APPENDIX N DRAINAGE ASSESSMENT REPORT (Report for 2012 and 2013)

This Page Intentionally Left Blank

APPENDIX F: BIOLOGICAL RESOURCES

PRELIMINARY JURISDICTIONAL DRAINAGE ASSESSMENT

WEST OF DEVERS UPGRADE PROJECT SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA

Page F-1221 October 2013

PRELIMINARY JURISDICTIONAL DRAINAGE ASSESSMENT

WEST OF DEVERS UPGRADE PROJECT SAN BERNARDINO AND RIVERSIDE COUNTIES, CALIFORNIA

Submitted to:

Corporate Environmental Services Southern California Edison Company 1218 South 5th Avenue Monrovia, California 91016 (626) 462-8636

Prepared by:

LSA Associates, Inc. 20 Executive Park, Suite 200 Irvine, California 92614 (949) 553-0666

Project No. SCE1110

TABLE OF CONTENTS

INTRODUCTION/SUMMARY	1
SETTING	3
PROJECT DESCRIPTION	3
STUDY AREA DESCRIPTION	4
REGULATORY BACKGROUND	6
UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTION	6
Wetlands	8
CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION	10
REGIONAL WATER QUALITY CONTROL BOARD	10
REGIONAL CONSERVATION PLANS	11
Western Riverside County Multiple Species Habitat Conservation Plan	11
Coachella Valley Multiple Species Habitat Conservation Plan	11
METHODOLOGY	13
DEFINITIONS AND DETERMINATIONS	14
Potential United States Army Corps of Engineers Jurisdictional Areas	14
Potential CDFW Jurisdictional Areas	15
RESULTS AND CONCLUSIONS	18
POTENTIAL JURISDICTION	18
United States Army Corps of Engineers Jurisdiction	18
California Department of Fish and Wildlife Jurisdiction	20
Regional Water Quality Control Board Jurisdiction	20
Western Riverside County MSHCP Riparian/Riverine/Vernal Pool Areas	20
Coachella Valley MSHCP Desert Wetland Communities	21
AUTHORIZATION FOR IMPACTS TO POTENTIAL JURISDICTIONAL AREAS	21
United States Army Corps of Engineers	21
California Department of Fish and Wildlife	21
Regional Water Quality Control Board	21
Avoidance Measures	22
REFERENCES	23

TABLE

Table A: Drainage Counts Identified During 2012 and 2013 Assessment Surveys......19

APPENDICES

- A: FIGURES 1–3
- B: TABLES B AND C
- C: WETLAND DETERMINATION DATA FORMS ARID WEST REGION

INTRODUCTION/SUMMARY

A drainage assessment was prepared by LSA Associates, Inc. (LSA) to identify and map drainage features, determine the maximum extent of the Proposed Project effects, and to provide data for the development of final engineering plans so drainage features may be avoided if possible. Regulatory considerations addressed in this assessment are put forth by the United States Army Corps of Engineers (USACE), the California Department of Fish and Wildlife (CDFW), and the Regional Water Quality Control Board (RWQCB). Specifically addressed considerations include the following: Section 404 of the Clean Water Act (CWA), Streambed Alteration Agreement (SAA) Notification processing under Section 1600 of the California Fish and Game Code, and Certification of Water Quality or Waste Discharge Requirements under Section 401 of the CWA.

Throughout this assessment, the term "drainage features" refers to all land features with water flow patterns and includes both potentially jurisdictional defined drainage courses along with non-jurisdictional drainage features such as swales or rills. Additionally, potentially jurisdictional defined drainage courses will be referred to simply as drainages.

The Southern California Edison (SCE) proposed West of Devers (WOD) Project Area extends for more than 48 corridor miles of a proposed upgrade of a 220 kilovolt (kV) transmission line. The Project Study Area occurs within an SCE right-of-way and extends along an existing transmission line corridor from the Vista Substation in the City of Grand Terrace, San Bernardino County, to the Devers Substation, near North Palm Springs, Riverside County (Figure 1). The Proposed Project would also include reconductoring and transmission facility upgrades extending up to the San Bernardino Substation between the Cities of San Bernardino and Redlands, San Bernardino County. Specifically, the Project Study Area for 2012 included the SCE ROW with a 200-foot buffer for assessing drainage features and a 500-foot buffer for mapping riparian vegetation. In 2013, the Project Study Area included areas unmapped during the 2012 assessment surveys. These new areas included buffers associated with telecommunication lines, subtransmission lines, temporary staging yards, and the Alternative Project on the Morongo Band of Mission Indians Reservation (Reservation), as well as along access roads intended for use within the Proposed Project. These areas included a 100-foot buffer around telecommunication lines, subtransmission lines, and staging yards, a 200-foot or 250-foot buffer along existing or proposed access roads, respectively, for assessing drainage features, and a 500-foot buffer for mapping riparian vegetation.

The Project Study Area is predominantly vegetated with nonnative grassland, coastal sage scrub and desert scrub communities, chaparral, coast live oak woodland, and riparian forest/woodland with some ruderal lands and agricultural fields.

A total of 497 drainages and 323 other drainage features were assessed and reported in 2012 and 2013. It was determined that many of these drainages contain a potential interstate commerce nexus (i.e., a connection to traditional navigable water [TNW]). As a result, many of the drainages located within the right-of-way and survey buffer are potentially subject to Federal jurisdiction by the

USACE; in addition, these areas are potentially subject to jurisdiction under the CDFW and the RWQCB pursuant to State regulations and the CWA.

Data from 2012 and 2013 have been categorized into a table for each year. The first table (Appendix B, Table B) includes all drainage and drainage feature data collected in 2012, while a second table (Appendix B, Table C) includes all drainage and drainage feature data collected during 2013. Figure 2, 2012 and 2013 Drainage Assessment Results, includes the locations of potentially jurisdictional USACE and State drainages, as well as other drainage features (e.g., swales, rills, and inactive drainage features) lacking potential jurisdiction.

A preliminary impacts analysis was not conducted as part of this assessment.

This report was prepared as a jurisdictional assessment and is not intended to serve as a routine jurisdictional delineation. The findings and recommendations presented in this report, including the location and extent of wetlands and other waters subject to regulatory jurisdiction (or lack thereof), represent the professional opinion of LSA and are subject to more detailed delineation, and verification by the USACE, the CDFW, and the RWQCB.

SETTING

PROJECT DESCRIPTION

The West of Devers Upgrade Project would be located primarily within the existing WOD corridor and covers approximately 48 corridor miles in the incorporated and unincorporated areas of Riverside and San Bernardino Counties including the Morongo Band of Mission Indians Reservation (Reservation), and the Cities of Banning, Beaumont, Calimesa, Colton, Grand Terrace, Loma Linda, Palm Springs, Rancho Cucamonga,¹ Redlands, and San Bernardino (Figure 1, Project Location).

The Proposed Project would upgrade the existing WOD system by replacing existing 220 kilovolt (kV) transmission lines and associated structures with new, higher-capacity 220 kV transmission lines and structures; modifying existing substation facilities; removing and relocating existing subtransmission (66 kV) lines; removing and relocating existing distribution (12 kV) lines; and making various telecommunication improvements. In particular, the Proposed Project would:

- Upgrade substation equipment within SCE's existing Devers, El Casco, Etiwanda, San Bernardino, and Vista Substations in order to accommodate continuous and emergency power on the upgraded WOD 220 kV transmission lines. Upgrade SCE's existing Timoteo and Tennessee Substations in order to accommodate the 66 kV subtransmission line relocations.
- Remove and upgrade the existing 220 kV transmission lines and structures primarily within the existing WOD corridor as follows:
 - Segment 1 would be approximately 3.5 miles long and extend south from the San Bernardino Substation south of the Santa Ana River in the City of Loma Linda to San Bernardino Junction located south of the city in Scott's Canyon. Segment 1 would include the following existing 220 kV transmission lines: Devers-San Bernardino, Etiwanda-San Bernardino, San Bernardino-Vista, and El Casco-San Bernardino.
 - Segment 2 would be approximately 5 miles long and extend west from San Bernardino Junction in Scott's Canyon to Vista Substation in the City of Grand Terrace. Segment 2 would include the following existing 220 kV transmission lines: Devers-Vista No. 1 and Devers-Vista No. 2.
 - Segment 3 would be approximately 10 miles long and extend east from San Bernardino Junction in Scott's Canyon to El Casco Substation located along San Timoteo Creek north of the City of Moreno Valley. Segment 3 would include the following existing 220 kV transmission lines: Devers-Vista No. 1, Devers-Vista No. 2, El Casco-San Bernardino, and Devers-San Bernardino.

