Habitat Assessment and MSHCP Consistency Analysis World Logistics Center Specific Plan City of Moreno Valley, Riverside County, California

Sunnymead and El Casco USGS 7.5-minute Topographic Quadrangles
Sections 1, 10, 11, 12, 13, and 14 Township 3 South, Range 2 West and
Sections 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, and 21 Township 3 South, Range 3 West

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Survey Date: June 27, 2013
Report Date: December 6, 2013
Revised: September 2014

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ACRONYMS AND ABBREVIATIONS

APNs	Assessor's Parcel Numbers
BMP	Best Management Practice
CDFG	California Department of Fish and Game
CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFG	California Fish and Game
CFR	Code of Federal Regulations
CNDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSC	California Species of Concern
CSP	Corrugated Steel Pipe
CWA	Clean Water Act
DBESP	Determination of Biologically Equivalent or Superior Preservation
DE	diesel emissions
DPM	diesel particulate matter
EPA	Environmental Protection Agency
EIR	Environmental Impact Report
FCS-MBA	FirstCarbon Solutions | Michael Brandman Associates
FESA	Federal Endangered Species Act
GIS	Geographic Information Systems
GPS	Global Positioning System
HCP	Habitat Conservation Plan
HRA	Health Risk Assessment
I	Interstate
JPR	Joint Project Review
LPSRA	Lake Perris State Recreation Area
MBA	Michael Brandman Associates
MBTA	Migratory Bird Treaty Act
MSHCP	Multiple Species Habitat Conservation Plan
MWD	Metropolitan Water District
NEPA	National Environmental Policy Act
NPDES	National Pollutant Discharge Elimination System
OEHHA	Office of Environmental Health Hazard Assessment (State of California)
OHWM	ordinary high water mark

PQP	Public/Quasi-Public
RBC	Reinforced Boxed Culvert
RCA	Regional Conservation Authority
RCIP	Riverside County Integrated Project
RPW	Relatively Permanent Water
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SCE	Southern California Edison
SDG&E	San Diego Gas and Electric
SJWA	San Jacinto Wildlife Area
SKR	Stephens' kangaroo rat
sq ft	square feet
SR	State Route
SWANCC	Solid Waste Agency of Northern Cook County
SWPPP	Storm Water Pollution Prevention Plan
TNW	Traditional Navigable Water
USACE	United States Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
WDR	Waste Discharge Requirement
WLCSP	World Logistics Center Specific Plan

SUMMARY

FirstCarbon Solutions | Michael Brandman Associates (FCS-MBA) conducted a Habitat Assessment, Multiple Species Habitat Conservation Plan (MSHCP) Consistency Analysis, Joint Project Review, and California Environmental Quality Act (CEQA) Biological Resources Assessment to comply with the Western Riverside County MSHCP and City of Moreno Valley CEQA requirements for an Environmental Impact Report (EIR) for the World Logistics Center Specific Plan and General Plan Amendment. This report includes an assessment of the World Logistics Center Specific Plan (WLCSP) area (2,610 acres) , the 910-acre CDFW conservation buffer (within the San Jacinto Wildlife Area), the SDG&E Moreno Compressor Plant (192 acres), SoCal Gas Plant (1.0 acres), an indirect impact zone surrounding portions of the WLCSP (610 acres), potential offsite infrastructure facilities (104 acres) and additional survey areas (1,636 acres) associated with reduced specific plan boundary changes located in the City of Moreno Valley, western Riverside County, California. The combined area (6,063 acres) is hereafter referred to as the survey area.

Within the WLCSP, Highland Fairview Operating Company is proposing to develop 40.6 million square feet of warehouse facilities and associated infrastructure. As part of the project design, a buffer area will remain along the southern boundary adjacent to the CDFW Conservation Buffer.

A 1,000-foot area adjacent to the eastern and southwestern borders of the WLCSP was examined to comply with the Urban/Wildlands interface as required by the MSHCP and to address indirect impacts associated with construction and operation of the facilities, hereafter referred to as the Indirect Impact Zone. A total of 6,063 acres was examined that includes the WLCSP, offsite infrastructure facilities, CDFW Conservation Buffer, indirect impact zone, and additional survey areas. The examination was made through direct pedestrian surveys, literature reviews, and aerial photography reviews.

The WLCSP is located within the Reche Canyon/Badlands Area Plan of the Western Riverside County MSHCP. Portions of the WLCSP, CDFW conservation buffer area and offsite infrastructure facilities occur within 12 Criteria Cells within the MSHCP boundaries and include:

1204	1370	1389	1482
1297	1377	1390	1483
1364	1386	1477	1577

Because portions of the WLCSP are located within Criteria Cells (Criteria Cells 1204, 1297, and 1364), a JPR is required between the City of Moreno Valley, the Western Riverside County Regional Conservation Authority (RCA), and any developers of the WLCSP. Portions of the survey area are also located within the northern extent of the San Jacinto Wildlife Area (SJWA), which is a Public/Quasi-Public Conservation Area (PQP) Land and designated as existing Core Area H.

Suitable habitat for burrowing owl occurs on the majority of the WLCSP. FCS-MBA conducted focused surveys for burrowing owl across the WLCSP in 2005, 2006, 2007, 2010, 2012, and 2013. FCS-MBA determined that burrowing owl were present in the WLCSP in 2005 (MBA 2005), 2008 (Fierro pers. comm. 2012.), early spring 2012 (MBA 2012a), and most recently in 2013 (FCS-MBA 2013). Due to the presence of suitable habitat and periodic use of the area by burrowing owls, avoidance measure included in the CDFW 2012 staff report will be required.

