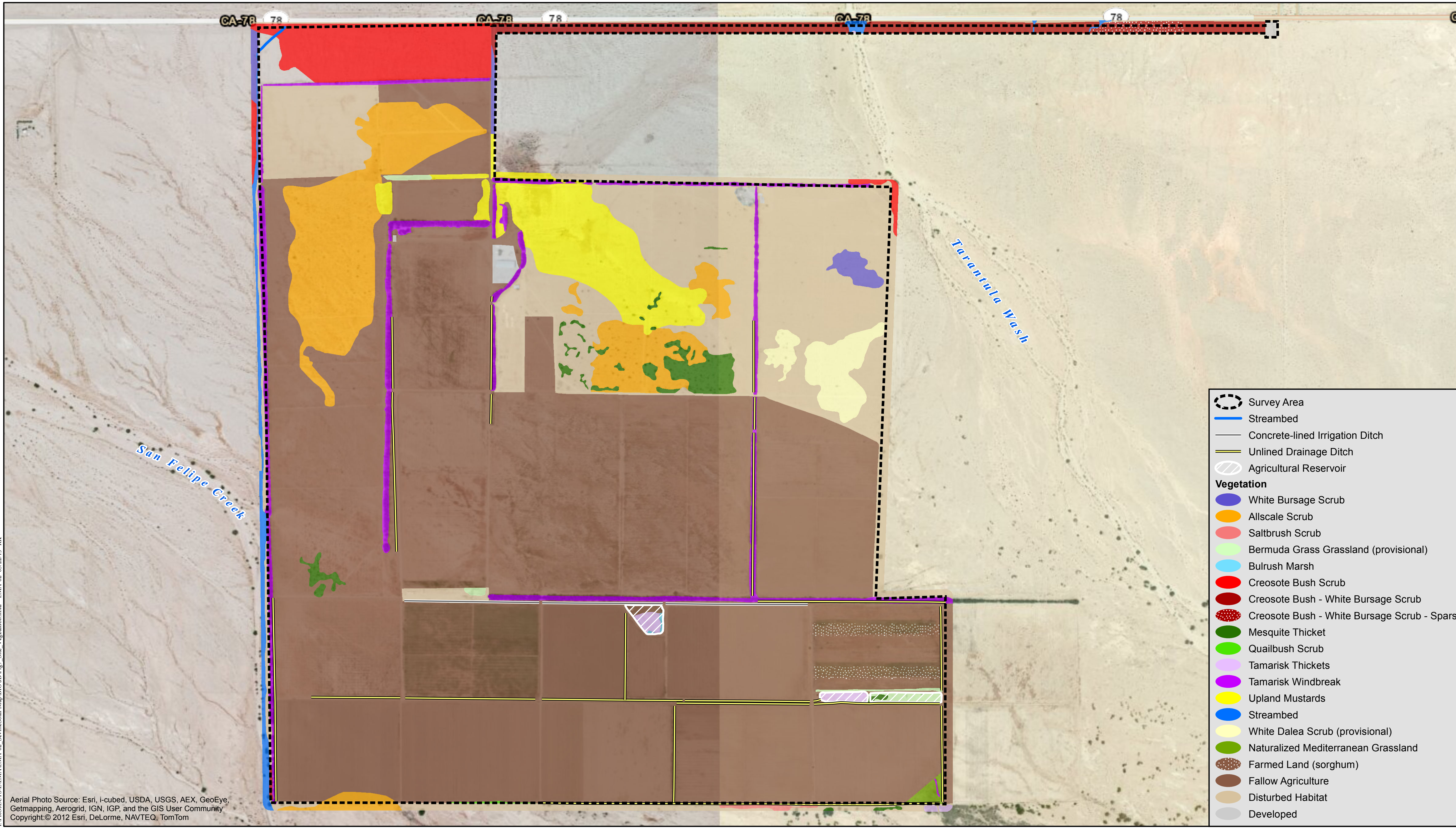

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Vegetation Map

SEVILLE SOLAR PROJECT

HELIX Environmental Planning

N 0 1,200 Feet

Figure 7

hydrology and isolation from off-site jurisdictional areas renders these features non-jurisdictional. Within the survey area, exclusive of Tarantula Wash, this habitat is not jurisdictional because it became established by artificial hydrology and is isolated from WUS and WS.

A small patch of tamarisk thicket occurs in Tarantula Wash, which is along the IID transmission corridor. This patch is regarded as WS jurisdictional habitat since is contains tamarisk, a wetland species, that occurs in a streambed. It is also regarded as wetland WUS. This location met the wetland vegetation and hydrology indicators specified in the Arid West Supplement (USACE 2008). Soils in this wash consist of coarse sands that rarely exhibit wetland soil indicators, but nonetheless may be wetland soils based on the National Technical Committee for Hydric Soils definition of wetland soil (Soil Conservation Service 1994). For this reason it is regarded as a "Problem Area" for soils and for the purposes of this analysis is a wetland.

Tamarisk Windbreak

Tamarisk windbreak is present as narrow bands of athel (*Tamarix aphylla*). This species was intentionally planted to create windbreaks. Athel is a facultative species. Athel exists along drainage ditches and irrigation lines. It was planted as part of the agricultural operations, in landscape positions isolated from off-site WUS and WS. As a phreatophyte, once established, it is capable of persisting in the absence of any surface hydrology. The drainage ditches it occurs along are remnants from past farming operations. Since farming operations have been suspended over most of the site, surface flow through the drainages ditches no longer occurs. It is not regarded as WUS or WS because it was artificially established and maintained.

Streambed

A streambed is a river or stream that flows through a bed or channel. Streambed occurs in several places along the proposed transmission line along the existing IID distribution line: at the northwest corner of the survey area, and just offsite along the western boundary of the survey area. These areas are regarded as non-wetland WUS and unvegetated WS because they periodically convey surface flows and are connected to off-site areas recognized as WUS or WS.

The drainage ditches and basins at Allegretti Farms are not regarded as jurisdictional. These features conveyed or contained water in association with the farming and since farming is nearly absent from the site, so are any flows in the ditches.