The Proposed Project component in the City of Rancho Cucamonga is limited to improvements within the Mechanical Electrical Equipment Room at Etiwanda Substation. The extent of this work within an existing facility would not have the potential to affect biological resources in the City of Rancho Cucamonga; therefore, the City of Rancho Cucamonga is not included for further discussion.

- Segment 4 would be approximately 12 miles long and extend east from El Casco Substation along San Timoteo Creek to San Gorgonio Avenue in the City of Banning. Segment 4 would include the following existing 220 kV transmission lines: Devers-Vista No. 1, Devers-Vista No. 2, Devers-El Casco, and Devers-San Bernardino.
- Segment 5 would be approximately 9 miles long and extend east from San Gorgonio Avenue in the City of Banning to the eastern limit of the Reservation at Rushmore Avenue in the community of Whitewater. Segment 5 would include the following existing 220 kV transmission lines: Devers-Vista No. 1, Devers-Vista No. 2, Devers-El Casco, and Devers-San Bernardino. Segment 5 would also include the 220 kV Transmission Line Route Alternative 1 (Alternative Project).²
- Segment 6 would be approximately 8 miles long and extend east from the eastern limit of the Reservation in the community of Whitewater to Devers Substation located west of the City of Desert Hot Springs. Segment 6 would include the following existing 220 kV transmission lines: Devers-Vista No. 1, Devers-Vista No. 2, Devers-El Casco, and Devers-San Bernardino.
- Remove a portion (approximately 2 miles) of the existing San Bernardino-Redlands-Timoteo and San Bernardino-Redlands-Tennessee 66 kV subtransmission lines from within the existing WOD right-of-way (ROW) and reconstruct as follows:
 - The relocated San Bernardino-Redlands-Timoteo 66 kV Subtransmission Line would be approximately 2 miles long and would reconnect to the San Bernardino-Redlands-Timoteo 66 kV Subtransmission Line inside Timoteo Substation.
 - The relocated San Bernardino-Redlands-Tennessee 66 kV Subtransmission Line would be approximately 3.5 miles long and would reconnect to the San Bernardino-Redlands-Tennessee 66 kV Subtransmission Line at Barton Road.
- Remove a portion of the existing Dental and Intern 12 kV distribution circuits within the WOD ROW and relocate the circuits as follows:
 - The relocated Dental 12 kV Distribution Circuit would be approximately 1.5 miles long and would reconnect to the existing Dental 12 kV circuit.
 - The relocated Intern 12 kV Distribution Circuit would be approximately 2.25 miles long and would reconnect to the Intern 12 kV circuit.
- Install telecommunication lines and equipment for the protection, monitoring, and control of transmission lines and substation equipment.

STUDY AREA DESCRIPTION

The West of Devers Upgrade Project passes through predominantly native or historically disturbed lands with scattered homes or small ranches in the vicinity of the WOD corridor. The dominant plant communities within the right-of-way include nonnative grassland, coastal sage scrub and desert scrub communities, chaparral, coast live oak woodland, and riparian forest and woodland with agricultural fields near the City of Beaumont. Scrub and grassland habitats occur mainly in the hills of the San

² Approximately 3 miles of existing ROW would be abandoned and replaced with a new 3-mile alignment pursuant to the SCE-Morongo ROW agreement. In addition, this segment consists of an alternative to a new 3-mile alignment (220 kV Transmission Line Route Alternative 1).

Timoteo Badlands and mountain foothills, while chaparral occurs on north-facing slopes, and riparian forest/woodlands are found along larger drainages.

The topography in the Project Study Area is mostly rolling and steep hills, most notably including the San Timoteo Badlands. This rugged terrain in the west transitions to a mixture of flat desert and mountain foothills in the eastern portion (15 miles) of the Project Study Area. Ephemeral drainages typically originate in the mountains and foothills to the north or south of the lowland areas, with many of these low-lying areas subject to flash flooding. These ephemeral drainages are generally well-defined. Other, less-defined, features that transport water occur throughout the area in the form of swales (i.e., low-lying areas that may occasionally convey surface water, but do not have evidence of flows [an ordinary high water mark {OHWM}]).

Ephemeral and perennial drainages occur throughout the Project Study Area. San Timoteo Creek is the most notable drainage in the western half of Project Study Area and flows into the Santa Ana River in the City of Colton. The San Gorgonio River at the west edge of the Reservation and the Whitewater River near the Devers Substation are the two most prominent desert drainages in the eastern portion of the Project Study Area. These two desert rivers are tributary to the Salton Sea east of Palm Springs.

REGULATORY BACKGROUND

Work in streams, lakes, and other bodies of water, including wetlands, may be regulated by the USACE under Section 404 of the CWA, by the CDFW under Sections 1600–1616 of the Fish and Game Code, and/or by the RWQCB under Section 401 of the CWA or the Porter-Cologne Water Quality Control Act (Porter-Cologne). The basis of USACE, CDFW, and RWQCB jurisdiction over various waters is described in the following sections.

UNITED STATES ARMY CORPS OF ENGINEERS JURISDICTION

The USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetland and nonwetland bodies of water that meet specific criteria. USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with TNWs used in interstate or foreign commerce, or may be indirect, through a nexus identified in the USACE regulations. The following definition of waters of the United States is taken from the discussion provided at 33 Code of Federal Regulations (CFR) 328.3:

"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 ... ;
- (2) All interstate waters including interstate wetlands;
- (3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams) ... the use, degradation or destruction of which could affect interstate or foreign commerce ... ;
- (4) All impoundments of waters otherwise defined as waters of the United States under the definition; and
- (5) Tributaries of waters defined in paragraphs (a) (1)-(4) of this section."

The USACE typically considers any body of water displaying an ordinary high water mark (OHWM) for designation as waters of the U.S., subject to guidance derived from Supreme Court decisions. USACE jurisdiction over nontidal waters of the United States extends laterally to the OHWM or beyond the OHWM to the limit of any adjacent wetlands, if present (33 CFR 328.4). The OHWM is defined as "that line on the shore established by the fluctuations 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, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area" (33 CFR 328.3). Jurisdiction typically extends upstream to the point where the OHWM is no longer perceptible.

As discussed above, USACE regulatory jurisdiction under Section 404 of the CWA is founded on a connection between the water body in question and interstate commerce. This connection may be direct, through a tributary system linking a stream channel with TNWs used in interstate or foreign commerce, or may be indirect, through a nexus identified in the USACE regulations. In the past, an indirect nexus could potentially be established if isolated waters provided habitat for migratory birds, even in the absence of a surface connection to a navigable water of the United States. The rule that enabled the USACE to expand jurisdiction over isolated waters became known as the Migratory Bird Rule. However, on January 9, 2001, the United States Supreme Court narrowly limited the USACE jurisdiction of "nonnavigable, isolated, intrastate" waters based solely on the use of such waters by migratory birds, and particularly, the use of indirect indicators of interstate commerce (e.g., use by migratory birds that cross state lines) as a basis for jurisdiction. The Court's ruling derives from the case *Solid Waste Agency of Northern Cook County v. U.S. Army Corps of Engineers*, No. 99-1178 (SWANCC). The Supreme Court determined that the USACE exceeded its statutory authority by asserting CWA jurisdiction over an abandoned sand and gravel pit in northern Illinois, which provides habitat for migratory birds.