A general Burrowing Owl Relocation Plan was prepared for the WLCSP project to spell out the steps necessary to take if burrowing owl occur within the WLCSP prior to development (see Appendix K). If burrowing owl are found onsite during project-specific presence/absence surveys, avoidance and mitigation measures, including active and/or passive relocation, may be required. In addition, conducting a 30-day pre-construction clearance survey prior to any ground disturbance activity will be required to avoid any direct impact to this species. Presence/absence surveys methods will follow the current MSHCP standards. All active/passive relocation efforts, if necessary, will be coordinated in consultation with CDFW and will generally follow the 2012 CDFW staff report.

Suitable habitat for Los Angeles pocket mouse occurs within one of the main drainage features located on the WLCSP as well as one of the potential offsite detention facilities. FCS-MBA conducted focused surveys for Los Angeles pocket mouse in 2005, 2010, 2012, and 2013 and concluded that Los Angeles pocket mouse is absent from the WLCSP and no further action is required for this species. There is no suitable habitat between the known occurrence of Los Angeles pocket mouse and the WLCSP. The known populations of Los Angeles pocket mouse are more than 2 miles from the southern WLCSP boundary. Therefore, there is a low potential for Los Angeles pocket mouse to establish a population within the WLCSP in the future.

A sensitive plant survey was conducted in June and July 2010 (MBA 2010), and resulted in negative findings for sensitive plant species identified as having a potential to occur on the site. Based on future site conditions, additional surveys will be required for those projects that potentially affect Riversidean sage scrub habitat within the survey area. If sensitive plant species covered under the MSHCP are found during these surveys, no additional mitigation measures will be required because the WLCSP is outside of the required survey area for narrow endemic and criteria cell plant species. If sensitive plant species not covered under the MSHCP or conditionally covered are identified during focused plant surveys, additional mitigation measures will be required including habitat conservation and/or sensitive plant relocation.

The WLCSP is located within the Stephens' kangaroo rat (SKR) Habitat Conservation Plan (HCP) fee area. Based on the HCP's Implementation Agreement, payment of the County's per-acre mitigation fee is required. This fee is separate from any MSHCP development fees. The SJWA is currently designated as PQP conserved lands and has been incorporated into the SKR core conservation area. Impacts to the proposed WLCSP will not directly impact any portion of the SKR core conservation area and are unlikely to indirectly impact the SKR core conservation area.

The WLCSP is bordered to the southeast by MSHCP Proposed Core 3 (Section 6.1.1, Proposed Core 3) and to the south by Existing Core H and SJWA. Moreover, portions of the WLCSP fall within the

boundaries of all the aforementioned MSHCP Conservation Areas. The portions of the survey area within the SJWA are not proposed for development because they are outside of the WLCSP area. The remaining portions of the survey area that are on or immediately adjacent to conservation areas will incorporate urban edge design features to minimize potential development impacts to wildlands. This includes development that would occur adjacent to the SJWA in the WLCSP. These design features address potential impacts associated with lighting, storm water runoff, and noise.

All drainage features within survey area are considered potentially jurisdictional until verified by regulatory agencies. Based on the most recent assessment of jurisdictional limits regarding the 15 drainage features potentially affected by WLCSP development, 13 of these drainage features do not have direct hydrologic connectivity to any Relatively Permanent Water (RPW) or Traditional Navigable Water (TNW), necessary to be considered jurisdictional by the United States Corps of Engineers (USACE) (MBA 2012). These features include drainages 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 13, and 14. Therefore, the features onsite are considered isolated and no regulatory permits under the federal Clean Water Act (CWA) will be required. Drainage Feature 12 will be directly impacted by project development in the southwestern portion of the WLCSP and Drainage 15 may be impacted by construction of offsite facilities. These drainages are under the jurisdiction of the USACE and would require permits under Section 404 and 401 of the Clean Water Act and Section 1602 of the California Fish and Game Code if they are impacted.

As few as five and as many as 10 drainage features with the WLCSP are likely considered waters of the state under CDFW jurisdiction and therefore may require a streambed alteration agreement under Section 1602 of the California Fish and Game (CFG) Code (Drainages 1, 2, 4, 5, 6, 7, 8, 9, 12, and 15). These features are also likely under Regional Water Quality Control Board (RWQCB) jurisdiction and may require a Waste Discharge Requirements under the Porter-Cologne Act. In addition, due to the large area of development a detailed a Storm Water Pollution Prevention Plan (SWPPP) will be required on a project-by-project basis. The SWPPP will specifically address all potentially significant impacts associated with toxic runoff associated with the proposed development.

Ten drainage features within the WLCSP proposed development area are considered riparian/riverine areas, as designated by the MSHCP (Drainages 1, 2, 4, 5, 6, 7, 8, 9, 12, and 15). Based on current design plans, a program-level Determination of Biologically Equivalent or Superior Preservation (DBESP) was completed. If impacts to any of these areas are anticipated on a project-level, a project-level DBESP may be required to assess the extent of impact and the measures taken to reduce the impact or determine mitigation measures for implementation to onsite habitat creation, offsite habitat creation or through the purchase of mitigation credits at an approved mitigation bank.

No United States Fish and Wildlife Service (USFWS) designated Critical Habitat for any species is present within the WLCSP.

Portions of the WLCSP contain suitable nesting habitat for birds protected under the Migratory Bird Treaty Act (MBTA) and CFG Code. If construction activities occur during the nesting season, early

February through the end of August, then FCS-MBA recommends conducting pre-construction clearance surveys for nesting birds.

