologist shall conduct a pre-construction survey to determine the presence or absence of nesting birds in the proposed area of disturbance. The pre-construction survey shall be conducted three calendar days prior to the start of construction activities (including removal of vegetation). If nesting birds are observed, a letter report or mitigation plan in conformance with applicable state and federal law (i.e. appropriate follow-up surveys, monitoring schedules, construction and noise barriers/buffers, etc.) shall be prepared and include proposed measures to be implemented to ensure that take of birds or eggs or disturbance of breeding activities is avoided. The report or mitigation plan shall be submitted to CDFW and/or USFWS, as applicable, for review and approval and implemented to the satisfaction of the agency(ies). The project biologist shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction. If nesting birds are not observed during the pre-construction survey, no further mitigation is required.

5.4 JURISDICTIONAL WATERS AND STREAMBEDS

If there are no impacts on the Coachella Canal, no Corps permit would be required. Impacts on jurisdictional features per RWQCB and CDFW (if deemed jurisdictional) would require WDR from RWQCB and SAA from CDFW. The RWQCB and/or CDFW may also require a functional assessment (e.g., CRAM) to quantitatively estimate the stream condition for the evaluation of the proposed project. Additionally, compensatory mitigation would be required by the regulatory agencies to offset the proposed project impacts. We recommend consulting with the regulatory agencies as soon as possible in the project planning process to avoid/reduce processing delays.

5.5 EAST INDIO HILLS CONSERVATION AREA

The project is within the EIHCA and adjacent to the Desert Tortoise Linkage and Conservation Area. In order to avoid direct impacts on the EIHCA, it is recommended the project dedicate the entire portion of the project site within the EIHCA as conserved open space. Dedication of this portion of the project site would ensure that the project would not conflict with the CVMSHCP Conservation Objectives. The project would comply with CVMSHCP Section 4.5 Land Use Adjacency Guidelines to avoid and minimize indirect effects to the adjacent Desert Tortoise Linkage and Conservation Area.

5.6 DEVELOPMENT MITIGATION FEE

Per the CVMSHCP Section 5.2.1.1 *Local Development Mitigation Fee*, the project will be conditioned by the lead agency to pay a mitigation fee for the costs of mitigating impacts of the project. See Table 4 below for the Local Development Mitigation Fee per building type.

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Table 4. Local Development Mitigation Fee

Building Type	Fee as of July 1, 2018
Commercial/Industrial per acre	$5,911
Residential (fee is per unit)	
0-8 units per acre	$1,331
8.1 – 14 units per acre	$554
More than 14 units per acre	$247

Source: Coachella Valley Conservation Commission 2019

6 CONCLUSIONS

In summary, the 2,812-acre project site supports sensitive biological resources including jurisdictional waters of the state and U.S., two non-listed special-status bird species, moderate potential to support the state and federally-threatened desert tortoise, low potential to support the federally endangered Coachella Valley milk-vetch, and moderate to high potential to support numerous non-listed special-status species including burrowing owl. In addition, 61 acres of the project site is within the EIHCA.

The CVMSHCP was developed to enhance and maintain biological diversity by protecting critical Core Habitat while allowing development in other areas. The CVMSHCP sets Conservation Goals and Objectives to ensure conservation of the Covered Species and conserved natural communities in the CVMSHCP Reserve System. Protection of large areas of habitat across the Plan Area provides coverage for a variety of special-status biological resources including those on the project site and with potential to occur. If the project complies with CVMSHCP guidelines and the recommended measures outlined in section 6.0 are implemented, the project would be consistent with the goals and objectives of the CVMSHCP.

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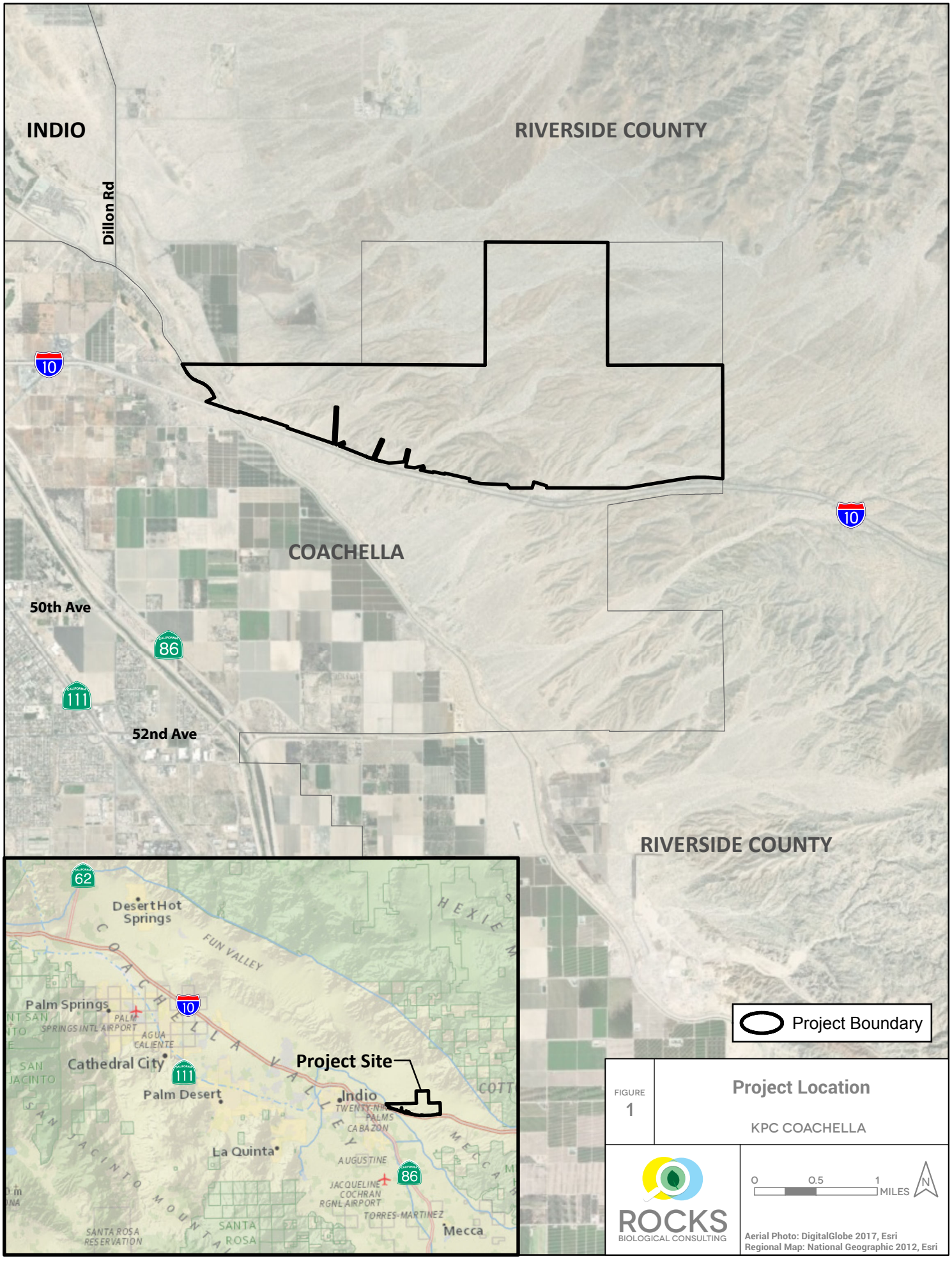
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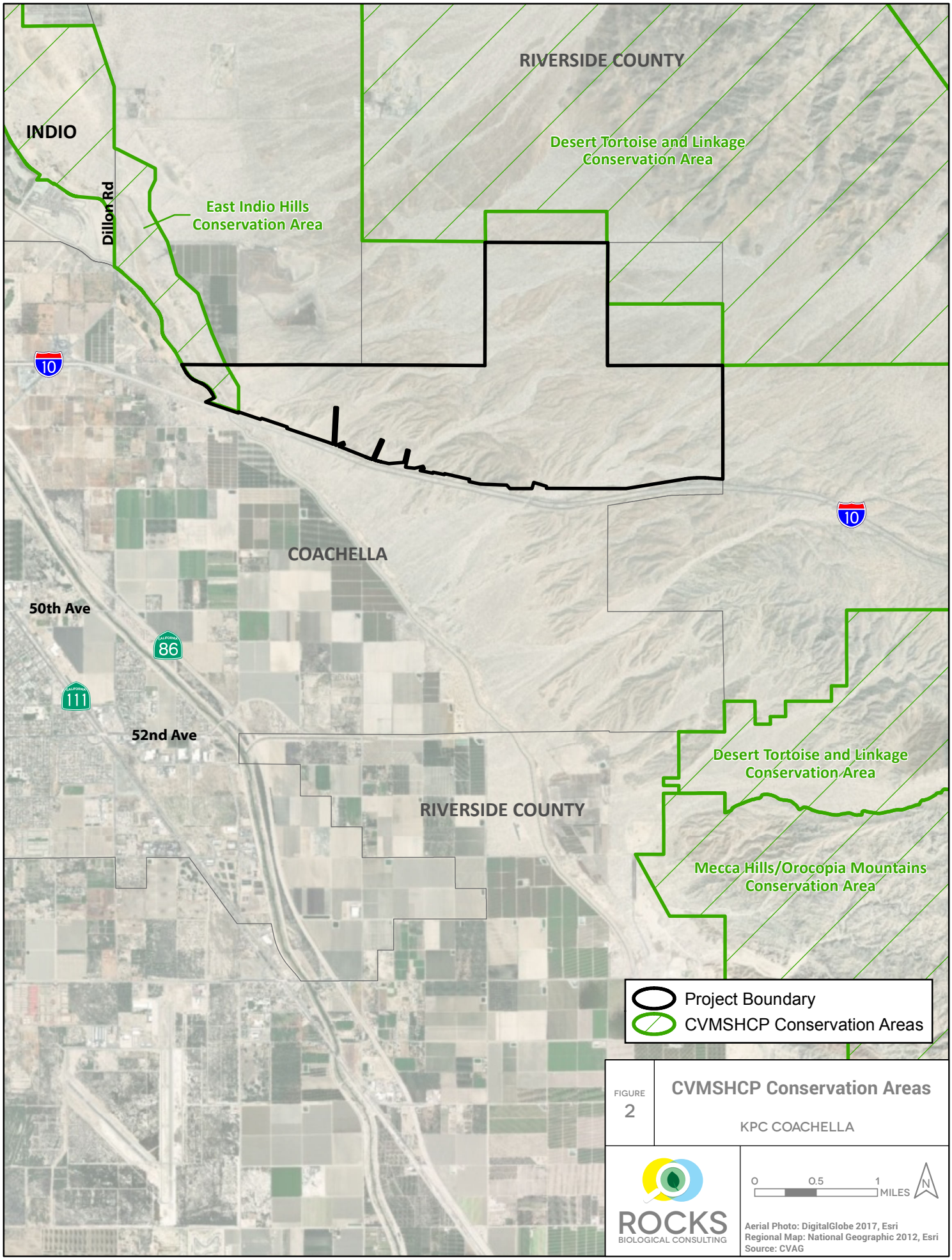
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INDIO
RIVERSIDE COUNTY
Dillon Rd
10
COACHELLA
50th Ave
86
111
52nd Ave
10
RIVERSIDE COUNTY
62
Desert Hot Springs
COACHELLA VALLEY
FUN VALLEY
HEXIE
Palm Springs
10
SPRINGS INTL AIRPORT
AGUA CALIENTE
Cathedral City
111
Palm Desert
Project Site
Indio
TWENTY-NINE PALMS
CABAZON
La Quinta
AUGUSTINE
86
JACQUELINE COCHRAN RGNL AIRPORT
TORRES-MARTINEZ
Mecca
SAN JACINTO MOUNTAINS
SANTA ROSA RESERVATION
SANTA ROSA
Project Boundary
FIGURE
1
Project Location
KPC COACHELLA
ROCKS
BIOLOGICAL CONSULTING
0
0.5
1
MILES
N
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri


RIVERSIDE COUNTY
INDIO
Desert Tortoise and Linkage Conservation Area
East Indio Hills Conservation Area
Dillon Rd
10
10
COACHELLA
50th Ave
86
111
52nd Ave
Desert Tortoise and Linkage Conservation Area
RIVERSIDE COUNTY
Mecca Hills/Orocopia Mountains Conservation Area
Project Boundary
CVMSHCP Conservation Areas
FIGURE 2
CVMSHCP Conservation Areas
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 0.5 1 MILES
N
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri
Source: CVAG

Project Boundary
1-mile Buffer
3-mile Buffer
5-mile Buffer
CNDDB Species Locations

Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Mecca-aster
Mecca-aster
Palm Springs pocket mouse
flat-tailed horned lizard
Palm Springs pocket mouse
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Palm Springs pocket mouse
flat-tailed horned lizard
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
Palm Springs pocket mouse
Palm Springs pocket mouse
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
flat-tailed horned lizard
Palm Springs pocket mouse
Palm Springs pocket mouse
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
flat-tailed horned lizard
Coachella Valley fringe-toed lizard
ferruginous hawk
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
American badger
flat-tailed horned lizard
Crissal thrasher
chaparral sand-verbena
western yellow bat
burrowing owl
Le Conte's thrasher
glandular ditaxis
gravel milk-vetch
Coachella Valley milk-vetch
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
burrowing owl
Crissal thrasher
Palm Springs round-tailed ground squirrel
western yellow bat
western mastiff bat
Crissal thrasher
black-tailed gnatcatcher
Coachella Valley fringe-toed lizard
Coachella Valley fringe-toed lizard
vermilion flycatcher
western yellow bat
burrowing owl
Crissal thrasher
black-tailed gnatcatcher
burrowing owl
Coachella Valley fringe-toed lizard
burrowing owl
burrowing owl
Mecca-aster
burrowing owl
burrowing owl
desert tortoise
Palm Springs pocket mouse
burrowing owl
burrowing owl
burrowing owl
chaparral sand-verbena
Mecca-aster
Mecca-aster
chaparral sand-verbena
chaparral sand-verbena
burrowing owl
desert bighorn sheep
desert tortoise
desert bighorn sheep
Palm Springs pocket mouse
desert tortoise
desert tortoise
desert tortoise
jackass-clover

FIGURE 3	CNDDB KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 3,250 6,500 FEET

Base Map: USGS 7.5' Quadrangles (Thermal Canyon, Indio) 2013, Esri
Source: CDFW

Project Boundary

Soils

- Badland
- Borrow pits
- Carrizo stony sand, 2 to 9 percent slopes
- Carsitas gravelly sand, 0 to 9 percent slopes
- Carsitas cobbly sand, 2 to 9 percent slopes
- Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes
- Coachella fine sand, wet, 0 to 2 percent slopes
- Gilman loamy fine sand, 0 to 5 percent slopes
- Gilman fine sandy loam, wet, 0 to 2 percent slopes
- Myoma fine sand, 0 to 5 percent slopes
- Water
- Unmapped

FIGURE 4

NRCS Soils Survey Data

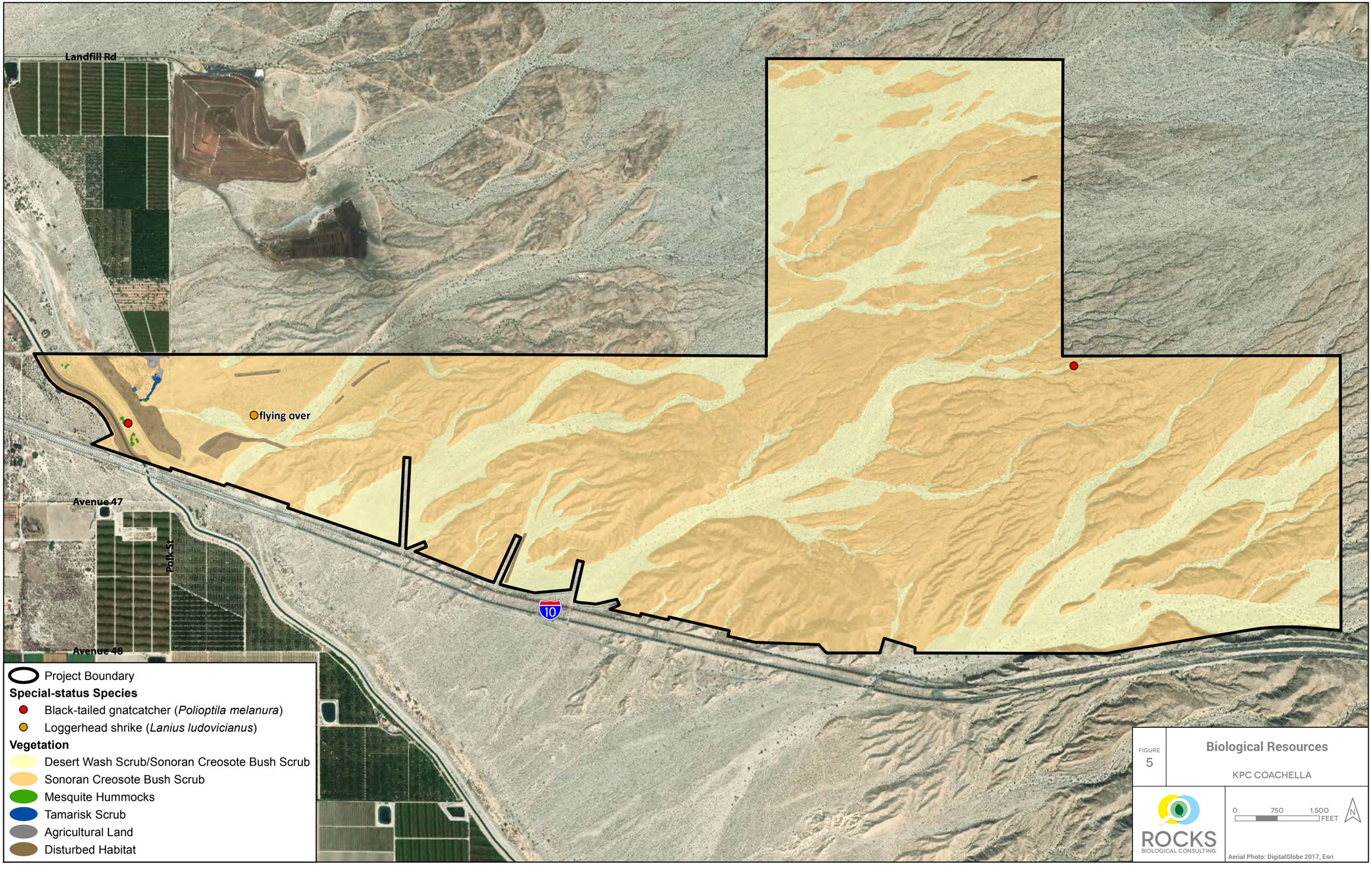
KPC COACHELLA

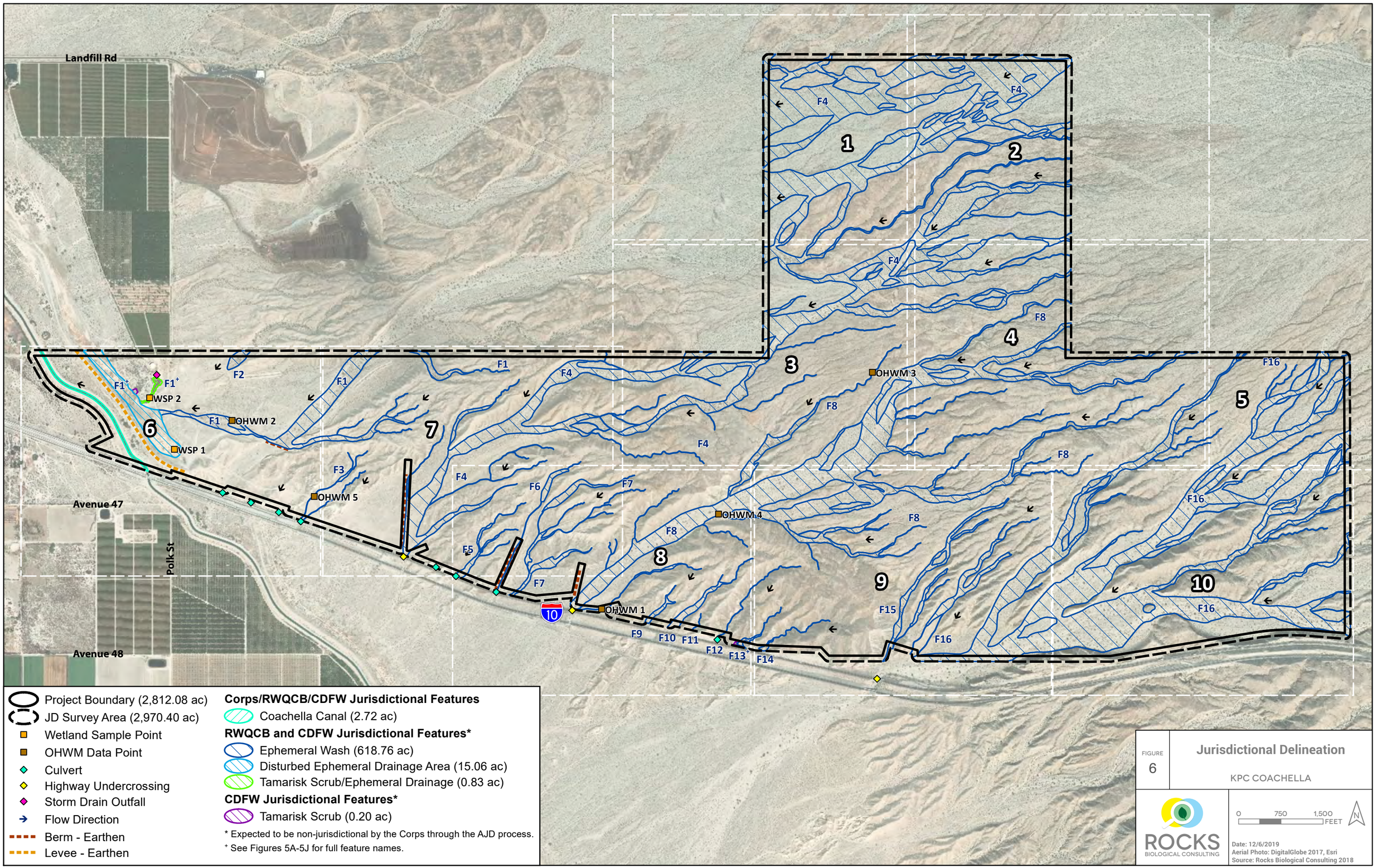
ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Aerial Photo: DigitalGlobe 2017, Esri
Source: USDA NRCS Soils


Landfill Rd
flying over
Avenue 47
Polk St
10
Avenue 48
Project Boundary
Special-status Species
Black-tailed gnatcatcher (Polioptila melanura)
Loggerhead shrike (Lanius ludovicianus)
Vegetation
Desert Wash Scrub/Sonoran Creosote Bush Scrub
Sonoran Creosote Bush Scrub
Mesquite Hummocks
Tamarisk Scrub
Agricultural Land
Disturbed Habitat
FIGURE 5
Biological Resources
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 750 1,500 FEET
N
Aerial Photo: DigitalGlobe 2017, Esri


Landfill Rd
Avenue 47
Avenue 48
Polk St
1
2
3
4
5
6
7
8
9
10
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
F13
F14
F15
F16
WSP 1
WSP 2
OHWM 1
OHWM 2
OHWM 3
OHWM 4
OHWM 5
10
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Wetland Sample Point
OHWM Data Point
Culvert
Highway Undercrossing
Storm Drain Outfall
Flow Direction
Berm - Earthen
Levee - Earthen
Corps/RWQCB/CDFW Jurisdictional Features
Coachella Canal (2.72 ac)
RWQCB and CDFW Jurisdictional Features*
Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)
CDFW Jurisdictional Features*
Tamarisk Scrub (0.20 ac)
* Expected to be non-jurisdictional by the Corps through the AJD process.
+ See Figures 5A-5J for full feature names.
FIGURE 6
Jurisdictional Delineation
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 750 1,500 FEET
N
Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: Rocks Biological Consulting 2018
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Appendix A

Site Photographs

Appendix A

Site Photographs



Photo 1. Overview of the western portion of the project site, facing northeast. Photo shows sparse Sonoran creosote bush scrub on site. May 9, 2019.



Photo 2. Overview of the center portion of the project site, facing northwest. Photo shows typical sparse hills with Sonoran creosote bush scrub. May 9, 2019.

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Photo 3. Typical desert wash scrub/Sonoran creosote bush scrub within eastern portion of the project site, facing northeast. May 8, 2019.

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Photo 4. Typical desert wash scrub/Sonoran creosote bush scrub within eastern portion of the project site, facing southeast. May 2, 2019



Photo 5. Characteristic large ephemeral wash on site within eastern portion of the project site, facing southwest. May 2, 2019.

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Photo 6. Characteristic large ephemeral wash on site within eastern portion of the project site, facing southwest. Photograph shows the mix of upland Sonoran creosote bush scrub and desert wash scrub. May 2, 2019.



Photo 7. Tamarisk scrub in disturbed wash by water tower and agricultural land within western portion of the project site, facing northeast. May 1, 2019.



Photo 8. Large disturbed area within western portion of the project site, facing northwest. May 1, 2019.

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Photo 9. Mesquite hummocks in the western portion of the project site, facing northwest. May 1, 2019.



Photo 10. Sonoran creosote bush scrub within the project site, facing northwest. April 14, 2019.

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Appendix B

Plant Species Observed

Appendix B

Plant Species Observed within Project Site

Family	Scientific Name	Common Name
Amaranthaceae	*Tidestromia suffruticosa* var. *oblongifolia*	Salton Sea honeysweet
Apocynaceae	*Asclepias subulata*	rush milkweed
Apocynaceae	*Funastrum hirtellum*	trailing townula
Arecaceae	*Phoenix dactylifera**	edible date palm
Asteraceae	*Ambrosia dumosa*	white bur-sage
Asteraceae	*Ambrosia salsola* var. *salsola*	cheesebush
Asteraceae	*Bebbia juncea* var. *aspera*	rush sweetbush
Asteraceae	*Chaenactis carphoclinia* var. *carphoclinia*	pebble pincushion
Asteraceae	*Encelia farinosa*	brittlebush
Asteraceae	*Geraea canescens*	desert sunflower
Asteraceae	*Isocoma acradenia* var. *bracteosa*	bracted alkali goldenbush
Asteraceae	*Lactuca serriola**	prickly lettuce
Asteraceae	*Monoptilon bellioides*	Mojave Desert star
Asteraceae	*Palafoxia arida* var. *arida*	desert Spanish-needle
Asteraceae	*Peucephyllum schottii*	pigmy-cedar
Boraginaceae	*Cryptantha barbigera*	bearded cryptantha
Boraginaceae	*Cryptantha maritima*	white-hair cryptantha
Brassicaceae	*Brassica tournefortii**	Sahara mustard
Brassicaceae	*Lepidium lasiocarpum* ssp. *lasiocarpum*	sand peppergrass
Brassicaceae	*Sisymbrium irio**	London rocket
Cactaceae	*Cylindropuntia bigelovii*	teddy-bear cholla
Cactaceae	*Cylindropuntia ramosissima*	diamond cholla
Cactaceae	*Ferocactus cylindraceus*	California barrel cactus
Cactaceae	*Opuntia basilaris* var. *basilaris*	beavertail cactus
Caryophyllaceae	*Achyronychia cooperi*	onyx flower
Chenopodiaceae	*Atriplex canescens*	four-wing saltbush
Chenopodiaceae	*Atriplex hymenelytra*	desert-holly
Chenopodiaceae	*Atriplex polycarpa*	many-fruit saltbush
Chenopodiaceae	*Chenopodium murale**	nettle-leaf goosefoot
Cleomaceae	*Peritoma arborea* var. *angustata*	desert bladderpod
Cucurbitaceae	*Brandegea bigelovii*	desert star vine
Ehretiaceae	*Tiquilia plicata*	fan-leaved tiquilia
Euphorbiaceae	*Croton californicus*	California croton
Euphorbiaceae	*Ditaxis lanceolata*	desert silverbush
Euphorbiaceae	*Euphorbia peplus**	petty spurge
Fabaceae	*Hoffmannseggia microphylla*	desert bird-of-paradise
Fabaceae	*Lupinus concinnus*	Bajada lupine
Fabaceae	*Parkinsonia florida*	blue palo verde
Fabaceae	*Prosopis glandulosa* var. *glandulosa*	mesquite
Fabaceae	*Psorothamnus arborescens*	California dalea
Fabaceae	*Psorothamnus emoryi* var. *emoryi*	white dalea
Fabaceae	*Psorothamnus schottii*	indigo bush
Fabaceae	*Psorothamnus spinosus*	smoke tree

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Fabaceae	*Senegalia greggii*	catclaw acacia
Fouquieriaceae	*Fouquieria splendens* ssp. *splendens*	ocotillo
Hydrophyllaceae	*Emmenanthe penduliflora* var. *penduliflora*	whispering bells
Hydrophyllaceae	*Phacelia crenulata*	notch-leaf phacelia
Krameriaceae	*Krameria bicolor*	white rhatany
Lamiaceae	*Condea emoryi*	desert-lavender
Lamiaceae	*Salvia columbariae*	chia
Loasaceae	*Mentzelia involucrata*	sand blazing star
Loasaceae	*Petalonyx thurberi* ssp. *thurberi*	Thurber's sandpaper plant
Malvaceae	*Eremalche rotundifolia*	desert five-spot
Malvaceae	*Hibiscus denudatus*	rock hibiscus
Namaceae	*Nama demissa*	purple mat
Nyctaginaceae	*Abronia villosa* var. *villosa*	desert sand-verbena
Nyctaginaceae	*Allionia incarnata* var. *villosa*	hairy trailing windmills
Nyctaginaceae	*Mirabilis laevis* var. *villosa*	hairy wishbone plant
Onagraceae	*Chylismia brevipes*	yellow cups
Onagraceae	*Chylismia claviformis*	clavate fruited primrose
Onagraceae	*Eremothera boothii*	Booth's sun cup
Onagraceae	*Eulobus californicus*	false-mustard
Papaveraceae	*Eschscholzia minutiflora*	pygmy gold-poppy
Plantaginaceae	*Plantago ovata* var. *fastigiata*	woolly plantain
Poaceae	*Aristida adscensionis*	six-weeks three-awn
Poaceae	*Phalaris minor**	little-seed canary grass
Poaceae	*Schismus barbatus**	Mediterranean schismus
Polemoniaceae	*Aliciella latifolia* ssp. *latifolia*	broad-leaf gilia
Polemoniaceae	*Eriastrum eremicum* ssp. *eremicum*	desert woolly-star
Polemoniaceae	*Langloisia setosissima* ssp. *setosissima*	bristly langloisia
Polemoniaceae	*Loeseliastrum schottii*	Schott's calico
Polygonaceae	*Chorizanthe brevicornu* var. *brevicornu*	brittle spineflower
Polygonaceae	*Chorizanthe rigida*	rigid spineflower
Polygonaceae	*Eriogonum inflatum*	desert trumpet
Polygonaceae	*Eriogonum thomasii*	Thomas's buckwheat
Resedaceae	*Oligomeris linifolia*	narrow-leaf oligomeris
Solanaceae	*Datura wrightii*	western jimson weed
Solanaceae	*Nicotiana quadrivalvis*	Indian tobacco
Solanaceae	*Physalis crassifolia*	Greene's ground-cherry
Tamaricaceae	*Tamarix ramosissima**	saltcedar
Viscaceae	*Phoradendron californicum*	desert mistletoe
Zygophyllaceae	*Fagonia laevis*	California fagonia
Zygophyllaceae	*Larrea tridentata*	creosote bush
**: Non-native species*		

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Appendix C

Wildlife Species Observed

Appendix C

Wildlife Species Observed within Project Site

Family	Code	Common Name	Scientific Name
BUTTERFLIES			
Danaidae	DANGILSTR	striated queen	*Danaus gilippus strigosus*
Lycaenidae	BREEXIEXI	western pygmy blue	*Brephidium exilis exilis*
AMPHIBIANS and REPTILES			
Iguanidae	DIPDOR	desert iguana	*Dipsosaurus dorsalis*
Phrynosomatidae	UTASTA	common side-blotched lizard	*Uta stansburiana*
BIRDS			
Accipitridae	RTHA	red-tailed hawk	*Buteo jamaicensis*
Cathartidae	TUVU	turkey vulture	*Cathartes aura*
Columbidae	ROPI	rock pigeon*	*Columba livia*
Columbidae	MODO	mourning dove	*Zenaida macroura*
Corvidae	CORA	common raven	*Corvus corax*
Fringillidae	HOFI	house finch	*Haemorhous mexicanus*
Hirundinidae	BASW	barn swallow	*Hirundo rustica*
Laniidae	LOSH	loggerhead shrike (SSC; nesting) †	*Lanius ludovicianus*
Mimidae	NOMO	northern mockingbird	*Mimus polyglottos*
Parulidae	WIWA	Wilson's warbler	*Cardellina pusilla*
Passerellidae	BTSP	black-throated sparrow	*Amphispiza bilineata*
Passerellidae	CALT	California towhee	*Melozone crissalis*
Passeridae	HOSP	house sparrow	*Passer domesticus*
Polioptilidae	BTGN	black-tailed gnatcatcher (WL)	*Polioptila melanura*
Remizidae	VERD	verdin	*Auriparus flaviceps*
Sturnidae	EUST	European starling*	*Sturnus vulgaris*
Troglodytidae	ROWR	rock wren	*Salpinctes obsoletus*
Tyrannidae	SAPH	Say's phoebe	*Sayornis saya*
MAMMALS			
Canidae	CANLAT	coyote	*Canis latrans*
Leporidae	LEPCAL	black-tailed jackrabbit	*Lepus californicus*
Leporidae	SYLAUD	desert cottontail	*Sylvilagus audubonii*
Sciuridae	AMMLEU	white-tailed antelope squirrel	*Ammospermophilus leucurus*

SSC: *California Department of Fish and Wildlife (CDFW) Species of Special Concern*

WL: *California Department of Fish and Wildlife (CDFW) Watch List species*

*: *Non-native species*

†: *Species not observed nesting by RBC during project survey(s)*

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Appendix D

Special-status Plants and Animals with Potential to Occur

Appendix D

Special-Status Plants and Animals with Potential to Occur

Species	Status	Habitat Description	Potential to Occur
PLANTS			
California ayenia (*Ayenia compacta*)	ESA: -- CESA: -- CRPR: 2B.3 CVMSHCP: NC	Rocky soil in Sonoran and Mojavean desert scrub at 490 to 3595 feet elevation. Perennial herb. Blooms between March and April.	Moderate. Suitable habitat present on site.
California ditaxis (*Ditaxis serrata* var. *californica*)	ESA: -- CESA: -- CRPR: 3.2 CVMSHCP: NC	Sonoran desert scrub at 95 to 3280 feet elevation. Perennial herb. Blooms between March and December.	Moderate. Suitable habitat present on site.
chaparral sand-verbena (*Abronia villosa* var. *aurita*)	ESA: -- CESA: -- CRPR: 1B.1 CVMSHCP: NC	Sandy chaparral, coastal scrub and desert dunes at 245 to 5250 feet elevation. Annual herb. Blooms between March and September.	Low. Suitable sandy/dune habitat not present.
Coachella Valley milk-vetch (*Astragalus lentiginosus* var. *coachellae*)	ESA: FE CESA: -- CRPR: 1B.2 CVMSHCP: C	Loose aeolian (i.e., windblown) or alluvial (i.e., water transported) sands that are located on dunes or flats, and along disturbed margins of sandy washes in the Coachella Valley at 130 to 2150 feet. Annual/short-lived perennial. Blooms between February and May.	Low. The project site does not support aeolian or alluvial sand dunes; however, sandy washes do occur on site.
Coves' cassia (*Senna covesii*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Dry, sandy washes and slopes in Sonoran desert scrub at 735 to 4250 feet elevation. Perennial herb. Blooms between March and June.	Moderate. Suitable habitat present on site.
glandular ditaxis (*Ditaxis claryana*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Sandy soils in Sonoran and Mojavean desert scrub at 0 to 1526 feet elevation. Perennial herb. Blooms between October and March.	Moderate. Suitable habitat present on site.
gravel milk-vetch (*Astragalus sabulonum*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Sandy/gravelly areas in flats, washes, and roadsides in Sonoran and Mojavean desert scrub and desert dunes at -197 to 3051 feet elevation. Annual/short-lived perennial. Blooms between February and June.	Moderate. Suitable Sonoran creosote bush scrub habitat (sandy and gravelly areas) present on site.
jackass clover *(Wislizenia refracta* ssp. *refracta)*	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Desert dunes, playas, and desert scrub of the Sonoran and Mojave deserts at 1968 to 2624 feet elevation. Annual herb. Blooms between April and November.	Moderate. Suitable habitat present on site.
little-leaf elephant tree (*Bursera microphylla*)	ESA: -- CESA: -- CRPR: 2B.3 CVMSHCP: NC	Rocky soils in Sonoran desert scrub at 655 to 2295 feet elevation. Perennial deciduous tree. Blooms between June and July.	Low. Suitable habitat present on site; however, species likely would have been observed during general biological survey.