In 2006, the United States Supreme Court further considered the USACE jurisdiction of "waters of the United States" in the consolidated cases Rapanos v. United States and Carabell v. United States (126 S. Ct. 2208), collectively referred to as Rapanos. The Supreme Court concluded that wetlands are "waters of the United States" if they significantly affect the chemical, physical, and biological integrity of other covered waters more readily understood as navigable. On December 2, 2008, the USACE issued the most recent guidance regarding the Rapanos decision. This guidance states that the USACE will continue to assert jurisdiction over TNWs, wetlands adjacent to TNWs, relatively permanent nonnavigable tributaries that have a continuous flow at least seasonally (typically 3 months), and wetlands that directly abut relatively permanent tributaries. The USACE will determine jurisdiction over waters that are nonnavigable tributaries that are not relatively permanent and wetlands adjacent to nonnavigable tributaries that are not relatively permanent only after making a finding of significant nexus to TNWs. The USACE will generally not assert jurisdiction over swales, erosional features or ditches excavated wholly in and draining only uplands that do not carry a relatively permanent flow of water. However, the USACE does reserve the right to regulate these waters on a case-by-case basis. Although concrete ditches or channels that have replaced historically jurisdictional waters are considered potentially subject to USACE and/or CDFW jurisdiction, they were presumably mitigated for during their construction and would likely not be considered a substantial regulatory constraint or require further mitigation.

Furthermore, the preamble to USACE regulations (Preamble Section 328.3, Definitions) states that the USACE does not generally consider the following waters to be waters of the United States. The USACE does, however, reserve the right to regulate these waters on a case-by-case basis.

- Nontidal drainage and irrigation ditches excavated on dry land.
- Artificially irrigated areas that would revert to upland if the irrigation ceased.
- Artificial lakes or ponds created by excavating and/or diking dry land to collect and retain water and which are used exclusively for such purposes as stock watering, irrigation, settling basins, or rice growing.
- Artificial reflecting or swimming pools or other small ornamental bodies of water created by excavating and/or diking dry land to retain water for primarily aesthetic reasons.

• Water-filled depressions created in dry land incidental to construction activity and pits excavated in dry land for purposes of obtaining fill, sand, or gravel unless and until the construction or excavation operation is abandoned and the resulting body of water meets the definition of waters of the United States.

Waters found to be isolated and not subject to CWA regulation are often still regulated by the RWQCB under Porter-Cologne.

Wetlands

The USACE and United States Environmental Protection Agency (EPA) define wetlands as follows:

"Those areas that are inundated or saturated by surface or groundwater at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted to life in saturated soil conditions."

In order to satisfy the USACE wetland definition, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific definition and criteria that must be satisfied in order for that particular wetland characteristic to be met. Several parameters (indicators) may be analyzed to determine whether the criteria are satisfied. Conversely, if an area lacks one of the three characteristics under normal circumstances, the area is nonwetland.

Hydrology. Under natural conditions, development of hydrophytic vegetation and hydric soils is dependent on wetland hydrology. Areas with wetland hydrology are those where the presence of water has an overriding influence on vegetation and soil characteristics due to anaerobic and reducing conditions, respectively (*1987 Corps of Engineers Wetland Delineation Manual* [*1987 Manual*]). The wetland hydrology parameter is satisfied if the area is seasonally inundated or saturated to the surface for a minimum of 14 consecutive days during the growing season in most years (*2008 Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region* [Regional Supplement]).

Hydric Soils.³ Hydric soils are defined as soils that formed under conditions of saturation, flooding or ponding long enough during the growing season to develop anaerobic conditions in the upper part.⁴ The following criteria reflect those soils that are considered likely to meet the definition of a hydric soil: ⁵

1. All Histels except Folistels and Histosols except Folists; or

³ The hydric soil definition and criteria included in the 1987 Manual are obsolete. Users of the Manual are directed to the USDA National Resources Conservation Service (NRCS) website for the most current information on hydric soils.

⁴ Current definition as of 1994 (Federal Register [FR] July 13, 1994).

⁵ Although Criterion 2 is listed by NRCS as an indicator for identification of hydric soils, this criterion cannot be used to document the presence of a hydric soil.

- 2. Soils in Aquic suborders, great groups or subgroups, Albolls suborder, Historthels great group, Histoturbels great group, Pachic subgroups, or Cumulic subgroups that are:
 - A) Somewhat poorly drained and have a water table equal to 0.0 feet from the surface during the growing season; or
 - B) Poorly drained or very poorly drained and have either:
 - (i) Water table equal to 0.0 feet from the surface during the growing season if textures are coarse sand, sand, or fine sand in all layers within 20 inches; or for other soils
 - (ii) Water table at less than or equal to 0.5 feet from the surface during the growing season if permeability is greater than 6.0 inches/hour in all layers within 20 inches; or
 - (iii) Water table at less than 1.0 foot from the surface during the growing season if permeability is less than 6.0 inches/hour in any layer within 20 inches; or
- 3. Soils that are frequently ponded for long duration or very long duration⁶ during the growing season; or
- 4. Soils that are frequently flooded for long duration or very long duration during the growing season.

Hydric soils develop under conditions of saturation and inundation combined with microbial activity in the soil that causes a depletion of oxygen. While saturation may occur at any time of year, microbial activity is limited to the growing season, when soil temperature is above biologic zero. Biogeochemical processes that occur under anaerobic conditions during the growing season result in the distinctive morphologic characteristics of hydric soils.

The *Regional Supplement* has a number of field indicators that may be used to identify hydric soils. The National Resources Conservation Service (NRCS) (2003) has also developed a number of field indicators that may demonstrate the presence of hydric soils. These indicators include hydrogen sulfide generation, accumulation of organic matter, and the reduction, translocation and/or accumulation of iron and other reducible elements. These processes result in soil characteristics that persist during both wet and dry periods. Separate indicators have been developed for sandy soils and for loamy and clayey soils.

Hydrophytic Vegetation. Hydrophytic vegetation is plant life that grows, and is typically adapted for life, in permanently or periodically saturated soils. The hydrophytic vegetation criterion is met if more than 50 percent of the dominant plant species from all strata (tree, shrub, and herb layers) are considered hydrophytic. Hydrophytic species are those included on the *North American Digital Flora: National Wetland Plant List* (Lichvar et al. 2009). Each species on the list is rated according to a wetland indicator category, as shown in the table below.

⁶ Long duration is defined as a single event ranging from 7 to 30 days. Very long duration is defined as a single event that lasts longer than 30 days.

Category		Probability		
Obligate Wetland	OBL	Almost always occur in wetlands (estimated probability >99%) under natural conditions		
Facultative Wetland	FACW	Usually occur in wetlands (estimated probability 67%–99%)		
Facultative	FAC	Equally likely to occur in wetlands and nonwetlands (estimated probability 34%–66%)		
Facultative Upland	FACU	Usually occur in nonwetlands (estimated probability 67%–99%)		
Obligate Upland	UPL	Almost always occur in nonwetlands (estimated probability >99%) under natural conditions		

To be considered hydrophytic, the species must have *wetland indicator status*, i.e., be rated as OBL, FACW, or FAC.

CALIFORNIA DEPARTMENT OF FISH AND WILDLIFE JURISDICTION

The CDFW, through provisions of the State of California Code of Regulations, is empowered to issue Agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be substantially adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an ephemeral flow of water. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW.

The CDFW has not defined wetlands for jurisdictional purposes. The CDFW generally includes, within the jurisdictional limits of streams and lakes, any *riparian* habitat present. Riparian habitat includes willows, alders, and other vegetation typically associated with the banks of a stream or lake shoreline. In most situations, wetlands associated with a stream or lake would fall within the limits of riparian habitat. Thus, defining the limits of CDFW jurisdiction based on riparian habitat will automatically include any wetland areas. Wetlands not associated with a lake, stream or other regulated areas are generally not subject to CDFW jurisdiction.