The WLCSP currently contains low quality raptor foraging habitat. Impacts to low-quality raptor foraging habitat is not a significant impact under CEQA. Food sources for raptors in the agricultural areas are currently limited due to yearly disking and lack of artificial irrigation. Certain crops experience low utilization by native wildlife, as stated in the General Plan (Page 5.9-28). The WLCSP area is currently dry land farmed, which contains an extremely low prey biomass based on the Burrow Study required for the 2013 Protocol Burrowing Owl Survey. The raptor foraging areas within the CDFW Conservation Buffer Area, south of the WLCSP also provide low-quality raptor foraging habitat, but were also surveyed as a buffer area between the proposed development and high quality raptor foraging habitat further to the south (4,500 linear feet), within the SJWA. Since golden eagle and white-tailed kite are known to occur within the immediate vicinity or on the project site, there is a potential for project-related impacts to these species, including the loss of foraging habitat. These two species are California fully protected species and any impacts to these species are significant. These two species are covered under the MSHCP and payment of the MSHCP fee will be used by the Western Riverside County Regional Conservation Authority (RCA) to purchase offsite lands that will mitigate for the loss of this foraging habitat.

A wildlife movement corridor is generally defined as an area that allows movement of a small, medium, and large wildlife species on a regular basis between or through large areas of suitable habitat. This area could be represented by a large riparian corridor providing adequate vegetative cover or similar topographic feature. Based on 10 years of active study of the WLCSP area, FCS/MBA has determined that there is little to no evidence that any portion of the WLCSP provides suitable habitat components to support a significant wildlife movement corridor on a local or regional basis. There is evidence of wildlife tracks located in three of the culverts located within the WLCSP (Culvert #s 2, 5, and 6).

However, suitable habitat components to support a significant wildlife movement corridor does occur southeast of the project site where Core Area H abuts Proposed Core Area 3. There are two culverts (Culvert #s 15 and 19) within this area that contain evidence of wildlife activity. The MSCHP does not designate the WLCSP as an area of wildlife movement concern (linkage, constraint linkage or proposed linkage). Therefore, the development of the WLCSP project will not have a direct impact on any wildlife movement corridors associated with any MSHCP linkages, constraint linkages or proposed linkages. Although not specifically designated a wildlife corridor or linkage as defined under the MSHCP, the area along Gilman Springs Road southeast of the WLCSP that connects Core Area H and Proposed Core Area 3 is considered a significant wildlife crossing by the RCA.

In some cases, a barrier between two large, adjoining conservation areas may limit wildlife movement, similar to where Core Area H abuts Proposed Core Area 3 as mentioned above. The WLCSP does not contain this type of barrier, and, therefore, there are no direct impacts associated with the WLCSP to any such wildlife crossings.

The southeastern corner of the WLCSP contains portions of MSHCPs Proposed Core Area 3. At present, wildlife crossing under Gilman Springs Road within Criteria Cell 1204 and 1297 are limited to three corrugated steel pipes (CSP). Two of the pipes are 36 inches in diameter and the third is 24 inches. Recent Russian thistle (*Salsola tragus*) growth blocks all three CSPs, and there is no evidence of active use by wildlife species within the CSPs within Criteria Cell 1204 and 1297. Spider webs across the upstream portion of the CSPs indicate the lack of use by medium- to large-size wildlife species.

Less than 400 linear feet southeast of the project site, Core Area H and Proposed Core Area 3 are separated by Gilman Springs Road. Based on the WLCSP's Traffic Impact Analysis, the WLCSP will increase traffic along Gilman Springs Road by approximately 5 percent at final buildout. The WLCSP project is not required to construct any road improvements to Gilman Springs Road frontage or to Gilman Springs Road southeast of the project boundary as part of the WLCSP. The DEIR for the WLC project contains mitigation measures associated with traffic, which requires the project to contribute its fair share toward a number of off-site roadway improvements, including Gilman Springs Road. In the future, if the City of Moreno Valley requires such road improvements, additional environmental review will be required at a project-level analysis.

The incremental increase in traffic may have off-site indirect impacts associated with an increase in traffic between MSHCP Core Area H and Proposed Core Area 3. There are 10 culvert undercrossings of Gilman Springs Road between MSHCP Core Area H and Proposed Core 3 Area (Culvert #s 10 to 19). These features consist of one 24-inch CSPs (Culvert 13), five 36-inch CSPs (Culvert #s 10, 11, 16, 17, and 18), two dual 36-inch CSPs (Culvert #s 12 and 14), one crossing consisting of eight 36-inch CSPs (Culvert # 15), and one 12-foot by 12-foot reinforced concrete box (Culvert # 19). It should be noted that the County of Riverside has recently improved all drainage crossing beneath Gilman Springs Road as part of the Gilman Springs Road Safety Improvement Corridor, which was completed in December 2013. All existing culverts were either replaced or improved with new concrete wing-walls or headwalls.

Although not required as mitigation for impacts to wildlife movement, project design features to accommodate wildlife movement within the WLCSP will include improvements to Drainage 9. This improvement will provide a wildlife movement corridor between Gilman Springs Road and the SJWA. The present crossings under Gilman Springs Road in this area are large enough (6-foot by 7-foot reinforced box culvert) to provide a crossing for the largest target species, which is the mountain lion.

There are no mitigation measures that require the construction of physical improvements to Gilman Springs Road in connection with the project, either on-site, off-site, or immediately adjacent to the WLCSP. The DEIR for the WLC project contains mitigation measures associated with traffic that require the project to contribute its fair share toward a number of off-site roadway improvements, including Gilman Springs Road. Highland Fairview has committed to paying its fair share of future Gilman Springs Road improvements, including those that would benefit wildlife movement, such as adding additional underground dry-crossing culverts and/or resizing existing culverts that connect Core Area H and Proposed Core Area 3. Gilman Springs Road is planned as an arterial roadway (85 feet wide), which will consist of four lanes of traffic and a center divider. Currently, Gilman Springs

Road is a two-lane arterial roadway with a southbound passing lane (50 feet wide), which was completed at the end of 2013. The MSHCP requires that underground culverts that will be built as part of the future expansion of Gilman Springs Road will be sufficient to meet the initial guidelines for Wildlife Movement Design within Criteria Areas (Section 7.5.2 of the MSHCP).