In agricultural operations near the Salton Sea, the drainage ditches are typically categorized as streambed and are regarded as WUS and WS. These drainage ditches flow directly into the Salton Sea, which is a WUS and WS. This connection to the Salton Sea is the basis for these agricultural features being jurisdictional. At Allegretti Farms, this does not occur. No agricultural runoff leaves the farm. There are several detention basins where water is piped or channeled and allowed to percolate into the ground.

Another distinction between the farms near the Salton Sea and Allegretti Farms is the source of the water. Water for farming near the Salton Sea is from the Colorado River. It is conveyed to the area by a series of canals. Water for the Allegretti Farms is groundwater pumped by on-site wells. This combination of well water and detention basins on the farm are hydrologically isolated from WUS and WS.

The upland vegetation types present in the survey area are briefly described below, and include creosote bush scrub, white bursage scrub, creosote bush - white bursage scrub (including a sparse phase), allscale scrub, white dalea scrub, mesquite thicket, Bermuda grass grassland, naturalized Mediterranean grassland, upland mustards, farmed land, fallow agriculture, disturbed habitat, and developed.

Creosote Bush Scrub

Creosote bush (*Larrea tridentata*) is dominant in the shrub canopy of this community that is the most abundant and extensive in the desert southwest. White bursage (*Ambrosia dumosa*), honey sweet, (*Tidestromia oblongifolia*), and desert sand mat (*Chamaesyce polycarpa*) are also present in this habitat.

White Bursage Scrub

White bursage is dominant in the shrub canopy. Associated species include Saharan mustard (*Brassica tournefortii*) and burro bush (*Hymenoclea salsola*).

Creosote Bush

White Bursage Scrub. Creosote bush and white bursage are co-dominant in the shrub canopy. Associated shrub species include white dalea (*Psorothamnus emoryi*). A sparse phase of this community is also present.

Allscale Scrub

Allscale (*Atriplex polycarpa*) is the dominant species in the shrub canopy. Associated species include white bursage, creosote bush, Mediterranean grass (*Schismus barbatus*), and Saharan mustard.

White dalea scrub

White dalea scrub is a near monotypic stand of white dalea that appears to be the result of previous disturbance. This species is more typically known as an associated species in creosote bush-white bursage scrub.

Mesquite Thicket

Honey mesquite (*Prosopis glandulosa* var. *torreyana*) is dominant in the tree canopy of this vegetation community. Quail saltbush, mistletoe (*Phoradendron* sp.), and apricot mallow (*Sphaeralcea ambigua*) are also present.

Bermuda Grass Grassland

Bermuda grass is a non-native, invasive species that thrives in warm, moist conditions. It often grows in open areas where there are frequent disturbances such as grazing, flooding, and fire. In Imperial County, it is often grown for migratory waterfowl forage.

Naturalized Mediterranean Grassland

Naturalized Mediterranean grassland supports non-native species such as Mediterranean canary grass (*Phalaris minor*) and knotweed (*Polygonum* sp.), the former of which is dominant in the community. Naturalized Mediterranean grassland occurs in the southeastern corner of the survey area.

Upland Mustards

The upland mustards community is dominated by Saharan mustard, a highly invasive, non-native species.

Farmed Land

Farmed land supports an agricultural crop (sorghum; *Sorghum* sp.) that was planted to attract wildlife for the landowner to hunt. Farmed land occurs in the southeastern portion of the proposed solar site.

Fallow Agriculture

Fallow agriculture consists of areas that are not presently being farmed but still retain a corrugated surface from furrows graded into it during active agricultural operations. Fallow agriculture supports a very small amount of non-native plant species.

Disturbed Habitat

Disturbed habitat consists of unpaved roads and fallow agricultural areas that support a preponderance of non-native Russian thistle (*Salsola tragus*), are un-furrowed fallow agricultural land, or are unvegetated.

Developed

Developed land in the survey area consists of a residential development and agricultural loading docks with associated paved areas on the proposed solar site, as well as the IID Anza Substation.

B. SAMPLE POINTS

Two wetland delineation points were sampled within the project (Figures 8 and 9). A summary of these samples is provided below. Four species were present within the sample points; their indicator status ranged from obligate wetland to obligate upland (Table 1).

Table 1 PLANT SPECIES OBSERVED AT SAMPLE POINTS			
FAMILY	**SPECIES**	**COMMON NAME**	**INDICATOR STATUS†**
Chenopodiaceae	*Atriplex canescens*	shad-scale	UPL
Cyperaceae	*Bolboschoenus maritimus* ssp. *paludosus*	alkali bulrush	OBL
Poaceae	*Phalaris minor**	Mediterranean canary grass	UPL
Polygonaceae	*Polygonum* sp.	knotweed	FACW Θ
Tamaricaceae	*Tamarix ramosissima**	saltcedar	FAC

† FAC=facultative species, FACW=facultative wetland species, OBL=obligate wetland species; UPL=obligate upland species. Please also see Appendix A.

* Non-native species.