REGIONAL WATER QUALITY CONTROL BOARD

The California RWQCB is responsible for the administration of Section 401 of the CWA. Typically, the areas subject to RWQCB jurisdiction coincide with those of the USACE (i.e., waters of the United States, including any wetlands). Although the SWANCC decision limited USACE jurisdiction over isolated wetlands and other waters (collectively called isolated waters), the courts reiterated that it is the states' responsibility to protect these isolated waters. The RWQCB has not provided any public guidance on how this protection will be carried out; however, the State Water Resource Control Board (SWRCB) issued in a September 2004 workplan titled "Filling the Gaps in Wetland Protection" (SWRCB 2004). In the September 2004 Workplan, the SWRCB recommended adopting the Federal definition for wetlands and adopt a state version of the CWA Section 404 guidelines making "minimal revisions."

The RWQCB also asserts authority over "waters of the State" under waste discharge requirements pursuant to Porter-Cologne, which establishes a regulatory program to protect water quality and to protect beneficial uses of State waters. Porter-Cologne empowers the RWQCB to formulate and adopt, for all areas within the regions, a Water Quality Control Plan (Basin Plan) that designates beneficial uses and establishes such water quality objectives that in its judgment will ensure reasonable protection of beneficial uses. Each RWQCB establishes water quality objectives that will ensure the reasonable protection of beneficial uses and the prevention of nuisance. The Water Code provides flexibility for some change in water quality, provided that beneficial uses are not adversely affected. "Waters of the State" is defined by Porter-Cologne as any surface or subsurface water or groundwater, including saline waters, within the boundaries of the State. This may include waters that are determined to be non-jurisdictional under Section 404 of the CWA.

REGIONAL CONSERVATION PLANS

Western Riverside County Multiple Species Habitat Conservation Plan

The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) includes provisions for the documentation of riverine, riparian, and vernal pool habitat. These areas are defined in the following manner:

- *Riparian/riverine* are lands dominated by trees, shrubs, persistent emergents, or emergent mosses and lichens that occur close to, or which depend on, soil moisture from a nearby freshwater source, or areas with freshwater flow during all or a portion of the year (Western Riverside County MSHCP 2003). Western Riverside County MSHCP Riparian/riverine and CDFW riparian resources are similar in definition. They are based on riparian habitat that includes willows, alders, or other vegetation typically associated with the banks of a stream or lake shoreline. Riparian habitat resources described by CDFW for the Western Riverside County MSHCP are wetlands and watercourses, whether intermittent or perennial, and should be retained and preserved.
- *Vernal pools* are seasonal wetlands that occur in depression areas that have all three wetland indicators (i.e., soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack the wetland indicators of hydrology and/or vegetation during the drier portion of the growing season.

SCE is not a signatory to the Western Riverside County MSHCP, but may become one in the future.

Coachella Valley Multiple Species Habitat Conservation Plan

The Coachella Valley MSHCP includes provisions for the documentation of wetland communities. These community descriptions are based on the *Preliminary Description of the Terrestrial Natural Communities of California* (Holland 1986). The following wetland communities are included in the Coachella Valley MSHCP:

- Mesquite hummocks;
- Mesquite bosque;

- Desert saltbush scrub;
- Desert sink scrub;
- Southern arroyo willow riparian forests;
- Cottonwood willow riparian forest;
- Southern sycamore-alder riparian forest;
- Freshwater marsh;
- Cismontane alkali marsh;
- Desert fan palm oasis woodland; and
- Arrowweed scrub.

SCE is not a signatory to the Coachella Valley MSHCP, but may become one in the future.

METHODOLOGY

A jurisdictional drainage assessment was conducted throughout the Project Study Area. This assessment consisted of a preliminary determination of the location of potentially jurisdictional waters and other drainage features. In the field, the drainage features were typically recorded as average widths for the entire drainage. A single line was drawn on an aerial photograph and then digitized to show the general centerline for each drainage feature, including very wide drainages. Thus, the exact drainage extent or area (polygon mapping) was not determined as would be done for a routine delineation, which could be used for a more precise determination of impacts. Assessment features included drainages with defined streambeds and OHWMs, as well as swales, gullies/erosion rills, inactive drainage features, and basins. The entire nearly 50-mile-long Project Study Area was surveyed with the use of a 4×4 vehicle and on foot to investigate potential wetland and nonwetland jurisdictional waters, as well as streambed and riparian resources. Most areas were surveyed on foot for both potential Federal and State jurisdictional areas.

Potential USACE jurisdictional drainages were determined based on the presence of OHWM and a potential connection to TNW of the United States, while potential CDFW jurisdictional areas were determined based on the presence of a bed and bank and any associated riparian habitat. Because the RWQCB has not provided any public guidance on how its jurisdiction is determined, areas subject to jurisdiction by RWQCB were determined by using USACE criteria per the recommendation in the September 2004 Workplan (SWRCB 2004). A routine assessment of wetland waters of the United States was not conducted; however, any areas that appeared to have potential to meet the three USACE criteria for wetland waters of the United States were mapped.

The field maps were prepared using existing right-of-way information from SCE (November 2011) and Thomas Brothers Maps (TBM) overlaid on orthographically rectified aerial images flown by SCE (2011) and, as needed, Bing Maps (c. 2010). Figure 2, 2012 and 2013 Survey Results, (scale: 1" = approximately 300') illustrate the findings of both 2012 and 2013 assessments and provide a reference for drainage locations.

Assessment visits for 2012 surveys were conducted between April 16 and September 20, 2012, by LSA biologists Claudia Bauer, Maria Lum, Ingri Quon, Stan Spencer, Matt Teutimez, Wendy (Walters) Davis, BioGin Consultant biologist Susan (Gin) Ingram, and Dudek biologist Emily Wier. Specifically, the Project Study Area for 2012 included the SCE ROW with a 200-foot buffer for assessing drainage features and a 500-foot buffer for mapping riparian vegetation.

Assessment visits for 2013 surveys were conducted between March 4 and May 20, 2013, by LSA biologists Jodi Ross-Borrego, Wendy Davis, Stefan De Barros, Elizabeth Hohertz, Maria Lum, Erin Martinelli, Ingri Quon, Lonnie Rodriguez, Stan Spencer, and BioGin Consultant biologist Gin Ingram. The Alternative Project was assessed May 16, 2013, by LSA biologists Dan Rosie, Jaime Morales, and Lonnie Rodriguez. In 2013, the Project Study Area included areas unmapped during the 2012 assessment surveys. These new areas included buffers associated with telecommunication lines, subtransmission lines, temporary staging yards, and the Alternative Project on the Reservation, as

well as along access roads intended for use within the Proposed Project. These areas included a 100foot buffer around telecommunication lines, subtransmission lines, and staging yards, a 200-foot or 250-foot buffer along existing or proposed access roads, respectively, for assessing drainage features, and a 500-foot buffer for mapping riparian vegetation. In August and September of 2013, land between the 200-foot and 500-foot ROW buffers for all segments and the V-shaped relocated distribution line in Segment 1 were assessed for drainage features using Google Earth and Bing aerial imagery; therefore, these areas were not surveyed as pedestrian surveys. However, most of the areas of potential jurisdiction were observed in the field, photographed, and marked on the field maps, while Google and/or Bing aerial imagery was used to facilitate or augment drainages with difficult access or large size.

Potential Federal and State jurisdictional drainage features were mapped and recorded using a combination of direct or estimated measurements taken in the field and geographic information system (GIS) measurements where direct measurements were not possible. Drainage widths were measured with a measuring tape and estimated to the nearest foot. In some situations, the drainages were too wide to measure with a tape or the banks were not accessible; in such cases, a global positioning system (GPS) point was taken at each side of the drainage or the drainage bank was marked on the field map and then measured in the office using GIS software. Handheld GPS units (Garmin GPSMAP 76CSx) with less than 10-meter (m) accuracy were used by each surveyor to record drainage width and soil pit locations. The general location of each potential jurisdictional area and drainage feature was digitized using GIS software based on the mapped drainage locations while in the field, while the extent of riparian woodland vegetation was plotted with GPS units or digitized from recent aerial photographs and Google Earth and Bing Map aerial image websites. Riparian vegetation types not associated with CDFW or USACE jurisdiction were not mapped.