The WLCSP does not contain any designated wildlife movement corridors or linkages. Additionally, the WLCSP does not contain suitable habitat for any Criteria Area plant species or Narrow Endemic plant species.

The discussion of nitrogen deposition as an indirect impact to USFWS designated critical habitat was misapplied and inappropriate for the World Logistics Center project. Due to the way in which nitrogen is generated by the WLC project, its overall patterns for dispersion, and the multi-variant parameters that would need to be taken into consideration for such an analysis, there is no basis or standards set-forth to study the effects of Nitrogen Dispersion for non-point pollution sources; hence, project-specific conclusions are overly speculative and cannot be meaningfully obtained. The Document has been revised to reflect an accurate characterization of the Nitrogen Deposition issue, consistent with the EIR for the WLCSP project.

SECTION 1: INTRODUCTION

At the request of Highland Fairview Operating Company, FirstCarbon Solutions | Michael Brandman Associates (FCS-MBA) conducted a Habitat Assessment and MSHCP Consistency Analysis to comply with the Western Riverside County MSHCP. This report contains the results of a habitat assessment for burrowing owl (*Athene cunicularia*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), sensitive plants, and riparian areas. Also included is an analysis of all applicable CEQA requirements and constraints.

For the purposes of this report, the survey area has been divided into three major areas:

- The first area includes proposed development associated with the WLCSP area, including offsite infrastructure areas and will be referred to as the WLCSP.
- The second area includes the CDFW conservation area as well as the San Diego Gas & Electric (SDG&E) lands and will be referred to as the CDFW Conservation Buffer.
- The third area includes the 1,000-foot survey area surrounding the WLCSP and will be referred to as the Indirect Impact Zone.

The WLCSP survey area boundary has changed over the years and subsequently a much larger survey area is included in this report to accommodate those revisions. The portion of the survey area not covered under the above-mentioned three areas will be referred to as "additional survey area." In addition, since the WLCSP boundary has changed, so has the 1,000-foot Indirect Impact Zone. All of these changes are reflected in this document.

1.1 - Project Location

The survey area is generally located north of State Route (SR) 74, south of SR-60, east of Interstate (I) 215, and west of SR-79 (Exhibit 1). Specifically, the survey area is located within Sections 1, 2, 10, 11, 12, 13, and 14 of Township 3 South, Range 2 West; and Sections 5, 6, 7, 8, 9, 16, 17, 18, 19, 20, and 21 of Township 3 South, Range 3 West as depicted on the Sunnymead and El Casco, California, United States Geological Survey (USGS) 7.5-minute topographic maps (Exhibit 2). The survey area is specifically located south of SR-60, east of Redlands Boulevard, and west of Gilman Springs Road (Exhibit 3). The survey area encompasses several contiguous parcels totaling approximately 6,063 acres including potential offsite improvements on the eastern, northern, and western margins of the WLCSP to assess indirect impacts to "wildlands areas." Highland Fairview Operating Company is proposing to develop the WLCSP on 2,610 acres of the northern portions of the survey area. The WLCSP consists of the Assessor's Parcel Numbers (APNs) listed in Appendix I.

1.2 - Project Description

For the reader's reference, this document and each of the technical reports and analyses contained herein have been written to address a series of planning entitlements which affect several separate,

adjacent and related properties. The overall project site covers 3,819 acres in the Rancho Belago area of the City of Moreno Valley. It includes 3,713 acres of land which is the subject of various entitlements, plus 104 acres of land affected by off-site improvements needed to support the proposed development. The off-site improvements consist of eight utility lines (16 acres), four freeway ramps (15 acres), four basins (9 acres), one drainage (6 acres), and eight roadways (60 acres) (Exhibit 4). The proposed entitlements are summarized below.