Species	Status	Habitat Description	Potential to Occur
mecca aster (*Xylorhiza cognata*)	ESA: -- CESA: -- CRPR: 1B.2 CVMSHCP: C	Arid canyons in sandstone and clay in Sonoran desert scrub at 65 to 1300 feet elevation. Known principally in the Indio and Mecca hills of Riverside County. Perennial herb. Blooms between January and June.	Moderate. Suitable habitat present on site.
narrow-leaf sandpaper-plant (*Petalonyx linearis*)	ESA: -- CESA: -- CRPR: 2B.3 CVMSHCP: NC	Sandy or rocky canyons in desert scrub of the Sonoran and Mojave deserts at -80 to 3660 feet elevation. Perennial shrub. Blooms between March and May.	Moderate. Suitable habitat present on site.
Orocopia sage (*Salvia greatae*)	ESA: -- CESA: -- CRPR: 1B.3 CVMSHCP: C	Alluvial slopes in desert scrub of the Sonoran and Mojave deserts at -130 to 2705 feet elevation. Restricted to the Orocopia and Chocolate Mountains. Perennial evergreen shrub. Blooms between March and April.	Low. Suitable habitat present on site, but current distribution is limited to mountains southeast of the site.
slender cottonheads (*Nemacaulis denudata* var. *gracilis*)	ESA: -- CESA: -- CRPR: 2B.2 CVMSHCP: NC	Coastal dunes, desert dunes and Sonoran desert scrub at -160 to 1310 feet elevation. Annual herb. Blooms between April and May.	Moderate. Suitable Sonoran desert scrub habitat present on site.
MAMMALS			
American badger (*Taxidea taxus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	A variety of habitats including arid fields, grasslands, and desert scrub containing friable soil to excavate dens. Preys on fossorial mammals, reptiles, and insects.	Moderate. Suitable habitat, soils, and prey species present on site.
Coachella Valley [Palm Springs] round-tailed ground squirrel (*Xerospermophilus tereticaudus chlorus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Habitats include eolian dunes and desert scrub containing shrubs for cover and burrowing. Prefers mesquite thickets and coarse sand/gravel soils.	Moderate. Suitable habitat and soils present on site.
desert bighorn sheep (*Ovis canadensis nelsoni*)	ESA: -- CESA: -- USFWS: -- CDFW: FP CVMSHCP: C	A variety of habitats including palm oases, desert riparian, desert succulent scrub, desert scrub, and perennial grasslands. Grazes in open areas and require steep, rocky areas for bedding. Close proximity to water sources is critical for this species.	Low. Suitable foraging and bedding habitat not present on site.
Palm Springs pocket mouse (*Perognathus longimembris bangsi*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	A variety of habitats including creosote bush scrub, desert scrub, and grasslands containing uncompressed soils and sparse to moderate vegetation cover.	Moderate. Suitable desert scrub habitat and soils present on site.

Species	Status	Habitat Description	Potential to Occur
western mastiff bat (*Eumops perotis californicus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	Chaparral, live oaks, and arid, rocky regions. Requires downward opening crevices to roost. Foraging habitats include desert washes, flood plains, chaparral, oak woodlands, grasslands, and agricultural fields.	Moderate. No suitable roosting habitat present on site; however, suitable desert wash foraging habitat present.
western yellow bat (*Lasiurus xanthinus*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	A range of habitats in arid and dry areas. Inhabits secluded woodlands, agricultural lands, and sometimes even residential areas. In California, this species prefers to roost and forage in palms (both native palm oases and ornamental palms).	Low. No suitable palm habitat present on site.
BIRDS			
black-tailed gnatcatcher (*Polioptila melanura*)	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	Semiarid and desert thorn scrub with creosote bush.	Present. This species was documented onsite and suitable desert scrub habitat is present throughout.
burrowing owl (*Athene cunicularia*) ‡	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Found in grasslands and open scrub habitats from coasts to deserts. Strongly associated with ground squirrels (*Otospermophilus* spp., *Xerospermophilis* spp., etc.) and other fossorial mammal burrows.	High. Suitable open scrub habitat, soils, and fossorial mammals present on site. CNDDB records show historic occurrences onsite (Figure 3).
California horned lark (*Eremophila alpestris actia*)	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	Sparsely vegetated prairies, deserts, and agricultural lands.	Moderate. Suitable desert habitat present on site.
Cooper's hawk (*Accipiter cooperii*) †	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	A variety of habitats including riparian forests, interior valleys, and woodlands.	Low. Suitable breeding habitat not present on site.
Costa's hummingbird (*Calypte costae*) †	ESA: -- CESA: -- USFWS: BCC CDFW: -- CVMSHCP: NC	Habitats include deserts, desert washes, and hillsides within desert scrub, chaparral, coastal sage scrub, and various fringe habitats.	High. Suitable desert habitats present on site.
crissal thrasher (*Toxostoma crissale*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	In the Coachella Valley region, this species inhabits mesquite thickets containing catclaw acacia (*Acacia greggii*), desert ironwood (*Olneya tesota*), and arrowweed (*Pluchea sericea*).	Moderate. Suitable habitat (tamarisk thickets) present on site.

Species	Status	Habitat Description	Potential to Occur
ferruginous hawk (*Buteo regalis*) ±	ESA: -- CESA: -- USFWS: BCC CDFW: WL CVMSHCP: NC	Open habitats from grasslands to deserts. During winter, tend to aggregate where prey species, especially ground squirrels and prairie dogs, are abundant.	High. Suitable wintering habitat present on site.
Lawrence's goldfinch (*Spinus lawrencei*) †	ESA: -- CESA: -- USFWS: BCC CDFW: -- CVMSHCP: NC	Arid and open woodlands bordered by chaparral/scrub, annual weed fields, or aquatic features.	Low. No suitable woodland habitat present on site.
Le Conte's thrasher (*Toxostoma lecontei*)	ESA: -- CESA: -- USFWS: BCC CDFW: SSC CVMSHCP: C	Saltbush scrub, creosote bush scrub, and other lightly vegetated desert scrub. Permanent resident within California range.	High. Suitable desert scrub habitat present on site.
least Bell's vireo (*Vireo bellii pusillus*)	ESA: FE CESA: SE USFWS: -- CDFW: SSC CVMSHCP: C	Breeding habitat: riparian communities including Sonoran cottonwood-willow riparian forest, southern arroyo willow riparian forest, and southern sycamore-alder riparian woodland. Migration habitat: mesquite hummocks, desert dry wash woodland, desert saltbush scrub, desert sink scrub, mesquite bosque, and arrowweed scrub.	Low (breeding habitat). High (migration habitat). There is no suitable riparian breeding habitat on site or within the East Indio Hills Conservation Area. The site contains suitable migration habitat in the form of mesquite hummocks and desert dry wash woodland on site.
loggerhead shrike (*Lanius ludovicianus*) †	ESA: -- CESA: -- USFWS: BCC CDFW: SSC CVMSHCP: NC	Grassland, chaparral, desert, and desert edge scrub, particularly near dense vegetation used for nesting.	Present. This species was observed onsite and suitable foraging and breeding habitat (tamarisk thickets) are present on site.
merlin (*Falco columbarius*) ±	ESA: -- CESA: -- USFWS: -- CDFW: WL CVMSHCP: NC	Riparian habitats and coastal marshes. Uncommon to rare in southern California.	Low. Suitable wintering habitat not present on site.
northern harrier (*Circus hudsonius*) †	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	A variety of open habitats including deserts, plains, agricultural fields, and estuaries.	Low. Although suitable foraging habitat present on site, suitable breeding habitat not present on site.
Oregon vesper sparrow (*Pooecetes gramineus affinis*) ±	ESA: -- CESA: -- USFWS: BCC CDFW: SSC CVMSHCP: NC	Winters on open, flat areas containing low grasslands or savannahs in southern California.	Low. Suitable habitat not present on site.

Species	Status	Habitat Description	Potential to Occur
peregrine falcon (*Falco peregrinus*) †	ESA: FDL CESA: SDL USFWS: BCC CDFW: FP CVMSHCP: NC	A variety of habitats. Most peregrine falcon will nest on open cliff faces, however, are also known to occupy water body fringes and human-built buildings and towers.	Low. Suitable habitat not present on site.
prairie falcon (*Falco mexicanus*) †	ESA: -- CESA: -- USFWS: BCC CDFW: WL CVMSHCP: NC	Desert shrubland and grasslands. Primarily forages in grassland habitats.	Low. Suitable desert shrubland occurs on site, however foraging habitat is sparse.
summer tanager (*Piranga rubra cooperi*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Breeding habitat: riparian natural communities including Sonoran cottonwood-willow riparian forest, southern arroyo willow riparian forest, and southern sycamore-alder riparian woodland. Migration habitat: mesquite hummocks, desert dry wash woodland, desert saltbush scrub, desert sink scrub, mesquite bosque coastal and valley freshwater marsh, and arrowweed scrub.	Low (breeding habitat). High (migration habitat). There is no suitable riparian breeding habitat on site or within the East Indio Hills Conservation Area. The site contains suitable migration habitat in the form of mesquite hummocks, and desert dry wash woodland on site.
vermilion flycatcher (*Pyrocephalus rubinus*) †	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: NC	Deserts, scrub, agricultural fields, parks, golf courses, and riparian woodlands, often near water.	Moderate. Suitable breeding habitat (tamarisk thickets) present on site.
white-tailed kite (*Elanus leucurus*) †	ESA: -- CESA: -- USFWS: -- CDFW: FP CVMSHCP: NC	Low elevation grasslands, agricultural fields, wetlands/marshes, oak woodlands, savannahs, and riparian habitats bordering open areas.	Low. No suitable habitat occurs on site.
yellow-breasted chat (*Icteria virens*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Breeding habitat: riparian communities including Sonoran cottonwood-willow riparian forest, southern arroyo willow riparian forest, southern sycamore-alder riparian woodland. Migration habitat: mesquite hummocks, desert dry wash woodland, desert saltbush scrub, desert sink scrub, mesquite bosque coastal and valley freshwater marsh, arrowweed scrub.	Low (breeding habitat). High (migration habitat). There is no suitable riparian breeding habitat on site or within the East Indio Hills Conservation Area. The site contains suitable migration habitat in the form of mesquite hummocks, and desert dry wash woodland on site.
yellow warbler (*Setophaga petechia*) †	ESA: -- CESA: -- USFWS: -- USFWS: BCC CDFW: SSC CVMSHCP: C	Variety of riparian habitats and occasionally disturbed habitats bordering riparian areas.	Low. No suitable riparian habitat occurs on site.

Species	Status	Habitat Description	Potential to Occur
REPTILES/AMPHIBIANS			
Coachella Valley fringe-toed lizard (*Uma inornata*)	ESA: FT CESA: SE USFWS: -- CDFW: -- CVMSHCP: C	Fine, windblown sand and dune habitat with widely spaced desert shrubs; known only from the Coachella Valley.	Low. Although historically recorded in proximity of site, suitable aeolian transported sand and dune habitat not present on site.
desert tortoise (*Gopherus agassizii*)	ESA: FT CESA: ST USFWS: -- CDFW: -- CVMSHCP: C	Burrows in firm sandy or gravelly soils along creosote bush flats, riverbanks, washes, dunes, alluvial fans, hillsides, and canyons, often containing rocky areas.	Moderate. Suitable habitat and soils present on site.
flat-tailed horned lizard (*Phrynosoma mcallii*)	ESA: -- CESA: -- USFWS: -- CDFW: SSC CVMSHCP: C	Fine sand in desert washes and flats with vegetative cover and prey species (ants), generally below 600 feet elevation in Riverside, San Diego, and Imperial Counties.	Moderate. Suitable desert washes and flats are present on site and this species is known from the East Indio Hills Conservation Area

California Rare Plant Rank (CRPR) Definitions		
California Rare Plant Rank (CRPR)	1A	presumed extirpated in California and rare or extinct elsewhere
	1B	rare, threatened, or endangered in California and elsewhere
	2A	presumed extirpated in California but more common elsewhere
	2B	rare, threatened, or endangered in California but more common elsewhere
	3	plants for which more information needed
	4	plants of limited distribution
CRPR Threat Ranks	0.1	Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)
	0.2	Moderately threatened in California (20-80% occurrences threatened/moderate degree and immediacy of threat)
	0.3	Not very threatened in California (<20% of occurrences threatened/low degree and immediacy of threat or no current threats known)
Endangered Species Act (ESA)		
FE: Endangered Species Act (ESA) Federally Endangered Species FT: Endangered Species Act (ESA) Federally Threatened Species FDL: Endangered Species Act (ESA) Federally Delisted Species		
California Endangered Species Act (CESA)		
SE: California Endangered Species Act (CESA) State Endangered Species ST: California Endangered Species Act (CESA) State Threatened Species SDL: California Endangered Species Act (CESA) State Delisted Species		
United States Fish and Wildlife Service (USFWS)		
BCC: United States Fish and Wildlife Service (USFWS) Birds of Conservation Concern		
California Department of Fish and Wildlife (CDFW)		
FP: California Department of Fish and Wildlife (CDFW) Fully Protected Species SSC: California Department of Fish and Wildlife (CDFW) Species of Special Concern WL: California Department of Fish and Wildlife (CDFW) Watch List Species		

Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)
C: Species Covered Under Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP) NC: Species Not Covered Under Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP)
Bird Nesting Status
†: Nesting ±: Wintering ‡: Nesting and Wintering

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Appendix E Delineation of State and Federal Jurisdictional Waters

ROCKS
BIOLOGICAL CONSULTING





KPC COACHELLA PROJECT
JURISDICTIONAL DELINEATION REPORT

Riverside County, California

December 6, 2019

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1 INTRODUCTION

Rocks Biological Consulting (RBC) conducted a formal jurisdictional delineation for the KPC Coachella Project (project) to identify areas that may be considered jurisdictional under the U.S. Army Corps of Engineers (Corps) pursuant to Section 404 of the Clean Water Act; the Regional Water Quality Control Board (RWQCB) pursuant to Section 401 of the Clean Water Act and the Porter-Cologne Act; and streambed and riparian habitats under California Department of Fish and Wildlife (CDFW) pursuant to California Fish and Game Code (§1602). This information is necessary to evaluate estimated jurisdictional impacts and permit requirements associated with the project, can be used by the agencies to assess project conformance with state and federal regulations, and serves as a request for the Corps to complete an Approved Jurisdictional Determination (AJD) based on the information provided in this report. Furthermore, Appendix A provides a checklist of the information contained in this report in compliance with the Corps Los Angeles District's *Minimum Standards for Acceptance of Aquatic Resources Delineation Reports* (Corps 2017b).

1.1 PROJECT LOCATION

The project site for the proposed project is located along the western foothills of the Little San Bernardino Mountains immediately north of Interstate 10 (I-10) and east of Coachella Canal Road within the City of Coachella and an unincorporated area of Riverside County, California (Figure 1). The Coachella Canal runs north to south through the westernmost portion of the project site. State Route 86 is located approximately two miles west of the project site.

The latitude and longitude of the approximate center of the site is 33.711629, -116.108462. The project site sits on Township 5 South, Range 8 East, Sections 24, 25, 26, 27, and 28 and Township 5 South, Range 9 East, Section 30 within the Thermal Canyon and Indio 7.5-minute quadrangles, as mapped by the U.S. Geological Survey (USGS; Figure 2).

1.2 PROJECT DESCRIPTION

The proposed project consists of a Specific Plan for a new master planned community located at the eastern entrance to the City of Coachella. The 2,800-acre project site will provide a mixture of land uses intended to create a cohesive entrance to the City of Coachella, with unique residential components that will be compatible with the surrounding existing and planned neighboring areas. The proposed project will provide additional commercial, residential, educational, employment, and recreational opportunities for residents and visitors within the City of Coachella, including a hotel and casino.

1.3 REGULATORY BACKGROUND

Several regulations have been established by federal, state, and local agencies to protect and conserve aquatic resources. The descriptions below provide a brief overview of agency regulations that may be applicable to the project. Regulatory agencies make the final determination of whether a project requires authorization pursuant to these regulations.

1.3.1 APPLICABLE AQUATIC RESOURCE PROTECTION REGULATIONS

Clean Water Act

Pursuant to Section 404 of the Clean Water Act (33 U.S. Code [USC] § 1251 et seq.; CWA), the Corps is authorized to regulate any activity that would result in the discharge of dredged or fill material into waters of the U.S. (including wetlands), which include those waters listed in 33 Code of Federal Regulations (CFR) 328.3 (as amended at 80 Federal Register [FR] 37104, June 29, 2015; also referred to as the 2015 Clean Water Rule). The Corps, with oversight from the U.S. Environmental Protection Agency (USEPA), has the principal authority to issue CWA Section 404 permits. The Corps would require a Standard Individual Permit (SIP) for more than minimal impacts to waters of the U.S. as determined by the Corps. Projects with minimal individual and cumulative adverse effects on the environment may meet the conditions of an existing Nationwide Permit (NWP).

Under the 2015 Clean Water Rule applicable on the date of this report, the Corps defines waters of the U.S. as follows:

a. [T]he term "waters of the United States" means:

    1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;

    2) All interstate waters, including interstate wetlands;

    3) The territorial seas;

    4) All impoundments of waters otherwise identified as waters of the United States under this section;

    5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section; and

    6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters.

Additionally, under the 2015 Clean Water Rule, waters of the U.S. also include all waters noted in 33 CFR 328.3 (a)(7) (i.e., prairie potholes, Carolina bays and Delmarva bays, pocosins, western vernal pools, and Texas coastal prairie wetlands) and all waters noted in 33 CFR 328.3 (a)(8) (i.e., "waters located within the 100-year floodplain" of a water identified in 33 CFR 328.3 (a)(1) through (3) and all waters "within 4,000 feet of the high tide line or OHWM" of a water identified in 33 CFR 328.3 (a)(1) through (5)) where they are determined to have a significant nexus to a water identified above in 33 CFR 328.3 (a)(1) through (a)(3).

A repeal of the 2015 Clean Water Rule was published on October 22, 2019. As a result, the following definition of waters of the U.S., per pre-2015 regulations, is anticipated to go into effect on December 23, 2019 per 33 CFR 328.3 (51 FR 41217; 53 FR 20764).

a. The term waters of the United States means:

1) All waters which are currently used, or were used in the past or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
2) All interstate waters including interstate wetlands;
3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation or destruction of which could affect interstate or foreign commerce including any such waters:
    i. Which are or could be used by interstate or foreign travelers for recreational or other purposes; or
    ii. From which fish or shellfish are or could be taken and sold in interstate or foreign commerce; or
    iii. Which are used or could be used for industrial purpose by industries in interstate commerce;
4) All impoundments of waters otherwise defined as waters of the United States under the definition;
5) Tributaries of waters identified in paragraphs (a)(1) through (4) of this section;
6) The territorial seas;
7) Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs (a)(1) through (6) of this section.

The pre-2015 definition of waters of the U.S. was further defined by two Supreme Court cases, namely the 2001 Solid Waste Agency of Northern Cook County decision (Solid Waste Agency of Northern Cook County [SWANCC] v. U.S. Army Corps of Engineers et al., 2001) and the 2006 Rapanos decisions (Rapanos v. United States, 2006).

A water quality certification or waiver pursuant to Section 401 of the CWA is required for all Section 404 permitted actions. The RWQCB, a division of the State Water Resources Control Board, provides oversight of the 401-certification process in California. The RWQCB is required to provide "certification that there is reasonable assurance that an activity that may result in the discharge to waters of the United States will not violate water quality standards." Water Quality Certification must be based on the finding that proposed discharge will comply with applicable water quality standards.

The National Pollutant Discharge Elimination System (NPDES) is the permitting program for discharge of pollutants into surface waters of the U.S. under Section 402 of the CWA.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Section 13000 et seq.) provides for statewide coordination of water quality regulations. The State Water Resources Control Board was established as the statewide authority and nine separate RWQCBs were developed to oversee water quality on a day-to-day basis. The RWQCB is the primary agency responsible for protecting water quality in California. As discussed above, the RWQCB regulates discharges to

surface waters under the federal CWA. In addition, the RWQCB is responsible for administering the Porter-Cologne Water Quality Control Act.

Pursuant to the Porter-Cologne Water Quality Control Act, the state is given authority to regulate waters of the state, which are defined as any surface water or groundwater, including saline waters. As such, any person proposing to discharge waste into a water body that could affect its water quality must first file a Report of Waste Discharge if Section 404 is not required for the activity. "Waste" is partially defined as any waste substance associated with human habitation, including fill material discharged into water bodies.

California Fish and Game Code Section 1600-1602

Pursuant to Division 2, Chapter 6, Section 1602 of the California Fish and Game Code (CFGC), CDFW regulates all diversions, obstructions, or changes to the natural flow or bed, channel or bank of any river, stream or lake that supports fish or wildlife. A Notification of Lake or Streambed Alteration must be submitted to CDFW for "any activity that may substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake." CDFW has jurisdiction over riparian habitats associated with watercourses and wetland habitats supported by a river, lake, or stream. Jurisdictional waters are delineated by the outer edge of riparian vegetation (i.e., drip line) or at the top of the bank of streams or lakes, whichever is wider. CDFW jurisdiction does not include tidal areas or isolated resources. CDFW reviews the proposed actions and, if necessary, submits (to the applicant) a proposal that includes measures to protect affected fish and wildlife resources. The final proposal that is mutually agreed upon by CDFW and applicant is the Lake or Streambed Alteration Agreement.

1.4 CONTACT INFORMATION

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Agency access to the project site can be coordinated with the applicant and/or agent upon request.

2 METHODS

Prior to the on-site delineation, field maps were created using a Geographic Information System (GIS) and a color aerial photograph at a 1:400 scale. RBC staff also reviewed U.S. Geological Survey (USGS) National Hydrography Dataset (NHD) and topography data (Figure 2) and U.S. Fish and Wildlife Service (USFWS) National Wetlands Inventory (NWI) data (Figure 4) to further determine the potential locations of jurisdictional aquatic resources. Google Earth was also utilized to assess current and historic presence or absence of flow in the project area.

RBC regulatory specialists Shanti Santulli, Emily Trevino, and Sarah Krejca conducted the jurisdictional delineation field visit from May 7, 2019 to May 10, 2019. Shanti Santulli and Brenda Bennett conducted an additional jurisdictional delineation field visit from October 29, 2019 to October 30, 2019. Field survey conditions are shown below in Table 1.

Table 1. Field Survey Conditions

	Start				End			
Survey Date & Method	Time	Temp. (°F)	Cloud Cover (%)	Wind Speed (MPH)	Time	Temp. (°F)	Cloud Cover (%)	Wind Speed (MPH)
May 7, 2019 On foot; from vehicle	1200	89	5	5-10	1515	85	2	7-14
May 8, 2019 On foot; from vehicle	0630	64	0	15-20	1245	85	0	4-8
May 9, 2019 On foot; from vehicle	0630	66	5 (hazy)	0-1	1230	85	0	3-5
May 10, 2019 On foot; from vehicle	0645	68	90	1-5	0805	70	100	1-5
October 29, 2019 On foot; from vehicle	0930	58	0	3-4	1430	68	0	2-3
October 30, 2019 On foot; from vehicle	0830	54	0	1-2	1230	67	0	3-4

The project survey area included the proposed project area with a 100-foot buffer for a total of approximately 2,970 acres. Field staff utilized modeled hydrology data/figures for the project survey area provided by the project hydrologist, Q3 Consulting, to assist in focusing the field effort within the large project survey area (Appendix B). Areas with depressions, drainage patterns, and/or wetland vegetation within the project impact area were evaluated for potential jurisdictional status, with focus on the presence of defined channels and/or wetland vegetation, soils, and hydrology. Field staff examined potential Corps- and RWQCB-jurisdictional wetland areas using the routine determination methods set forth in Part IV, Section D, Subsection 2 of the Corps 1987 *Wetland Delineation Manual* (Wetland Manual) (Environmental Laboratory 1987) and the 2008 *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region Version 2.0* (Arid West Supplement) (Corps 2008a).

Areas that met the three parameters per the Arid West Supplement (i.e., hydrophytic vegetation, hydric soils, and wetland hydrology) were considered wetland waters of the U.S./State. RBC staff based wetland plant indicator status (i.e., Obligate [OBL], occurs 99+% in wetlands; Facultative Wetland [FACW], occurs 67-99% in wetlands; Facultative [FAC], occurs 34-66% in wetlands; Facultative Upland [FACU], occurs 1-33% in wetlands; Upland [UPL], occurs 99+% in uplands) on the *National Wetland Plant List* (NWPL; Corps 2016) and hydric soils indicators on *Field Indicators of Hydric Soils in the United States, Version 8.2* (NRCS 2018). Soil chromas were identified in the field according to *Munsell's Soil Color Charts* (Munsell Color 2015) and using protocols per the Arid West Supplement.

Note that in April 2019 the State Water Resources Control Board adopted the *State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State* (the Procedures) which will become effective on May 28, 2020, nine months after the Office of Administrative Law approved the Procedures on August 28, 2019. As detailed in the Procedures, the State Water Resources Control Board and RWQCBs (Water Boards) define a wetland as follows: "An area is wetland if, under normal circumstances, (1) the area has continuous or recurrent saturation of the upper substrate caused by groundwater, or shallow surface water, or both; (2) the duration of such saturation is sufficient to cause anaerobic conditions in the upper substrate; and (3) the area's vegetation is dominated by hydrophytes or the area lacks vegetation."

Although the Procedures are not yet applicable to this project, the Procedures provide that RWQCB shall rely on a wetland area delineation from a final aquatic resource report verified by the Corps to determine the extent of wetland waters of the State. If any potential wetland areas have not been delineated in a final aquatic resources report verified by the Corps, the limits of such potential wetland waters of the State shall be identified using the same wetland delineation methods per the Corps as described above, except that a lack of vegetation (i.e., less than 5 percent areal coverage of plants during the peak of the growing season) does not preclude an area from meeting the definition of a wetland waters of the State.

Lateral limits of potential non-wetland waters of the U.S./State for the Corps and RWQCB, respectively, were identified using field indicators of an ordinary high water mark (OHWM). An OHWM is defined in 33 CFR 329.11 as "that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank; shelving; changes in the character of the soil; destruction of terrestrial vegetation; the presence of litter or debris; or other appropriate means that consider the characteristics of the surrounding areas." RBC staff used *A Field Guide to the Identification of the Ordinary High Water Mark in the Arid West Region of the Western United States* (OHWM Field Guide; Corps 2008b) to estimate the extent of an OHWM in the field. For each feature exhibiting the potential presence of an OHWM, RBC completed a 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet following the guidance provided in the *Updated Datasheet for the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States* (OHWM Datasheet; Corps 2010). Per the 2010 OHWM Datasheet, common indicators of an OHWM include a break in slope (i.e., abrupt cut in bank slope created by hydrogeomorphic processes across the landscape), changes in average sediment texture between floodplain units (i.e., low-flow, active floodplain, low terrace), and changes in vegetation species and/or cover between floodplain units.

CDFW potential jurisdictional boundaries were determined based on the presence of streambed and associated riparian habitat and/or wetland areas. Streambeds considered within CDFW jurisdiction were delineated based on the definition of streambed as "a body of water that flows at least periodically or intermittently through a bed or channel having banks and supporting fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports riparian vegetation" (Title 14, Section 1.72). Riparian habitat refers to vegetation and habitat associated with a stream. The CDFW jurisdictional habitat includes all riparian shrub or tree canopy that may extend beyond the banks of a stream. Isolated riparian habitat (i.e., where riparian vegetation did not appear associated with an ephemeral wash) were not considered CDFW-jurisdictional. CDFW follows the USFWS wetland definition and classification system, which defines a wetland as transitional land between terrestrial and aquatic systems having one or more of the following attributes: "(1) at least periodically, the land supports predominantly hydrophytes; (2) the substrate is predominantly undrained hydric soil; and (3) the substrate is non-soil and is saturated with water or covered by shallow water at some time during the growing season of each year" (USFWS 1979). A wetland is presumed when all three attributes are present; if less than three attributes are present the presumption of a wetland must be supported by "the demonstrable use of wetland areas by wetland associated fish or wildlife resources, related biological activity, and wetland habitat values" (CFGC 1994).

Furthermore, to assist in assessing CDFW streambed limits in desert areas, RBC staff utilized the methods outlined in the *Mapping Episodic Stream Activity (MESA) Field Guide* (Vyverberg et al. 2013). The MESA Field Guide was developed to describe methodology for delineating episodic streams within the arid and semi-arid California desert regions. The MESA guidelines indicate streams extend beyond an OHWM and can consist of associated features such as low-flow, active, and braided channels and banks associated with islands, secondary channels, and streambed within the bounds of a larger channel complex defined as the "watercourse" (Vyverberg et al. 2013).

While in the field, potentially jurisdictional features were recorded using a hand-held Global Positioning System (GPS) unit with a level of accuracy ranging from four to 20 feet. RBC staff refined the data using aerial photographs and topo maps with two-foot contours to ensure accuracy. Plants were identified according to The Jepson Manual 2nd edition (Baldwin et al. 2012). A plant list compiled by RBC biologists during the May 1, 2, 8, and 9, 2019 field surveys, with each plant's wetland indicator status per the NWPL, is included as Appendix C. RBC staff used the vegetation community classifications mapped by RBC biologists during the May 1, 2, 8, and 9, 2019 field surveys. The vegetation community classifications follow Holland (1986) and nomenclature follows Jepson eFlora (Jepson Flora Project 2019).