DEFINITIONS AND DETERMINATIONS

Potential United States Army Corps of Engineers Jurisdictional Areas

Determination of connection of potential USACE jurisdictional drainages to TNWs was done by using Google Earth and/or Bing Maps to follow drainage features outside of the right-of-way and buffers to the nearest TNW or known tributary thereto. If the drainage had an ultimate connection to a TNW, then it was mapped as potentially jurisdictional by both CDFW and the USACE, while drainages that did not have a connection to a TNW were mapped as drainage features that are considered potentially jurisdictional only for CDFW.

Determination of the size or extent of the potential USACE jurisdictional drainages was based on the USACE regulations which define the OHWM (33 CFR § 328.3) as the line on the shore established by the fluctuations of water and indicated by physical characteristics such as the clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding area. Because this is an assessment and not a routine delineation, these features (e.g., width, depth, gradient) were identified and widths between the OHWM lines were averaged for each drainage feature.

Potential wetland waters associated with jurisdictional drainages, which are also potentially subject to jurisdiction, were assessed using on-site examination according to the USACE three-parameter

method (vegetation, soils, and hydrology) of wetlands delineation (*1987 Manual; Regional Supplement*). In some areas, soil pits were dug in areas with visible indicators of wetland vegetation and hydrology to determine whether wetland soils are present. In such cases, potential wetlands were evaluated using the USACE three-parameter criteria and, for each investigated soil pit area, the Wetland Determination Forms – Arid West Region were completed. For nonwetland waters, the limits of the water bodies for USACE purposes were based on the OHWM.

In addition, if a human-made drainage feature (e.g., v-ditch, riprap or concrete-lined channel) replaced a former natural drainage or if it conveys flows from a natural drainage and it is ultimately tributary to a TNW, then the feature would be considered potentially USACE jurisdictional. If a feature is human-made and has no historical record and no connection, then the feature was either not mapped or was mapped as potentially jurisdictional for CDFW if it met CDFW regulatory requirements.

Potential CDFW Jurisdictional Areas

Potential CDFW jurisdictional areas were determined based on the presence of a bed and banks, which defines the jurisdictional streambed and any associated riparian habitat. The streambed is defined as the physical features of the channel invert and the channel banks and is measured from the highest point from which water flows, and typically has shelving, changes in the character of soil, or an absence of upland terrestrial vegetation. Because this is an assessment and not a routine delineation, these drainage features (e.g., width, depth, gradient) were identified, and widths between the bed and bank lines averaged for each feature; in addition, riparian vegetation areas were mapped on the aerial field maps for areas within a 500-foot buffer of the right-of-way edge.

Other Drainage Features. During the drainage assessment, several drainage features were noted in addition to the standard identification of drainages that have an OHWM or other evidence of water flow.

These drainage features are defined as follows:

- **Rills and Gullies.** Rills are formed by overland water flows that erode the soil surface during rain events. Gullies are deep channels typically formed on valley sides and floors where no well-defined channel previously existed. Gullies, rills (both of these erosional features were mapped as rills), and swales were mapped despite likely nonjurisdictional status to ensure complete coverage; however, when a gully or rill connected with a drainage, these features were then incorporated into the potential jurisdictional drainage.
- Swales. Swales are topographical features that have no clearly defined channel bottom (invert) and banks and lack visible evidence of water flow, but still may convey limited amounts of water. Generally swale widths were not measured since they lack measurable bed and banks, but in some cases, the widths were estimated and provided as supplemental information in Tables B and C (Appendix B). Paleo channels (considered inactive drainage features) are part of the low terrace, which is outside of the active floodplain. These areas may appear like drainage features but are completely abandoned and are above the current active and low flow channels.

- **Springs.** Springs occur when underground water emerges on the ground surface. The flowing water may connect to a drainage or dissipate back into the ground without connection to a drainage.
- **Open Water.** Open water identifies areas that are distinctly open bodies of water. These areas may contain aquatic plant and animal species but are not characterized by riparian or wetland species, though riparian or wetland species may occur along the edges of open water. Open water may or may not connect to a TNW.
- **Ponding Features.** Ponding features represent two types of features identified within the WOD Project Area. They are as follows:
 - **Depressional Feature.** A depressional feature within the WOD Project Area occurs just east of Lion Canyon River within the Reservation. This feature consists of a low-lying area in which hillside runoff has caused a large expanse of moist and dry mud that varies in diameter depending on rainfall. This area is isolated and does not connect to a TNW; however, it may be considered jurisdictional by the RWQCB.
 - **Mud Pool.** Mud pools are ephemeral, small shallow depressions that, due to soil texture and compaction, retain water long enough to support or potentially support some invertebrate species adapted to ephemeral pools. All identified mud pools are either road ruts or a small area of standing water behind a diversion ditch, none of which constitute water bodies that are considered jurisdictional by the CDFW, USACE, or RWQCB.
- **Detention Basins.** Detention basins are human-made storm water management features that collect and hold water for a limited time. They are typically located on, or adjacent to, tributaries of rivers, streams, lakes and other water bodies. Detention basins may or may not have an outflow, which may or may not have a connection to a TNW. If a basin is isolated from TNWs, but is associated with a stream and contains riparian vegetation, the riparian vegetation area and the basin were mapped as potentially CDFW jurisdictional.

Percent Gradient. Percent slope, called the percent gradient in Tables B and C, was visually estimated and averaged in the field for the entire drainage. The percent gradient represents the incline of the drainage or water flow path. The percent of slope is determined by how many feet the slope rises or falls per 100 feet. For example, a 10 percent gradient or slope is a slope that rises or falls 10 feet for each 100 feet of length. Or, a 100 percent slope is one that falls 10 feet per each 10 feet or a 45 degree angle. Anything steeper than that is actually more than a 100 percent slope. A vertical "slope" is infinite, while a horizontal "slope" is zero.

Mapping. Drainage locations were mapped in Figure 2 as lines or, occasionally, as lines with branches. In some cases, the features had branches with their own identification numbers and unique associated characteristics (e.g., depth, width). Lines generally followed the centerline of each drainage, including very large drainages. Identification of the 2012 drainage locations in Figure 2 are shown using white highlighted numbers and letters. These numbers are based on numbered grids that were used on field maps during 2012 field surveys. Similarly, identification of the 2013 drainage locations in Figure 2 are shown using orange highlighted numbers and letters, and these numbers are based on numbered grids that were used on field maps during 2013 field surveys.

Mud pool locations mapped as ponding features in Figure 2 were identified during focused fairy shrimp surveys conducted for the WOD Project Study Area between November 30, 2011, and March 27, 2013 (LSA 2013). These locations (nearly all are road ruts) are included in order to address the Western Riverside County MSHCP; however, mud pool dimensional information was not included in this report and is not shown in Table B or Table C. For a full methodology on the mapping of mud pools, see the focused fairy shrimp report (LSA 2013).

Table A. Table A in the Results and Conclusions section illustrates both the number of drainages identified within the entire Project Study Area and the number of drainages identified within each segment. These drainage counts are based on the number of drainages that were given a specific identification number (as described in the Mapping section above). Counts should only be considered an approximation and not necessarily accurate to the precise number of drainages present within the Project Study Area.

Table B. Table B (Appendix B) lists all identified drainage features for 2012 surveys (e.g., drainages, swales, rills, and inactive drainage features), the resulting potential for USACE, CDFW, and/or RWQCB⁷ jurisdiction, and documented drainage feature characteristics with a UTM location coordinate. The Table B identification numbers correspond to the white highlighted drainage numbers on the map (Figure 2).