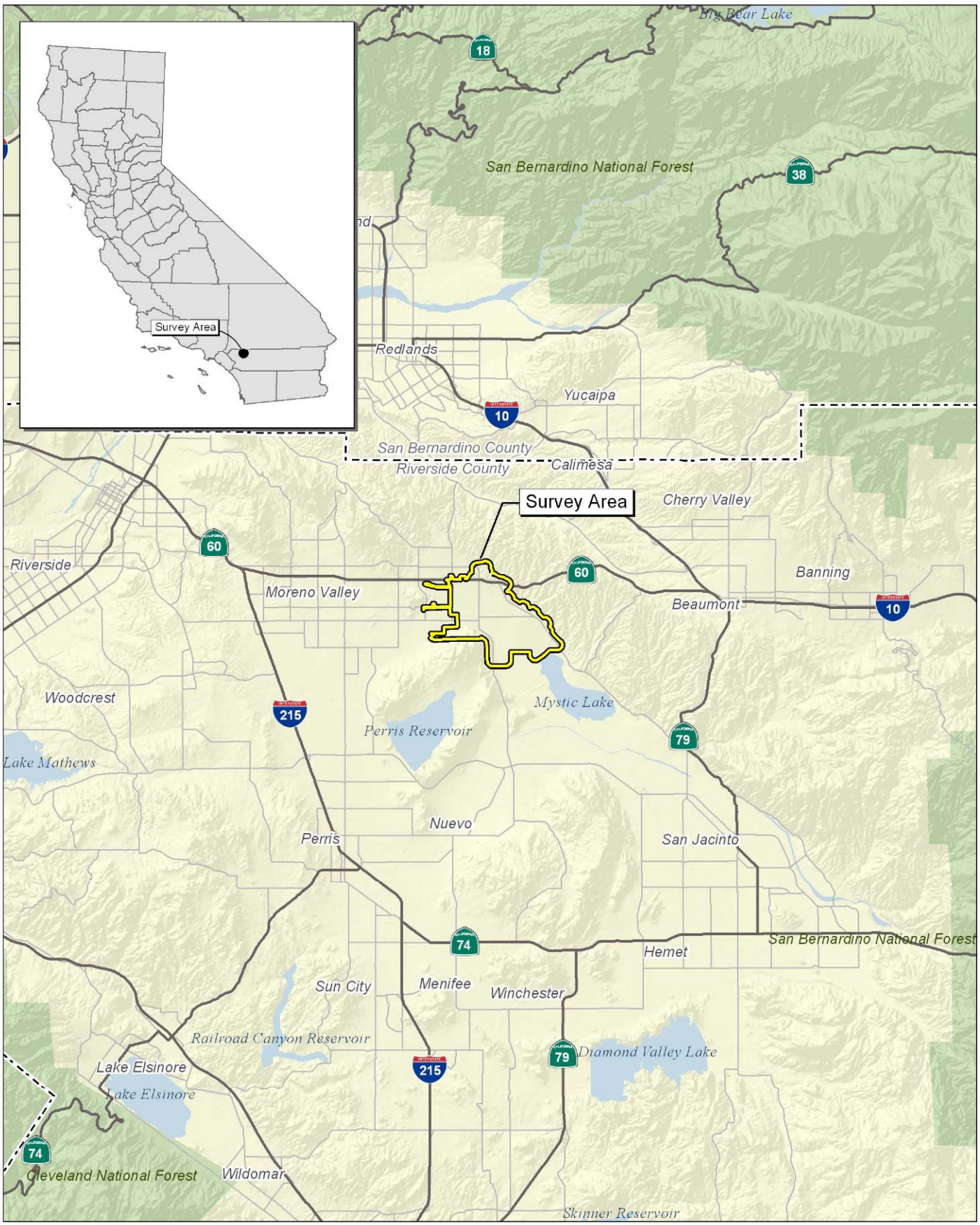
A 74.3-acre parcel will remain undeveloped and will be zoned for open-space. This parcel is located in the southwestern corner of the survey area, immediately north of the Lake Perris State Recreational Area. This parcel is located at the foothills of Mt. Russell and is located between the proposed development and the land associated with existing Core H under the MSHCP. At this point, the parcel is not being offered up as conservation but will remain as undeveloped open space.

A General Plan Amendment is proposed covering 3,713 acres which re-designates approximately 70 percent of the area (2,610 acres) for logistics warehousing (the World Logistics Center project), and the remaining 30 percent (1,103 acres) for permanent open space and public facilities. The following elements of the General Plan are included in the proposed Amendment: Community Development (land use), Circulation, Parks, Recreation, and Open Space, Safety, Conservation, and the General Plan Goals and Objectives. A new Specific Plan is proposed to govern development of the 2,610-acre World Logistics Center project.

The Specific Plan will be adopted through the zone change process. A separate zone change is also proposed to re-zone 1,103 acres for open space and public facilities uses. This acreage is currently zoned for a variety of development uses under the existing Moreno Highlands Specific Plan. This area is not part of the proposed WLC Specific Plan. In addition to the General Plan Amendment, Specific Plan, and Zone Change, the project includes a Tentative Parcel Map covering 1,539 acres (property owned by the project applicant, Highland Fairview) is within the project site. This subdivision map is for financing purposes only and will not confer any development rights. The project also includes pre-annexation zoning for an 85-acre parcel of land within the proposed Specific Plan. This area is already within the city's adopted Sphere of Influence. This project proposes to complete the annexation process for this 85-acre parcel.

Finally, a Development Agreement between the City and Highland Fairview (the project applicant) is included as one of the project entitlements.

The details of these project entitlements are included in Section 3.4 of the EIR (Project Characteristics).



Source: Census 2000 Data, The CaSIL, FCS-MBA GIS 2014.