All figures generated for this jurisdictional delineation report follow the Corps' *Updated Map and Drawing Standards for the South Pacific Division Regulatory Program* (Corps 2016).

3 RESULTS

3.1 TOPOGRAPHY

The proposed project area consists of steep, hilly terrain associated with the Little San Bernardino foothills with interspersed, flatter alluvial fans and desert washes. Elevations within the project area range from 512 to 1,420 feet above mean sea level (Figure 2).

3.2 WATERSHED

The proposed project area is within the Whitewater River Hydrologic Unit Code [HUC] 8 (18100201), Middle Whitewater River HUC 10 (1810020107), and City of Indio – Whitewater River HUC 12 (181002010705) watersheds (Figure 3).

The Whitewater River watershed is approximately 4,500 square miles. The Whitewater River headwaters originate in the San Bernardino Mountains, and continue southeast to the Salton Sea and Sonoran Desert (Riverside County Watershed Protection [RCWP] 2018). The Middle Whitewater River HUC 10 encompasses approximately 177 square miles and the City of Indio – Whitewater River HUC 12 encompasses approximately 74 square miles.

3.3 HYDROLOGY

USGS NHD maps several "blue-line streams" within the project survey area, which are all ephemeral washes (Figure 2). USGS NHD also maps the Coachella Canal as a "green-line canal/ditch," along the western boundary of the project boundary. USFWS NWI maps several features with a designation of "Riverine" and two features with a designation of "Freshwater Forested/Shrub Wetland" within the project boundary and survey area (Figure 4). The two features designated as "Freshwater Forested/Shrub Wetland" appear to receive flows from a storm drain outfall (Figure 5).

The Coachella Canal, which is partially located on site, flows in the northwesterly direction, continuing into Lake Cahuilla, then the Whitewater River, which ultimately connects to the Salton Sea.

The known hydrologic sources for the other observed on-site aquatic features (i.e., ephemeral washes), discussed further below, are direct precipitation, including surface flows from the higher elevations, and from the agricultural operation runoff to the north of the western portion of the project survey area. Based on field observations, the ephemeral washes on site are topographically disconnected from and cannot connect to the Coachella Canal given the presence of a large 40- to 50-foot high levee along the north bank of the canal. On-site aquatic features generally flow in a southwesterly direction through the project survey area. Several on-site aquatic features are confined and/or redirected by several manmade berms, as shown on Figure 5. On-site ephemeral washes eventually flow toward the southern boundary of the property where they are directed under the I-10 through a number of culverts and undercrossings to the undeveloped property to the south. The La Entrada Specific Plan (La Entrada) is a master-planned residential community slated to occur on the undeveloped property to the south of the KPC Coachella property. Because any flows that leave the KPC Coachella property end up on the La Entrada site, RBC reviewed the *La Entrada Specific Plan, City of Coachella, California, Delineation of State and Federal Jurisdictional Waters* (La Entrada JDR; RBF Consulting 2013) for information regarding the hydrology in the area and downstream connectivity.

Based on the La Entrada JDR, flows from the La Entrada site are directed southwest to an evacuation outlet (i.e., culvert) under the Coachella Canal which serves as the only flood-conveyance facility for flows that continue south/downstream. After travelling through the evacuation outlet, flows are conveyed through Wasteway Channel No. 2 for approximately 2.2 miles before discharging into the Whitewater River. Based on hydrologic studies (conducted by the same project hydrologists for both the La Entrada site and the KPC Coachella property), it

would take nearly a 50-year storm event for waters to flow from the La Entrada site through the evacuation outlet (RBF Consulting 2013). Since the on-site features that flow under the I-10 from the KPC Coachella property are upstream and discharge onto the La Entrada site, Q3 Consulting determined that a similar assumption can be made for the KPC Coachella property. That is, the KPC Coachella Project will not change the analyzed hydrologic condition per the La Entrada JDR; therefore, flows from the KPC Coachella property would not discharge to the Whitewater River during a storm event below the 50-year annual return frequency (John McCarthy [Q3 Consulting], personal communication, June 14, 2019). Section 3.8 provides additional information regarding downstream connectivity of the on-site ephemeral washes.

RBC utilized the Natural Resources Conservation Service (NRCS) Agricultural Applied Climate Information System (AgACIS) database for the Indio Fire Station, California National Weather Service (NWS) station in Riverside County to access precipitation and Wetlands (WETS) Climate Tables data. WETS tables are utilized to define the range of normal precipitation and growing season for NWS stations. WETS tables define the "normal" range at the 30th and 70th percentile of all the data in the precipitation record for that station. RBC requested data for the past 30 years (1988-2019) to provide the pertinent pre-site visit precipitation data. Appendix D and Table 2 utilize the Indio Fire Station, California station due to its comprehensive historical data and proximity to the project site (i.e., approximately 3 miles northwest).

Riverside County is characterized by hot, dry summers and mild, relatively wet winters. The Indio Fire Station, California NWS station lists the highest averaged daily maximum temperature over the past 30 years as 106.9°F for the month of July and the lowest averaged daily minimum temperature over the past 30 years as 44.2°F for the month of December (NRCS 2019). The NRCS does not calculate a growing season length for this station since insufficient data is available for the 30-year period.

Table 2 describes the estimated monthly total precipitation for the proposed project area from November 2018 to October 2019 to provide the pertinent pre-site visit precipitation data from the NRCS AgACIS database for the Indio Fire Station, California NWS station.

Table 2. Precipitation Data for November 2018 to October 2019

	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct
Monthly Total Precip. (inch[es])	0.00	0.43	0.55	1.35	0.16	0.00	0.00	0.00	0.02	0.00	0.22	0.00

*Per AgACIS database: "Values of 'M' indicate missing data."

Appendix D and Table 2 indicate that the field survey dates of May 7 to 10, 2019 and October 29 to 30, 2019 occurred after a year of less than normal precipitation for 2018. The field survey dates of May 7 to 10, 2019 occurred after a higher than normal precipitation period for the months of February and March 2019 and a normal precipitation period for the month of April 2019. The field survey dates of October 29 to 30, 2019 occurred after a normal precipitation period for the months of July and August 2019 and a higher than normal precipitation period for the month of September 2019.

3.4 SOILS

The NRCS Web Soil Survey does not provide soils data for the eastern portion of the project area. Based on the NRCS map of the portion of the project area for which soils data is available (Figure 4), the following soils occur within the project site boundary and are described below per the USDA's Official Soil Series Description and Series Classification database (NRCS n.d. a) and the Soil Survey of Riverside County, California, Coachella Valley Area (USDA 1980):

Badland – Badland consists of very steep, excessively drained, severely eroded areas broken by numerous deeply entrenched channels and steep side drainages with raw bands or freshly exposed material. Badland is composed of slightly consolidated sandy alluvium capped with a very thin mantle of loose sand and is primarily used for watershed, wildlife habitat, and recreation. The NRCS does not list Badland, which occurs on site, as hydric.

Borrow pits – Borrow pits result from the removal of soil and underlying material. The NRCS lists Borrow pits, which occurs on site, as hydric under Criteria 3, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

Carrizo stony sand, 2 to 9 percent slopes – The Carrizo series consists of very deep, excessively drained soils formed in mixed igneous alluvium. These soils are found primarily on numerous landforms on flood plains, fan piedmonts, and bolson floors in the Mojave Desert of southeastern California, western Arizona, and southern Nevada. These soils are primarily used for rangeland, recreation, and wildlife habitat. The NRCS does not list Carrizo stony sand, 2 to 9 percent slopes, which occurs within the 50-foot buffer and possibly occurs within the eastern portion of the project site, as hydric.

Carsitas gravelly sand, 0 to 9 percent slopes – The Carsitas series consists of very deep, somewhat excessively drained soils formed in alluvium from granitoid and/or gneissic rocks. These soils are found primarily on alluvial fans, fan aprons, valley fills, and dissected remnants of alluvial fans and in drainageways in the Colorado Desert of southeastern California. These soils are primarily used for watershed, wildlife habitat, and recreation. The NRCS lists Carsitas gravelly sand, 0 to 9 percent slopes, which occurs on site, as hydric under Criteria 4, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

Carsitas cobbly sand, 2 to 9 percent slopes – The Carsitas series consists of very deep, somewhat excessively drained soils formed in alluvium from granitoid and/or gneissic rocks. These soils are found primarily on alluvial fans, fan aprons, valley fills, and dissected remnants of alluvial fans and in drainageways in the Colorado Desert of southeastern California. These soils are primarily used for watershed, wildlife habitat, and recreation. The NRCS lists Carsitas cobbly sand, 2 to 9 percent slopes, which occurs on site, as hydric under Criteria 4, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil

series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes – The Chuckawalla series consists of very deep, well drained soils formed in stratified mixed alluvium. These soils are found primarily on fan terraces in low desert areas of southern California and southwestern Arizona, and used for recreation and watershed. The NRCS does not list Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes, which occurs on site, as hydric.

Myoma fine sand, 0 to 5 percent slopes – The Myoma series consists of moderately alkaline fine and very fine sands to a depth of about 31 inches, below 31 inches they are strongly alkaline very fine sands. These soils are found in southern California and primarily used for growing citrus fruits, grapes, alfalfa, dates, and truck crops under irrigation. The NRCS lists Myoma fine sand, 0 to 5 percent slopes, which occurs on site, as hydric under Criteria 4, meaning this soil map unit contains "components that are frequently ponded for long duration or very long duration during the growing season that: a) Based on the range of characteristics for the soil series, will at least in part meet one or more Field Indicators of Hydric Soils in the United States, or b) Show evidence that the soil meets the definition of a hydric soil" (NRCS n.d. b).

As stated in the Arid West Supplement, RBC used the hydric soils list as a tool and made final hydric soils determinations based on field-collected data at representative wetland delineation sample points deemed appropriate on site as recorded on the attached Arid West Wetland Delineation Forms (Appendix E) discussed further below.

3.5 VEGETATION

Based on field surveys conducted by RBC biologists on April 13 and May 1, 2, 8, and 9, 2019, the following vegetation communities occur within the project survey area.

Agricultural Land – Agricultural land within the project survey area (3.84 acres) is under current cultivation. Agricultural areas are both disturbed and irrigated and provide little habitat for native plant and wildlife species. Agicultural land occurs in the western portion of the project survey area.

Desert Wash Scrub/Sonoran Creosote Bush Scrub – An intermixing of two vegetation types; desert wash scrub and Sonoran creosote bush scrub occurs across large areas of the project survey area most often within, but not limited to, the numerous ephemeral washes on site. These washes contain a mix of species associated with both vegetation types including desert-lavender (*Condea emoryi*), smoke tree (*Psorothamnus spinosus*), indigo bush (*Psorothamnus schottii*), desert bird-of-paradise (*Hoffmannseggia microphylla*), rush sweet-bush (*Bebbia juncea* var. *aspera*), catclaw acacia (*Senegalia greggii*), and occasional blue palo verde (*Parkinsonia florida*), as well as creosote bush (*Larrea tridentata*) and white bursage (*Ambrosia dumosa*).

Disturbed Habitat – Disturbed habitat within the project survey area (39.99 acres) consists primarily of bare soils and non-native species that are a result of human disturbance. Disturbed lands have been graded, cleared, or used to the point where the land cannot support native vegetation. Disturbed areas occur mostly in the western portion of the project survey area adjacent to agricultural land.

Mesquite Hummocks – Mesquite hummocks (1.28 acres) occur only on the western portion of the project survey area within the Coachella Valley Multiple Species Habitat Conservation Plan's (CVMSHCP) East Indio Hills Conservation Area. Mesquite hummocks consist solely of mesquite (*Prosopis glandulosa* var. *glandulosa*) on a raised hummock of blown sand. This habitat is important for wildlife and has a stabilizing effect on sand dunes.

Sonoran Creosote Bush Scrub – Sonoran creosote bush scrub (1,955.75) is the dominant habitat type within the project survey area. This community occurs on upland slopes, hills, bajadas, and alluvial fans, and within the ephemeral washes on site. Sonoran creosote bush scrub is dominated by widely-spaced stands of creosote bush with open soil, annual plants, and other shrubs occurring between creosote bush shrubs. Other common shrubs within this community include white bursage, brittlebush (*Encelia farinose*), and desert-holly (*Atriplex hymenelytra*). Observation of short-lived annual plant species was limited due to the timing of the field survey.

Tamarisk Scrub – Tamarisk scrub within the project survey area (1.10 acres) primarily consists of dense tamarisk (*Tamarix ramosissima*) shrubs. Tamarisk scrub typically occurs on sandy or gravelly soils within or in close proximity to washes or streams and often follows major anthropogenic disturbance. Tamarisk scrub occurs on the western portion of the project survey area in areas disturbed by both agriculture and construction of a water tower.

Table 3 provides vegetation community acreages within the project survey area (Figure 6).

Table 3. Vegetation Communities within Project Survey Area

Vegetation Community	Project Survey Area (acres)
Agricultural Land	3.84
Desert Wash Scrub/Sonoran Creosote Bush Scrub	968.45
Disturbed Habitat	39.99
Mesquite Hummocks	1.28
Sonoran Creosote Bush Scrub	1,955.75
Tamarisk Scrub	1.10
Total	**2,970.40**

3.6 FEATURES OBSERVED

The project survey area consists of hilly desert land with many braided dry, sandy washes. The western portion of the project survey area also includes one earthen levee and five earthen berms which confine or redirect flows throughout the project survey area, as shown on Figure 5. As further supported by the aerial imagery analysis provided in Appendix F, the western portion of the project survey area was heavily manipulated between 1940 and 1953 with the construction of the Coachella Canal, an adjacent earthen levee, and several earthen berms to obstruct or redirect flows. The locations of the earthen berms changed throughout the years, with the present-day locations first appearing in 2002 aerials (Appendix F).

Estimated jurisdictional features observed within the project survey area during the formal jurisdictional delineation field effort, further discussed in Section 3.7, include Feature (F) 1 to F16

(which includes F1 – Disturbed Ephemeral Drainage Area, F1 – Tamarisk Scrub/Ephemeral Drainage, F1 – Tamarisk Scrub, and F13 – Tamarisk Scrub in this report unless otherwise specified) and the Coachella Canal (Figure 5, 5A-5J). Each named/numbered feature represents a separate watercourse, and as such, includes all functionally related and connected single-thread channels, compound channels, braided channels, and floodplains. Features that may connect outside of the project survey boundary were not deemed to be functionally related or connected for purposes of naming each on-site feature. Some on-site delineated features may not be jurisdictional by an agency or agencies as detailed in Section 3.8.

RBC investigated two wetland sample points to determine the presence or absence of federally jurisdictional wetlands (Figure 5, 5A-5J; Appendix E) in areas displaying potential wetland landscape position (e.g., minimal slope and/or depressional) and hydrology (e.g., surface soil cracks). RBC also completed five OHWM Datasheets at representative sample points in areas observed to have defined drainage patterns in the project survey area since there were multiple dry washes (i.e., features) with similar hydrology/OHWM characteristics in the project survey area (Figure 5, 5A-5J; Appendix E). Note that RBC is able to provide the Figure 5 series, which shows the estimated jurisdictional resources on site, at a smaller scale, if requested by the resource agencies.

Wetland Sample Point (WSP 1) was taken within the relatively flat F1 – Disturbed Ephemeral Drainage Area in an area primarily dominated by nettle-leaf goosefoot (*Chenopodium murale*; FACU) blue palo verde (Not Listed [NL]/UPL), and London rocket (*Sisymbrium irio*; NL/UPL). WSP 1 met the wetland hydrology parameter based on the presence of surface soil cracks; the hydrophytic vegetation and hydric soils parameters, however, were not met (Appendix E). Note that there was also evidence of recent surface manipulation within this area due to the presence of large tire tracks; therefore, the vegetation and top soil layer appeared disturbed.

WSP 2 was taken within F1 – Tamarisk Scrub/Ephemeral Drainage in an area that was primarily dominated by tamarisk/salt cedar (*Tamarix* sp.). The *Tamarix* sp. was likely *Tamarix ramosissima* (NL/UPL), but is understood to hybridize and function similarly to *Tamarix chinensis* (FAC). Assuming *Tamarix chinensis* as the dominant vegetation, WSP 2 met the hydrophytic vegetation parameter; the wetland hydrology and hydric soils parameters, however, were not met (Appendix E).

RBC determined the presence of an OHWM and bed and bank in the following representative locations within the project survey area: three locations within F8 (OHWM 1, 3, and 4), one location within F1 (OHWM 2), and one location within F3 (OHWM 5). OHWM 2 and 4 were taken as representative OHWM data points for the large watercourses (i.e., F4, F8, and F16); OHWM 1, 3, and 5 were taken as representative OHWM data points for the smaller watercourses and tributaries (i.e., F1 - F3, F5 - F7, and F9 - F15).

Table G-1 within Appendix G provides a summary of the existing characteristics of each of the observed on-site aquatic resources, F1 to F16 and the Coachella Canal. Overall, the watercourses observed on site consisted of generally unvegetated, dry, braided low-flow channels within sparsely vegetated active floodplains, which transitioned to low terraces generally dominated by creosote bush (NL/UPL), or pebble pincushion (*Chaenactis carphoclinia* var. *carphoclinia*; NL/UPL). Sediment was generally finer in the low-flow channels than within the active floodplains. The features varied in width from 3 to 1,650 feet (Appendix G, Table G-1). RBC utilized on-site field observations and a kmz file of the GIS limits of the jurisdictional

delineation site visit to define estimated minimum and maximum feature limits on Google Earth imagery. Indicators of an OHWM for the observed features within the project survey area included a change in vegetation cover, vegetation species, and sediment texture between the active floodplain and upland areas as well as a small break in slope along the active channel (Appendix E, OHWM 1-5). The extent of the mapped OHWM also matched the delineated bed and bank of each feature (Figure 5). Please note that some of the islands located within a delineated feature were CDFW-jurisdictional areas that would not have been included within the OHWM per the OHWM Field Guide; however, calling out CDFW-jurisdictional islands between the delineated washes would have taken a substantial effort so RBC included these CDFW-jurisdictional islands as part of the OHWM.

Note that F1 – Disturbed Ephemeral Drainage Area is located within the CVMSHCP's East Indio Hills Conservation Area, which is part of the watershed for mesquite hummocks. This area also has a general plan land use designation of Open Space and will be preserved as open space with project implementation.

Appendix H provides site photographs of the features and Figure 7 displays representative photo points.

3.7 JURISDICTIONAL RESOURCES AND ANALYSES

The Coachella Canal would be considered a Corps-jurisdictional, non-wetland waters of the U.S. as a tributary (i.e., 33 CFR 328.3(a)(5)) to the Whitewater River and ultimately the Salton Sea. However, all other on-site features would not be considered Corps-jurisdictional as detailed in Section 3.8 below.

The Coachella Canal and F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) would be considered non-wetland waters of the State/surface waters per the RWQCB. RBC also expects the Coachella Canal and F1 to F16 would be considered CDFW streambed, associated riparian habitat, and/or watercourse as defined by the MESA Guidelines. Generally, areas deemed as jurisdictional by the RWQCB and CDFW consisted of watercourses comprised of ephemeral desert wash.

Table 4, below, provides the total acreages of estimated jurisdictional resources. Tables I-1, I-2, and I-3 in Appendix I provide additional information regarding the Coachella Canal and F1 through F16 including acreages, linear feet, and dominant vegetation. None of the features within the project survey area met the three parameters per the Arid West Supplement; therefore, no Corps-/RWQCB-jurisdictional wetlands occur within the project survey area.

Although WSP 1 taken within F1 – Disturbed Ephemeral Drainage did meet the wetland hydrology parameter based on the presence of surface soil cracks, the area does not support any wetland associated fish or wildlife resources, related biological activity, or wetland habitat values. Similarly, although WSP 2 taken within F1 – Tamarisk Scrub/Ephemeral Drainage did meet the hydrophytic vegetation parameter, based on the assumption that the *Tamarix ramosissima*, an NL/UPL species, was functioning similar to *Tamarix chinensis*, a FAC species, the area does not support any wetland associated fish or wildlife resources, related biological activity, or wetland habitat values. Further, none of the other features within the project survey area exhibited any of the three wetland parameters. Therefore, RBC expects that none of the features within the project survey area would be considered jurisidictional wetlands per CDFW.

As estimated overall, the project survey area supports 2.72 acres (2,957 linear feet) of Corps-jurisdictional, non-wetland waters of the U.S.; 637.37 acres (282,372 linear feet) of RWQCB-jurisdictional, non-wetland waters of the State; and 637.57 acres (282,372 linear feet) of CDFW-jurisdictional, non-wetland streambed, associated riparian habitat, and/or watercourse as summarized in Table 4 below. Appendix I, Tables I-1, I-2, and I-3, provide details on the delineated on-site features per agency jurisdiction.

Table 4. Jurisdictional Resources within Project Survey Area*

Agency	Resource Type	Total Acreage	Total Linear Feet
Corps	Non-wetland waters of the U.S.	2.72	2,957
RWQCB	Non-wetland waters of the U.S./State	637.37	282,372
CDFW	Streambed (Bank)	637.37	282,372
	Riparian Vegetation	0.20	n/a

*Appendix I provides detailed information regarding the delineated on-site features per agency jurisdiction.

Section 3.8 provides details on why F1 to are not expected to be considered jurisdictional by the Corps.

3.8 NON-JURISDICTIONAL RESOURCES AND ANALYSES

RBC anticipates this report will be submitted to the agencies after changes to the Corps' waters of the U.S. regulations go into effect on December 23, 2019 (i.e., pre-2015 regulations and guidance will apply instead of the current 2015 Clean Water Rule). Furthermore, a revised definition of waters of the U.S. is anticipated to be published as early as January 2020, but its effective date, if applicable, remains uncertain. Given the above, for purposes of this jurisdictional delineation report, the non-jurisdictional status of F1 to F16 is analyzed under the pre-2015 regulations and guidance that will be effective on December 23, 2019.

While potentially jurisidictional per CDFW and/or the RWQCB, F1 to F16 (including F1 – Disturbed Ephemeral Drainage Area, F1 – Tamarisk Scrub/Ephemeral Drainage, and riparian habitat areas F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) located within the project survey area do not meet the Corps' definition of waters of the U.S. per pre-2015 regulations and guidance.F1 to F16 either terminate on site or ultimately flow to the southern boundary of the proposed project site where they are directed under the I-10 through a number of culverts and undercrossings to the undeveloped property to the south. In general, flows are isolated on this neighboring undeveloped property by the Coachella Canal.

Furthermore, as discussed above in Section 3.3 and based on hydrologic studies performed for the downstream La Entrada site and an AJD completed by the Corps in May 2018, flows from the La Entrada site are directed southwest to an evacuation outlet (i.e., culvert) under the Coachella Canal which serves as the only flood-conveyance facility for flows that continue south/downstream. After travelling through the evacuation outlet, flows are conveyed through Wasteway Channel No. 2 for approximately 2.2 miles before discharging into the Whitewater River. Runoff from the La Entrada site would not discharge through Wasteway Channel No. 2 to the Whitewater River for a storm event below the 50-year annual return frequency, which also

would apply to the ephemeral washes that flow from the KPC Coachella property onto the La Entrada site (John McCarthy [Q3 Consulting], personal communication, June 14, 2019). Flows that would reach the Whitewater River in at least a 50-year event would then travel approximately 13 miles before ultimately flowing into the Salton Sea. Given the above, flow events connecting the ephemeral washes on the KPC Coachella property to the Whitewater River are of such infrequent duration that they would only have a "speculative or insubstantial" effect on the "chemical, physical, or biological integrity" on the applicable traditionally navigable water (TNW), the Salton Sea.

Given the above rationale, F1 to F16 are not jurisdictional by the Corps as these ephemeral washes and riparian areas do not meet the criteria of jurisdictional waters per 33 CFR 328.3(a)(1) – (a)(7) (51 FR 41217; 53 FR 20764) and do not have significant nexus analysis to the nearest TNW, the Salton Sea. Table I-4 in Appendix I provides additional information regarding those features RBC expects the Corps would not deem jurisdictional.

Additionally, F1 – Tamarisk Scrub and F13 – Tamarisk Scrub are not jurisdictional by the RWQCB as these features are associated riparian habitat not considered non-wetland or wetland waters of the State/surface waters. Table I-5 in Appendix I provides additional information regarding those features RBC expects the RWQCB would not deem jurisdictional.

Appendix L includes the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet.

4 CONCLUSION

Based on RBC's field and desktop analysis of the project survey area, RBC expects that the Coachella Canal would be considered a Corps-jurisdictional, non-wetland waters of the U.S. (Appendix I, Table I-1); an RWQCB-jurisditional, non-wetland waters of the State/surface waters (Appendix I, Table I-2); and a CDFW-jurisdictional, non-wetland streambed and/or watercourse (Appendix I, Table I-3).

F1 to F16 would not be considered jurisdictional by the Corps (Appendix I, Table I-4). F1 to F16 (excluding F1 – Tamarisk Scrub and F13 – Tamarisk Scrub) would be considered RWQCB-jurisdictional non-wetland waters of the State/surface waters (Appendix I, Table I-2), while F1 – Tamarisk Scrub and F13 – Tamarisk Scrub would not be considered jurisdictional by the RWQCB as these features are associated riparian habitat not considered non-wetland or wetland waters of the State/surface waters (Appendix I, Table I-5). F1 to F16 would be considered CDFW-jurisdictional, non-wetland streambed, associated riparian habitat, and/or watercourse (Appendix I, Table I-3).

Assuming the Corps finalizes the AJD and concludes that F1 to F16 are not jurisdictional, no Corps permitting would be required for the project assuming the proposed project will not impact the Coachella Canal. Impacts on jurisdictional features per other agencies (if deemed jurisdictional) would require Waste Discharge Requirements (WDR) from RWQCB and a Streambed Alteration Agreement (SAA) from CDFW. The RWQCB and/or CDFW may also require a functional assessment (e.g., California Rapid Assessment Method [CRAM]) to quantitatively estimate the stream condition for the evaluation of the proposed project. Additionally, compensatory mitigation would be required by the regulatory agencies to offset the proposed project impacts.

Please note that the applicable agencies will make final jurisdictional determinations. RBC recommends early coordination with the resource agencies to determine the final jurisdictional boundaries, applicable permitting processes, compensatory mitigation requirements, and other potential permitting issues specific to the proposed project. Agency representatives may request to access the site to field-verify the results of this jurisdictional delineation report with the project applicant, or a designated representative.

The information provided in this report should remain valid for up to five years from the date of the field effort for the jurisdictional delineation unless site conditions change substantially, or a regulatory agency requires an updated report.

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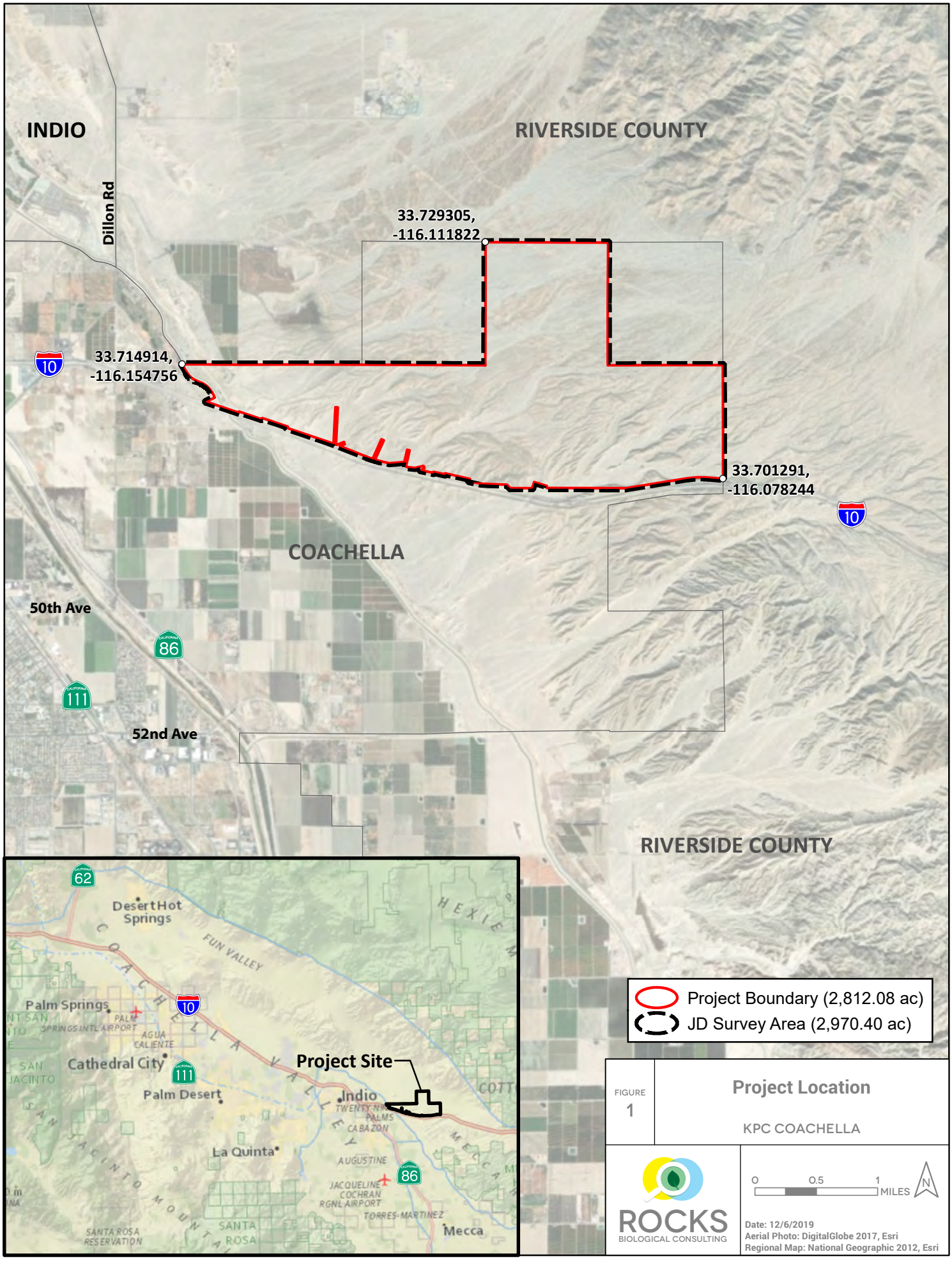
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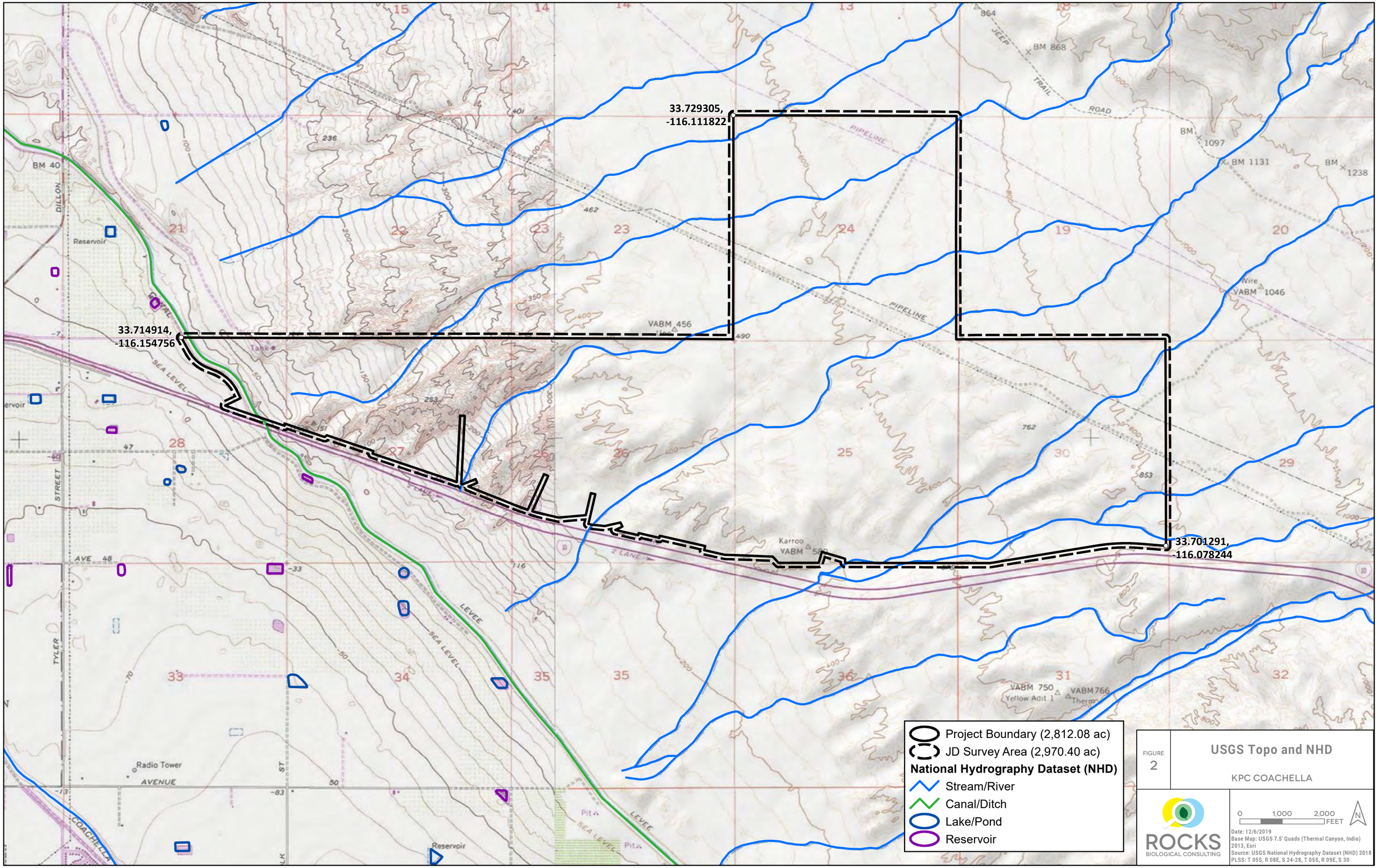
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INDIO
RIVERSIDE COUNTY
Dillon Rd
33.729305,
-116.111822
33.714914,
-116.154756
33.701291,
-116.078244
10
COACHELLA
50th Ave
86
111
52nd Ave
RIVERSIDE COUNTY
62
Desert Hot Springs
Palm Springs
Cathedral City
Palm Desert
Indio
La Quinta
Mecca
Project Site
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
FIGURE
1
Project Location
KPC COACHELLA
ROCKS
BIOLOGICAL CONSULTING
0
0.5
1
MILES
N
Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Regional Map: National Geographic 2012, Esri