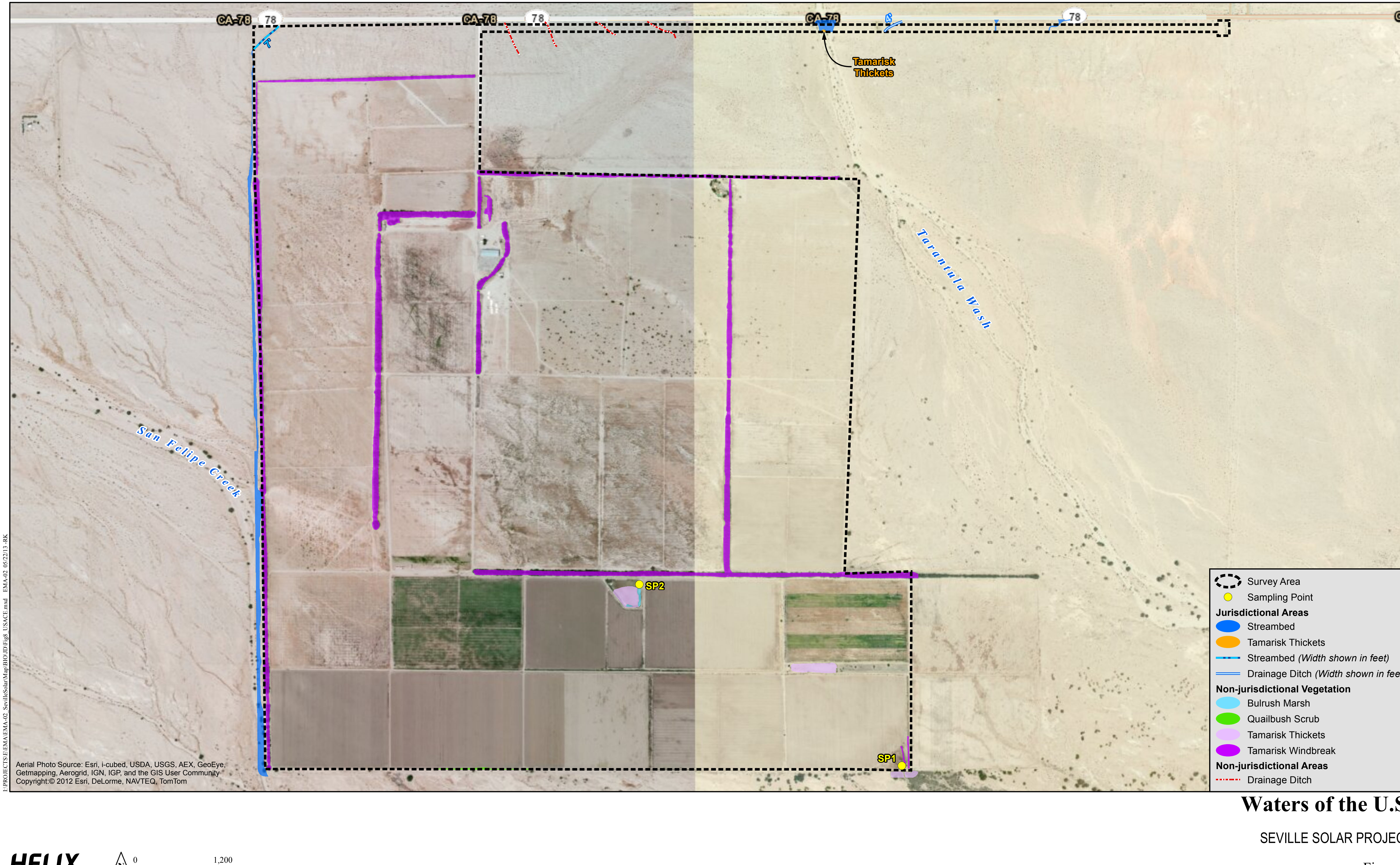
Θ Not identified to species, assumed to be wetland plant by best professional judgment.

Sample Point 1

This sample point was located in a low lying area at the southeastern corner of the survey area. This location is the lowest part of the site. Runoff is conveyed into the basin from a nearby, constructed drainage ditch. The basin did not have any outlet and was not connected to any WUS or waters of the State. A soil pit was excavated to a depth of 12 inches but did not reveal any hydric soil indicators. Wetland hydrology was indicated by the presence of a primary indicator surface soil cracks (B6). Dominant species present included two upland species (*Atriplex canescens* [shad-scale] and Mediterranean canary grass [*Phalaris minor*]), one facultative species (*Tamarix ramosissima* [saltcedar]), and one potentially facultative wetland species (Polygonum sp. [knotweed]). Since *Polygonum* was not identifiable to species, its wetland indicator status is not known (Table 1) but was assumed to be a wetland plant. Vegetation was dominated by upland species and did not qualify as wetland vegetation by either the dominance test or prevalence index. No hydric soil indicators were noted. Possible wetland hydrology was noted by the presence of soil surface cracks (B6), a primary wetland hydrology indicator. The primary source of surface water that created these cracks is thought to be from wells associated with past agricultural operations. This sample point is an upland and not under the jurisdiction of the USACE or CDFW.

Sample Point 2

This sample point was located in an agricultural reservoir. Water for this reservoir is supplied by wells. Most of the vegetation at this sample point was senescent. The habitat was dominated by a wetland species, alkali bulrush (*Bolboschoenus maritimus* ssp. *paludosus*), thus meeting the Dominance Test for wetland vegetation. Alkali bulrush only had 7 percent total cover, with most of the standing biomass of this species being senescent. Biotic crust covered 90 percent of the soil surface. A soil pit excavated to a depth of 15 inches revealed a depleted matrix (F3), a hydric soil indicator. Wetland hydrology was indicated by the presence of two primary



Waters of the U.S.