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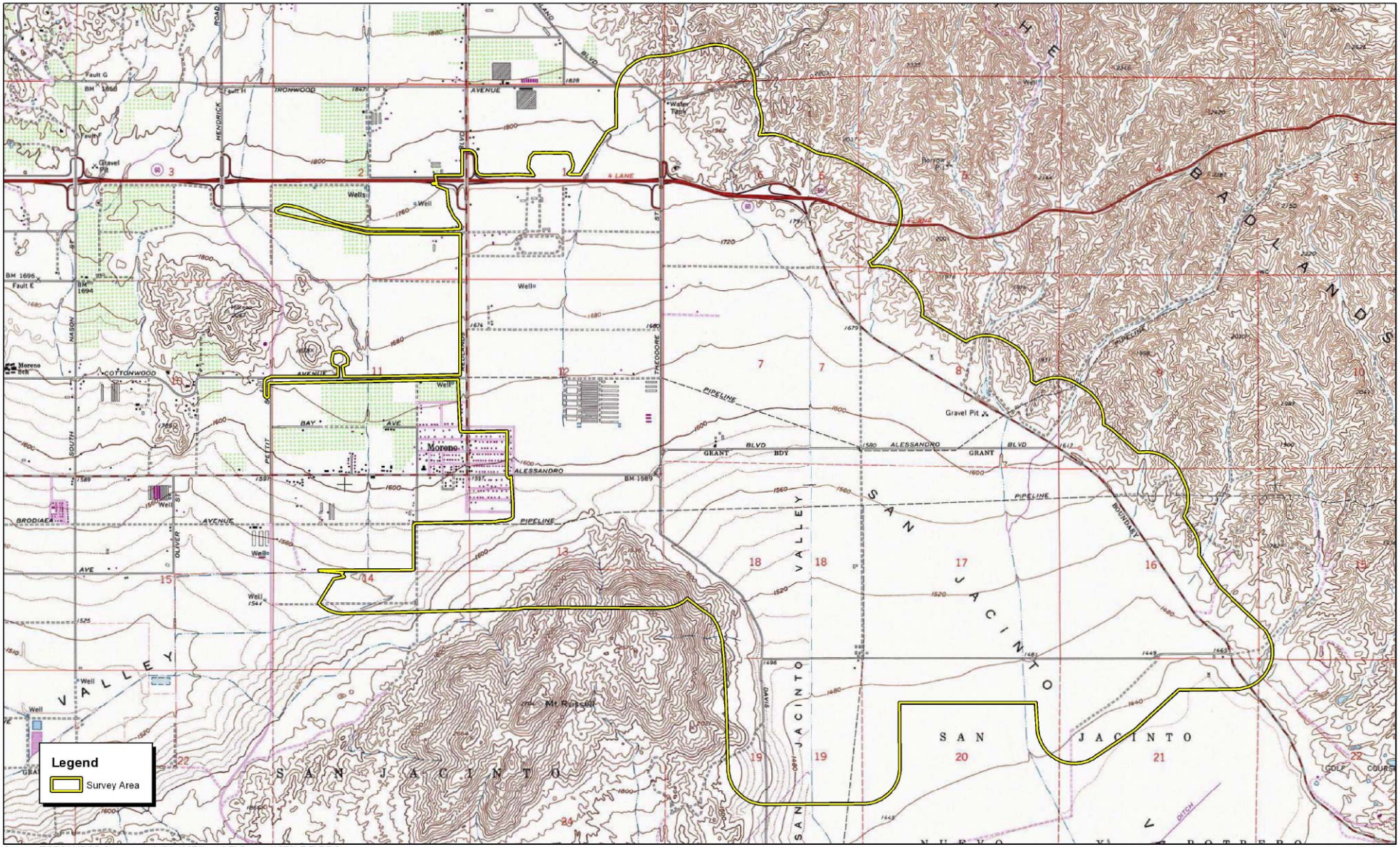
MICHAEL BRANDMAN ASSOCIATES

5 2.5 0 5
Miles

Exhibit 1
Regional Location Map



Source: TOPO! USGS Sunnymead, CA (1978) and El Casco (1976) 7.5' DRG.

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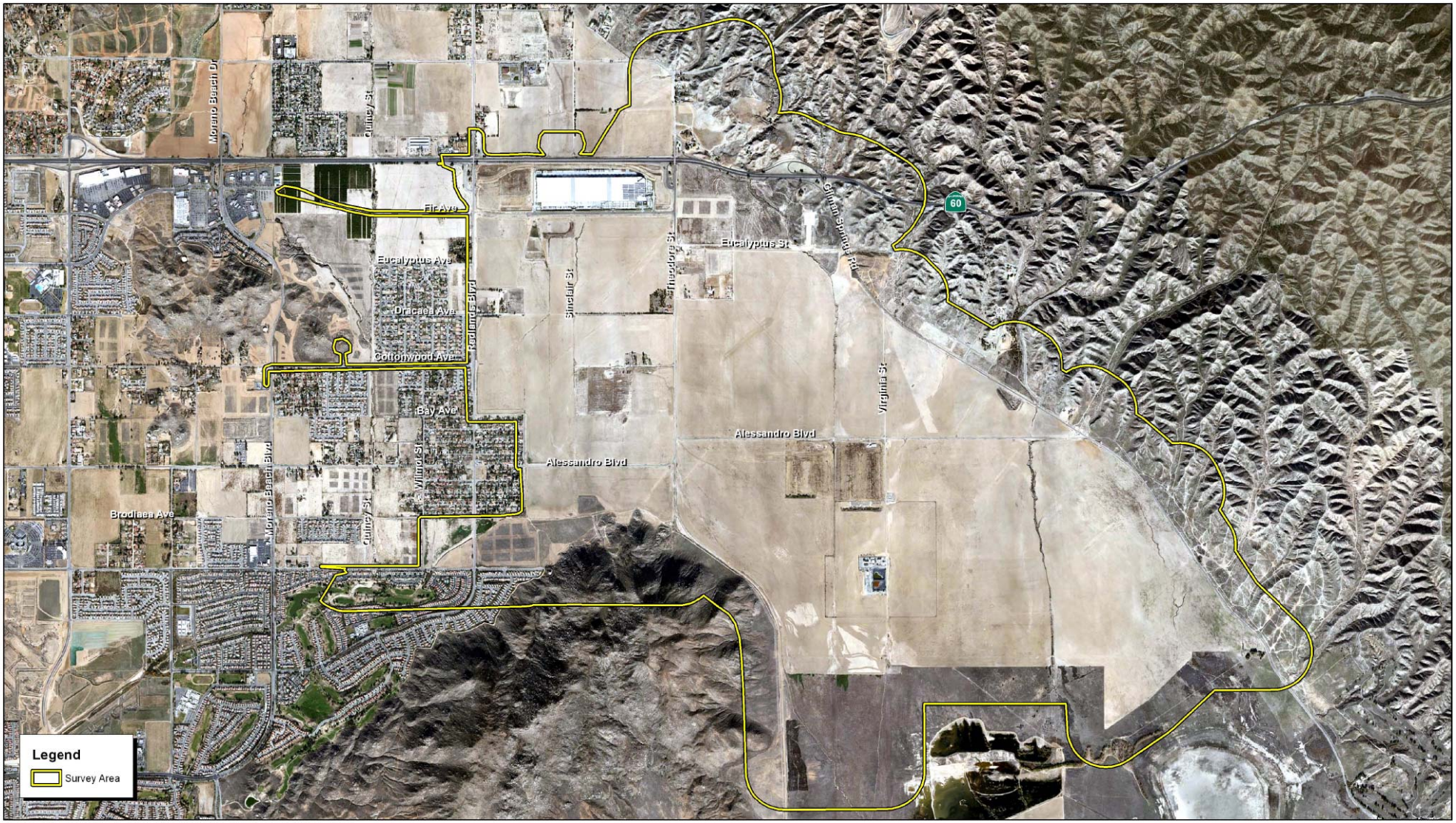
2,400 1,200 0 2,400 Feet

Exhibit 2
Local Vicinity Map
Topographic Base



Source: Google Earth Pro, 2012. FCS-MBA Field Survey and GIS Data, 2014.