33.729305,
-116.111822
33.714914,
-116.154756
33.701291,
-116.078244
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
National Hydrography Dataset (NHD)
Stream/River
Canal/Ditch
Lake/Pond
Reservoir
FIGURE
2
USGS Topo and NHD
KPC COACHELLA
ROCKS
BIOLOGICAL CONSULTING
0 1,000 2,000 FEET
N
Date: 12/6/2019
Base Map: USGS 7.5' Quads (Thermal Canyon, Indio) 2013, Esri
Source: USGS National Hydrography Dataset (NHD) 2018
PLSS: T 05S, R 08E, S 24-28, T 05S, R 09E, S 30

NHD Watershed 8-digit HUC
NHD Watershed 10-digit HUC
NHD Watershed 12-digit HUC

Santa Ana
HUC 8 - 18070203

Headwaters Whitewater River
HUC 10 - 1810020103

Little Morongo Creek-Morongo Wash
HUC 10 - 1810020104

Southern Mojave
HUC 8 - 18100100

San Gorgonio River
HUC 10 - 1810020101

Upper Whitewater River
HUC 10 - 1810020106

Whitewater River
HUC 8 - 18100201

Berdoo Canyon
HUC 12 - 181002010702

See Detail

Indio Canyon
HUC 12 - 181002010703

Fargo Canyon
HUC 12 - 181002010704

San Jacinto
HUC 8 - 18070202

Middle Whitewater River
HUC 10 - 1810020107

City of Indio-Whitewater River
HUC 12 - 181002010705

Project Site

Palm Canyon Wash
HUC 10 - 1810020102

Bear Creek
HUC 12 - 181002010701

Deep Canyon
HUC 10 - 1810020105

Lower Whitewater River
HUC 10 - 1810020108

Salton Sea
HUC 8 - 18100204

Santa Margarita
HUC 8 - 18070302

San Felipe Creek
HUC 8 - 18100203

Salton Sea

FIGURE 3

Watershed

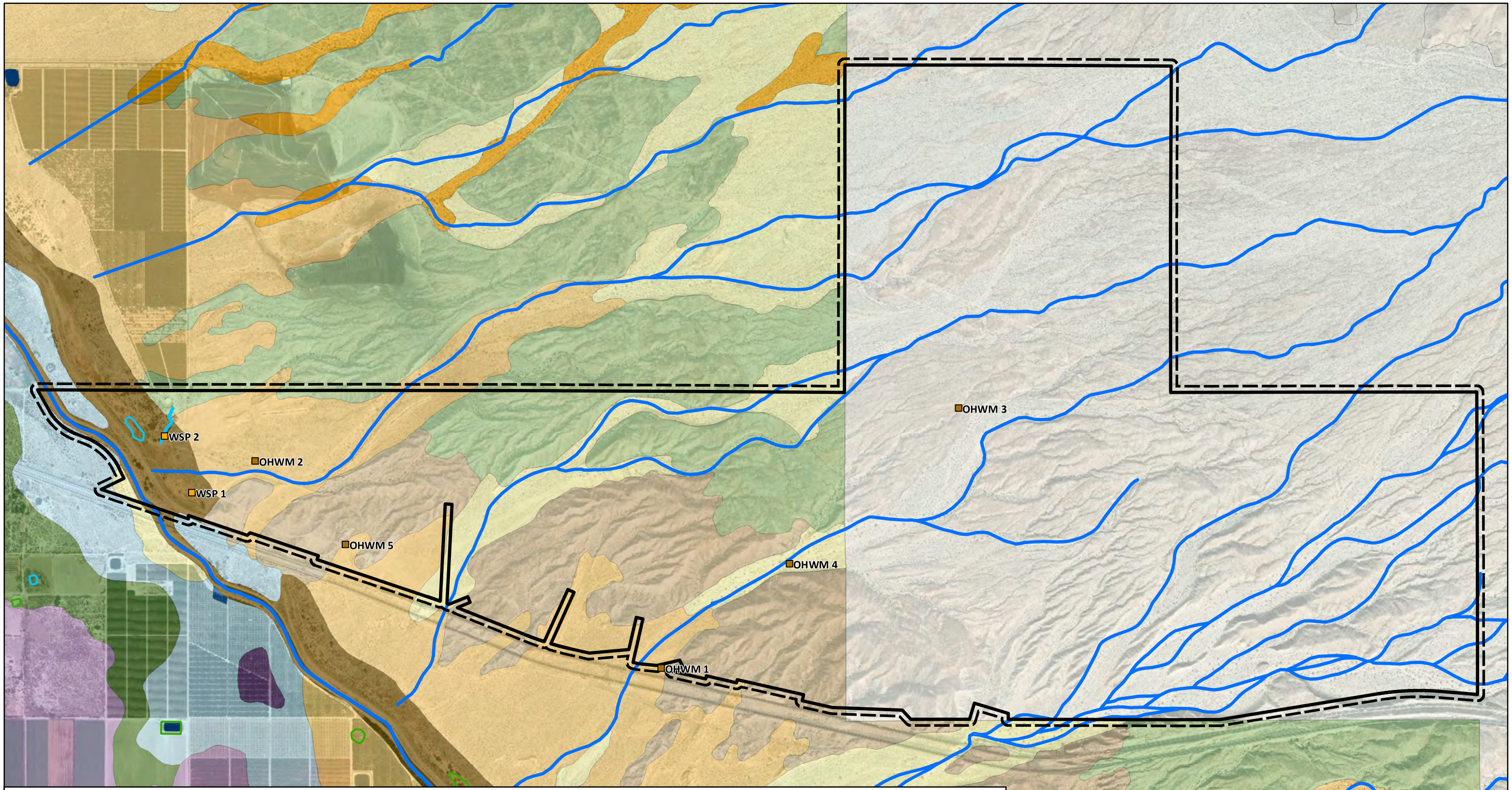
KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 2.5 5 MILES

N

Date: 12/6/2019
Aerial Photo: Digital Globe 2017, Esri
Source: USGS WBD, NHD 2018



Project Boundary
JD Survey Area
Wetland Sample Point
OHWM Data Point

National Wetlands Inventory

Freshwater Forested/Shrub Wetland
Freshwater Pond
Riverine

Soils

Badland
Borrow pits
Carrizo stony sand, 2 to 9 percent slopes
Carsitas gravelly sand, 0 to 9 percent slopes
Carsitas cobbly sand, 2 to 9 percent slopes
Chuckawalla very gravelly sandy clay loam, 2 to 5 percent slopes
Coachella fine sand, wet, 0 to 2 percent slopes
Gilman loamy fine sand, 0 to 5 percent slopes
Gilman fine sandy loam, wet, 0 to 2 percent slopes
Myoma fine sand, 0 to 5 percent slopes
Water
Unmapped

FIGURE 4

NRCS Soils Survey Data and National Wetlands Inventory

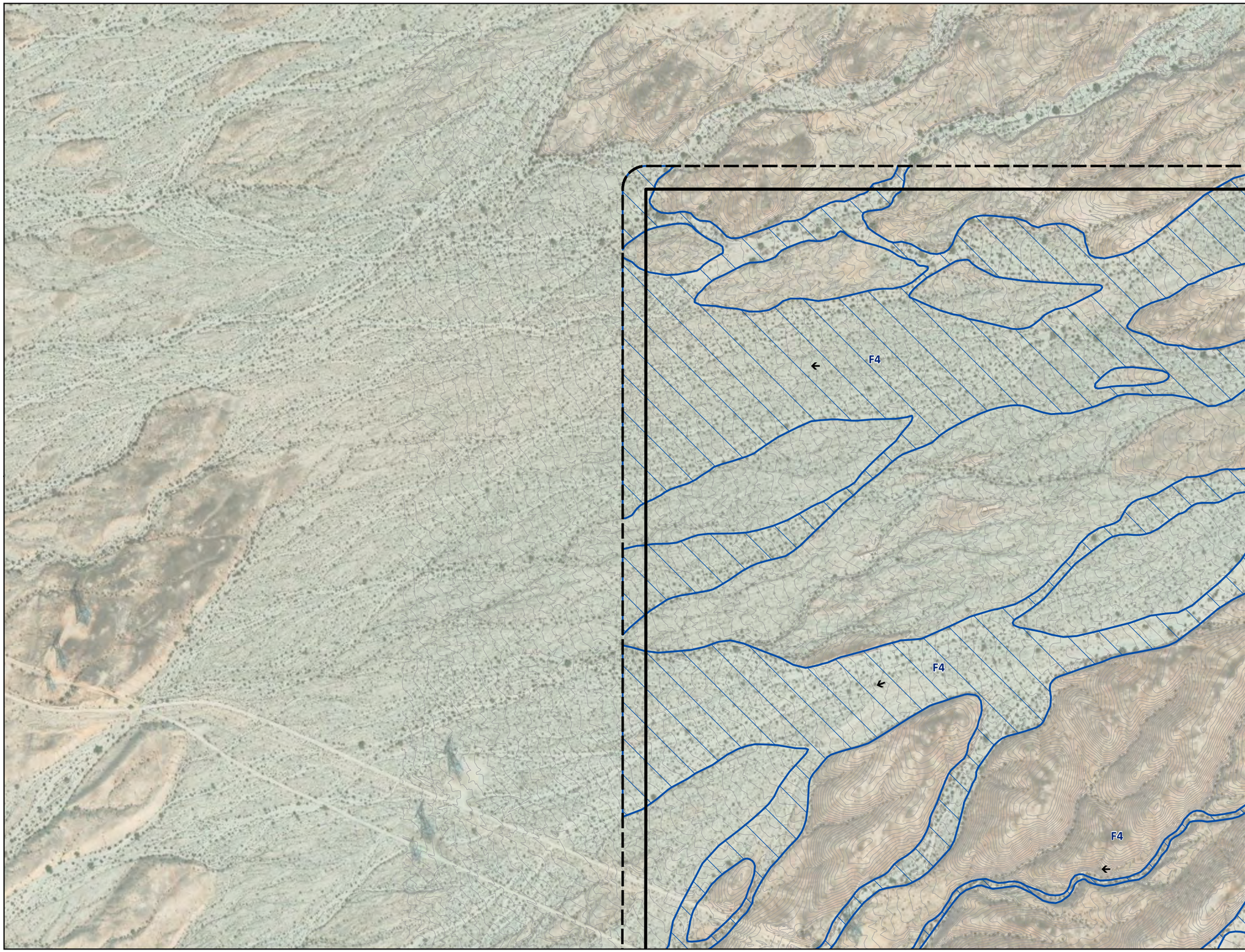
KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: USFWS National Wetlands Inventory (NWI) 2018, USDA NRCS 2013



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

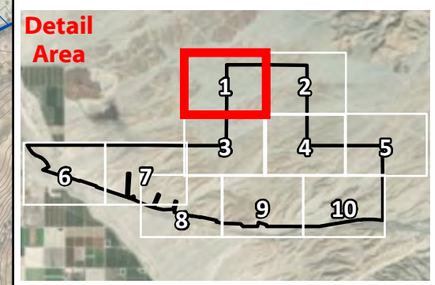


FIGURE 5A

Jurisdictional Delineation/Impacts Sheet 1 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

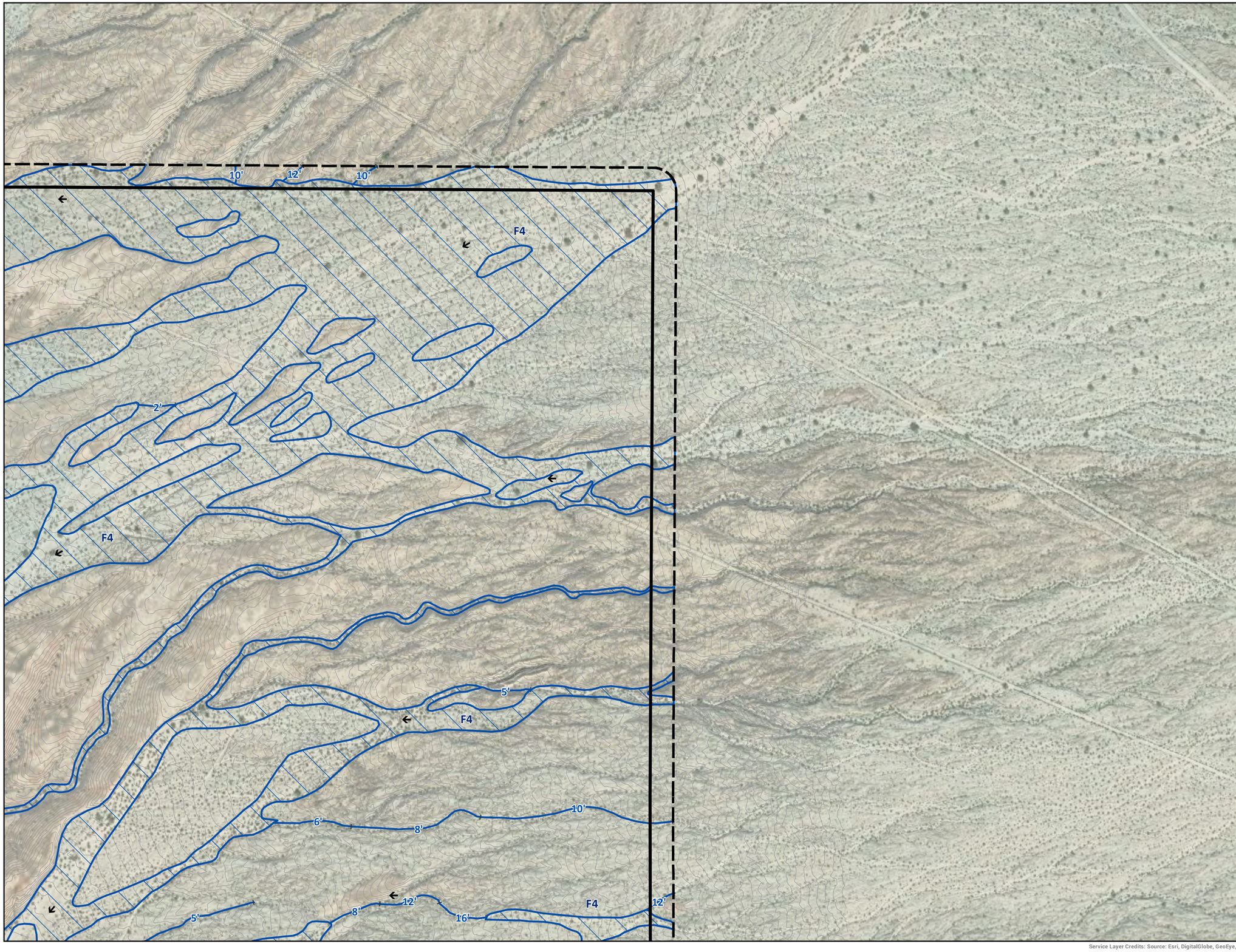
N

Date: 12/6/2019

Aerial Photo: DigitalGlobe 2018, Esri

Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

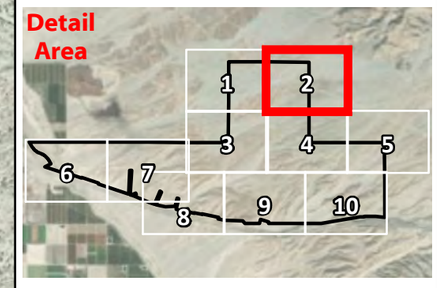


FIGURE 5B

Jurisdictional Delineation/Impacts Sheet 2 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
OHWM Data Point
Flow Direction

RWQCB and CDFW
Jurisdictional Features*
Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

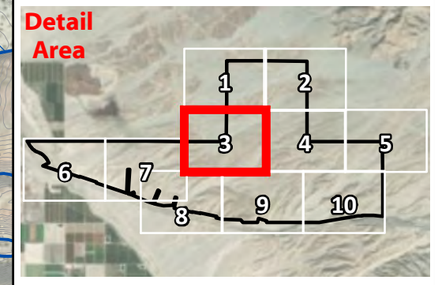


FIGURE 5C

Jurisdictional Delineation/Impacts
Sheet 3 of 10

KPC COACHELLA

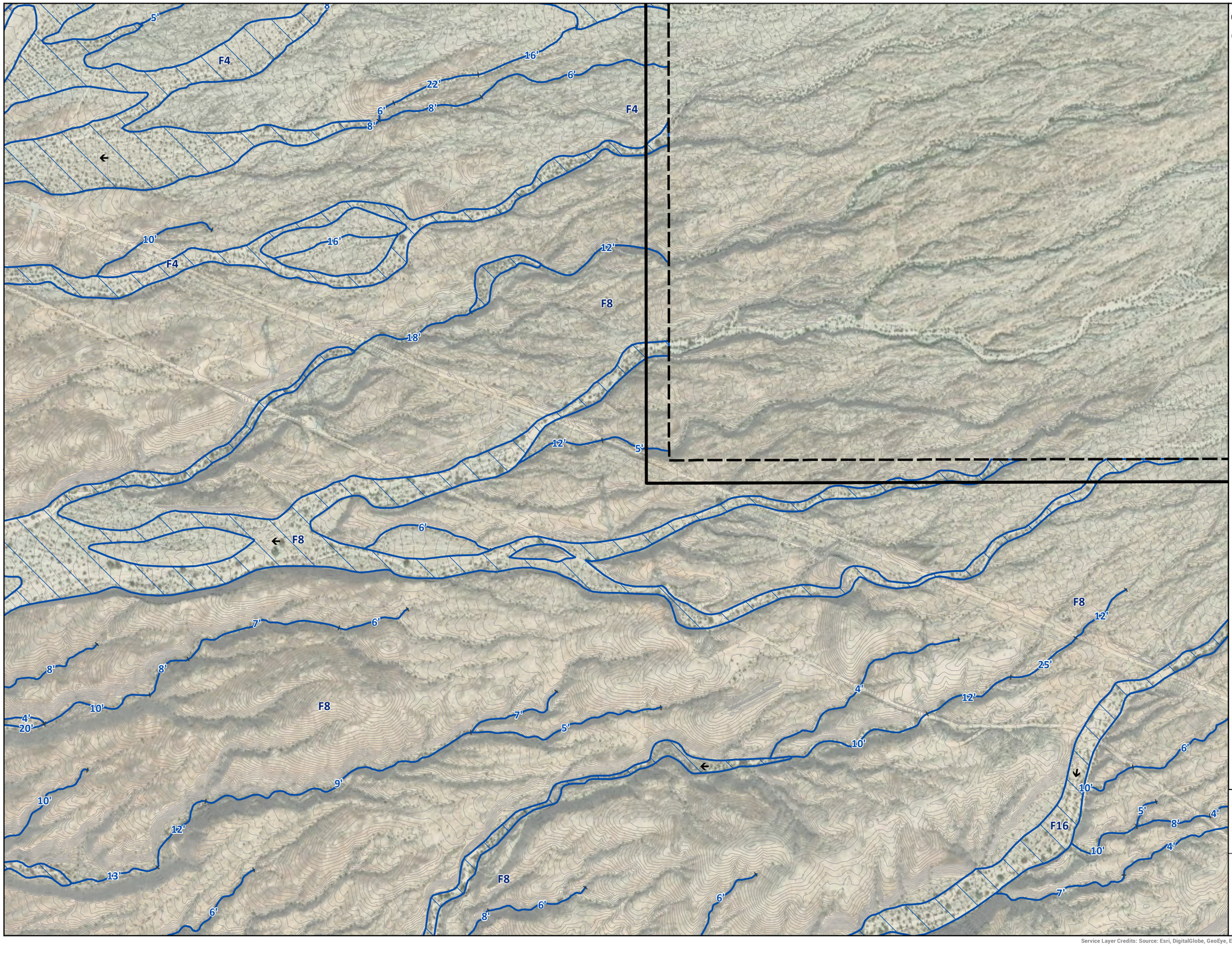
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0 200 400 FEET

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Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

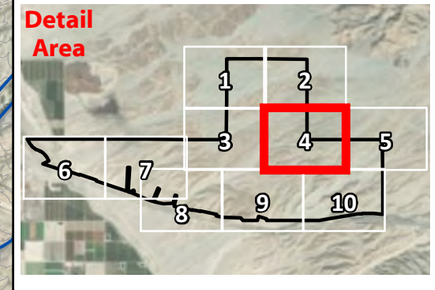


FIGURE 5D

Jurisdictional Delineation/Impacts Sheet 4 of 10

KPC COACHELLA

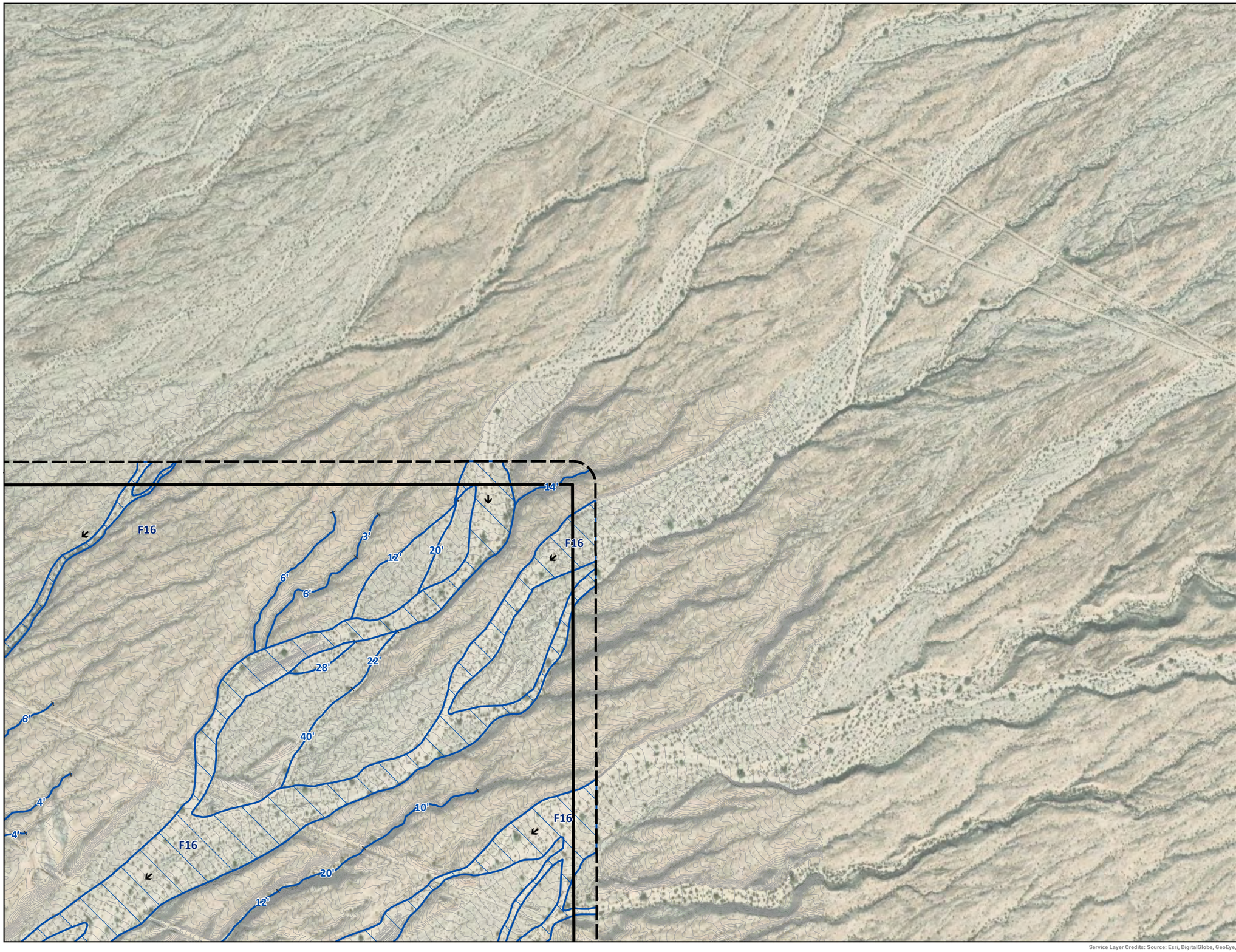
ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

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Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

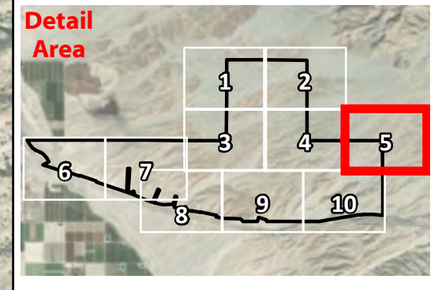


FIGURE 5E

Jurisdictional Delineation/Impacts
Sheet 5 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

F1 Tamarisk Scrub

F1 Tamarisk Scrub/ Ephemeral Drainage

WSP 2

40'

F1 Disturbed Ephemeral Drainage Area

WSP 1

F2

F1

OHWM 2

F1

OHWM 5

15'

F3

15'

10

Avenue 47

Polk St

Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Wetland Sample Point
OHWM Data Point
Culvert
Storm Drain Outfall
Flow Direction
Berm - Earthen
Levee - Earthen

Corps/RWQCB/CDFW Jurisdictional Features

Coachella Canal (2.72 ac)

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)

CDFW Jurisdictional Features*

Tamarisk Scrub (0.20 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

Detail Area

1 2 3 4 5 6 7 8 9 10

FIGURE 5F

Jurisdictional Delineation/Impacts Sheet 6 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Culvert
Highway Undercrossing
Flow Direction
Berm - Earthen

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

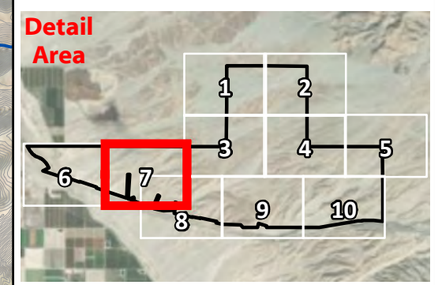


FIGURE 5G

Jurisdictional Delineation/Impacts
Sheet 7 of 10

KPC COACHELLA

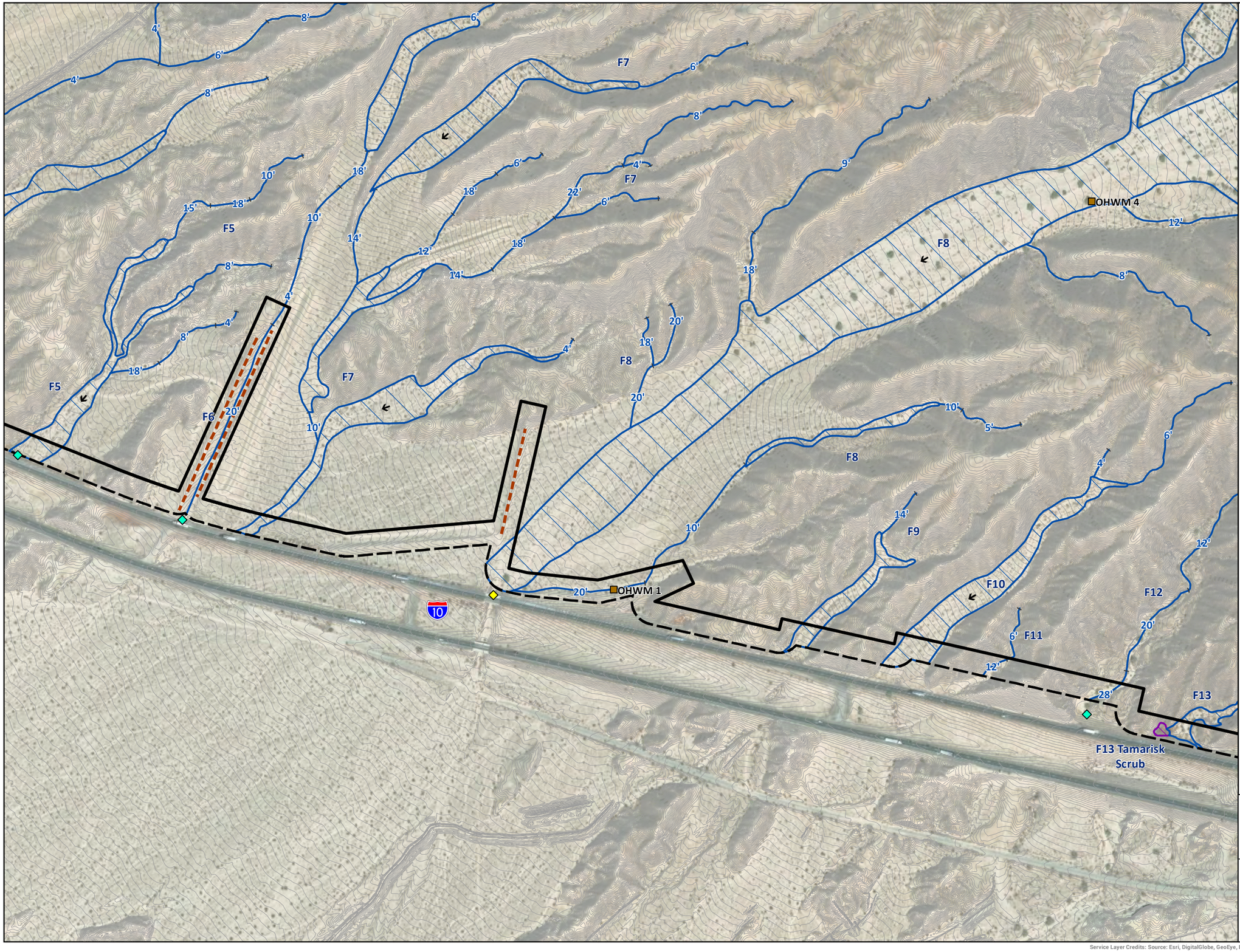
ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
OHWM Data Point
Culvert
Highway Undercrossing
Flow Direction
Berm - Earthen

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

CDFW Jurisdictional Features*

Tamarisk Scrub (0.20 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

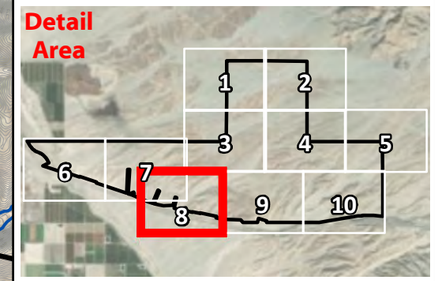


FIGURE 5H

Jurisdictional Delineation/Impacts
Sheet 8 of 10

KPC COACHELLA

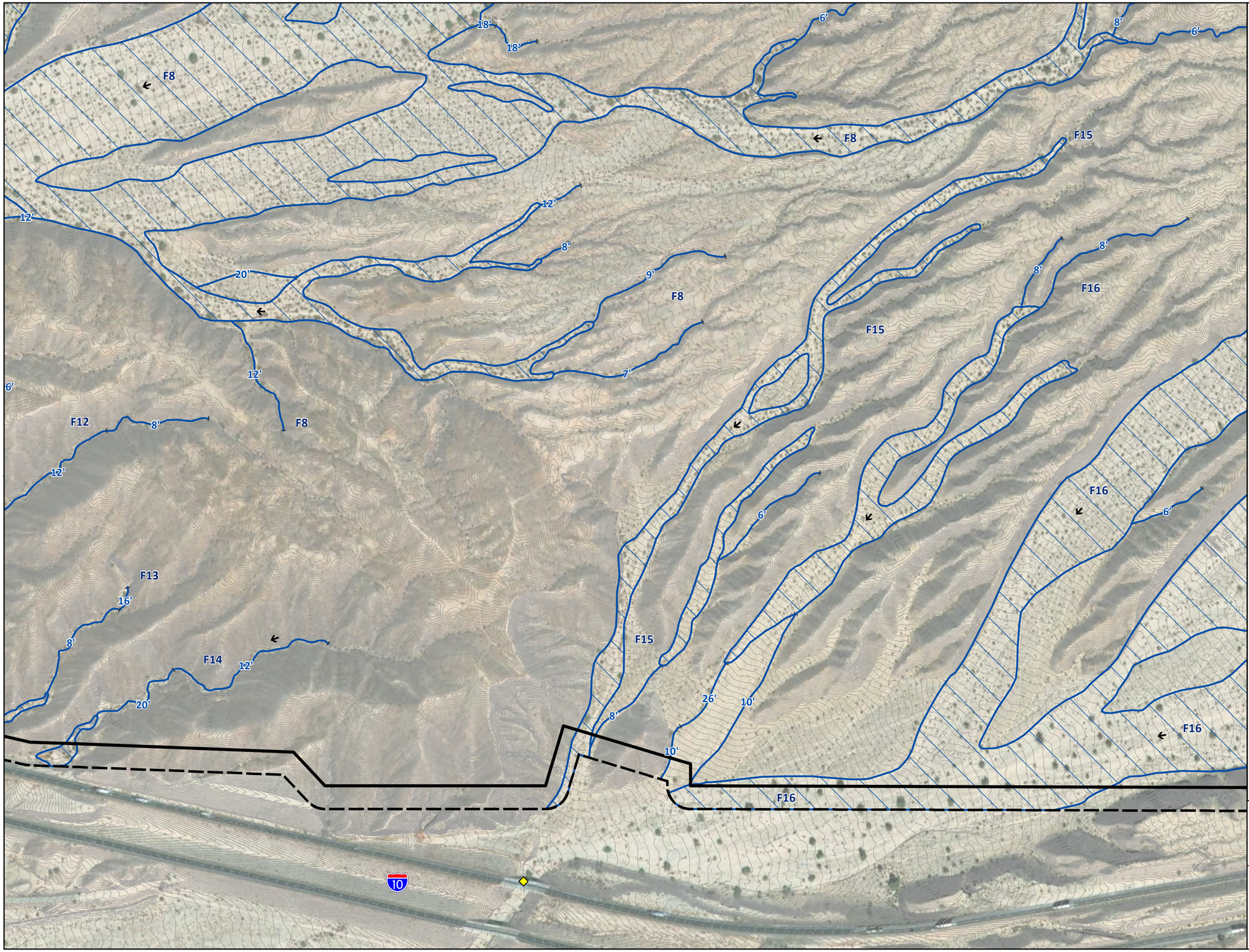
ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Highway Undercrossing

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

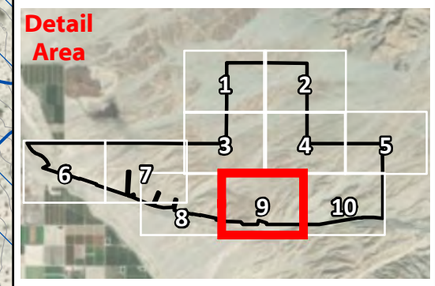


FIGURE 5I

Jurisdictional Delineation/Impacts Sheet 9 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2018, Esri
Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community



Project Boundary (2,812.08 ac)

JD Survey Area (2,970.40 ac)

Flow Direction

RWQCB and CDFW Jurisdictional Features*

Ephemeral Wash (618.76 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.