Table C. Table C (Appendix B) lists all identified drainage features for 2013 surveys (e.g., drainages, swales, rills, and inactive drainage features), the resulting potential for USACE, CDFW, and/or RWQCB⁸ jurisdiction, and documented drainage feature characteristics with a UTM location coordinate. The Table C identification numbers correspond to the orange highlighted drainage numbers on the map (Figure 2).

Appendix A includes representative photographs of drainages and other drainage features from the 2012 and 2013 surveys.

The following results were prepared as a preliminary assessment of potential jurisdiction and are not intended to serve as a routine jurisdictional delineation. Permit requirements are subject to analysis of construction site plans, more detailed delineation and verification by the appropriate resource agencies (CDFW, USACE, and RWQCB).

⁷ For purposes of this Assessment, it is assumed that RWQCB will concur with the jurisdictional limits and impacts identified for the CDFW, and that they may assert jurisdiction over portions of the project area pursuant to the September 2004 Workplan and Porter-Cologne, as described below.

⁸ For purposes of this Assessment, it is assumed that RWQCB will concur with the jurisdictional limits and impacts identified for the CDFW, and that they may assert jurisdiction over portions of the project area pursuant to the September 2004 Workplan and Porter-Cologne, as described below.

RESULTS AND CONCLUSIONS

POTENTIAL JURISDICTION

As described in the Regulatory Background section above, USACE jurisdiction is based on a nexus, between the subject body of water and TNW used in interstate or foreign commerce, as well as the existence of an OHWM, while CDFW jurisdiction is established through the presence of a channel bed and bank with at least an ephemeral flow of water.

As previously stated, this report was prepared as a jurisdictional assessment and is not intended to serve as a routine jurisdictional delineation. As such, no attempt was made to evaluate the effect of potential USACE jurisdictional waters on the biological, chemical, or physical integrity of downstream TWNs, per *Rapanos* guidance. Only the tributary status was investigated.

The findings and recommendations presented in this report are based on preliminary assessments of jurisdiction and are subject to further analysis in conjunction with construction site plans and verification by the appropriate resource agencies.

United States Army Corps of Engineers Jurisdiction

Assessment of Federal Nexus. Up to 301 drainages throughout the Project Study Area were identified as potentially jurisdictional by the USACE due to their likely tributary connection to a TNW (Table A). Refer to Tables B and C for a listing of the potential jurisdictional drainages. The identification numbers in the table correspond to the identification numbers on the map (Figure 2).

Drainages in the western half of the Project Study Area (Segments 1–4) generally flow north or southwest into the Santa Ana River, Reche Canyon, Mission Channel, San Timoteo Wash, or San Timoteo Creek, which are tributary to the Pacific Ocean, a TNW. The drainages identified in the eastern part of the Proposed Project Area (Segments 4–6) and located in the City of Banning, on the Reservation, or situated farther east to Devers Substation, generally flow south or southeast into the San Gorgonio River, the Whitewater River, Super Creek, or Garnet Wash, each of which then flows into the Salton Sea, a TNW. Because the Pacific Ocean and the Salton Sea are TNWs, several of the drainages in the Project Study Area, or tributaries thereof, are potentially subject to USACE jurisdiction pursuant to Section 404 of the CWA. Preparation of a routine jurisdictional delineation, with a Preliminary or Approved Jurisdictional Determination by the USACE would determine jurisdictional status.

Potential Nonwetland Waters of the United States. Up to 275 nonwetland drainages, all of which have evidence of an OHWM, appeared to meet the USACE nexus criteria within the Project Study Area (Table A). Only drainages with a connection to a relatively permanent water and/or traditional navigable water would be considered potential waters of the United States. Most drainages within the Project Study Area are considered potentially jurisdictional.

Per Each Segment	Year	Potentially Jurisdictional Wetland Drainage, CDFW/USACE/RWQCB	Potentially Jurisdictional Nonwetland Drainage, CDFW/USACE/RWQCB	Potentially Jurisdictional Nonwetland Drainage, CDFW/RWQCB
1	2012	0	15	1
	2013	2	13	12
	Total	2	28	13
2	2012	5	37	35
	2013	0	11	11
	Total	5	48	46
3	2012	1	20	33
	2013	5	49	41
	Total	6	69	74
4	2012	10	33	9
	2013	2	18	18
	Total	12	51	27
5 *	2012	0	36	12
	2013	0	8	1
	Total	0	44	13
6	2012	1	28	22
	2013	0	7	1
	Total	1	35	23
Per the	2012	17	169	112
Entire	2013	8	105	84
Study Area	TOTAL	26	275	196

Table A: Drainage Counts Identified During 2012 and 2013 Assessment Surveys

* One depressional feature potentially subject only to the RWQCB is in Segment 5 (Drainage number 182B from 2012). CDFW = California Department of Fish and Wildlife

RWQCB = Regional Water Quality Control Board

USACE = United States Army Corps of Engineers

Potential Wetlands. There are up to 26 drainages within the Project Study Area that were identified with the potential to satisfy the three criteria necessary to meet the USACE definition of a wetland (i.e., presence of hydrophytic vegetation, hydric soils, and wetland hydrology) (Table A).

For this assessment, these areas were mapped as potentially jurisdictional for the USACE since they have a potential dominance of hydrophytic vegetation (e.g., willows [*Salix* spp.], desert willow [*Chilopsis linearis*], mule fat [*Baccharis salicifolia*], rush species [*Juncus* spp.]) associated with the channel bed and banks, and in most cases, had standing or flowing water, satisfying the hydrology criteria. A soil pit would be necessary to determine whether the third and final wetland criteria of hydric soils would be met in these areas. In general, soil pits were not dug to definitively determine wetland status; therefore, mapped wetland areas should be considered possible wetlands and the mapped area and table data (Tables B and C) as an estimation of the wetland area. However, soil pits were dug in areas within or in the vicinity of San Timoteo Creek to facilitate mapping of potentially jurisdictional USACE wetland areas. The Wetland Determination Data Forms – Arid West Region are included in Appendix C.

California Department of Fish and Wildlife Jurisdiction

All of the potential USACE jurisdictional areas would also be considered CDFW jurisdictional. In addition, up to 196 drainages that did not meet the USACE nexus criteria but showed evidence of a bed and bank (e.g., not categorized as swales) were also identified and are potentially subject to CDFW jurisdiction (Table A). These drainages have distinct channel beds and banks and, within the Project Study Area, appear to convey flows during and immediately following storm events. Drainages with a bed and bank were measured with the widths in feet. Associated riparian vegetation was also mapped as potentially CDFW jurisdictional. Tables B and C list these drainages and describe associated riparian vegetation.

Topographic features within the Project Study Area that lack an OHWM or evidence of a bed and bank were also mapped and are included in Tables B and C as potentially nonjurisdictional swales, rills, inactive drainage features, mud pools, or depressional features.

Regional Water Quality Control Board Jurisdiction

Areas of potential RWQCB jurisdiction coincide with the identified limits of potential USACE jurisdiction, per the September 2004 Workplan (SWRCB 2004). These areas may be subject to RWQCB jurisdiction through provisions in the CWA. In addition, areas that are potentially subject to CDFW jurisdiction, but do not qualify as USACE jurisdiction (i.e., isolated areas with a bed and bank that do not connect to a TNW and isolated wetlands), may also be subject to RWQCB jurisdiction through Porter-Cologne. The drainages in the western half of the Project Study Area (Segments 1–4), which flow into the Santa Ana River, will be subject to jurisdiction by Region 8 (Santa Ana RWQCB) of the SWRCB. The drainages in the eastern part of the Project Study Area (Segments 4–6), which flow into the Salton Sea, are regulated by Region 7 (Colorado River RWQCB) of the SWRCB. This includes the depressional feature (Drainage 182B from 2012) on the Reservation (Segment 5). The regional boundary within the Project Study Area is approximately the border (generally Highland Springs Avenue) between the cities of Beaumont and Banning in Riverside County.