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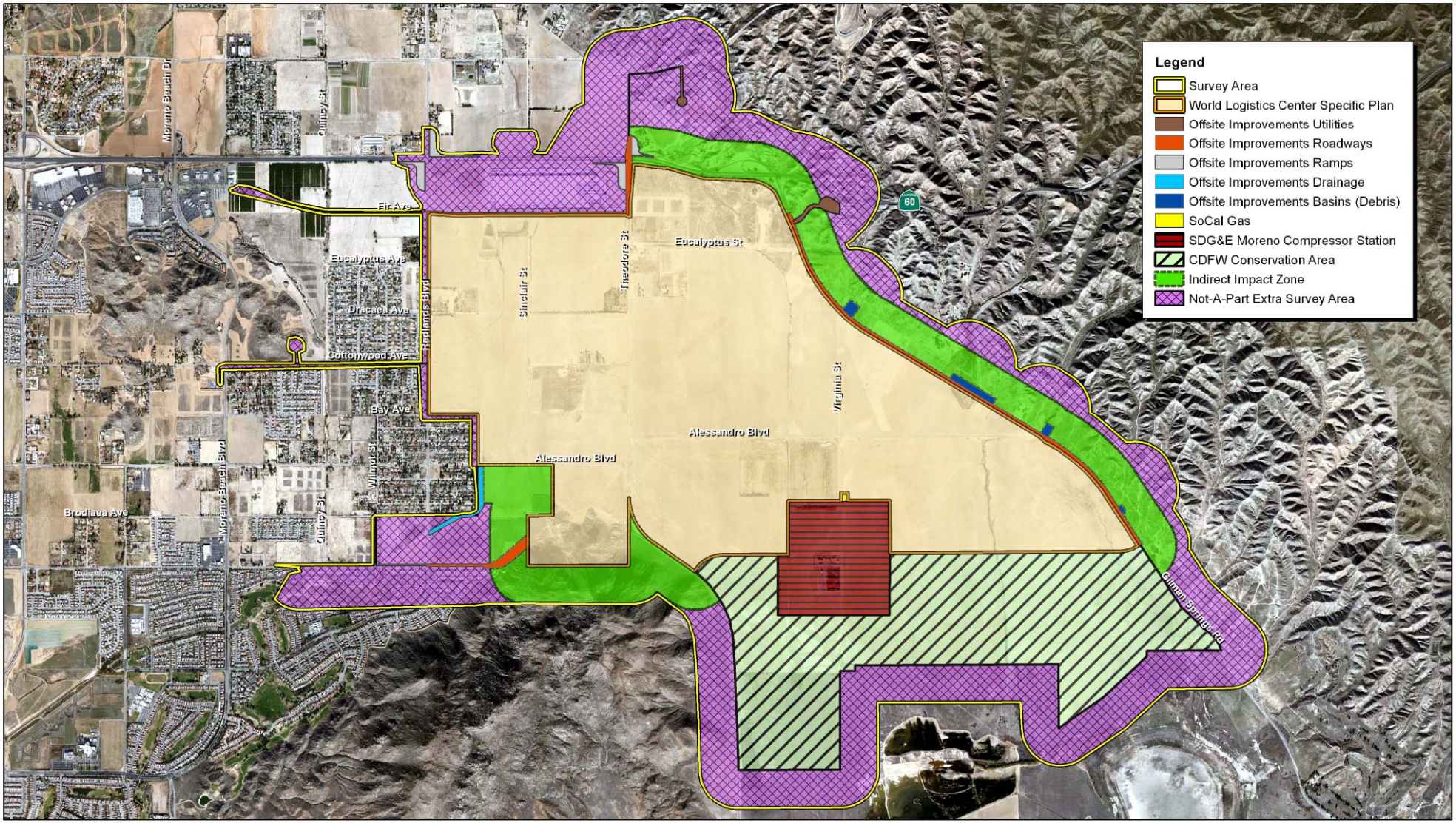
2,400 1,200 0 2,400 Feet

Exhibit 3
Local Vicinity Map
Aerial Base



Source: Google Earth Pro, 2012. FCS-MBA Field Survey and GIS Data, 2014.