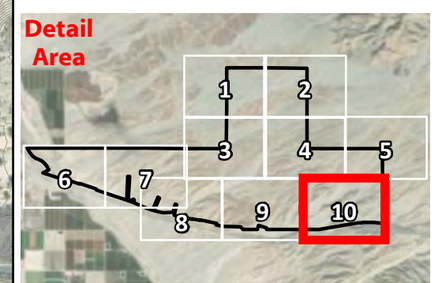


FIGURE 5J

Jurisdictional Delineation/Impacts Sheet 10 of 10

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 200 400 FEET

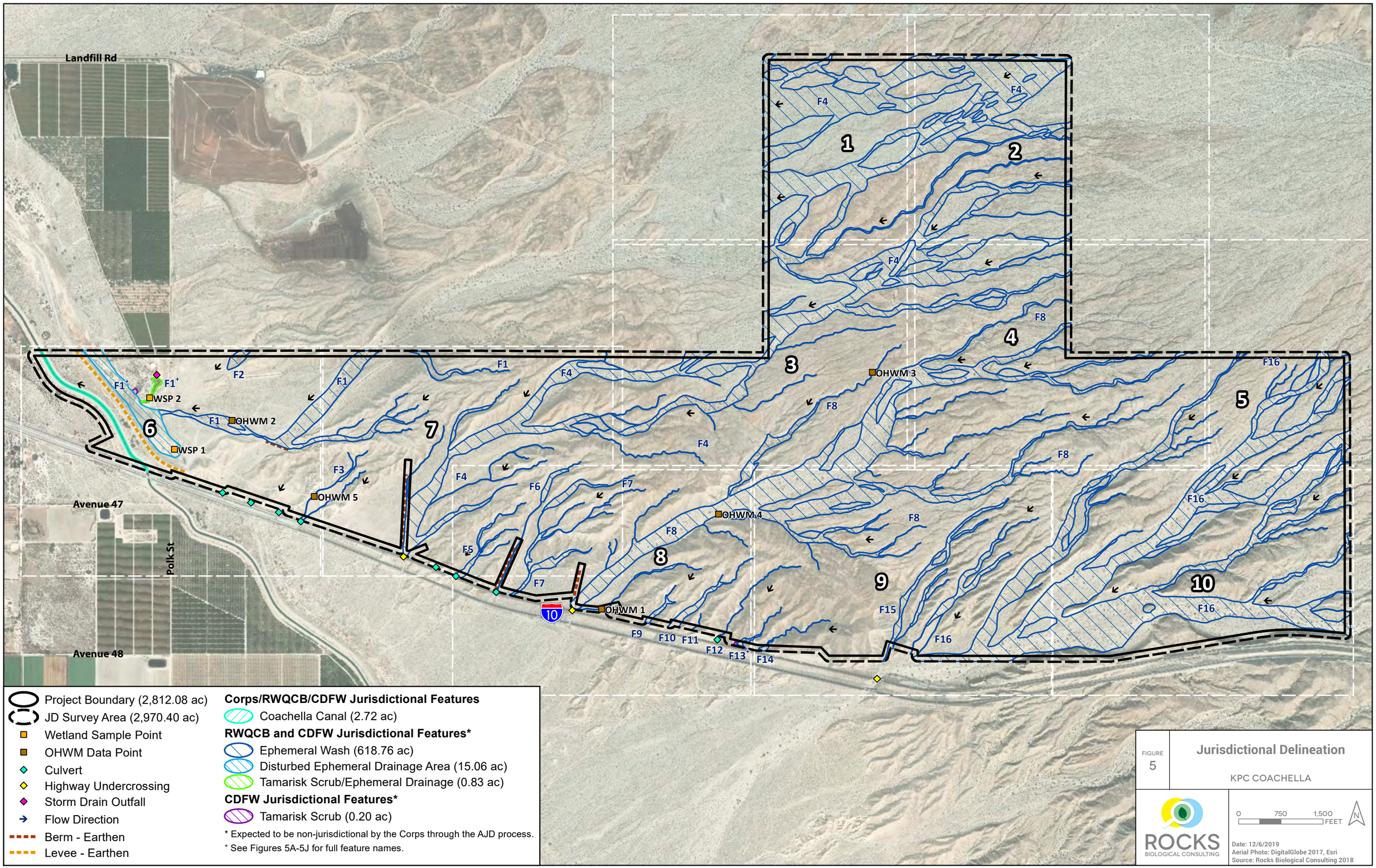
N

Date: 12/6/2019

Aerial Photo: DigitalGlobe 2018, Esri

Source: Rocks Biological Consulting 2019

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community


Landfill Rd
Avenue 47
Avenue 48
Polk St
1
2
3
4
5
6
7
8
9
10
F1
F2
F3
F4
F5
F6
F7
F8
F9
F10
F11
F12
F13
F14
F15
F16
WSP 1
WSP 2
OHWM 1
OHWM 2
OHWM 3
OHWM 4
OHWM 5
10
Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Wetland Sample Point
OHWM Data Point
Culvert
Highway Undercrossing
Storm Drain Outfall
Flow Direction
Berm - Earthen
Levee - Earthen
Corps/RWQCB/CDFW Jurisdictional Features
Coachella Canal (2.72 ac)
RWQCB and CDFW Jurisdictional Features*
Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)
CDFW Jurisdictional Features*
Tamarisk Scrub (0.20 ac)
* Expected to be non-jurisdictional by the Corps through the AJD process.
+ See Figures 5A-5J for full feature names.
FIGURE 5
Jurisdictional Delineation
KPC COACHELLA
ROCKS BIOLOGICAL CONSULTING
0 750 1,500 FEET
N
Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: Rocks Biological Consulting 2018
Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Landfill Rd

Avenue 47

Polk St

Avenue 48

10

Project Boundary

JD Survey Area

Vegetation

- Desert Wash Scrub/Sonoran Creosote Bush Scrub
- Sonoran Creosote Bush Scrub
- Mesquite Hummocks
- Tamarisk Scrub
- Agricultural Land
- Disturbed Habitat

FIGURE 6

Biological Resources

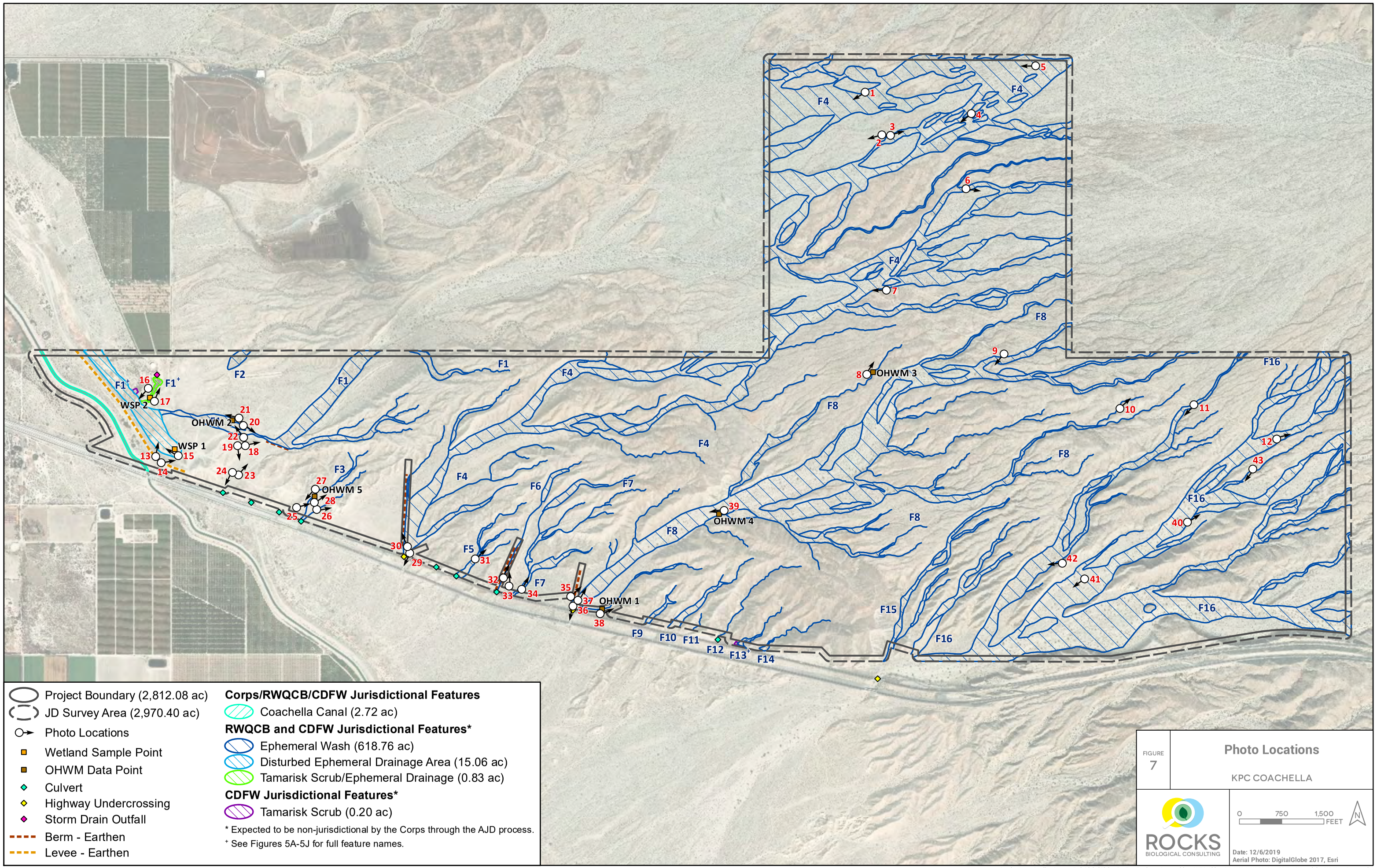
KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri
Source: Rocks Biological Consulting 2019



Project Boundary (2,812.08 ac)
JD Survey Area (2,970.40 ac)
Photo Locations
Wetland Sample Point
OHWM Data Point
Culvert
Highway Undercrossing
Storm Drain Outfall
Berm - Earthen
Levee - Earthen

Corps/RWQCB/CDFW Jurisdictional Features
Coachella Canal (2.72 ac)

RWQCB and CDFW Jurisdictional Features*
Ephemeral Wash (618.76 ac)
Disturbed Ephemeral Drainage Area (15.06 ac)
Tamarisk Scrub/Ephemeral Drainage (0.83 ac)

CDFW Jurisdictional Features*
Tamarisk Scrub (0.20 ac)

* Expected to be non-jurisdictional by the Corps through the AJD process.
* See Figures 5A-5J for full feature names.

FIGURE 7

Photo Locations

KPC COACHELLA

ROCKS BIOLOGICAL CONSULTING

0 750 1,500 FEET

N

Date: 12/6/2019
Aerial Photo: DigitalGlobe 2017, Esri

Service Layer Credits: Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

APPENDIX A

CHECKLIST: MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS, LOS ANGELES DISTRICT REGULATORY DIVISION, CORPS

CHECKLIST: MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS, LOS ANGELES DISTRICT REGULATORY DIVISION, USACE, MARCH 16, 2017

REPORT SECTION/ PAGE NUMBER	MINIMUM STANDARDS FOR ACCEPTANCE OF AQUATIC RESOURCES DELINEATION REPORTS	ADDITIONAL NOTES
Section 1; Appendix J	JD REQUEST AND FORMS: A cover letter indicating whether you are requesting a jurisdictional determination (JD). If you are requesting a JD, you must complete, sign, and return the Request for Corps Jurisdictional Determination (JD) sheet. For preliminary jurisdictional determinations the Preliminary Jurisdictional Determination Form must be signed and submitted.	
Section 1.4	CONTACT INFORMATION: Contact information for the applicant(s), property owner(s), and agent(s).	
N/A	SITE ACCESS: If the property owner or their representatives will not accompany the Corps to the site, a signed statement from the property owner(s) allowing Corps personnel to enter the property and to collect samples during normal business hours. If the property lacks direct access by public roads (in other words, access requires passage through private property not owned by the applicant), the owner or proponent must obtain permission from the adjacent property owner(s) to provide access for Corps personnel.	Property owner and/or representatives will accompany the Corps for a site visit upon request.
Section 1.1	LOCATION: Directions to the survey area, an address (if available) and one or more set of geographic coordinates expressed in decimal degrees.	
Section 2, Paragraphs 3 and 7	DELINEATION MANUAL CONFIRMATION: A statement confirming the delineation has been conducted in accordance with the 1987 Corps of Engineers Wetlands Delineation Manual and applicable regional supplement(s). The regional supplement(s) used must be identified. For OHWM delineations, a statement must be included confirming the use of the OHWM field guide or that it is not applicable.	
Section 3.6	AQUATIC RESOURCE(S) DESCRIPTION: A narrative describing all aquatic resources on-site and an explanation of the mapped boundaries and any complex transition zones. If the site contains resources that only meet one or two of the three wetland criteria or do not exhibit a clear OHWM, describe the rationale for their inclusion or exclusion from the delineation. Also explain if any erosional features, upland swales, ditches and other potential aquatic features were considered but not included in the delineation.	
Figure 5; Appendix G, Table G-1; Appendix I, Tables I-1, I-2, I-3, I-4, I-5	AQUATIC RESOURCE MAPPING AND ACREAGE: Map the outside survey boundary, total extent of aquatic and proposed non-aquatic features, type of feature(s) (waters of the United States or wetland), and include the total acreage for each polygon.	
Section 2, Paragraph 2; Table 1	FIELD WORK DATES: Date(s) field work was completed.	
Appendix G, Table G-1; Appendix I, Tables I-1, I-2, I-3, I-4, I-5	AQUATIC RESOURCE TABLE: A table listing all aquatic resources. The table must include the name of each aquatic resource (actual or arbitrary), its Cowardin type, acreage, summary of OHWM/wetland presence, dominant vegetation for each, and location (latitude/longitude in decimal degrees). For linear features, the table must show both acreage and linear feet as well as channel measurements (active channel width).	

ROCKS BIOLOGICAL CONSULTING

Section 1.1 and 2; Table 1	FIELD CONDITIONS: A description of existing field conditions, including current land use, normal conditions, flood/drought conditions, irrigation practices, past or recent manipulation to the site, and characteristics considered atypical (for criteria see OHWM and wetland supplement guides). Include WETS tables or pre-site visit precipitation data as appropriate: https://www.wcc.nrcs.usda.gov/climate/wets_doc.html.	
Section 3.3	HYDROLOGY: A discussion of the hydrology at the site, including all known surface or subsurface sources, drainage gradients, downstream connections to the nearest traditional navigable waterway or interstate water, and any influence from manmade water sources such as irrigation.	
N/A	REMOTE SENSING: If remote sensing was used in the delineation, provide an explanation of how it was used and include the name, date and source of the tools and data used and copies of the maps/photographs.	
Section 3.4; Figure 4; Appendix H	SOILS: Soil descriptions, soil map(s), soil photos, and a discussion of hydric soils (for wetland delineations only).	
Figure 2	USGS QUADRANGLE: A site location map on a 7.5-minute USGS quadrangle. The map must provide the name of the USGS quadrangle, Section, Township, Range, and the latitude and longitude in decimal degree format.	
Appendix L	BULK UPLOAD FORM: For sites with 3 or more separate aquatic features a completed copy of the ORM Bulk Upload Aquatic Resources or Consolidated Excel spreadsheet must be submitted.	
Figure 5	FIGURES: Map(s) of all delineated aquatic resources in accordance with the Final Map and Drawing Standards for the South Pacific Division Regulatory Program, available at: http://www.spd.usace.army.mil/Missions/Regulatory/Public-Notices-and-References/Article/651327/updated-map-and-drawing-standards/	
Figure 7 and Appendix H	SITE PHOTOGRAPHS: Ground photographs showing representative aquatic resource sites (or lack of), as well as an accompanying map of photo-points and table of photographic information (see Final Map and Drawing Standards for the South Pacific Division Regulatory Program item no. 8 a-c).	
Appendix E	DATA FORMS: Completed data forms including all essential information to make a jurisdictional determination [e.g. 2006 Wetland Determination Data Form -- Arid West Supplement; 2010 Arid West Ephemeral and Intermittent Streams OHWM Datasheet].	
Section 2	METHODS: A description of the methods used to survey the aquatic resource boundaries. If GPS data is used, the level of accuracy must be included. Ideally, the GPS equipment should have the capability of sub-meter (<=1 meter) level horizontal accuracy.	
Appendix K	GIS DATA: Digital data for the site, aquatic resource boundaries, and data point locations must be provided in a geographic information system (GIS) format, preferably either ESRI shapefiles or Geodatabase format, but GoogleEarth KMZ or KML files may be acceptable non-complex projects. Each GIS data file must be accompanied by a metadata file containing the appropriate geographic coordinate system, projection, datum, and labeling description. If GIS data is unavailable or otherwise cannot be produced and the Corps determines a site visit is necessary, the aquatic resource boundaries should be physically marked with numbered flags or stakes to facilitate verification by the Corps.	

APPENDIX B

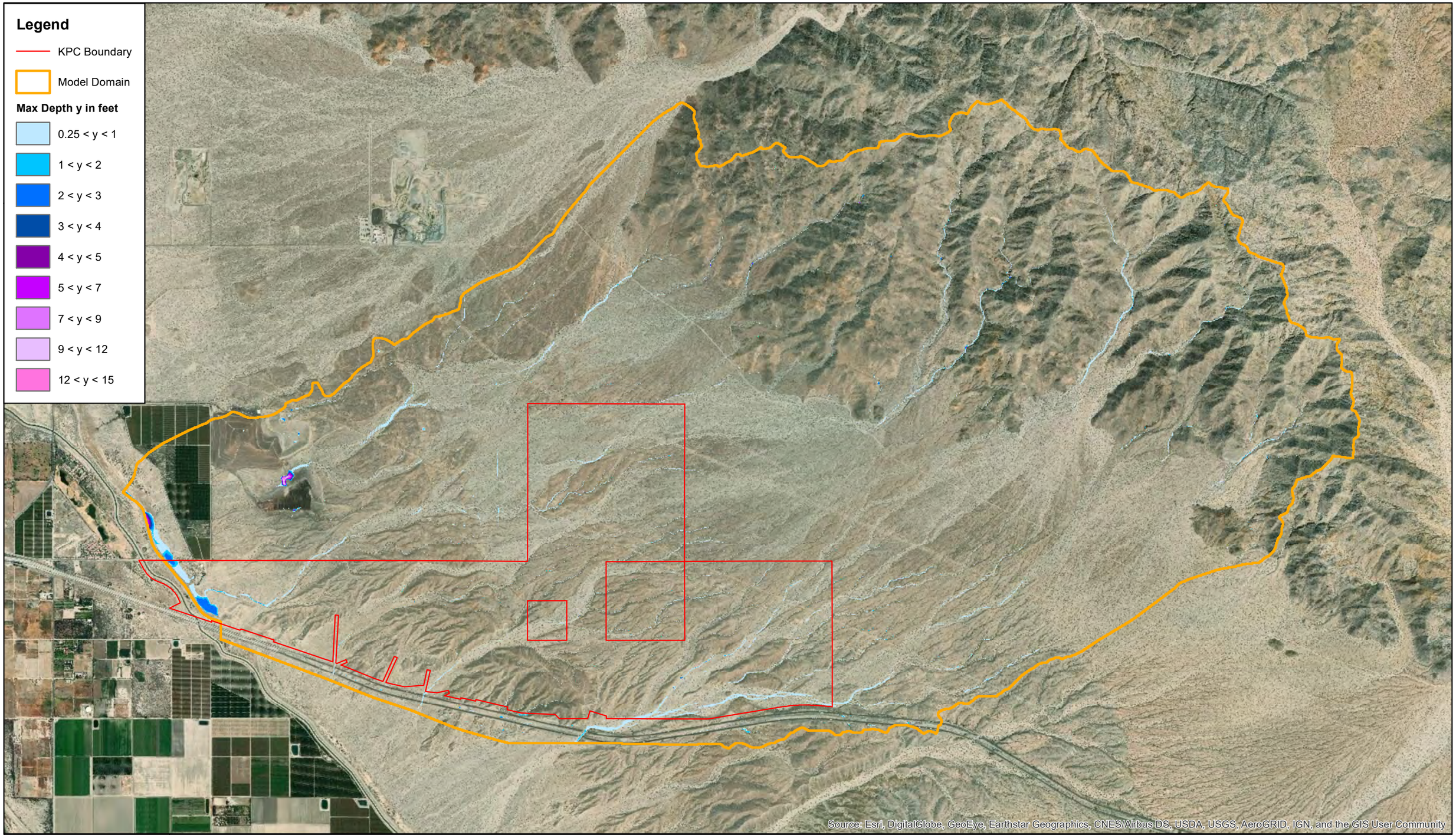
HYDROLOGY DATA

Legend

- KPC Boundary
- Model Domain

Max Depth y in feet

- 0.25 < y < 1
- 1 < y < 2
- 2 < y < 3
- 3 < y < 4
- 4 < y < 5
- 5 < y < 7
- 7 < y < 9
- 9 < y < 12
- 12 < y < 15



Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Q3 Consulting

N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Flood Depth
Existing Condition - 2 Year

Exhibit 1

Legend

- KPC Boundary
- Model Domain

Max Velocity v in fps

- 1 < v < 2
- 2 < v < 3
- 3 < v < 4
- 4 < v < 5
- 5 < v < 6

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Q3 Consulting

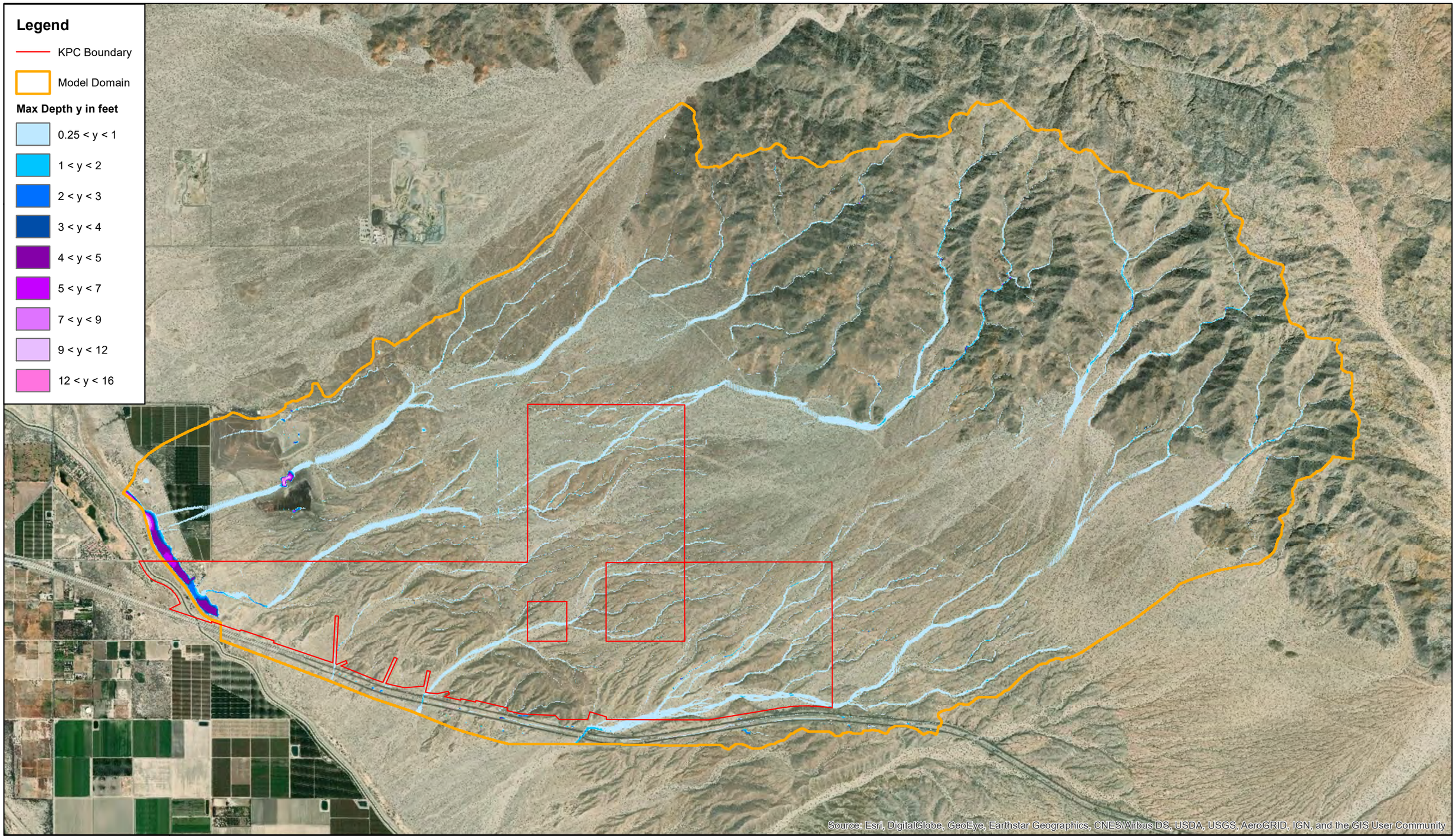
N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Velocity
Existing Condition - 2 Year

Exhibit 2



Q3 Consulting

N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Flood Depth
Existing Condition - 5 Year

Exhibit 3

Legend

KPC Boundary

Model Domain

Max Velocity v in fps

- 1 < v < 2
- 2 < v < 3
- 3 < v < 4
- 4 < v < 5
- 5 < v < 6
- 6 < v < 7
- 7 < v < 10

Source: Esri, DigitalGlobe, GeoEye, Earthstar Geographics, CNES/Airbus DS, USDA, USGS, AeroGRID, IGN, and the GIS User Community

Q3 Consulting

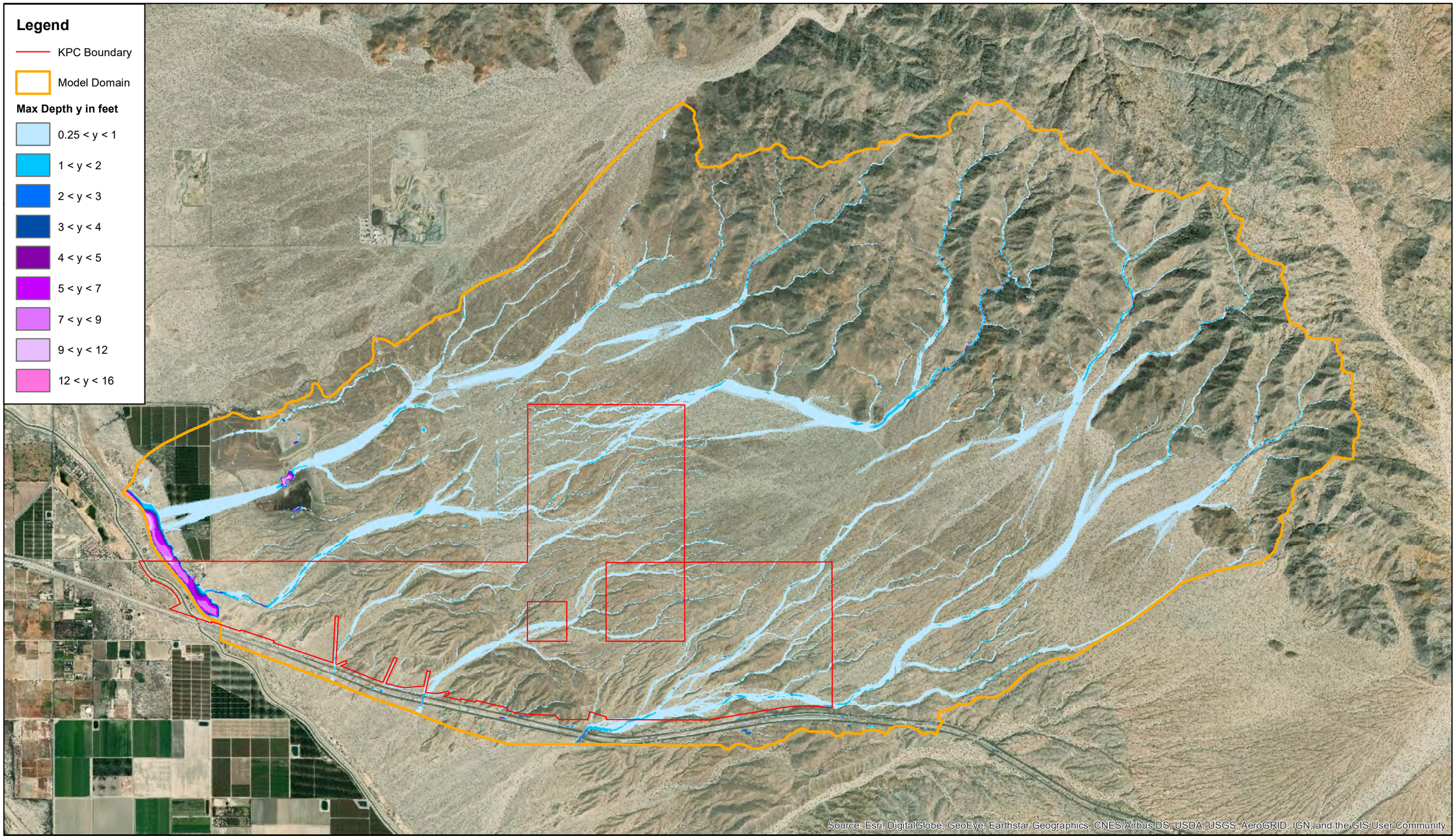
N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Velocity
Existing Condition - 5 Year