Western Riverside County MSHCP Riparian/Riverine/Vernal Pool Areas

Riparian/Riverine Areas. All of the existing riparian communities within the Western Riverside County MSHCP that occur within the Project Study Area likely fall under the regulatory jurisdiction of the USACE pursuant to Section 404 of the CWA and/or the CDFW pursuant to Section 1600 of the California Fish and Game Code. Therefore, all drainage features subject to conditions of the Western Riverside County MSHCP Riparian/Riverine guidelines were identified as potentially jurisdictional by the USACE and the CDFW. There are approximately 60 riverine or riparian areas identified within the boundaries of the Western Riverside County MSHCP planning area, which is in Segments 2, 3, and 4.

Vernal Pool Areas. The Western Riverside County MSHCP defines vernal pools as seasonal wetlands that occur in depression areas that have all three USACE wetland parameters during the

wetter portion of the growing season, but typically lack the hydrology and/or vegetation parameters during the dryer portion of the growing season. Considering this definition of vernal pool habitat, none of the seasonally ponded depressions found during the vernal pool assessment survey conducted in 2011 and 2012 met Western Riverside County MSHCP criteria. However, several nonjurisdictional mud pools were identified (Figure 2). All of these mud pools were found to be unvegetated, artificially created depressions (predominantly in and along dirt access roads) that have been highly disturbed by ongoing vehicle use or other human disturbance. These pools were surrounded by nonnative grassland and ruderal species. These pools are augmented by direct rainfall as well as runoff from adjacent compacted or paved areas. Due to soil texture and compaction, these features often retain water long enough to support common invertebrate species adapted to ephemeral pools.

Coachella Valley MSHCP Desert Wetland Communities

The Coachella Valley MSHCP only protects jurisdictional drainages as they relate to the Natural Communities Conservation Goals within the Conservation Areas. Desert Willow and Alluvial Scrub communities are present within the Project Study Area; however, these communities are not identified as wetland communities in the CV-MSHCP. See Figure 2 for all major drainage areas identified within the boundaries of the Coachella Valley MSHCP planning area in Segments 5 and 6.

AUTHORIZATION FOR IMPACTS TO POTENTIAL JURISDICTIONAL AREAS

United States Army Corps of Engineers

Many of the drainages in the Project Study Area are tributary to a TNW and, as a result, are potentially subject to jurisdiction pursuant to Section 404 of the CWA. Relatively Permanent Waters are considered jurisdictional under current guidance, whereas other drainages require a significant nexus evaluation to determine whether they affect the biological, chemical, or physical integrity of a TNW pursuant to an Approved Jurisdictional Determination. Alternatively, drainages tributary to a TNW could be *assumed* to be jurisdictional, pursuant to a Preliminary Jurisdictional Determination.

A 404 Authorization would be required for proposed project activities that may result in discharge of fill material within USACE jurisdiction.

California Department of Fish and Wildlife

Disturbance areas within CDFW jurisdiction would require an SAA from the CDFW, while other potentially non-jurisdictional areas may warrant a consultation with the CDFW to discuss appropriate jurisdiction.

Regional Water Quality Control Board

Water Quality Certification (Section 401 permit) would be required for proposed project activities within any project disturbance areas that may result in discharge of fill material within potential USACE jurisdiction.

Non-federal jurisdictional features (including CDFW jurisdictional features) may also be subject to RWQCB jurisdiction pursuant to Porter-Cologne. Impacts to these non-federal waters of the State may be covered by a Waste Discharge Requirement attached to the Water Quality Certification, if required.

Aside from all waters under State or USACE jurisdiction, the RWQCB also covers some additional isolated features. One such feature, a depressional feature, was identified within the Project Study Area on the Reservation (Drainage Number 182B from 2012). Therefore, this drainage feature is potentially jurisdictional only under the RWQCB.

Avoidance Measures

Proposed project activities can be designed to avoid jurisdictional areas through the use of temporary steel plate crossings when drainages are dry, installation of wattles and silt fencing adjacent to drainages, or by avoiding impacts that would require authorization. Therefore, some proposed project activities may not be expected to require regulatory permits if constructed using approved avoidance measures and/or are avoided.

REFERENCES

- California Department of Fish and Game, Wildlife and Habitat Data Analysis Branch. 2003. The Vegetation Classification and Mapping Program List of California Terrestrial Natural Communities Recognized by The California Natural Diversity Database. The Resource Agency, Sacramento, CA.
- Coachella Valley Multiple Species Habitat Conservation Plan (Coachella Valley MSHCP). 2007. Final Recirculated Coachella Valley MSHCP. http://www.cvmshcp.org/Plan%20Documents/ 10.%20CVAG%20MSHCP%20Plan%20Section%203.0.pdf. September.
- Environmental Laboratory. 1987. *Corps of Engineers Wetlands Delineation Manual*. Technical Report Y-87-1. United States Army Engineer Waterways Experiment Station, Vicksburg, MS.
- Federal Interagency Committee for Wetland Delineation. 1989. Federal Manual for Identifying and Delineating Jurisdictional Wetlands. United States Army Corps of Engineers, United States Environmental Protection Agency, United States Fish and Wildlife Service, and United States Department of Agriculture Soil Conservation Service, Washington, D.C. Cooperative Technical publication. 76 pp. plus appendices.
- Hickman, J.C., ed. 1993. The Jepson Manual: Higher Plants of California. University of California Press, Berkeley and Los Angeles, CA. 1,400 pp.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. Non-Game Heritage Program, California Department of Fish and Game, Sacramento, California.
- Lichvar, Robert W., and John T. Kartesz. 2009. North American Digital Flora: National Wetland Plant List, version 2.4.0 (https://wetland_plants.usace.army.mil). U.S. Army Corps of Engineers, Engineer Research and Development Center, Cold Regions Research and Engineering Laboratory, Hanover, NH, and BONAP, Chapel Hill, NC.
- LSA Associates, Inc. (LSA). 2013. Letter to Susie Tharratt of the Recovery Permits Coordinator, entitled: Results of 2012–2013 Second Year Wet Season Fairy Shrimp Survey East of the El Casco Substation for the West of Devers Upgrade Project in San Bernardino and Riverside Counties (LSA Project No. SCE1110). July 11.
- State Water Resources Control Board (SWRCB). 2004. Workplan: Filling the Gaps in Wetland Protection. September.

- United States Army Corps of Engineers. 2008. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)*, ed. J.S. Wakeley, R.W. Lichvar, and C.V. Noble. ERDC/EL TR-08-28. Vicksburg, MS: U.S. Army Engineer Research and Development Center.
- ------. 2007. CECW-OR Memorandum: Clean Water Act Jurisdiction Following the United States Supreme Court's Decision in Rapanos v. United States & Carabell v. United States.

- United States Department of Agriculture, Natural Resources Conservation Service. 1969. Report and General Soil Map: Los Angeles County, California. United States Government Printing Office, Washington, D.C.
- ———. Soil Survey Staff. 1975. Soil Taxonomy. Agriculture Handbook No. 436. United States Government Printing Office, Washington, D.C. 754 pp.
- United States Geological Survey (USGS). 1992. San Bernardino South, Redlands, Sunnymead, El Casco, Beaumont, Cabazon, White Water, and Desert Hot Springs, California 7.5-minute series topographic quadrangles.
- Western Riverside Multiple Species Habitat Conservation Plan (Western Riverside MSHCP). 2003. Joint Environmental Impact Report and Environmental Impact Statement. http://www.rctlma.org/mshcp/volume4/index.html.
- Wetland Training Institute, Inc. 1995. Field Guide for Wetland Delineation; 1987 Corps of Engineers Manual, Glenwood, NM. WTI 02-1. 143 pp.
 - ——. 2004. Pocket Guide to Hydric Soil Field Indicators. Robert J. Pierce (ed.). Wetland Training Institute, Inc., Glenwood, NM. WTI 2004-2. 152 pp.