SEVILLE SOLAR PROJECT

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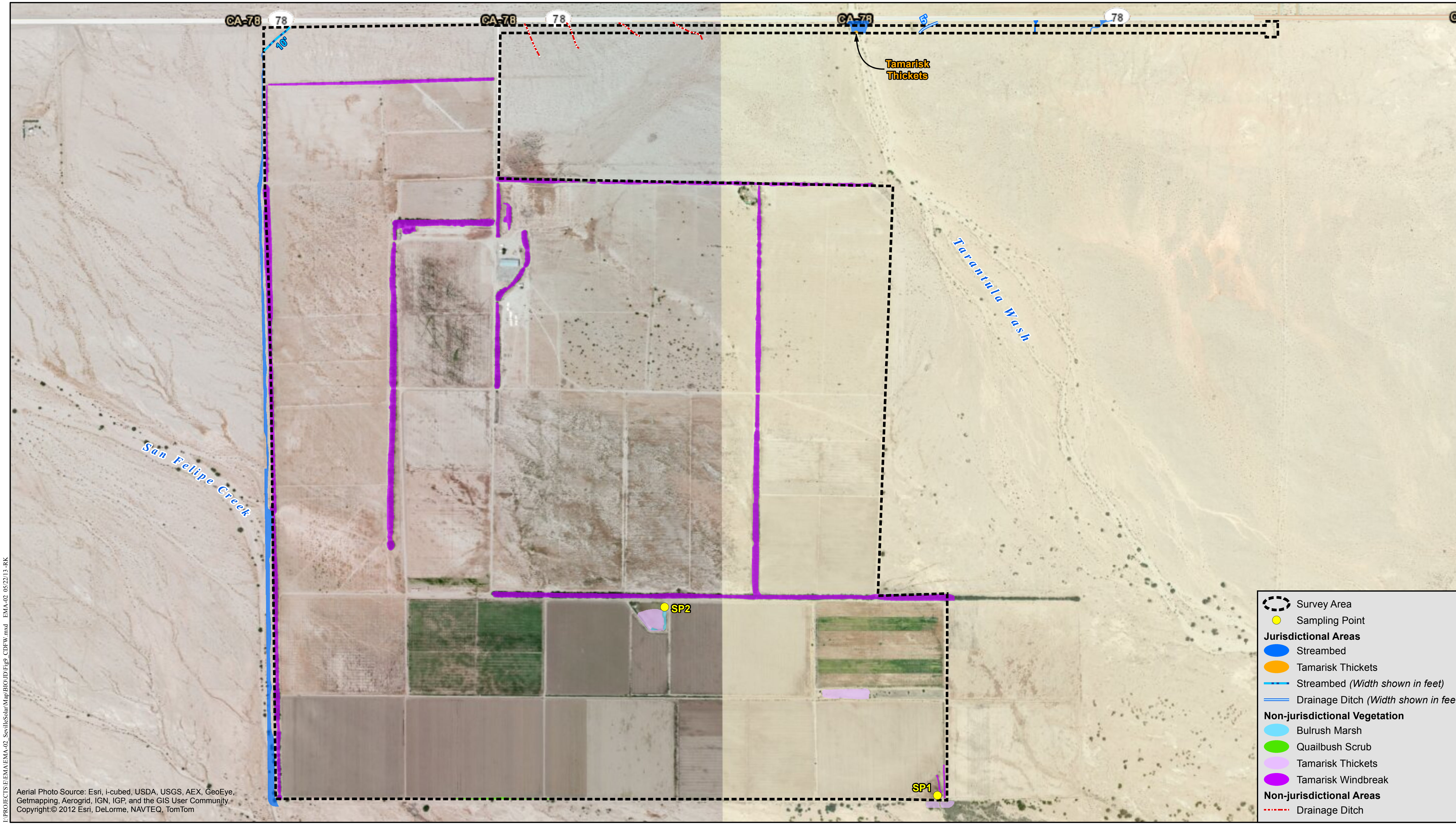
Figure 8



Waters of the State

SEVILLE SOLAR PROJECT

HELIX Environmental Planning

N 0 1,200 Feet

Figure 9

indicators: surface soil cracks (B6) and biotic crust (B12); and one secondary indicator: FAC-neutral test (D5).

Unlike other wetland habitats within agricultural operations in Imperial County, this stand is not regarded as wetland WUS or WS. Other agricultural operations in the county are irrigated by Colorado River water. Excess irrigation water collects in drains that then flow into the Salton Sea, a WUS and WS. Irrigation water at Allegretti Farms is from on-site wells. Water pumped onto the farm does not flow off of the farm. It is directed into detention basins and percolates into the ground. This sample point is regarded as upland due to artificial hydrology (that created the observed wetland vegetation, wetland soil, and hydrology indicators) and its isolation from other jurisdictional areas. It is not under the jurisdiction of the USACE or CDFW.

C. JURISDICTIONAL HABITAT SUMMARY

Jurisdictional areas within the survey area consist of a single wetland type along with non-wetland WUS/CDFW streambed.

1. Federal Jurisdiction

Federal (USACE) jurisdictional areas at Seville Solar include 0.05 acre of tamarisk thicket and 0.58 acre of non-wetland WUS (i.e., streambed and drainage ditch), along a total of 1,043 linear feet (Figure 8; Table 2).

Table 2
WATERS OF THE U.S.

WATERS OF THE U.S.	AREA[1] (acres)	LENGTH[2] (feet)
WETLAND		
Tamarisk Thicket	0.05	35
NON-WETLAND		
Non-wetland Waters of the U.S.	0.58	1,008
TOTAL	**0.63**	**1,043**

[1]Rounded to nearest one-hundredth.
[2]Rounded to nearest foot.

2. State Jurisdiction

State (CDFW) jurisdictional areas at Seville Solar include tamarisk thicket and streambed (including the drainage ditch), and comprise a total 0.72 acre and 1,043 linear feet (Figure 9, Table 3). This small patch of habitat occurs along the transmission line where it crosses Tarantula Wash.

Table 3 WATERS OF THE STATE		
HABITAT	**AREA[1]** (acres)	**LENGTH[2]** (feet)
Tamarisk Thicket	0.05	35
Streambed	0.67	1,008
TOTAL	**0.72**	**1,043**

[1]Rounded to nearest one-hundredth.
[2]Rounded to nearest foot.

IV. CONCLUSION

A. FEDERAL PERMITTING

Placement of fill and spoils (impacts) to jurisdictional areas are regulated by the USACE under Section 404 of the CWA (33 USC 401 et seq.; 33 USC 1344; USC 1413; and Department of Defense, Department of the Army, Corps of Engineers 33 CFR Part 323). A federal CWA Section 404 Permit would be required for the project to place fill in WUS. A CWA Section 401 Water Quality Certification administered by the State Water Resources Control Board must be issued prior to any 404 Permit. All USACE jurisdictional areas would be subject to the 401 Certification.

Impacts to WUS may potentially occur from the transmission line. It is very likely that impacts to these areas are avoidable. If that does not prove to be the case, the project should qualify for a Nationwide Permit No. 12.