Exhibit 4



Q3 Consulting

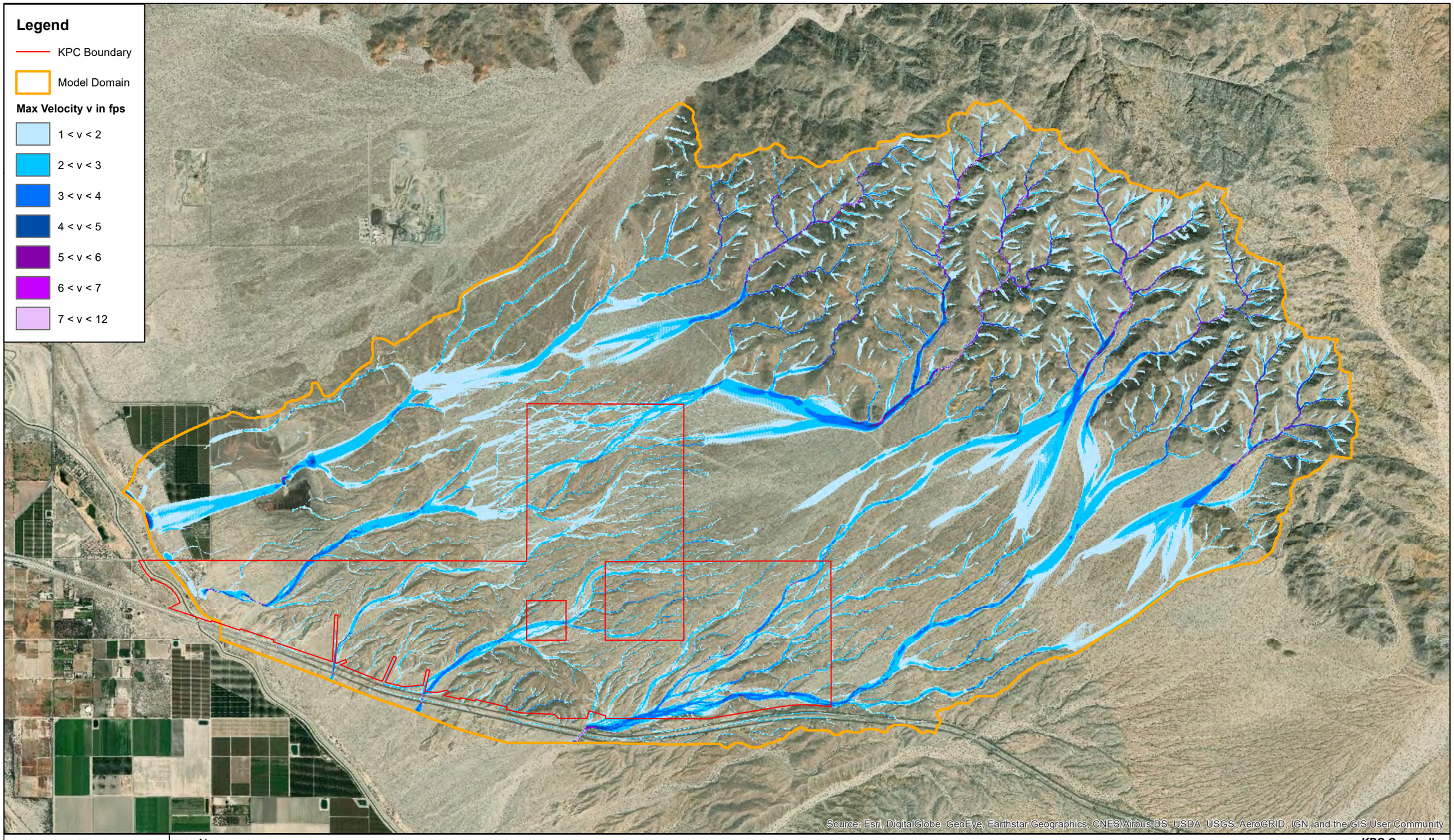
N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Flood Depth
Existing Condition - 10 Year

Exhibit 5



Consulting

N

0 700 1,400 2,800 Feet

The KPC Group

KPC Coachella
Maximum Velocity
Existing Condition - 10 Year

Exhibit 6

Figure 4-1. Baseline watershed conditions 1-percent annual chance maximum flood depths

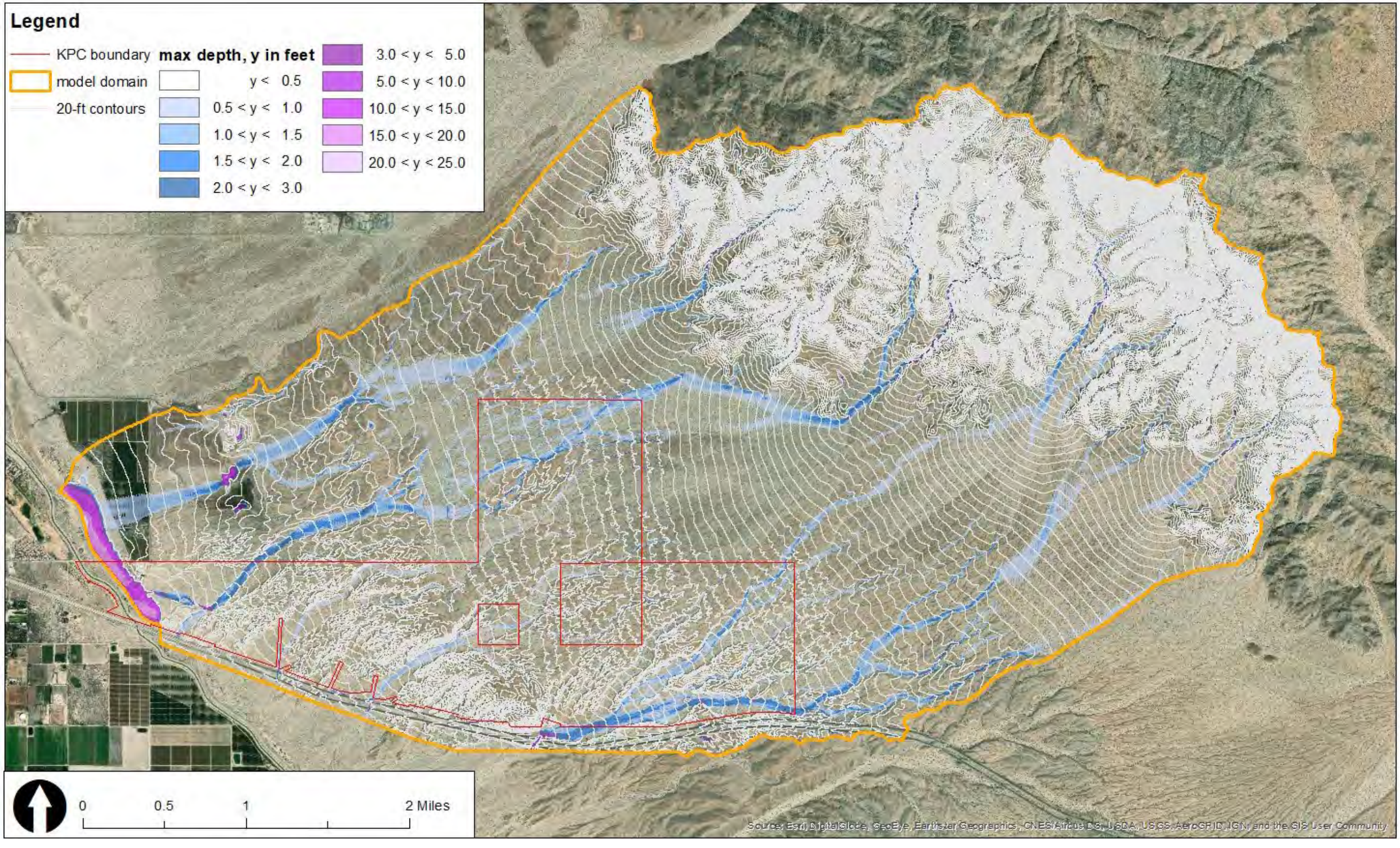


Figure 4-2. Baseline watershed conditions 1-percent annual chance maximum flood velocities

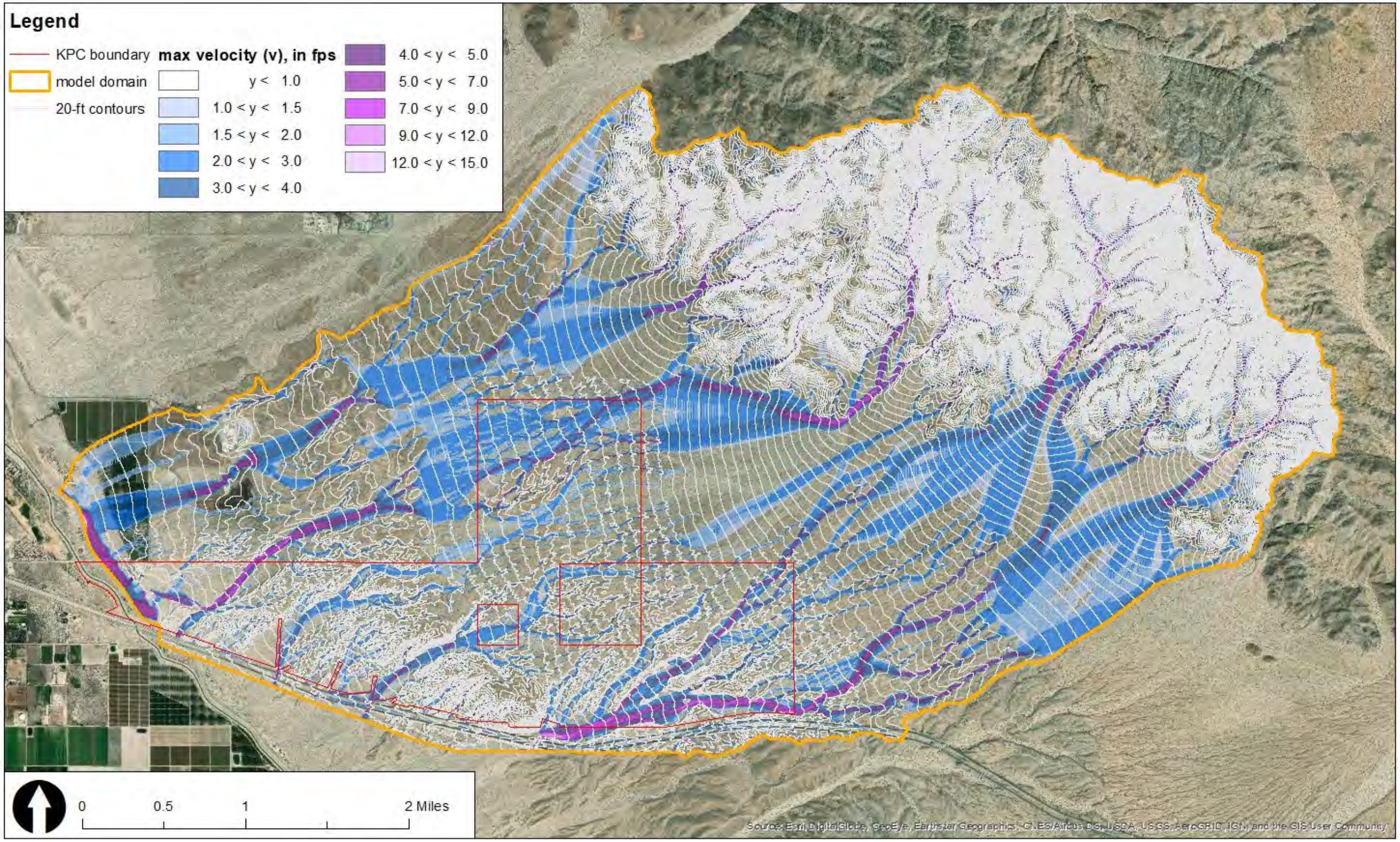
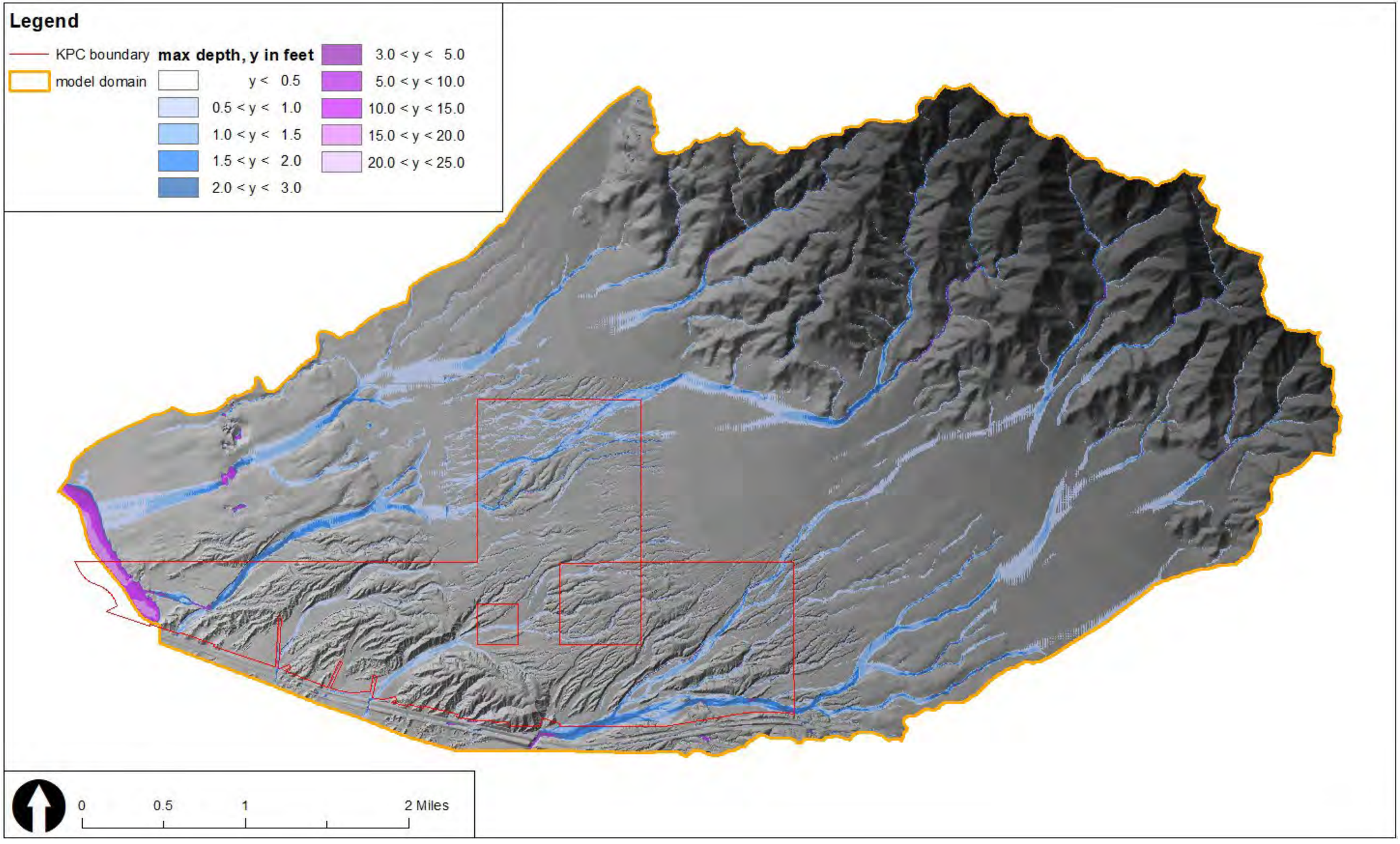


Figure 4-3. Baseline watershed conditions 1-percent annual chance maximum flood depths on relief



APPENDIX C

PLANT SPECIES OBSERVED AND WETLAND INDICATOR STATUS WITHIN PROJECT SURVEY AREA

Appendix C – Plant Species Observed and Wetland Indicator Status within Project Survey Area

KPC Coachella Project Jurisdictional Delineation

Family	Scientific Name	Common Name	National Wetland Plant List Indicator Status
Amaranthaceae	*Tidestromia suffruticosa* var. *oblongifolia*	Salton Sea honeysweet	*NL*
Apocynaceae	*Asclepias subulata*	rush milkweed	*NL*
Apocynaceae	*Funastrum hirtellum*	trailing townula	*NL*
Arecaceae	*Phoenix dactylifera**	edible date palm	*NL*
Asteraceae	*Ambrosia dumosa*	white bur-sage	*NL*
Asteraceae	*Ambrosia salsola* var. *salsola*	cheesebush	*NL*
Asteraceae	*Bebbia juncea* var. *aspera*	rush sweetbush	*NL*
Asteraceae	*Chaenactis carphoclinia* var. *carphoclinia*	pebble pincushion	*NL*
Asteraceae	*Encelia farinosa*	brittlebush	*NL*
Asteraceae	*Geraea canescens*	desert sunflower	*NL*
Asteraceae	*Isocoma acradenia* var. *bracteosa*	bracted alkali goldenbush	*FACU*
Asteraceae	*Lactuca serriola**	prickly lettuce	*FACU*
Asteraceae	*Monoptilon bellioides*	Mohave Desert star	*NL*
Asteraceae	*Palafoxia arida* var. *arida*	desert Spanish-Needle	*NL*
Asteraceae	*Peucephyllum schottii*	pigmy-cedar	*NL*
Boraginaceae	*Cryptantha barbigera*	bearded cryptantha	*NL*
Boraginaceae	*Cryptantha maritima*	white-hair cryptantha	*NL*
Brassicaceae	*Brassica tournefortii**	Sahara mustard	*NL*
Brassicaceae	*Lepidium lasiocarpum* ssp. *lasiocarpum*	sand peppergrass	*NL*
Brassicaceae	*Sisymbrium irio**	London rocket	*NL*
Cactaceae	*Cylindropuntia bigelovii*	teddy-bear cholla	*NL*
Cactaceae	*Cylindropuntia ramosissima*	diamond cholla	*NL*
Cactaceae	*Ferocactus cylindraceus*	California barrel cactus	*NL*
Cactaceae	*Opuntia basilaris* var. *basilaris*	beavertail cactus	*NL*
Caryophyllaceae	*Achyronychia cooperi*	onyx flower	*NL*
Chenopodiaceae	*Atriplex canescens*	four-wing saltbush	*NL*
Chenopodiaceae	*Atriplex hymenelytra*	desert-holly	*NL*
Chenopodiaceae	*Atriplex polycarpa*	many-fruit saltbush	*NL*
Chenopodiaceae	*Chenopodium murale**	nettle-leaf goosefoot	*FACU*

Cleomaceae	*Peritoma arborea* var. *angustata*	desert bladderpod	*NL*
Cucurbitaceae	*Brandegea bigelovii*	desert star vine	*NL*
Ehretiaceae	*Tiquilia plicata*	plicate tiquilia	*NL*
Euphorbiaceae	*Croton californicus*	California croton	*NL*
Euphorbiaceae	*Ditaxis lanceolata*	desert silverbush	*NL*
Euphorbiaceae	*Euphorbia peplus**	petty spurge	*NL*
Fabaceae	*Hoffmannseggia microphylla*	desert bird-of-paradise	*NL*
Fabaceae	*Lupinus concinnus*	bajada lupine	*NL*
Fabaceae	*Parkinsonia florida*	blue palo verde	*NL*
Fabaceae	*Prosopis glandulosa* var. *glandulosa*	mesquite	*FACU*
Fabaceae	*Psorothamnus arborescens*	California dalea	*FACU*
Fabaceae	*Psorothamnus emoryi* var. *emoryi*	white dalea	*NL*
Fabaceae	*Psorothamnus schottii*	indigo bush	*NL*
Fabaceae	*Psorothamnus spinosus*	smoke tree	*NL*
Fabaceae	*Senegalia greggii*	catclaw acacia	*FACU*
Fouquieriaceae	*Fouquieria splendens* ssp. *splendens*	ocotillo	*NL*
Hydrophyllaceae	*Emmenanthe penduliflora* var. *penduliflora*	whispering bells	*NL*
Hydrophyllaceae	*Phacelia crenulata*	notch-leaf phacelia	*NL*
Krameriaceae	*Krameria bicolor*	white rhatany	*NL*
Lamiaceae	*Condea emoryi*	desert-lavender	*NL*
Lamiaceae	*Salvia columbariae*	chia	*NL*
Loasaceae	*Mentzelia involucrata*	sand blazing star	*NL*
Loasaceae	*Petalonyx thurberi* ssp. *thurberi*	Thurber's sandpaper plant	*NL*
Malvaceae	*Eremalche rotundifolia*	desert five-spot	*NL*
Malvaceae	*Hibiscus denudatus*	rock hibiscus	*NL*
Namaceae	*Nama demissa*	purple mat	*NL*
Nyctaginaceae	*Abronia villosa* var. *villosa*	desert sand-verbena	*NL*
Nyctaginaceae	*Allionia incarnata* var. *villosa*	hairy trailing windmills	*NL*
Nyctaginaceae	*Mirabilis laevis* var. *villosa*	hairy wishbone plant	*NL*
Onagraceae	*Chylismia brevipes*	yellow cups	*NL*
Onagraceae	*Chylismia claviformis*	clavate fruited primrose	*NL*
Onagraceae	*Eremothera boothii*	Booth's sun cup	*NL*

Onagraceae	*Eulobus californicus*	false-mustard	*NL*
Papaveraceae	*Eschscholzia mintifolra*	pygmy gold-poppy	*NL*
Plantaginaceae	*Plantago ovata var. fastigiata*	woolly plantain	*FACU*
Poaceae	*Aristida adscensionis*	six-weeks three-awn	*NL*
Poaceae	*Phalaris minor**	little-seed canary grass	*NL*
Poaceae	*Schismus barbatus**	Mediterranean schismus	*NL*
Polemoniaceae	*Aliciella latifolia ssp. latifolia*	broad-leaf gilia	*NL*
Polemoniaceae	*Eriastrum eremicum ssp. eremicum*	desert woolly-star	*NL*
Polemoniaceae	*Langloisia setosissima ssp. setosissima*	bristly langloisia	*NL*
Polemoniaceae	*Loeseliastrum schottii*	Schott's calico	*NL*
Polygonaceae	*Chorizanthe brevicornu var. brevicornu*	brittle spineflower	*NL*
Polygonaceae	*Chorizanthe rigida*	rigid spineflower	*NL*
Polygonaceae	*Eriogonum inflatum*	desert trumpet	*NL*
Polygonaceae	*Eriogonum thomasii*	Thomas's buckwheat	*NL*
Resedaceae	*Oligomeris linifolia*	narrow-leaf oligomeris	*NL*
Solanaceae	*Datura wrightii*	western jimson weed	*UPL*
Solanaceae	*Nicotiana quadrivalvis*	Indian tobacco	*FACU*
Solanaceae	*Physalis crassifolia*	greene's ground-cherry	*NL*
Tamaricaceae	*Tamarix ramosissima*[*+]	saltcedar	*NL*
Viscaceae	*Phoradendron californicum*	desert mistletoe	*NL*
Zygophyllaceae	*Fagonia laevis*	California fagonia	*NL*
Zygophyllaceae	*Larrea tridentata*	creosote bush	*NL*

**: Non-native species*
[+]: Saltcedar is understood to hybridize and function similar to five-stamen tamarisk (Tamarix chinensis; FAC); therefore, saltcedar was treated as a FAC species in determining hydrophytic vegetation indicators.
FAC: Facultative
FACU: Facultative Upland
NL: Not Listed
UPL: Upland

APPENDIX D

NRCS WETS TABLE

Appendix D. NRCS WETS Table

KPC Coachella Project Jurisdictional Delineation

WETS Station: INDIO FIRE STATION, CA

Requested years: 1988 - 2019

Month	Avg Max Temp (°F)	Avg Min Temp (°F)	Avg Mean Temp (°F)	Avg Precip (inch[es])	30% chance precip less than (inch[es])	30% chance precip more than (inch[es])	Avg number days precip 0.10 inch or more	Avg Snowfall (inch[es])
Jan	71.7	45.4	58.6	0.67	0.00	0.56	2	-
Feb	75.6	49.2	62.4	0.36	0.00	0.34	1	-
Mar	82.1	55.9	69.0	0.18	0.00	0.12	0	-
Apr	87.6	61.4	74.5	0.04	0.00	0.00	0	-
May	94.2	67.6	80.9	0.02	0.00	0.00	0	-
Jun	102.9	74.7	88.8	0.01	0.00	0.00	0	0.0
Jul	106.9	81.0	94.0	0.05	0.00	0.04	0	0.0
Aug	106.5	81.3	93.9	0.16	0.00	0.00	0	-
Sep	101.9	75.0	88.4	0.11	0.00	0.14	0	-
Oct	92.0	64.2	78.1	0.11	0.00	0.08	0	-
Nov	79.1	51.9	65.5	0.10	0.00	0.12	0	-
Dec	70.5	44.2	57.3	0.38	0.00	0.28	1	0.0
Annual	-	-	-	-	-	-	-	-
Average	89.3	62.7	76.0	-	-	-	-	-
Total	-	-	-	2.18	-	-	5	-

GROWING SEASON DATES

Years with missing data:	24 deg = 15	28 deg = 16	32 deg = 17
Years with no occurrence:	24 deg = 17	28 deg = 14	32 deg = 10
Data years used:	24 deg = 17	28 deg = 16	32 deg = 15
Probability	24 F or higher	28 F or higher	32 F or higher
50 percent*	Insufficient data	Insufficient data	Insufficient data
70 percent*	Insufficient data	Insufficient data	Insufficient data

*Percentage chance of the growing season occurring at the Beginning and Ending dates.

APPENDIX E

ARID WEST WETLAND DELINEATION DATA FORMS AND EPHEMERAL AND INTERMITTENT STREAMS ORDINARY HIGH WATER MARK (OHWM) DATASHEETS

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: KPC Coachella City/County: Coachella Valley/Riverside Sampling Date: 5/08/2019

Applicant/Owner: JDP Development State: CA Sampling Point: 1

Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino Section, Township, Range: T 5S, R 8E, S 24-28; T 5S, R 9E, S 30

Landform (hillslope, terrace, etc.): disturbed depression Local relief (concave, convex, none): concave Slope (%): 0-1

Subregion (LRR): LRR-D Lat: 33.710345 Long: -116.146570 Datum: WGS 1984

Soil Map Unit Name: Borrow pits NWI classification: None

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation ✔, Soil ✔, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks:

Highly disturbed depressional area that sits at base of levee. Flows from surrounding ephemeral washes collect and sit in this general area, based on review of aerial photos.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. N/A			
2.			
3.			
4.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
	= Total Cover		
Herb Stratum (Plot size: 10')			
1. Chenopodium murale	20	Y	FACU
2. Parkinsonia florida	15	Y	NL
3. Sisymbrium irio	10	Y	NL
4.			
5.			
6.			
7.			
8.			
	45 = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. N/A			
2.			
	= Total Cover		

% Bare Ground in Herb Stratum 55 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0% (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:	
OBL species	x 1 =	
FACW species	x 2 =	
FAC species	x 3 =	
FACU species 20	x 4 =	80
UPL species 25	x 5 =	125
Column Totals: 45 (A)		205 (B)

Prevalence Index = B/A = 4.6

Hydrophytic Vegetation Indicators:

___ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes _____ No ✔

Remarks:

No hydrophytic vegetation present. Evidence of tire tracks/disturbance.

SOIL

Sampling Point: 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10YR 3/2	100	N/A				clay loam	

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✔

Remarks:

Uniform, no redox features present. Extremely dry soils; used spray bottle to moisten soils and record soil color.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ✔ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ___ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): ___

Water Table Present? Yes ___ No ✔ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): ___

Wetland Hydrology Present? Yes ✔ No ___

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Shallow soil surface cracks in highly disturbed depressional area that sits at base of levee. No secondary indicators. Area does not appear to pond enough to create wetland conditions.

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: KPC Coachella City/County: Coachella Valley/Riverside Sampling Date: 5/10/2019

Applicant/Owner: JDP Development State: CA Sampling Point: 2

Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino Section, Township, Range: T 5S, R 8E, S 24-28; T 5S, R 9E, S 30

Landform (hillslope, terrace, etc.): disturbed drainage Local relief (concave, convex, none): concave Slope (%): 5

Subregion (LRR): LRR-D Lat: 33.712861 Long: -116.148010 Datum: WGS 1984

Soil Map Unit Name: Borrow pits NWI classification: shrub wetland

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation ✔, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks:

Tamarix sp. dominated drainage; hydrology appears to be from an upstream stormdrain outfall which appeared damaged.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: 10')	Absolute % Cover	Dominant Species?	Indicator Status
1. Tamarix sp.	20	Y	FAC
2.			
3.			
4.			
	20 = Total Cover		
Sapling/Shrub Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
	_____ = Total Cover		
Herb Stratum (Plot size: 10')			
1. N/A			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
	_____ = Total Cover		
Woody Vine Stratum (Plot size: 10')			
1. N/A			
2.			
	_____ = Total Cover		

% Bare Ground in Herb Stratum 15 % Cover of Biotic Crust N/A

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 1 (A)

Total Number of Dominant Species Across All Strata: 1 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100 (A/B)

Prevalence Index worksheet:

Total % Cover of:	Multiply by:
OBL species _____	x 1 = _____
FACW species _____	x 2 = _____
FAC species _____	x 3 = _____
FACU species _____	x 4 = _____
UPL species _____	x 5 = _____
Column Totals: _____ (A)	_____ (B)

Prevalence Index = B/A = _____

Hydrophytic Vegetation Indicators:

✔ Dominance Test is >50%

___ Prevalence Index is ≤3.0[1]

___ Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Hydrophytic Vegetation Present? Yes ✔ No _____

Remarks:

Tamarix sp. likely Tamarix ramosissima (NL) but functioning similar to Tamarix chinensis (FAC). Dead Tamarix sp. drift abundant. Whole sample plot composed of dead/diedback Tamarix sp. not included in absolute cover. Cryptantha sp. present but not present at 5% or more.

SOIL

Sampling Point: 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0-20	10 YR 4/2	100	N/A				LS	loamy sand

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, CS=Covered or Coated Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators: (Applicable to all LRRs, unless otherwise noted.)

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5) (**LRR C**)
- ___ 1 cm Muck (A9) (**LRR D**)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Loamy Mucky Mineral (F1)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)
- ___ Vernal Pools (F9)

Indicators for Problematic Hydric Soils[3]:

- ___ 1 cm Muck (A9) (**LRR C**)
- ___ 2 cm Muck (A10) (**LRR B**)
- ___ Reduced Vertic (F18)
- ___ Red Parent Material (TF2)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if present):

Type: N/A

Depth (inches): ___

Hydric Soil Present? Yes ___ No ✔

Remarks:

Soil uniform throughout. No indicators of hydric soil.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1) (**Nonriverine**)
- ___ Sediment Deposits (B2) (**Nonriverine**)
- ___ Drift Deposits (B3) (**Nonriverine**)
- ___ Surface Soil Cracks (B6)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Water-Stained Leaves (B9)
- ___ Salt Crust (B11)
- ___ Biotic Crust (B12)
- ___ Aquatic Invertebrates (B13)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres along Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (2 or more required)

- ___ Water Marks (B1) (**Riverine**)
- ___ Sediment Deposits (B2) (**Riverine**)
- ✔ Drift Deposits (B3) (**Riverine**)
- ___ Drainage Patterns (B10)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Visible on Aerial Imagery (C9)
- ___ Shallow Aquitard (D3)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present? Yes ___ No ✔ Depth (inches): ___

Water Table Present? Yes ___ No ✔ Depth (inches): ___

Saturation Present? (includes capillary fringe) Yes ___ No ✔ Depth (inches): ___

Wetland Hydrology Present? Yes ___ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Heavy presence of dead Tamarix sp. drift. Only 1 secondary hydrology indicator observed.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 1
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/07/2019
Town: Coachella Valley
Photo begin file#:

Time: 1258
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

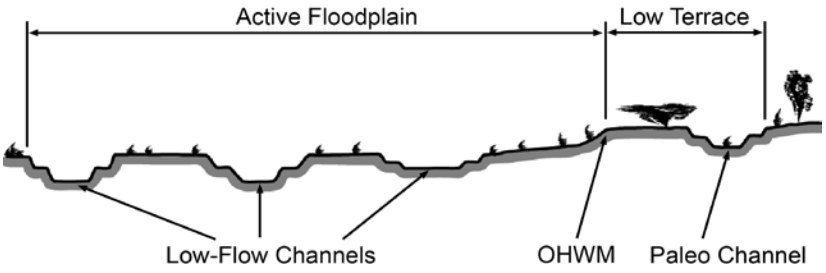
Brief site description:
Receives surface flows from higher elevation, foothills

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

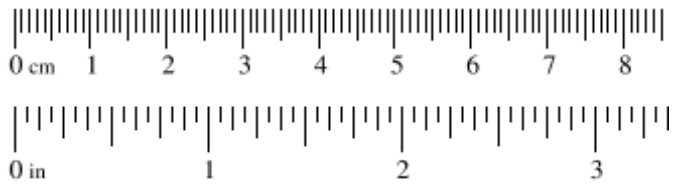


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

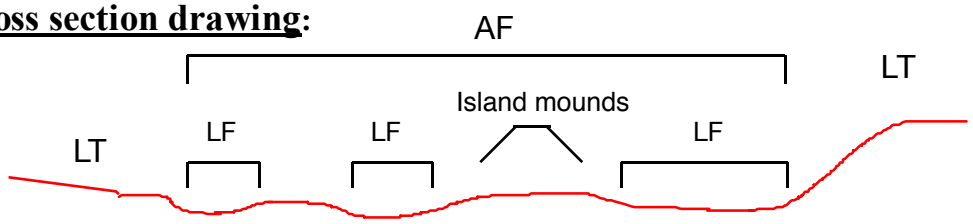
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 1 **Date:** 5/07/2019 **Time:** 1258

Cross section drawing:



OHWM

GPS point: 33.702525, -116.121639

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:
Several low-flow channels ranging from 2 to 5 feet within 20-foot wide active floodplain. Small islands interspersed but seem to have flows present within.