This Page Intentionally Left Blank

APPENDIX A

FIGURES 1–3

Figure 1: Project Location Figure 2: 2012 and 2013 Survey Results Figure 3: Representative Photos This Page Intentionally Left Blank



I:\SCE1110\GIS\MXD\Biology\Drainages_2013_ProjectLocation.mxd (9/13/2013)

Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Page F-1251 October 2013 APPENDIX F: BIOLOGICAL RESOURCES

This Page Intentionally Left Blank



Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

This Page Intentionally Left Blank

Proponent's Environmental Assessment West of Devers Upgrade Project








Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

- **157** 2012 Drainage labels
- 157A 2013 Drainage labels

Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW

Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE'

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results





200 feet from Right of Way Soil Pit ID

Morongo Reservation

Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

- **157** 2012 Drainage labels
- 157A 2013 Drainage labels

Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE'

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results



- Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)
- **157** 2012 Drainage labels

Morongo Reservation

157A 2013 Drainage labels

Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

Soil Pit ID

200 feet from Right of Way

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1259 October 2013



Existing Right of Way

200 feet from Right of Way Soil Pit ID

WOD Existing Right of Way to be Removed Morongo Reservation

Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

157 2012 Drainage labels

roposed Access Roads

157A 2013 Drainage labels

Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1261 October 2013



EDISON

FEE

Project Study Area Existing Right of Way

200 feet from Right of Way Soil Pit ID

WOD Existing Right of Way to be Removed

Staging Yards

xisting Access Roads

roposed Access Roads

Morongo Reservation

Potentially Jurisdictional Wetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

- 157A 2012 Drainage labels
- 157A 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

Sheet 5 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1263 October 2013



SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013)

Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

2012 and 2013 Drainage Assessment Results

Page F-1265 October 2013



Existing Right of Way WOD Existing Right of Way to be Removed

200 feet from Right of Way Soil Pit ID

Morongo Reservation

Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

157A 2012 Drainage labels

xisting Access Roads

roposed Access Roads

157A 2013 Drainage labels

Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE'

I:\SCE1110\GIS\MXD\Biology\JD Drainages 2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1267 October 2013



I:\SCE1110\GIS\MXD\Biology\JD Drainages 2013.mxd (9/30/2013)

Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Page F-1269 October 2013





FEE

LEGEND Project Study Area

Existing Right of Way

200 feet from Right of Way Soil Pit ID

WOD Existing Right of Way to be Removed

Potentially Jurisdictional Wetland Drainage - CDFW/USACE Staging Yards xisting Access Roads Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW roposed Access Roads Morongo Reservation

Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features) 157A 2012 Drainage labels

157 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

FIGURE 2 Sheet 9 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results



I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013)

Proponent's Environmental Assessment

West of Devers Upgrade Project





Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES



SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

2012 and 2013 Drainage Assessment Results



Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined)

Potentially Jurisdictional Nonwetland Basin - CDFW

Open Water

Ponding Features

Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated"

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010) I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

Soil Pit ID

Existing Right of Way

200 feet from Right of Way

WOD Existing Right of Way to be Removed

xisting Access Roads

Morongo Reservation

roposed Access Roads

Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE

Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

Potentially Jurisdictional Nonwetland Drainage - CDFW

157 2012 Drainage labels

157A 2013 Drainage labels

West of Devers Upgrade Project

FEE

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results



Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

157 2012 Drainage labels

Morongo Reservation

157A 2013 Drainage labels

Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE

200 feet from Right of Way

Soil Pit ID

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1281 October 2013



SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project



2012 and 2013 Drainage Assessment Results



- WOD Existing Right of Way to be Removed 200 feet from Right of Way
- Soil Pit ID

- Morongo Reservation
- Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)
 - 157A 2012 Drainage labels
 - 157A 2013 Drainage labels

Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE'

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results



Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Page F-1287 October 2013



Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE'

I:\SCE1110\GIS\MXD\Biology\JD Drainages 2013.mxd (9/30/2013)

Soil Pit ID

157A 2012 Drainage labels

2013 Drainage labels

Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1289 October 2013


Ponding Features

157 2013 Drainage labels

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE'

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013)

Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results



Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project



2012 and 2013 Drainage Assessment Results

Page F-1293 October 2013



Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

2012 and 2013 Drainage Assessment Results

Page F-1295 October 2013



I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

2012 and 2013 Drainage Assessment Results



Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

2012 and 2013 Drainage Assessment Results

Page F-1299 October 2013



Project Study Area

Existing Right of Way

WOD Existing Right of Way to be Removed 200 feet from Right of Way Soil Pit ID

Morongo Reservation

Potentially Jurisdictional Wetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

157 2012 Drainage labels

sisting Access Roads

roposed Access Roads

157A 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Sheet 24 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1301 October 2013



Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

157 2012 Drainage labels

Morongo Reservation

157 2013 Drainage labels

- Potentially Jurisdictional Riparian Vegetation CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water
- Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

FEE

200 feet from Right of Way

Soil Pit ID

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1303 October 2013





FEE'

Project Study Area Existing Right of Way 200 feet from Right of Way

WOD Existing Right of Way to be Removed Soil Pit ID

Staging Yards

Potentially Jurisdictional Wetland Drainage - CDFW/USACE sisting Access Roads Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE roposed Access Roads Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features) Morongo Reservation

- **157** 2012 Drainage labels
- **157** 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project



Sheet 26 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1305 October 2013



I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013)

Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Page F-1307 October 2013



EDISON

FEE'

Project Study Area Existing Right of Way WOD Existing Right of Way to be Removed

200 feet from Right of Way Soil Pit ID

Staging Yards Potentially Jurisdictional Wetland Drainage - CDFW/USACE xisting Access Roads roposed Access Roads Morongo Reservation

Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

- **157** 2012 Drainage labels
- 157A 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Sheet 28 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1309 October 2013





FEE'

Project Study Area Existing Right of Way WOD Existing Right of Way to be Removed 200 feet from Right of Way

Soil Pit ID

Staging Yards Potentially Jurisdictional Wetland Drainage - CDFW/USACE xisting Access Roads Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE roposed Access Roads Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features) Morongo Reservation

- **157** 2012 Drainage labels
- **157** 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Sheet 29 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1311 October 2013



SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

2012 and 2013 Drainage Assessment Results

Page F-1313 October 2013



EDISON

FEE

Project Study Area Existing Right of Way WOD Existing Right of Way to be Removed

200 feet from Right of Way Soil Pit ID

Staging Yards Potentially Jurisdictional Wetland Drainage - CDFW/USACE xisting Access Roads Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE roposed Access Roads Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features) Morongo Reservation

- **157** 2012 Drainage labels
- 157A 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water

Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment West of Devers Upgrade Project

FIGURE 2 Sheet 31 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1315 October 2013

This Page Intentionally Left Blank

Proponent's Environmental Assessment West of Devers Upgrade Project





FEE'

Project Study Area Existing Right of Way

200 feet from Right of Way Soil Pit ID

xisting Access Roads WOD Existing Right of Way to be Removed Proposed Access Roads Morongo Reservation

Potentially Jurisdictional Wetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW/USACE Potentially Jurisdictional Nonwetland Drainage - CDFW Non-jurisdictional Drainage Features (including rills, swales, or in-active drainage features)

- **157** 2012 Drainage labels
- 157A 2013 Drainage labels

Potentially Jurisdictional Wetland - CDFW/USACE Potentially Jurisdictional Riparian Vegetation - CDFW (USACE Undetermined) Potentially Jurisdictional Riparian Vegetation - CDFW "Isolated" Potentially Jurisdictional Nonwetland Basin - CDFW Open Water Ponding Features

SOURCE: SCE (11/2011, 11/2012, 2/2013); Microsoft (5/2010); ESRI (2010)

I:\SCE1110\GIS\MXD\Biology\JD_Drainages_2013.mxd (9/30/2013) Proponent's Environmental Assessment

West of Devers Upgrade Project

APPENDIX F: BIOLOGICAL RESOURCES

Sheet 32 of 108

Southern California Edison West of Devers Upgrade Project 2012 and 2013 Drainage Assessment Results

> Page F-1317 October 2013

This Page Intentionally Left Blank

Proponent's Environmental Assessment West of Devers Upgrade Project