B. STATE PERMITTING

CDFW regulates alterations or impacts to streambeds or lakes under California Fish and Game Code 1602. The CDFW requires a Streambed Alteration Agreement (SAA) for projects that will divert or obstruct the natural flow of water; change the bed, channel, or bank of any stream; or use any material from a streambed. The SAA is a contract between the applicant and CDFW stating what activities can occur in the riparian zone and stream course (California Association of Resource Conservation Districts 2002). A SAA may be necessary for activities along the transmission line.

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Appendix A

FEDERAL JURISDICTIONAL INFORMATION

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Appendix A
FEDERAL JURISDICTIONAL INFORMATION

Wetlands and "Waters of the U.S." Definitions

The U.S. Army Corps of Engineers (Corps; Federal Register 1982) and the Environmental Protection Agency (Federal Register 1980) jointly define wetlands as "[t]hose areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions" (Environmental Laboratory 1987).

The official definition of "Waters of the U.S." and their limits of jurisdiction (as they may apply) are defined by the Corps' Regulatory Program Regulations (Section 328.3, paragraphs [a] 1-3 and [e], and Section 328.4, paragraphs [c] 1 and 2) as follows:

> 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; all waters including interstate wetlands, all other waters such as interstate 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 commerce including any such water, which are or could be used by interstate travelers for recreation or other purposes; or from which fish or shellfish are or could be taken and sold in interstate commerce; or which are or could be used for industries in interstate commerce; or wetlands adjacent to waters [other than waters that are themselves wetlands].
>
> Non-tidal Waters of the U.S. The limits of jurisdiction in non-tidal waters: In the absence of adjacent wetlands, the jurisdiction extends to the ordinary high water mark, or when adjacent wetlands are present, the jurisdiction extends to the limit of the adjacent wetlands.
>
> The term ordinary high water mark means that line on the shore established by the fluctuation of water and indicated by physical characteristics such as clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation (scouring), the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Waters of the U.S. must exhibit an ordinary high water mark (OHWM) or other evidence of surface flow created by hydrologic physical changes. These physical changes include (Riley 2005):

- Natural line impressed on the bank
- Shelving
- Changes in the character of soil
- Destruction of terrestrial vegetation
- Presence of litter and debris
- Sediment sorting
- Leaf litter disturbed or washed away
- Scour
- Deposition
- Multiple observed flow events

- Wracking
- Vegetation matted down, bent, or absent
- Bed and banks
- Water staining
- Change in plant community

Jurisdictional areas also must be connected to Waters of the U.S. (Guzy and Anderson 2001; U.S. Supreme Court 2001).

As a consequence of the U.S. Supreme Court decision in Rapanos v. United States, a memorandum was developed regarding Clean Water Act jurisdiction (Grumbles and Woodley 2007). The memorandum states that the EPA and the Corps will assert jurisdiction over traditional navigable waters (TNW), wetlands adjacent to TNW, tributaries to TNWs that are a relatively permanent water body (RPW), and wetlands adjacent to TNW. An RPW has year round flow or continuous seasonal flow (i.e., typically for three months or longer). Jurisdiction over other waters (i.e., non TNW and RPW) will be based on a fact specific analysis to determine if they have a significant nexus to a TNW.

Pursuant to the Corps Instructional Guidebook (Corps and EPA 2007), the significant nexus evaluation will cover the subject reach of the stream (upstream and downstream) as well as its adjacent wetlands (Illustrations 2 through 6, Corps and EPA 2007). The evaluation will include the flow characteristics, annual precipitation, ability to provide habitat for aquatic species, ability to retain floodwaters and filter pollutants, proximity of the subject reach to a TNW, drainage area, and the watershed.

Wetland Criteria

Wetland boundaries are determined using three mandatory criteria (hydrophytic vegetation, wetland hydrology, and hydric soil) established for wetland delineations and described within the Wetlands Delineation Manual (Environmental Laboratory 1987) and the Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Corps 2006). Following is a brief discussion of the three criteria and how they are evaluated.

Vegetation

"Hydrophytic vegetation is defined herein as the sum total of macrophytic plant life that occurs in areas where the frequency and duration of inundation or soil saturation produce permanently or periodically saturated soils of sufficient duration to exert a controlling influence on the plant species present" (Environmental Laboratory 1987).

The wetland indicator status (obligate upland, facultative upland, facultative, facultative wetland, obligate wetland, or no indicator status) of the dominant plant species of all vegetative layers is determined. Species considered to be hydrophytic include the classifications of facultative, facultative wetland, and obligate wetland as defined by the U.S. Fish and Wildlife Service (1988; Table A-1). The percent of dominant wetland plant species is calculated. The hydrophytic vegetation criterion is considered to be met if it meets the "Dominance Test," "Prevalence Index," or the vegetation has morphological adaptations for prolonged inundation.

Table A-1 DEFINITIONS OF PLANT INDICATOR CATEGORIES		
Indicator Categories	**Abbreviation**	**Probability of Occurring in Wetlands**
Obligate wetland	OBL	Occur almost exclusively in wetlands
Facultative wetland	FACW	Usually found in wetlands (66 to 99 percent probability) but occasionally in uplands
Facultative	FAC	Equally likely to occur in wetland (34 to 66 percent probability) or non-wetland
Facultative upland	FACU	Usually occur in non-wetlands but occasionally found in wetlands
Obligate upland	UPL	Occur almost exclusively in non-wetlands
No indicator	NI	Inconclusive status

Hydrology

"The term 'wetland hydrology' encompasses all hydrologic characteristics of areas that are periodically inundated or have soils saturated to the surface at some time during the growing season. Areas with evident characteristics of wetland hydrology are those where the presence of water has an overriding influence on characteristics of vegetation and soils due to anaerobic reducing conditions, respectively" (Environmental Laboratory 1987).

Hydrologic characteristics must indicate that the ground is saturated to within 12 inches of the surface for at least 5 percent of the growing season during a normal rainfall year (approximately 18 days for most of low-lying southern California). Hydrology criteria are evaluated based on the characteristics listed below (Corps 2006). Where positive indicators of wetland hydrology are present, the limit of the OHWM (or the limit of adjacent wetlands) is noted and mapped. Evidence of wetland hydrology is met by the presence of a single primary indicator or two secondary indicators.