Floodplain unit:

- [x] Low-Flow Channel
- [ ] Active Floodplain
- [ ] Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: medium sand

Total veg cover: 0 % Tree: 0 % Shrub: 0 % Herb: 0 %

Community successional stage:

- [x] NA
- [ ] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [ ] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [x] Other: change in sediment texture
- [ ] Other: _____
- [ ] Other: _____

Comments:
Low-flow channels range from 2 to 5 feet and dispersed throughout.

Project ID: KPC Coachella **Cross section ID:** OHWM 1 **Date:** 5/07/2019 **Time:** 1258

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: coarse sand

Total veg cover: 35 % Tree: 0 % Shrub: 25 % Herb: 10 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

20-foot wide active floodplain; coarse sand with pebbles and cobbles interspersed. Vegetation dominated by Chaenactis carphoclinia var. carphoclinia, Ambrosia dumosa, and Plantago ovata var. fastigiata. Island mounds present within active floodplain.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Just above OHWM

Characteristics of the floodplain unit:

Average sediment texture: pebble

Total veg cover: 50 % Tree: 0 % Shrub: 10 % Herb: 40 %

Community successional stage:

- ☐ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Very compacted soil; pebble with larger rocks and cobbles. Vegetation dominated by Larrea tridentata.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 2
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/08/2019
Town: Coachella Valley
Photo begin file#:

Time: 0837
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

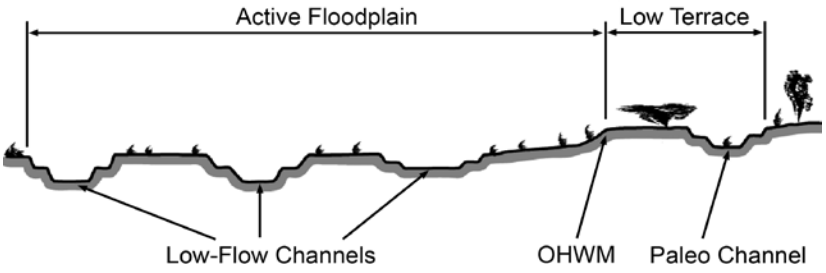
Brief site description:
Receives surface flows from higher elevation, foothills

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
  - ☐ History of recent effective discharges
  - ☐ Results of flood frequency analysis
  - ☐ Most recent shift-adjusted rating
  - ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

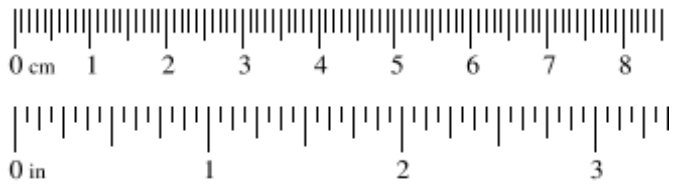


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

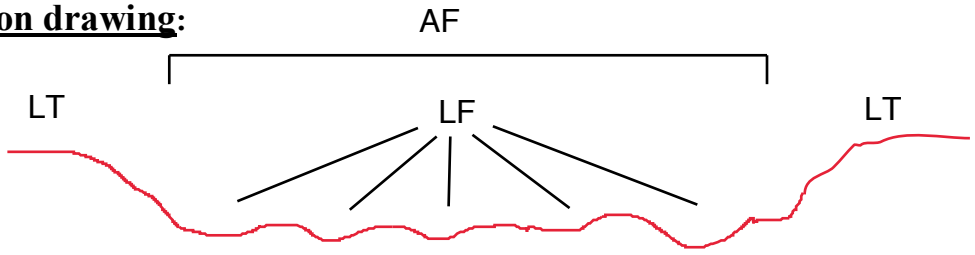
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 2 **Date:** 5/08/2019 **Time:** 0837

Cross section drawing:



OHWM

GPS point: 33.711963, -116.143138

Indicators:

- ☑ Change in average sediment texture
- ☑ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
Large system with range of low-flow channels from 2 to 6 feet within 183-foot active floodplain.

Floodplain unit:

☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: coarse sand

Total veg cover: 2 % Tree: 0 % Shrub: 0 % Herb: 2 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☑ Other: undulations in sand
- ☐ Other: _____

Comments:
Low-flow channels range from 2 to 6 feet. Vegetation dominated by Chaenactis carphclinia var. carphoclinia and Plantago ovata var. fastigiata.

Project ID: KPC Coachella **Cross section ID:** OHWM 2 **Date:** 5/08/2019 **Time:** 0837

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: pebble

Total veg cover: 40 % Tree: 5 % Shrub: 0 % Herb: 35 %

Community successional stage:

- ☐ NA
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☑ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

183-foot wide active floodplain; pebble mixed with cobbles and fine silt. Vegetation dominated by Parkinsonia florida.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Just above OHWM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 60 % Tree: 0 % Shrub: 2 % Herb: 58 %

Community successional stage:

- ☐ NA
- ☑ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Vegetation dominated by Chaenactis carphoclinia var. carphoclinia and Psorothamnus spinosus.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 3
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/08/2019
Town: Coachella Valley
Photo begin file#:

Time: 1145
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

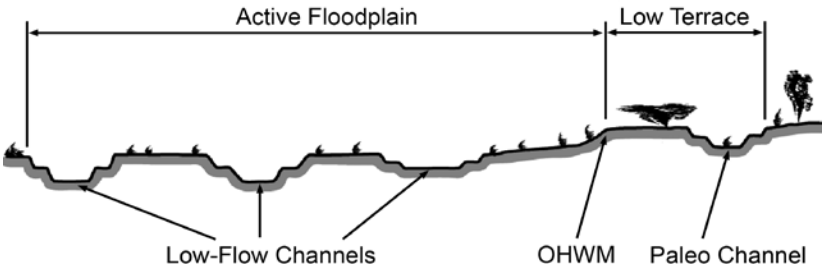
Brief site description:
Receives surface flows from higher elevation.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

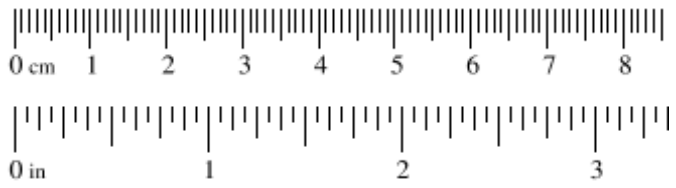


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

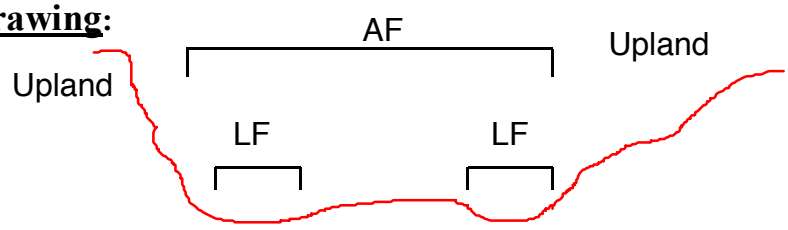
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 3 **Date:** 5/08/2019 **Time:** 1145

Cross section drawing:



OHWM

GPS point: 33.714063, -116.105813

Indicators:

- [x] Change in average sediment texture
- [x] Change in vegetation species
- [x] Change in vegetation cover
- [x] Break in bank slope
- [ ] Other: _____
- [ ] Other: _____

Comments:
Two braided 2-foot wide low-flow channels within 8-foot wide active floodplain. Steep adjacent slopes.

Floodplain unit:

- [x] Low-Flow Channel
- [ ] Active Floodplain
- [ ] Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 4 % Tree: 0 % Shrub: 0 % Herb: 4 %

Community successional stage:

- [ ] NA
- [x] Early (herbaceous & seedlings)
- [ ] Mid (herbaceous, shrubs, saplings)
- [ ] Late (herbaceous, shrubs, mature trees)

Indicators:

- [ ] Mudcracks
- [ ] Ripples
- [ ] Drift and/or debris
- [ ] Presence of bed and bank
- [ ] Benches
- [ ] Soil development
- [ ] Surface relief
- [x] Other: change in sediment texture
- [ ] Other: _____
- [ ] Other: _____

Comments:
Two braided 2-foot wide low-flow channels; granules with boulders interspersed. Vegetation dominated by Plantago ovata var. fastigiata.

Project ID: KPC Coachella **Cross section ID:** OHWM 3 **Date:** 5/08/2019 **Time:** 1145

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: cobble

Total veg cover: 45 % Tree: 0 % Shrub: 40 % Herb: 5 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☑ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

8-foot wide active floodplain; cobbles with granules interspersed. Vegetation dominated by Bebbia juncea var. aspera.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Above OHWM

Characteristics of the floodplain unit:

Average sediment texture: boulder

Total veg cover: 35 % Tree: 0 % Shrub: 2 % Herb: 33 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

Low terrace defined as upland; boulders with cobbles and pebbles present. Vegetation dominated by Plantago ovata var. fastigiata and Larrea tridentata.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 4
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/08/2019
Town: Coachella Valley
Photo begin file#:

Time: 1233
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

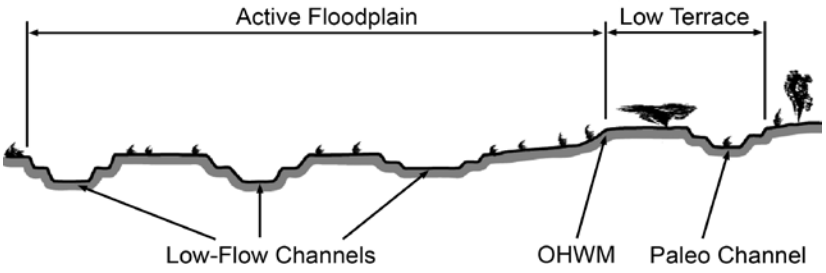
Brief site description:
Receives surface flows from higher elevation.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

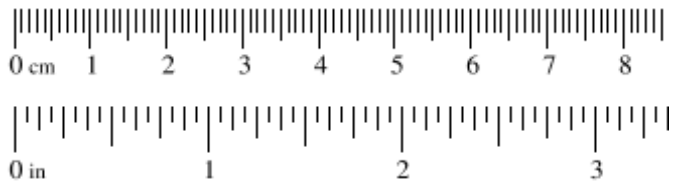


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

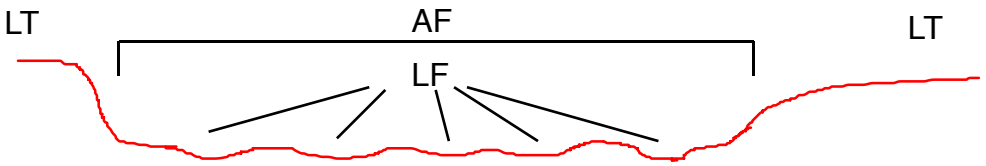
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 4 **Date:** 5/08/2019 **Time:** 1233

Cross section drawing:



OHWM

GPS point: 33.711963, -116.143138

Indicators:

- ☑ Change in average sediment texture
- ☑ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
Large system with range of low-flow channels from 2 to 6 feet within 100-foot active floodplain.

Floodplain unit:

☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: coarse sand

Total veg cover: 2 % Tree: 0 % Shrub: 0 % Herb: 2 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☑ Other: undulations in sand
- ☐ Other: _____

Comments:
Low-flow channels range from 2 to 6 feet. Vegetation dominated by Chaenactis carphoclinia var. carphoclinia and Plantago ovata var. fastigiata.

Project ID: KPC Coachella **Cross section ID:** OHWM 4 **Date:** 5/08/2019 **Time:** 1233

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: pebble

Total veg cover: 50 % Tree: 5 % Shrub: 30 % Herb: 15 %

Community successional stage:

- ☐ NA
- ☐ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☑ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☑ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:

100-foot wide active floodplain; pebble mixed with cobbles and fine silt. Vegetation dominated by Parkinsonia florida, Bebbia juncea, Ambrosia salsola var. salsola, Chaenactis carphoclinia var. carphoclinia, and Plantago ovata var. fastigiata.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Above OWHM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 60 % Tree: 0 % Shrub: 5 % Herb: 55 %

Community successional stage:

- ☐ NA
- ☑ Mid (herbaceous, shrubs, saplings)
- ☑ Early (herbaceous & seedlings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☑ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Vegetation dominated by Chaenactis carphoclinia var. carphoclinia and Psorothamnus spinosus.

Arid West Ephemeral and Intermittent Streams OHWM Datasheet

Project: KPC Coachella
Project Number:
Stream: OHWM 5
Investigator(s): Sarah Krejca, Shanti Santulli, Emily Trevino

Date: 5/10/2019
Town: Coachella Valley
Photo begin file#:

Time: 0745
State: CA
Photo end file#:

Y ☑ / N ☐ Do normal circumstances exist on the site?

Y ☐ / N ☑ Is the site significantly disturbed?

Location Details:
Foothills of Little San Bernardino Mountains

Projection:
Datum: WGS 1984
Coordinates: See below

Potential anthropogenic influences on the channel system:
Flows on site are confined or redirected by several manmade berms throughout site.

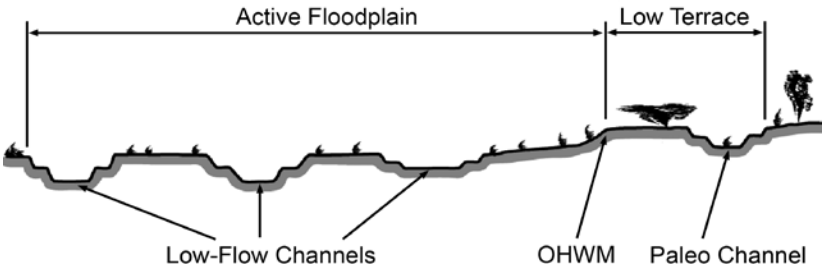
Brief site description:
Receives surface flows from higher elevation.

Checklist of resources (if available):

- ☑ Aerial photography
  Dates:
- ☑ Topographic maps
- ☐ Geologic maps
- ☑ Vegetation maps
- ☑ Soils maps
- ☐ Rainfall/precipitation maps
- ☐ Existing delineation(s) for site
- ☑ Global positioning system (GPS)
- ☑ Other studies

- ☐ Stream gage data
  Gage number:
  Period of record:
- ☐ History of recent effective discharges
- ☐ Results of flood frequency analysis
- ☐ Most recent shift-adjusted rating
- ☐ Gage heights for 2-, 5-, 10-, and 25-year events and the most recent event exceeding a 5-year event

Hydrogeomorphic Floodplain Units

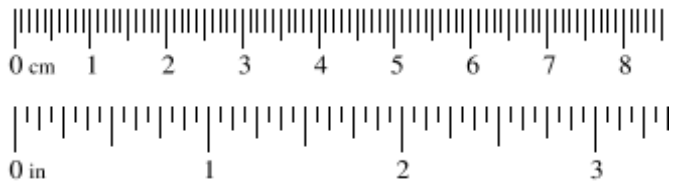


Procedure for identifying and characterizing the floodplain units to assist in identifying the OHWM:

1. Walk the channel and floodplain within the study area to get an impression of the geomorphology and vegetation present at the site.
2. Select a representative cross section across the channel. Draw the cross section and label the floodplain units.
3. Determine a point on the cross section that is characteristic of one of the hydrogeomorphic floodplain units.
   a) Record the floodplain unit and GPS position.
   b) Describe the sediment texture (using the Wentworth class size) and the vegetation characteristics of the floodplain unit.
   c) Identify any indicators present at the location.
4. Repeat for other points in different hydrogeomorphic floodplain units across the cross section.
5. Identify the OHWM and record the indicators. Record the OHWM position via:
   - ☑ Mapping on aerial photograph
   - ☐ Digitized on computer
   - ☑ GPS
   - ☐ Other:

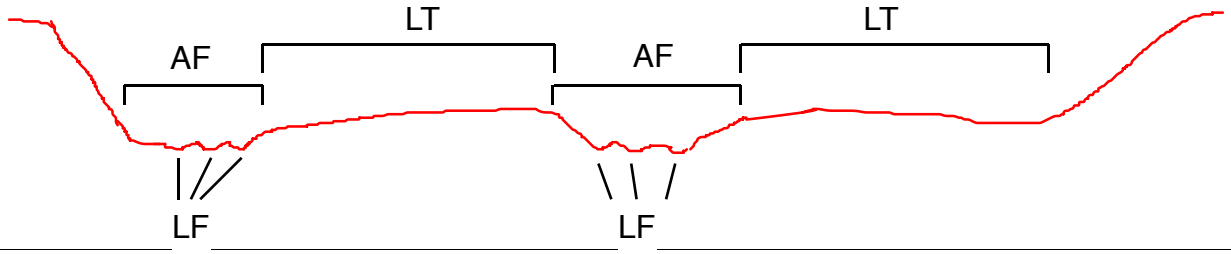
Wentworth Size Classes

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



Project ID: KPC Coachella **Cross section ID:** OHWM 5 **Date:** 5/10/2019 **Time:** 0745

Cross section drawing:



OHWM

GPS point: 33.708038, -116.138406

Indicators:

- ☑ Change in average sediment texture
- ☑ Change in vegetation species
- ☑ Change in vegetation cover
- ☑ Break in bank slope
- ☐ Other: _____
- ☐ Other: _____

Comments:
2-foot wide braided low-flow channels within 15-foot wide active floodplains.

Floodplain unit: ☑ Low-Flow Channel ☐ Active Floodplain ☐ Low Terrace

GPS point: Just below OHWM

Characteristics of the floodplain unit:

Average sediment texture: very coarse sand

Total veg cover: 0 % Tree: 0 % Shrub: 0 % Herb: 0 %

Community successional stage:

- ☑ NA
- ☐ Early (herbaceous & seedlings)
- ☐ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☑ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: change in sediment texture
- ☐ Other: _____
- ☐ Other: _____

Comments:
2-foot wide braided low-flow channels; finer sediment than active floodplain.

Project ID: KPC Coachella **Cross section ID:** OHWM 5 **Date:** 5/10/2019 **Time:** 0745

Floodplain unit: ☐ Low-Flow Channel ☑ Active Floodplain ☐ Low Terrace

GPS point: At OHWM

Characteristics of the floodplain unit:

Average sediment texture: granule

Total veg cover: 10 % Tree: 0 % Shrub: 7 % Herb: 3 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☑ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☐ Surface relief
- ☑ Other: coarser sediment than LT
- ☐ Other: _____
- ☐ Other: _____

Comments:

15-foot wide active floodplains. Vegetation dominated by Plantago ovata var. fastigiata and Croton californicus.

Floodplain unit: ☐ Low-Flow Channel ☐ Active Floodplain ☑ Low Terrace

GPS point: Just above OHWM

Characteristics of the floodplain unit:

Average sediment texture: medium sand

Total veg cover: 50 % Tree: 0 % Shrub: 49 % Herb: 1 %

Community successional stage:

- ☐ NA
- ☑ Early (herbaceous & seedlings)
- ☑ Mid (herbaceous, shrubs, saplings)
- ☐ Late (herbaceous, shrubs, mature trees)

Indicators:

- ☐ Mudcracks
- ☐ Ripples
- ☐ Drift and/or debris
- ☐ Presence of bed and bank
- ☐ Benches
- ☐ Soil development
- ☑ Surface relief
- ☐ Other: _____
- ☐ Other: _____
- ☐ Other: _____

Comments:

Sheet flow area that does not appear to have active flows. Vegetation dominated by Cryptantha sp., Plantago ovata var. fastigiata, and Chaenactis carphoclinia var. carphoclinia.

APPENDIX F

RECENT AND HISTORIC AERIAL IMAGERY ANALYSIS

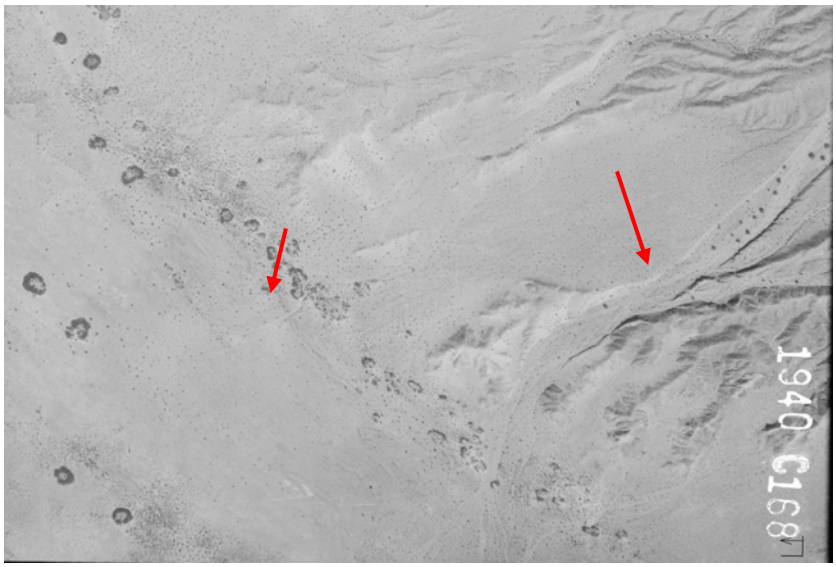
Appendix F – Recent and Historic Aerial Imagery Analysis

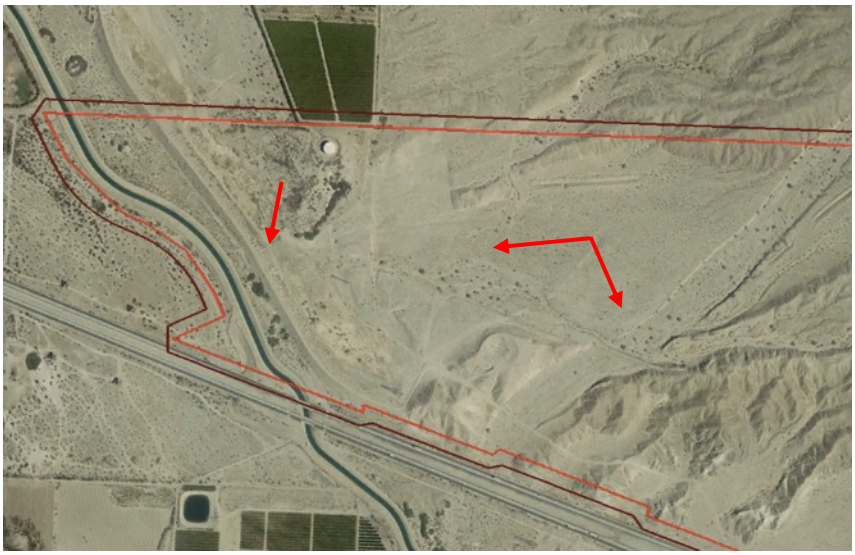
KPC Coachella Jurisdictional Delineation

Sources: Google Earth and University of California-Santa Barbara

The following is a review of recent and historic aerial images of select portions of the project area. RBC reviewed the images to gain a better understanding of the current site conditions observed during the May 2019 jurisdictional delineation site visit (JD site visit).

Western Corner – Area shows Feature 1 (F1) and the Disturbed Ephemeral Drainage Area. As shown through the aerials below, the area was heavily manipulated between 1940 and 1953, during which the earthen berm was placed to divert F1 flows and the earthen levee was constructed, likely to obstruct flows from entering the newly constructed Coachella Canal. After 1953, the area remains relatively unchanged, apart from the addition of agriculture to the north, which likely contributed to flows into the Disturbed Ephemeral Drainage Area.

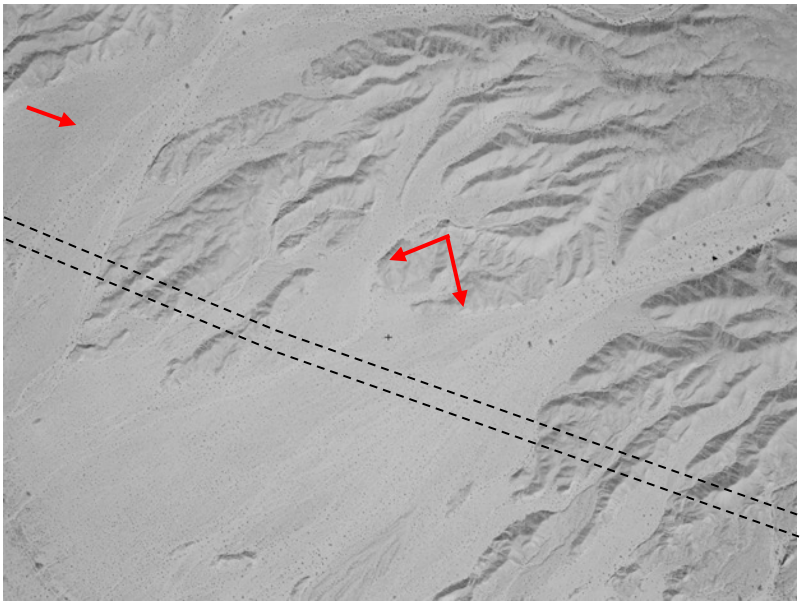
	1940 Aerial shows the Disturbed Ephemeral Drainage Area prior to the construction of the earthen levee, as well as an unobstructed F1.
	1953 Aerial shows area after the construction of the Coachella Canal and the adjacent earthen levee. The aerial also displays the first occurrence of the earthen berm obstructing F1 flows. The earthen berm and earthen levee are still present, observed during the JD site visit.



2018

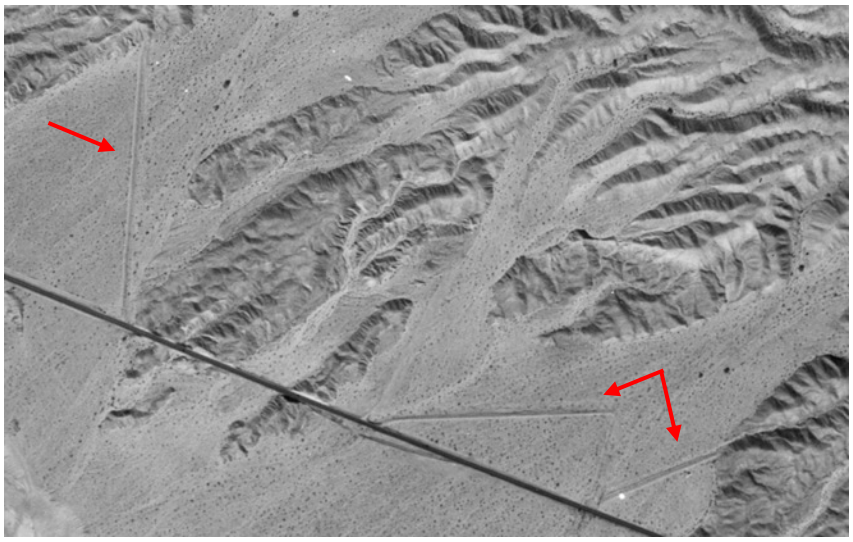
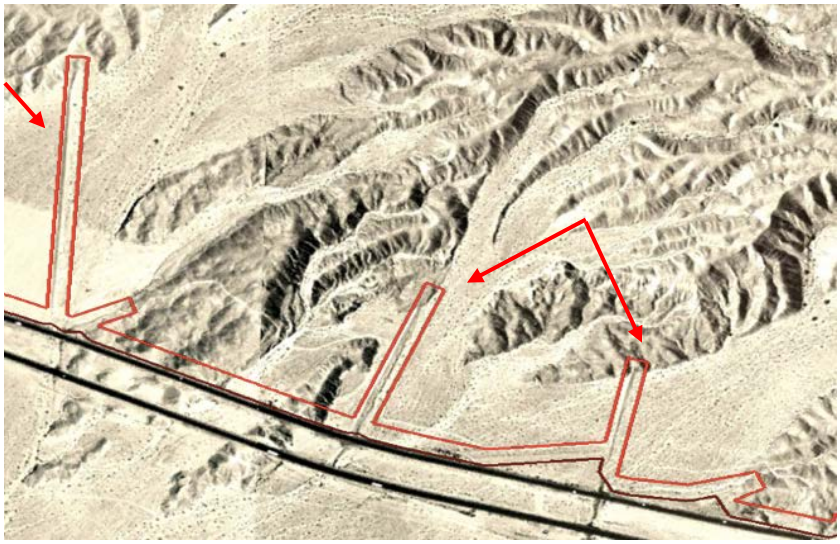
Aerial shows area remains relatively unchanged from 1953 aerial; the earthen levee and berm are still present. Upstream agriculture now contributes to flows entering the Disturbed Ephemeral Drainage Area. F1 diverted flows have marked the area west of the feature, as observed and mapped during the JD site visit.

Western Portion, Southern Boundary – Aerial shows the various earthen berms along the southern boundary of the project which runs parallel to Interstate 10 (I-10). As shown through the aerials below, this area was also heavily manipulated between 1940 and 1953, during which the various earthen berms were constructed although not in their current locations. The earthen berms appear in their present-day location on aerials in 2002 as seen in the 2018 aerial and during the JD site visit.



1940

Aerial shows the area prior to the construction of the earthen berms. Arrows and dashed lines indicate general area of the future berms and I-10, respectively, for reference.

	1953 Aerial shows first appearance of the earthen berms. The two easternmost berms were originally oriented towards the northeast, as opposed to their present-day locations, which are oriented to the north.
	2002 Aerial shows the earthen berms have been relocated to their present-day locations.
	2018 Aerial shows the earthen berms in the same locations they have been since 2002 and in the locations they were observed during the JD site visit.