Primary

- surface water (A1)
- high water table (A2)
- saturation (A3)
- water marks (B1; non-riverine)
- sediment deposits (B2; non-riverine)
- drift deposits (B3; non-riverine)
- surface soil cracks (B6)
- inundation visible on aerial imagery (B7)
- water-stained leaves (B9)
- salt crust (B11)
- biotic crust (B12)
- Primary (continued)
- presence of reduced iron (C4)
- recent iron reduction in plowed soils (C8)

Secondary

- watermarks (B1; riverine)
- sediment deposits (B2; riverine)
- drift deposits (B3; riverine)
- drainage patterns (B10)
- dry-season water table (C2)
- thin muck surface (C7)
- crayfish burrows (C8)

- aquatic invertebrates (B13)
- hydrogen sulfide odor (C1)
- oxidized rhizospheres along living roots (C3)
- saturation visible on aerial imagery (C9)
- shallow aquitard (D3)
- FAC-neutral test (D5)

In the absence of all other hydrologic indicators and in the absence of significant modifications of an area's hydrologic function, positive hydric soil characteristics are assumed to indicate positive wetland hydrology. This assumption applies unless the site visit was done during the wet season of a normal or wetter-than-normal year. Under those circumstances, wetland hydrology would not be present.

Soils

"A hydric soil is a soil that formed under conditions of saturation, flooding, or ponding long enough during the growing season to develop anaerobic conditions in the upper part" (Natural Resource Conservation Service [NRCS] 2004).

Soils must exhibit physical and/or chemical characteristics indicative of permanent or periodic saturation. Soil matrix and mottle colors are identified at each sampling plot using a Munsell soil color chart (Kollmorgen 1994). Generally, an 18-inch or deeper pit is excavated with a shovel at each sampling plot unless refusal occurs above 18 inches.

Soils in each area are closely examined for hydric soil indicators, including the characteristics listed below. Hydric soil indicators are presented in three groups. Indicators for "All Soils" (A) are used in any soil regardless of texture, indicators for "Sandy Soils" (S) area used in soil layers with USDA textures of loamy fine sand or coarser, and indicators for "Loamy and Clayey Soils" (F) are used with soil layers of loamy very fine sand and finer (Corps 2006).

- histosols (A1)
- histic epipedons (A2)
- black histic (A3)
- sulfidic odor (A4)
- stratified layers (A5)
- 1 cm muck (A9)
- 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)
- 2 cm muck (A10)
- reduced vertic (F18)
- red parent material (TF2; indicator is currently being tested by NRCS).

Hydric soils may be assumed to be present in plant communities that have complete dominance of obligate or facultative wetland species. In some cases, there is only inundation during the growing season and determination must be made by direct observation during that season, recorded hydrologic data, testimony of reliable persons, and/or indication on aerial photographs.

Non-wetland Waters of the U.S.

The non-wetland Waters of the U.S. designation is met when an area has periodic surface flows but lacks sufficient indicators to meet the hydrophytic vegetation and/or hydric soils criteria. For purposes of delineation and jurisdictional designation, the non-wetland Waters of the U.S. boundary in non-tidal areas is the OHWM as described in the Section 404 regulations (33 CFR Part 328).

USGS Mapping

The USGS Quad maps are one of the resources used to aid in the identification and mapping of jurisdictional areas. Their primary uses include understanding the subregional landscape position of a site, major topographical features, and a project's position in the watershed.

In our experience the designation of watercourse as a blue-line stream (intermittent or perennial) on USGS maps has been unreliable and typically overstates the hydrology of most streams. This has also been the experience of others, including the late Luna Leopold. Leopold was a hydrologist with USGS from 1952 to 1972, Professor in the Department of Geology and Geophysics, and Department of Landscape Architecture, University of California, Berkeley from 1972 to 1986, and Professor Emeritus from 1987 until his death in 2006. In regard to stream mapping on USGS maps, Dr. Leopold opined that ". . . blue lines on a map are drawn by nonprofessional, low-salaried personnel. In actual fact, they are drawn to fit a rather personalized aesthetic."

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Appendix B

STATE JURISDICTIONAL INFORMATION

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Appendix B
STATE JURISDICTIONAL INFORMATION

California Department of Fish and Wildlife Regulations

The California Department of Fish and Wildlife (CDFW; Department) regulates alterations or impacts to streambeds or lakes (wetlands) under Fish and Game Code Sections 1600 through 1616 for any private, state, or local government or public utility-initiated projects. The Fish and Game Code Section 1602 requires any entity to notify the Department before beginning any activity that will do one or more of the following: (1) substantially obstruct or divert the natural flow of a river, stream, or lake; (2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or (3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake. Fish and Game Code Section 1602 applies to all perennial, intermittent, and ephemeral rivers and streams as well as lakes in the state.

In order to notify the Department, a person, state, or local governmental agency or public utility must submit a complete notification package and fee to the Department regional office that serves the county where the activity will take place. A fee schedule is included in the notification package materials. Under the Permit Streamlining Act (Government Code Sections 65920 et seq.), the Department has 30 days to determine whether the package is complete. If the requestor is not notified within 30 days, the application is automatically deemed to be complete.

Once the notification package is deemed to be complete, the Department will determine whether the applicant will need a Lake or Streambed Alteration Agreement (SAA) for the activity, which will be required if the activity could substantially adversely affect an existing fish and wildlife resource. If an SAA is required, the Department will conduct an on-site inspection, if necessary, and submit a draft SAA that will include measures to protect fish and wildlife resources while conducting the project. If the applicant is applying for a regular SAA (less than five years), the Department will submit a draft SAA within 60 calendar days after notification is deemed complete. The 60-day time period does not apply to notifications for long-term SAAs (greater than five years).

After the applicant receives the SAA, the applicant has 30 calendar days to notify the Department whether the measures in the draft SAA are acceptable. If the applicant agrees with the measures included in the draft SAA, the applicant will need to sign the SAA and submit it to the Department. If the applicant disagrees with any measures in the draft SAA, the applicant must notify the Department in writing and specify the measures that are not acceptable. Upon written request, the Department will meet with the applicant within 14 calendar days of receiving the request to resolve the disagreement. If the applicant fails to respond in writing within 90 calendar days of receiving the draft SAA, the Department may withdraw that SAA. The time periods described above may be extended at any time by mutual agreement.

After the Department receives the signed draft SAA, the Department will make it final by signing the SAA; however, the Department will not sign the SAA until it both receives the notification fee and ensures that the SAA complies with the California Environmental Quality

Act (CEQA) (Public Resources Code Section 21000 et seq.). After the applicant receives the final agreement, the applicant may begin the project the agreement covers, provided that the applicant has obtained any other necessary federal, state and/or local authorizations.

Water Resource Control Board Regulations

Section 401 Water Quality Certification

Whenever a project requires a federal Clean Water Act (CWA) Section 404 permit or a Rivers and Harbors Act Section 10 permit, it must first obtain a CWA Section 401 Water Quality Certification. The Regional Water Quality Control Board (RWQCB) administers the 401 Certification program. Federal CWA Section 401 requires that every applicant for a Section 404 permit must request a Water Quality Certification that the proposed activity will not violate state and federal water quality standards.

Porter-Cologne Water Quality Control Act

The State Water Resource Control Board (SWRCB) and the RWQCB regulate the discharge of waste to waters of the State via the 1969 Porter-Cologne Water Quality Control Act (Porter-Cologne) as described in the California Water Code (SWRCB 2008). The California Water Code is the State's version of the federal CWA. Waste, according to the California Water Code, includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal. State waters that are not federal waters may be regulated under Porter-Cologne. A Report of Waste Discharge must be filed with the RWQCB for projects that result in discharge of waste into waters of the State. The RWQCB will issue Waste Discharge Requirements (WDRs) or a waiver. The WDRs are the Porter-Cologne version of a CWA 401 Water Quality Certification.

REFERENCES

California Association of Resource Conservation Districts. 2002. Guide to Watershed Project Permitting for the State of California. URL: http://www.carcd.org/permitting/pguide.pdf.

California Department of Fish and Wildlife (CDFW). Fish and Game Code Sections 1600 through 1616.

Date unknown. Streambed/Lake Alteration Notification Guidelines.

Appendix C

DATA FORMS

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WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seville Solar City/County: --/Imperial Sampling Date: 13 Feb 2013

Applicant/Owner: Z Global/EMA-02 State: CA Sampling Point: 1

Investigator(s): W.L. Sward and B. Rosenbaum Section, Township, Range: Section 25, Township 12S, Range 9E

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): None Slope (%): 1-2%

Subregion (LRR): Interior deserts/D Lat: 33°05'51.44"N Long: 115°59'34.77"W Datum: NAD 83

Soil Map Unit Name: Vint fine sandy loam 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.

	Yes	No
Hydrophytic Vegetation Present?		✓
Hydric Soil Present?		✓
Wetland Hydrology Present?	✓	

Is the Sampled Area within a Wetland? Yes ____ No ✓

Remarks:

SP located in a shallow basin. Runoff into basin is from nearby drainage ditch. No outlet for basin located.

VEGETATION – Use scientific names of plants.

Tree Stratum (Plot size: r=30')	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
= Total Cover	0		
Sapling/Shrub Stratum (Plot size: r=20')			
1. Tamarix ramosissima	3	yes	FAC
2. Atriplex canescens	2	yes	UPL
3.			
4.			
5.			
= Total Cover	5%		
Herb Stratum (Plot size: r=5')			
1. Phalaris minor	60	yes	UPL
2. Polygonum sp.	20	yes	FACW?
3.			
4.			
5.			
6.			
7.			
8.			
= Total Cover	80%		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
= Total Cover	0		

% Bare Ground in Herb Stratum 20% % Cover of Biotic Crust 0

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 2 (A)

Total Number of Dominant Species Across All Strata: 4 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 50% (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	20	x 2 =	40
FAC species	3	x 3 =	9
FACU species	0	x 4 =	0
UPL species	62	x 5 =	310
Column Totals:	85 (A)		359 (B)

Prevalence Index = B/A = 4.22

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:

Most vegetation is senescent. Polygonum unidentifiable to species: assumed to be a wetland plant for this sample point.
Upland vegetation.

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
0-2.5	10YR 3.5/2	100					C	
2.5-12	10YR 4/2	100					CL	

[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: ______________

Depth (inches): ______________

Hydric Soil Present? Yes ______ No ✓

Remarks:

No hydric soil indicators

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:

Primary wetland hydrology indicator present

WETLAND DETERMINATION DATA FORM – Arid West Region

Project/Site: Seville Solar City/County: --/Imperial Sampling Date: 13 Feb 2013

Applicant/Owner: Z Global/EMA-02 State: CA Sampling Point: 2

Investigator(s): W.L. Sward and B. Rosenbaum Section, Township, Range: Section 23, Township 12S, Range 9E

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): None Slope (%): 1-2%

Subregion (LRR): Interior deserts/D Lat: 33°05'51.44"N Long: 115°59'34.77"W Datum: NAD 83

Soil Map Unit Name: Vint fine sandy loam 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:

SP located in an agricultural reservoir. Water source for reservoir are wells. Not regarded as jurisdictional due to artificial hydrology and isolation from WUS.

VEGETATION – Use scientific names of plants.

	Absolute % Cover	Dominant Species?	Indicator Status
Tree Stratum (Plot size: 20'X60')			
1.			
2.			
3.			
4.			
= Total Cover	0		
Sapling/Shrub Stratum (Plot size: 20'X20')			
1.			
2. A			
3.			
4.			
5.			
= Total Cover	0		
Herb Stratum (Plot size: r=5')			
1. Bolboschoenus maritimus	7	yes	OBL
2.			
3.			
4.			
5.			
6.			
7.			
8.			
= Total Cover	7%		
Woody Vine Stratum (Plot size: r=10')			
1.			
2.			
= Total Cover	0		

% Bare Ground in Herb Stratum ____ % Cover of Biotic Crust 90%

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:

Most vegetation is senescent.
Bulrush marsh vegetation.