APPENDIX G

GENERAL CHARACTERISTICS OF FEATURES OBSERVED

Appendix G – General Characteristics of Features Observed

KPC Coachella Project Jurisdictional Delineation

Table G-1. Observed Aquatic Resources within Project Survey Area

Feature Name	Width Range (Min-Max) (feet)	General Characteristics	Location (Lat, Long)
Coachella Canal	40	Concrete-lined canal running through western project area; continues off site to northwest and southeast	33.712633, -116.151001
Feature 1 (F1)	4-315	Large ephemeral watercourse with several secondary channels within area mapped overall as desert wash scrub/Sonoran creosote brush scrub; continues southwest until directed west by earthen berm into F1 – Disturbed Ephemeral Drainage Area	33.712184, -116.134043
Feature 1 (F1) – Disturbed Ephemeral Drainage Area	3-418	Disturbed drainage area; receives flows from F1 and bounded by earthen levee along western extent	33.712184, -116.134043
Feature 1 (F1) – Tamarisk Scrub	N/A	Small area of tamarisk scrub abutting F1 – Disturbed Ephemeral Drainage Area	33.712184, -116.134043
Feature 1 (F1) – Tamarisk Scrub/Ephemeral Drainage	7-144	Small, distinct area of tamarisk scrub abutting F1 – Disturbed Ephemeral Drainage Area; receives flows from storm drain outfall	33.712184, -116.134043
Feature 2 (F2)	4-218	Ephemeral watercourse with some unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; receives flows from off site; terminates on site	33.714861, -116.142743
Feature 3 (F3)	8-56	Small ephemeral watercourse with several unvegetated secondary channels in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues off site to southwest through culvert	33.707087, -116.138759
Feature 4 (F4)	5-1,650	Large ephemeral watercourse with numerous unvegetated secondary channels and numerous unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; covers majority of the northern “panhandle” area; originates off site, then continues southwest before flows diverted to south by earthen berm to direct flows through highway undercrossing	33.718604, -116.106239

Feature Name	Width Range (Min-Max) (feet)	General Characteristics	Location (Lat, Long)
Feature 5 (F5)	4-130	Ephemeral watercourse with three unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues off site to southwest through culvert	33.707413, -116.126579
Feature 6 (F6)	4-110	Ephemeral watercourse with portions of unvegetated channel in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continue southwest along eastern edge of earthen berm before continues off site through culvert	33.705788, -116.126407
Feature 7 (F7)	4-180	Ephemeral watercourse with several unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues southwest before flows likely travel southeast to culvert	33.705569, -116.125701
Feature 8 (F8)	4-540	Large ephemeral watercourse with numerous unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub;; originates off site, then continues southwest before flows diverted to south by earthen berm to direct flows through highway undercrossing	33.711449, -116.094034
Feature 9 (F9)	14-145	Ephemeral watercourse with one unvegetated secondary channel and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues southwest before flows likely travel southeast to culvert	33.702045, -116.118858
Feature 10 (10)	4-150	Ephemeral watercourse with unvegetated secondary channel and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote brush scrub; originates on site and continues southwest before flows likely travel southeast to culvert	33.703574, -116.114962
Feature 11 (F11)	6-12	Small ephemeral channel in area mapped overall as Sonoran creosote bush scrub; originates on site and briefly continues south before flows likely travel southeast to culvert	33.701773, -116.115920

Feature Name	Width Range (Min-Max) (feet)	General Characteristics	Location (Lat, Long)
Feature 12 (F12)	8-28	Small ephemeral watercourse with several unvegetated braids in area mapped overall as Sonoran creosote bush scrub; originates on site and continues off site to southwest through culvert	33.704402, -116.109675
Feature 13 (F13)	8-100	Small ephemeral watercourse with one unvegetated secondary channel and several unvegetated braids in area mapped overall as Sonoran creosote bush scrub; originates on site and continues southwest before flows likely travel southeast to highway undercrossing	33.700930, -116.113503
Feature 13 (F13) – Tamarisk Scrub	N/A	Small area of tamarisk scrub abutting F13	33.700930, -116.113503
Feature 14 (F14)	12-75	Small ephemeral watercourse with one unvegetated secondary channel and several unvegetated braids in area mapped overall as Sonoran creosote bush scrub; originates on site and continues southwest before flows likely travel southeast to highway undercrossing	33.701403, -116.110071
Feature 15 (F15)	6-128	Ephemeral watercourse with several unvegetated secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote bush scrub; originates on site and continues off site to southwest through highway undercrossing	33.706900, -116.098967
Feature 16 (F16)	3-1,340	Large ephemeral watercourse with numerous secondary channels and several unvegetated braids in area mapped overall as desert wash scrub/Sonoran creosote bush scrub; originates off site and continues off site to southwest through highway undercrossing	33.705345, -116.094437

APPENDIX H

SITE PHOTOGRAPHS

Appendix H – Site Photographs*

KPC Coachella Project Jurisdictional Delineation
May 7-10, 2019

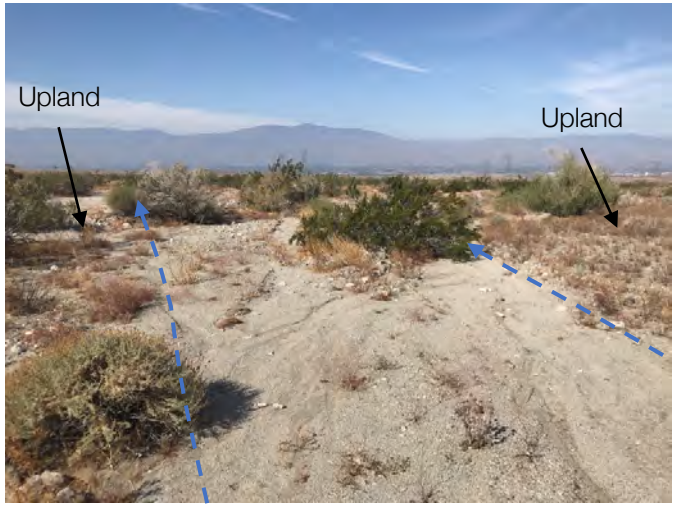


Photo 1. Downstream view of Feature 4 within the watercourse showing associated low-flow channels, active floodplain (within blue lines), vegetated islands within the floodplain, and upland areas. Photo taken facing southwest. May 9, 2019.



Photo 2. West facing view of large upland area lacking evidence of flows located between active braids of the larger Feature 4. May 9, 2019.



Photo 3. Upstream view of a Feature 4 single channel between upland areas. Photo taken facing east. May 9, 2019.

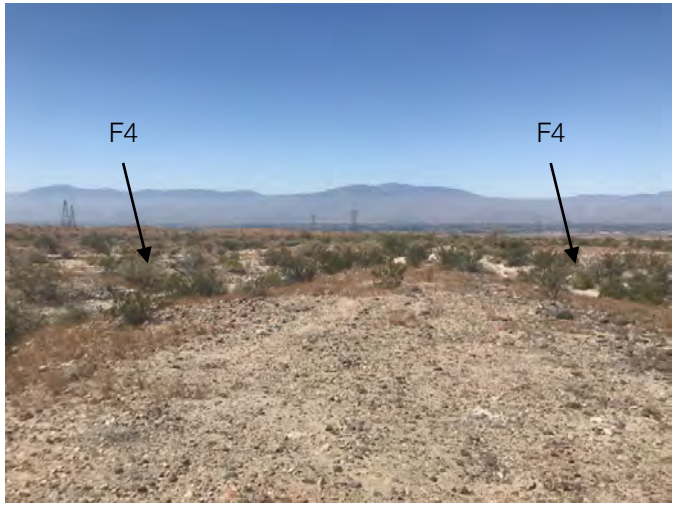


Photo 4. Southwest facing view of upland with Feature 4 active watercourse surrounding to the east and south. May 8, 2019.

* See corresponding Figure 7 for Photo Point Locations. See Jurisdictional Delineation Report Sections 3.7 and 3.8 for a discussion of jurisdictional status of each feature.



Photo 5. Downstream view of Feature 4 near the northern project boundary. Photo taken facing west. May 8, 2019.



Photo 6. Upstream view of Feature 4. Photo taken facing east. May 8, 2019.



Photo 7. Downstream overview of Feature 4 taken from upland/interfluve area. Photo taken facing west. May 8, 2019.



Photo 8. Upstream view of Ordinary High Water Mark (OHWM) 3. OHWM 3 consists of two, low-flow channels and is defined by a break in slope, a change in average sediment texture, and a change in vegetation species and cover. Photo taken facing northeast. Blue lines indicate extent of active floodplain and streambed. May 8, 2019.



Photo 9. Downstream view of Feature 8. Blue lines indicate general extent of Feature 8. Photo taken facing southwest. May 9, 2019.



Photo 10. Upstream view of Feature 8. Photo taken facing northeast. May 9, 2019



Photo 11. Downstream view of Feature 16. Photo taken facing southwest. May 9, 2019.



Photo 12. Upstream view of Feature 16 in the northeastern corner of the project survey area. Photo taken facing east. May 9, 2019.



Photo 13. Overview of Feature 1 – Disturbed Ephemeral Drainage Area, as generally indicated by the blue lines above. Photo taken facing north from on top of the earthen levee. May 9, 2019.



Photo 14. Overview of Feature 1 – Disturbed Ephemeral Drainage Area, as generally indicated by the blue lines. Wetland Sample Point (WSP) 1 was taken within this area. Photo taken facing east. May 9, 2019.

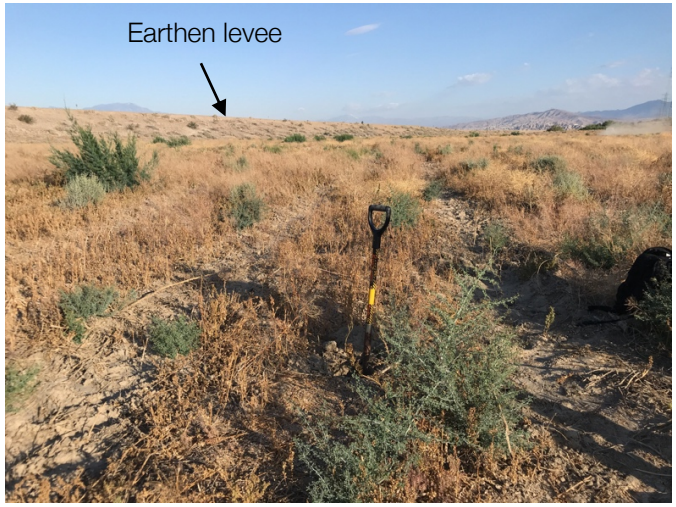


Photo 15. View of WSP 1. WSP 1 met the parameters for wetland hydrology; however, WSP 1 did not meet the hydrophytic vegetation or hydric soil parameters. Photo taken facing northwest. May 8, 2019.



Photo 16. Downstream view of Feature 1 – Tamarisk Scrub/Ephemeral Drainage and WSP 2 area. Photo taken facing southwest. May 10, 2019.



Photo 17. View of WSP 2. WSP 2 met the hydrophytic vegetation parameter; however, WSP 2 did not meet the hydric soil or wetland hydrology parameters. Photo taken facing northeast. May 10, 2019.

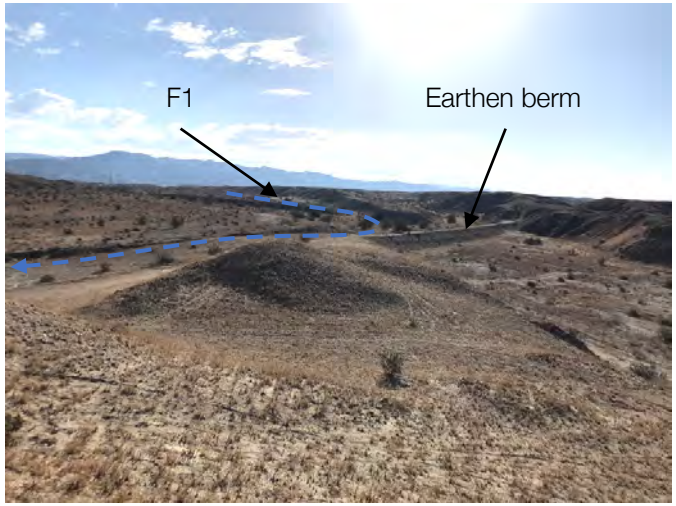


Photo 18. Eastern view of earthen berm cutting off and diverting Feature 1 flows west, as generally indicated by the blue line. Photo taken facing east. May 8, 2019



Photo 19. View of the abandoned watercourse south of the earthen berm along Feature 1. The berm appears on aerial imagery as early as 1953 (Appendix F). Photo taken facing south. May 8, 2019.



Photo 20. Upstream view of Feature 1, near the earthen berm historically disconnecting flows. Photo taken facing east. May 8, 2019.



Photo 21. Downstream view of OHWM 2. OHWM 2 is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing west. Blue lines indicate general flow direction and location of low-flow channels within larger active floodplain. May 8, 2019.



Photo 22. Overview of Feature 1, downstream (disconnected by earthen berm). Photo taken facing northwest. May 8, 2019



Photo 23. Upstream view within the abandoned channel south of the earthen berm adjacent to Feature 1. Photo taken facing northeast. May 7, 2019.



Photo 24. Downstream view within the abandoned channel south of the earthen berm adjacent to Feature 1. Photo taken facing southwest. May 7, 2019.

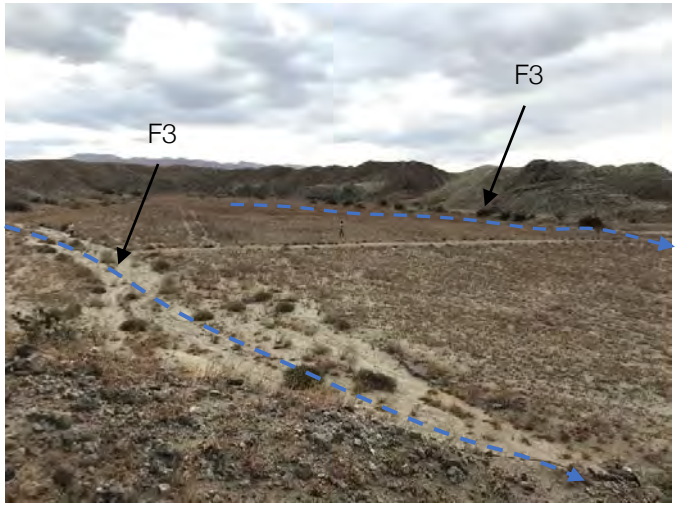


Photo 25. Overview of OHWM 5 area showing two active floodplain areas with a large low terrace/upland area in between. Photo taken facing east. May 10, 2019.



Photo 26. Upstream view of the easternmost active floodplain within Feature 3. The area is depicted in OHWM 5 (Photo 25). OHWM 5 consists of two, 15-foot wide active floodplains with braided 2-foot wide, low-flow channels. Photo taken facing east. May 7, 2019.



Photo 27. Downstream view of westernmost active floodplain within Feature 3 OHWM 5 (Photo 25). The OHWM is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing south. May 10, 2019.



Photo 28. Upstream view of low terrace/upland area near Feature 3. The area is further depicted in OHWM 5. Photo taken facing northeast. May 7, 2019.



Photo 29. Downstream view of Feature 4. Feature 4 flows towards a highway undercrossing at the edge of the project survey area boundary. Photo taken facing south. May 7, 2019.

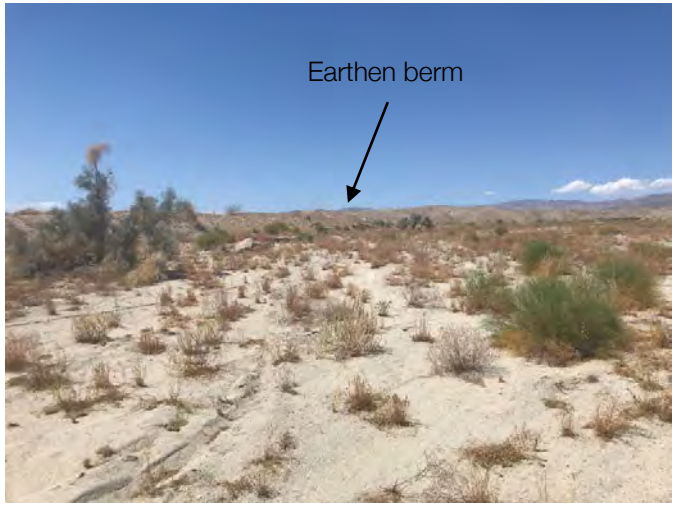


Photo 30. Upstream view of segment of Feature 4 adjacent to an earthen berm. Photo taken facing north. May 7, 2019.



Photo 31. Upstream view of Feature 5. Photo taken facing northeast. May 7, 2019.

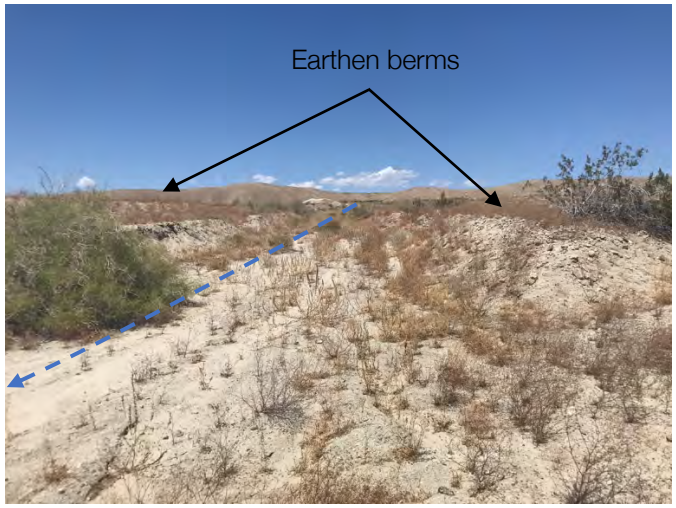


Photo 32. Upstream view of Feature 6 located in between two earthen berms. Photo taken facing north upstream. Blue line indicates general flow direction and location of a low-flow channel. May 7, 2019.

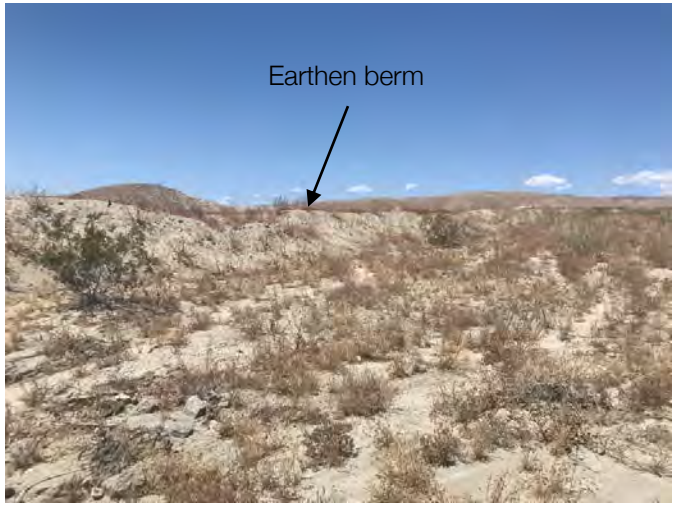


Photo 33. View of earthen berm. Photo taken facing north. May 7, 2019.



Photo 34. Upstream view of Feature 7. Photo taken facing north. Blue line indicates general flow direction and location of a low-flow channel. May 7, 2019.



Photo 35. Upstream view of Feature 8 flowing south parallel to the earthen berm, which stops flows from continuing further west and instead directs them south towards a highway undercrossing. Photo taken facing northeast. May 7, 2019.



Photo 36. Downstream view of Feature 8 continuing towards a highway undercrossing along the southern boundary of the project survey area. Photo taken facing south. May 7, 2019.



Photo 37. Upstream view of Feature 8 from a highway undercrossing. Photo taken facing northeast. May 7, 2019.



Photo 38. Upstream view of OHWM 1. OHWM 1 is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing east. Blue line indicates approximate extent of active floodplain/jurisdictional area. May 7, 2019.



Photo 39. Downstream view of OHWM 4. OHWM 4 is defined by a break in slope, change in average sediment texture, and change in vegetation species and cover. Photo taken facing west. May 8, 2019.



Photo 40. Upstream view of Feature 16. Photo taken facing east showing the feature's eastern boundary indicated by cut banks to an upland area. Photo taken facing northeast. May 9, 2019.



Photo 41. Downstream view of Feature 16. Photo taken facing southwest. May 9, 2019.



Photo 42. Overview of Feature 16 from upland/interfluve facing downstream. Photo taken facing west. Blue lines indicate general extent of Feature 16. May 9, 2019.



Photo 43. Downstream view of Feature 16. Photo taken facing south. May 9, 2019.

APPENDIX I

JURISDICTIONAL AND NON-JURISDICTIONAL RESOURCES BY AGENCY

Appendix I – Jurisdictional and Non-Jurisdictional Resources by Agency

KPC Coachella Project Jurisdictional Delineation

Table I-1. Corps Jurisdictional Resources within Project Survey Area

Feature Name	Acreage	Linear Feet	Cowardin Code	Presence of OHWM/ Average Width (feet)	Wetland Presence	Dominant Vegetation	Location (Lat, Long)
Coachella Canal	2.72	2,957	R5	Yes/40	No	Concrete-lined	33.709279, -116.148089
Total	**2.72**	**2,957**					

Table I-2. RWQCB Jurisdictional Resources within Project Survey Area*

Feature Name	Acreage	Linear Feet*	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
Coachella Canal	2.72	2,957	R5	Yes/No	Concrete-lined	33.709279, -116.148089
F1	25.92	11,924	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.710963, -116.141306
F1 – Disturbed Ephemeral Drainage Area	15.06	2,401	R6	Yes/No	Disturbed Habitat	33.710963, -116.141306
F1 – Tamarisk Scrub/ Ephemeral Drainage	0.83	670	R6	Yes/No	Tamarisk Scrub	33.710963, -116.141306
F2	1.66	452	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.715129, -116.142096
F3	1.26	3,746	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708460, -116.136597
F4	257.16	98,058	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.719869, -116.100948
F5	2.36	3,535	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705889, -116.127943

Feature Name	Acreage	Linear Feet*	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
F6	2.10	2,882	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708149, -116.125132
F7	7.57	8,767	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.706363, -116.124264
F8	121.76	64,102	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.709951, -116.107698
F9	1.03	1,021	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.701783, -116.119132
F10	2.77	2,147	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.702425, -116.116863
F11	0.07	389	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701773, -116.115920
F12	0.73	2,212	R6	Yes/No	Sonoran Creosote Bush Scrub	33.703503, -116.112915
F13	0.66	1,262	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701028, -116.113432
F14	0.86	1,610	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701847, -116.109069
F15	7.82	7,387	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.706205, -116.100397
F16	185.05	66,849	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705133, -116.097707
Total	637.37	282,372				

*Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

Table I-3. CDFW Jurisdictional Resources within Project Survey Area

Feature Name	Acreage	Linear Feet**	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
Coachella Canal	2.72	2,957	R5	Yes/No	Concrete-lined	33.709279, -116.148089
F1	25.92	11,924	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.710963, -116.141306
F1 – Disturbed Ephemeral Drainage Area	15.06	2,401	R6	Yes/No	Disturbed Habitat	33.710963, -116.141306
F1 – Tamarisk Scrub/ Ephemeral Drainage	0.83	670	R6	Yes/No	Tamarisk Scrub	33.710963, -116.141306
F1 – Tamarisk Scrub	0.14	0	R6	Yes/No	Tamarisk Scrub	33.710963, -116.141306
F2	1.66	452	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.715129, -116.142096
F3	1.26	3,746	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708460, -116.136597
F4	257.16	98,058	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.719869, -116.100948
F5	2.36	3,535	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705889, -116.127943
F6	2.10	2,882	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.708149, -116.125132
F7	7.57	8,767	R6	Yes/No	Desert Wash Scrub/Sonoran	33.706363, -116.124264

Feature Name	Acreage	Linear Feet**	Cowardin Code	Presence of OHWM/ Wetland	Dominant Vegetation	Location (Lat, Long)
					Creosote Bush Scrub	
F8	121.76	64,102	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.709951, -116.107698
F9	1.03	1,021	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.701783, -116.119132
F10	2.77	2,147	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.702425, -116.116863
F11	0.07	389	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701773, -116.115920
F12	0.73	2,212	R6	Yes/No	Sonoran Creosote Bush Scrub	33.703503, -116.112915
F13	0.66	1,262	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701028, -116.113432
F13 – Tamarisk Scrub	0.06	0	R6	Yes/No	Tamarisk Scrub	33.701028, -116.113432
F14	0.86	1,610	R6	Yes/No	Sonoran Creosote Bush Scrub	33.701847, -116.109069
F15	7.82	7,387	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.706205, -116.100397
F16	185.05	66,849	R6	Yes/No	Desert Wash Scrub/Sonoran Creosote Bush Scrub	33.705133, -116.097707
Total	637.57	282,372				

*Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

Table I-4. Corps Non-Jurisdictional Resources within Project Survey Area*

Feature Name	Acreage	Linear Feet**	Cowardin Code	Location (Latitude, Longitude)
F1	25.92	11,924	R6	33.710963, -116.141306
F1 – Disturbed Ephemeral Drainage Area	15.06	2,401	R6	33.710963, -116.141306
F1 – Tamarisk Scrub	0.83	670	R6	33.710963, -116.141306
F1 – Tamarisk Scrub/Ephemeral Drainage	0.14	0	R6	33.710963, -116.141306
F2	1.66	452	R6	33.715129, -116.142096
F3	1.26	3,746	R6	33.708460, -116.136597
F4	257.16	98,058	R6	33.719869, -116.100948
F5	2.36	3,535	R6	33.705889, -116.127943
F6	2.10	2,882	R6	33.708149, -116.125132
F7	7.57	8,767	R6	33.706363, -116.124264
F8	121.76	64,102	R6	33.709951, -116.107698
F9	1.03	1,021	R6	33.701783, -116.119132
F10	2.77	2,147	R6	33.702425, -116.116863
F11	0.07	389	R6	33.701773, -116.115920
F12	0.73	2,212	R6	33.703503, -116.112915
F13	0.66	1,262	R6	33.701028, -116.113432
F13 – Tamarisk Scrub	0.06	0	R6	33.701028, -116.113432
F14	0.86	1,610	R6	33.701847, -116.109069
F15	7.82	7,387	R6	33.706205, -116.100397

Feature Name	Acreage	Linear Feet**	Cowardin Code	Location (Latitude, Longitude)
F16	185.05	66,849	R6	33.705133, -116.097707
Total	**634.86**	**279,414**		

*Pending an approved jurisdictional determination from the Corps.
**Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

Table I-5. RWQCB Non-Jurisdictional Resources within Project Survey Area

Feature Name	Acreage	Linear Feet*	Cowardin Code	Location (Latitude, Longitude)
F1 – Tamarisk Scrub	0.14	0	R6	33.710963, -116.141306
F13 – Tamarisk Scrub	0.06	0	R6	33.701028, -116.113432
Total	**0.20**	**0**		

*Linear feet rounded to the nearest integer based on raw numbers provided during GIS analysis of project, which are available upon request.

APPENDIX J

JD REQUEST FORM

Appendix 1 - REQUEST FOR CORPS JURISDICTIONAL DETERMINATION (JD)

To: District Name Here

- I am requesting a JD on property located at: north of I-10, east of Coachella Canal Rd
  (Street Address)
  City/Township/Parish: Coachella County: Riverside State: CA
  Acreage of Parcel/Review Area for JD: 2970
  Section: 24-28, 30 Township: 5 S Range: 8 E, 9 E
  Latitude (decimal degrees): 33.711629 Longitude (decimal degrees): -116.108462
  (For linear projects, please include the center point of the proposed alignment.)
- Please attach a survey/plat map and vicinity map identifying location and review area for the JD.
- ___ I currently own this property. ___ I plan to purchase this property.
  ___ I am an agent/consultant acting on behalf of the requestor.
  ✔ Other (please explain): The KPC Group owns the majority of the property except for areas depicted as "Not A Part" per the land use plan.
- Reason for request: (check as many as applicable)
  ___ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all aquatic resources.
  ___ I intend to construct/develop a project or perform activities on this parcel which would be designed to avoid all jurisdictional aquatic resources under Corps authority.
  ___ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps, and the JD would be used to avoid and minimize impacts to jurisdictional aquatic resources and as an initial step in a future permitting process.
  ___ I intend to construct/develop a project or perform activities on this parcel which may require authorization from the Corps; this request is accompanied by my permit application and the JD is to be used in the permitting process.
  ___ I intend to construct/develop a project or perform activities in a navigable water of the U.S. which is included on the district Section 10 list and/or is subject to the ebb and flow of the tide.
  ___ A Corps JD is required in order to obtain my local/state authorization.
  ✔ I intend to contest jurisdiction over a particular aquatic resource and request the Corps confirm that jurisdiction does/does not exist over the aquatic resource on the parcel.
  ___ I believe that the site may be comprised entirely of dry land.
  ___ Other: _____
- Type of determination being requested:
  ✔ I am requesting an approved JD.
  ___ I am requesting a preliminary JD.
  ___ I am requesting a "no permit required" letter as I believe my proposed activity is not regulated.
  ___ I am unclear as to which JD I would like to request and require additional information to inform my decision.

By signing below, you are indicating that you have the authority, or are acting as the duly authorized agent of a person or entity with such authority, to and do hereby grant Corps personnel right of entry to legally access the site if needed to perform the JD. Your signature shall be an affirmation that you possess the requisite property rights to request a JD on the subject property.

*Signature: _____ Date: _____

- Typed or printed name: Stan McNaughton
  Company name: The KPC Group
  Address: 9 KPC Parkway, Suite #301
  Corona, CA 92879
  Daytime phone no.: 949-374-8830
  Email address: stanleymcnaughton@gmail.com

***Authorities:** Rivers and Harbors Act, Section 10, 33 USC 403; Clean Water Act, Section 404, 33 USC 1344; Marine Protection, Research, and Sanctuaries Act, Section 103, 33 USC 1413; Regulatory Program of the U.S. Army Corps of Engineers; Final Rule for 33 CFR Parts 320-332.
Principal Purpose: The information that you provide will be used in evaluating your request to determine whether there are any aquatic resources within the project area subject to federal jurisdiction under the regulatory authorities referenced above.
Routine Uses: This information may be shared with the Department of Justice and other federal, state, and local government agencies, and the public, and may be made available as part of a public notice as required by federal law. Your name and property location where federal jurisdiction is to be determined will be included in the approved jurisdictional determination (AJD), which will be made available to the public on the District's website and on the Headquarters USACE website.
Disclosure: Submission of requested information is voluntary; however, if information is not provided, the request for an AJD cannot be evaluated nor can an AJD be issued.

APPENDIX K

GIS DATA

(PROVIDED ELECTRONICALLY)

APPENDIX L

ORM BULK UPLOAD AQUATIC RESOURCES OR CONSOLIDATED EXCEL SPREADSHEET

Waters_Name	State	Cowardin_Code	M_Co	Meas_Type	Amount	Units	Waters_Type	Latitude	Longitude
Coachella Canal	CALIFORNIA	R5		Area	2.7156	ACRE	DELINEATE	33.70927901	-116.14808884
F1	CALIFORNIA	R6		Area	25.9159	ACRE	ISOLATE	33.71096281	-116.14130592
F1 - Dist Ephem Drainage Area	CALIFORNIA	R6		Area	15.06	ACRE	ISOLATE	33.71096300	-116.14130600
F1 - Tam Scrub/Ephem Drainage	CALIFORNIA	R6		Area	0.83	ACRE	ISOLATE	33.71096300	-116.14130600
F2	CALIFORNIA	R6		Area	1.6607	ACRE	ISOLATE	33.71512898	-116.14209612
F3	CALIFORNIA	R6		Area	1.2562	ACRE	ISOLATE	33.70845959	-116.13659675
F4	CALIFORNIA	R6		Area	257.1609	ACRE	ISOLATE	33.71986904	-116.10094833
F5	CALIFORNIA	R6		Area	2.356	ACRE	ISOLATE	33.70588870	-116.12794317
F6	CALIFORNIA	R6		Area	2.0965	ACRE	ISOLATE	33.70814909	-116.12513235
F7	CALIFORNIA	R6		Area	7.5664	ACRE	ISOLATE	33.70636325	-116.12426375
F8	CALIFORNIA	R6		Area	121.7639	ACRE	ISOLATE	33.70995119	-116.10769752
F9	CALIFORNIA	R6		Area	1.0262	ACRE	ISOLATE	33.70178300	-116.11913209
F10	CALIFORNIA	R6		Area	2.7718	ACRE	ISOLATE	33.70242549	-116.11686323
F11	CALIFORNIA	R6		Area	0.0717	ACRE	ISOLATE	33.70177259	-116.11592002
F12	CALIFORNIA	R6		Area	0.7314	ACRE	ISOLATE	33.70350341	-116.11291496
F13	CALIFORNIA	R6		Area	0.6574	ACRE	ISOLATE	33.70102818	-116.11343229
F14	CALIFORNIA	R6		Area	0.8566	ACRE	ISOLATE	33.70184729	-116.10906933

F15	CALIFORNIA	R6	Area	7.8226	ACRE	ISOLATE	33.70620548	-116.10039739
F16	CALIFORNIA	R6	Area	185.0508	ACRE	ISOLATE	33.70513300	-116.09770706

Appendix C5: Concurrence on Like Exchange

U.S. FISH AND WILDLIFE SERVICE
Palm Springs Fish and Wildlife Office
777 E. Tahquitz Canyon Way, Suite 208
Palm Springs, California 92262

CALIFORNIA DEPARTMENT OF
FISH AND WILDLIFE
Inland Deserts Region
3602 Inland Empire Blvd., Suite C-220
Ontario, California 91764

In Reply Refer to:
FWS/CDFW-RIV-2025-0040628

January 14, 2025
Sent by Email

Gabriel Perez
City of Coachella
53990 Enterprise Way
Coachella, CA 92236
gperez@coachella.org

Peter Satin
Coachella Valley Conservation Commission
74-199 El Paseo, Suite 100
Palm Desert, CA 92260
psatin@cvag.org

RE: Wildlife Agencies' Concurrence Regarding Proposed Like Exchange to Conservation Areas for the KPC Coachella Specific Plan

Dear Gabriel Perez and Peter Satin:

The U.S. Fish and Wildlife Service and the California Department of Fish and Wildlife (Wildlife Agencies) reviewed the equivalency analysis for the proposed like exchange for the East Indio Hills Conservation Area (EIHCA) and Dos Palmas Conservation Area (DPCA) associated with the KPC Coachella Specific Plan. The Wildlife Agencies concur that the proposed like exchange would result in equal or greater benefits to Covered Species and conserved natural communities as compared to those benefits analyzed in the Coachella Valley Multiple Species Habitat Conservation Plan (CVMSHCP).

One notable concern of the Wildlife Agencies regarding the conservation area design is that the land to be added to the DPCA will result in a donut-shaped configuration of the DPCA with unconserved land in the center. The Wildlife Agencies are concerned about the potential for increased edge effects associated with potential future development within the center area. To address this issue, the Wildlife Agencies request that CVCC incorporate the conservation of parcels within this center area into the acquisition strategy for the DPCA.

If you have any questions regarding this letter, please contact Jacob Skaggs, Senior Environmental Scientist Specialist, at jacob.skaggs@wildlife.ca.gov; or Lory Salazar-Velasquez, Fish and Wildlife Biologist, at lory_salazar-velasquez@fws.gov.

Sincerely,

DocuSigned by:
Heather Brashear
4ADE68D237B0401...

MARY WOULFE Digitally signed by MARY WOULFE
Date: 2025.01.14 10:02:59 -08'00'

Heather Brashear
Senior Environmental Scientist Supervisor
California Department of Fish and Wildlife

Mary Beth Woulfe
Acting Division Supervisor, Colorado Desert Division
U.S. Fish and Wildlife Service

ec:

Kathleen Brundige, CVCC
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