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 %	Type[1]	Loc[2]	Texture	Remarks
0-5	2.5YR 4/2	90	5YR 4/6	3	C	M	SiC	
5-15	2.5YR 5/2	93	5YR 3/4	7	C	M	SiC	

[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: ______

Depth (inches): ______

Hydric Soil Present? Yes ✓ No ___

Remarks:

Hydric soil indicator present.

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:

Wetland hydrology indicators present.
FAC-neutral Test, W:U=1:0

Appendix D

REPRESENTATIVE SITE PHOTOS

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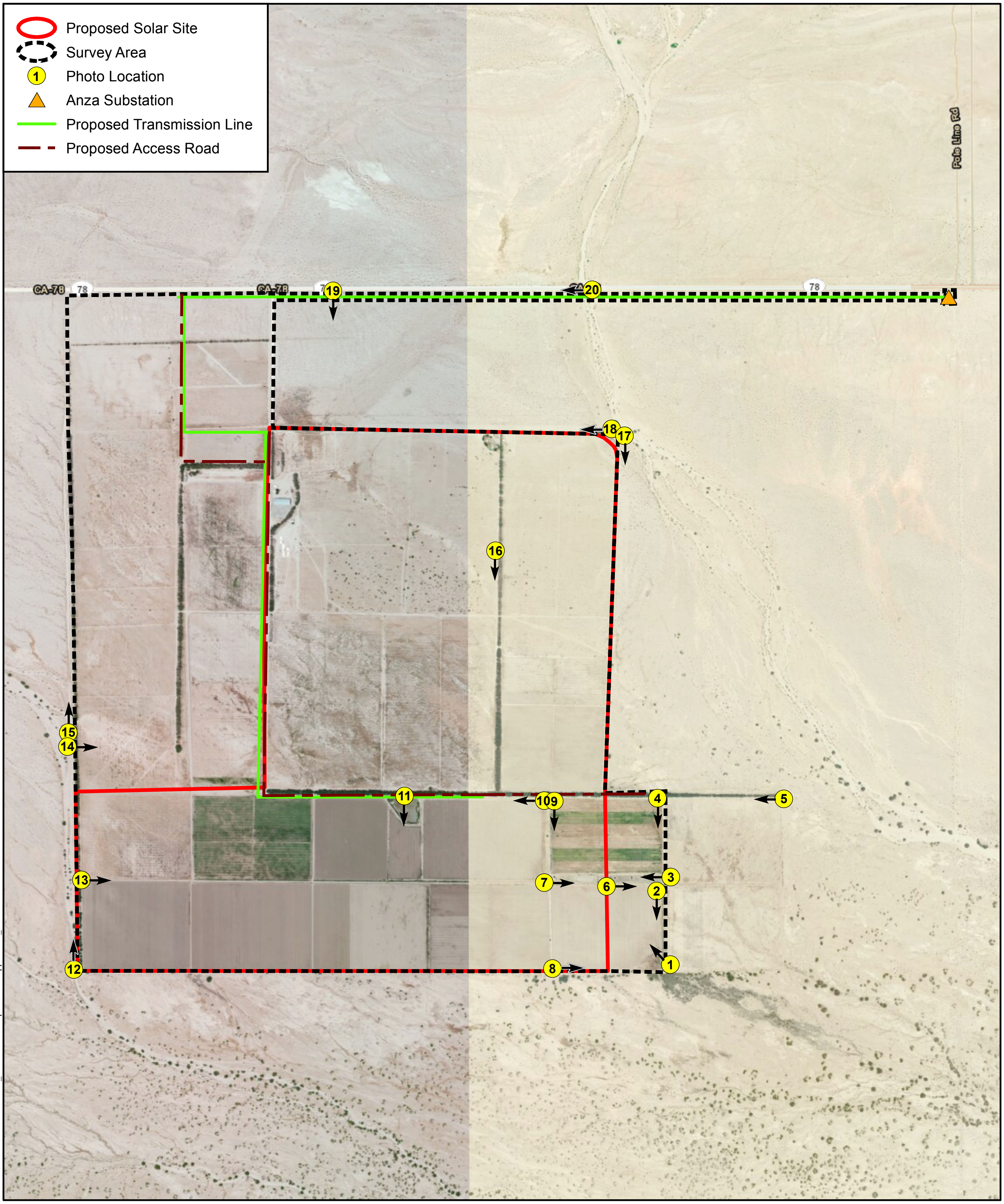

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Photo Location Key

SEVILLE SOLAR PROJECT

HELIX
Environmental Planning

N 0 2,000 Feet

Appendix D

Sample Point 1. Sample point had cracked mud indicating ponding. However, area supported upland vegetation and soils lacked hydric indicators.

Sample Point 2. Sample point had hydric vegetation, soils, and hydrology, but was regarded as an upland due to wetland hydrology supplied by wells and no surface connection to off-site WUS.

1. Drainage ditch and fallow agriculture in southeast part of study area.
This drainage ditch flows south (left in photo) but has no outlet off site.

2. Drainage ditch along eastern boundary in southeastern part of study area.
This drainage ditch flows south (left in photo) but has no outlet off site.

3. Shallow reservoir in southeastern part of survey area.

4. Drainage along southeastern edge of survey area.

5. Eastern end of drainage ditch in tamarisk windscreen.
No OHWM evident in drainage ditch or at its terminus.

6. Southern edge of shallow reservoir in southeastern part of survey area.

7. Eroded drainage ditch above deep basin in southeastern part of survey area.
Water enters this ditch from irrigation pipes (pictured) and drainage ditch to the west.
Ditch flows east into an agricultural reservoir.

8. Drainage ditch along southern survey area in southeastern part of survey area.