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2,400 1,200 0 2,400 Feet

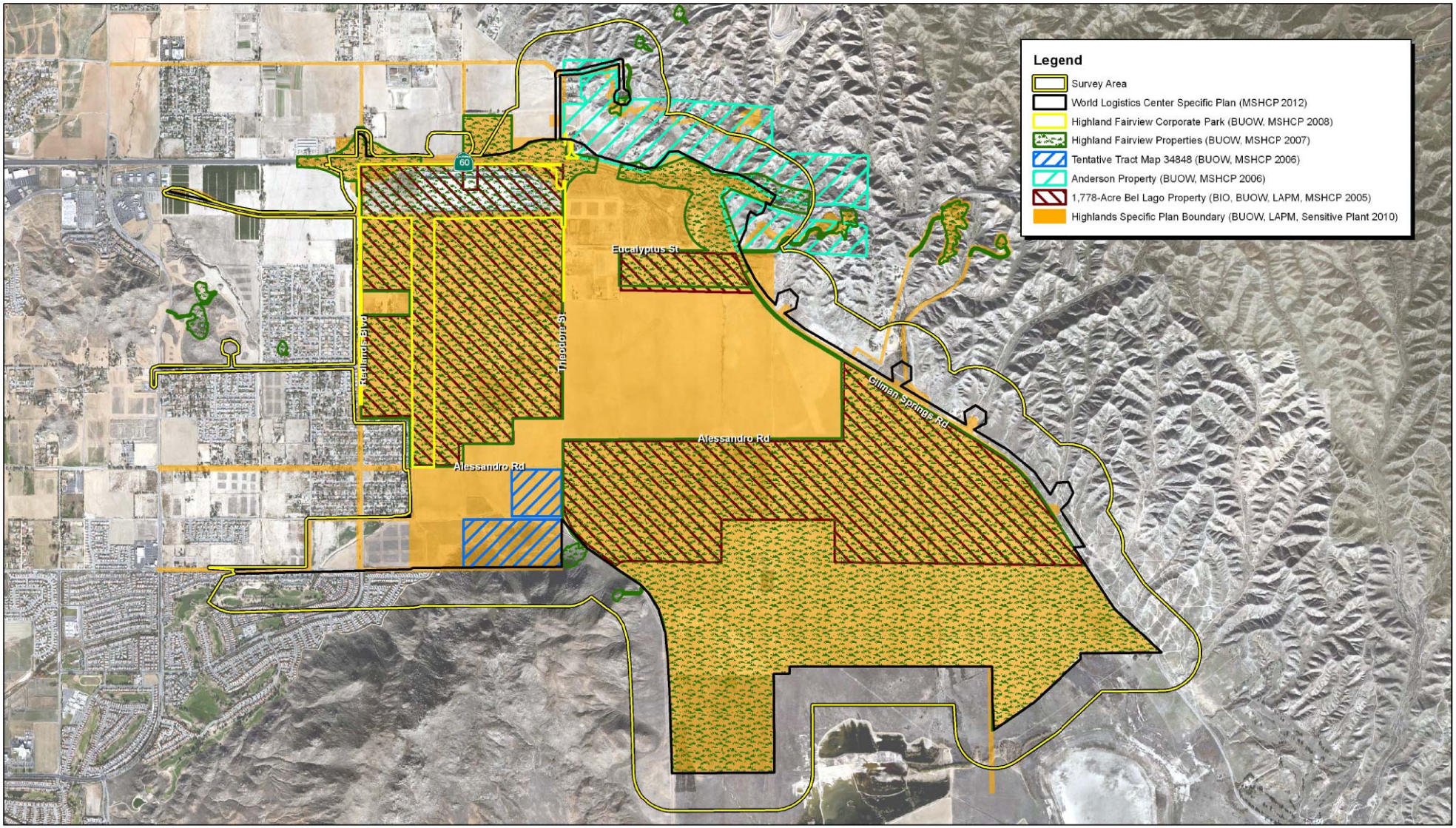
Exhibit 4
Survey Area Components

This biological resources assessment examines potential indirect impacts associated with both construction and operations of the proposed facilities on the WLCSP lands, as well as those in the rest of the survey area. Studies on indirect impacts are based on a combination of literature reviews, aerial photograph interpretation, and projects completed within the vicinity of the WLCSP. This 1,000-foot area is hereafter referred to as the Indirect Impact Zone. It is defined as an area extending 1,000 feet beyond the boundaries of the Specific Plan in areas with substantially undeveloped land adjacent to or proposed for conservation by the MSHCP, but does not include areas contained within the SJWA. Current plans call for a phased development over 15 years; thus, a programmatic analysis of the project is the preferred methodology. In previous documents, including the Draft EIR, the phased development has varied from 10 to 20 years. For consistency throughout all environmental documents, a 15-year buildout is the current plan for development. As individual developments occur and project-specific applications are processed additional site-specific studies may be required.

1.3 - Biological Survey History

The information presented herein encompasses eight years of biological studies conducted by FCS-MBA on various portions of the survey area. Thus, the results presented encompass not only the current conditions within the survey area, but also represents a history of the area based on knowledge of the region resulting from studies conducted over a variety of years with varying climatic conditions, seasonal variations, and observations by many biologists. Therefore, this comprehensive study provides a basis for interpretation far more detailed than a single site visit or a single year of studies.

Exhibit 5 graphically provides representation of the studies conducted over the last eight years. It indicates areas where repeated surveys were conducted and provides full coverage of the WLCSP as well as offsite impacts. Table 1 in Section 3.1, Survey Dates and Weather Conditions, provides further documentation of the studies conducted by FCS-MBA staff over the eight-year period.



Source: Google Earth Pro, 2012. FCS-MBA Field Survey and GIS Data, 2014.

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2,400 1,200 0 2,400 Feet

Exhibit 5
Project History Map

SECTION 2: METHODOLOGY

This section describes the methodology used to document existing conditions within the WLCSP survey area. Potential project-related effects to biological resources were analyzed in accordance with CEQA, the federal Endangered Species Act (FESA), the California State Endangered Species Act (CESA), the MSHCP, and all other relevant environmental policies and regulations that are provided in Appendix G, Regulatory Background.

The Biological Resources Assessment methods, as described below, include a literature review, reconnaissance-level surveys, plant community mapping, delineation of jurisdictional waters and wetlands, sensitive species potential for occurrence determination, burrowing owl protocol surveys, Los Angeles pocket mouse surveys, and wildlife corridor assessment.

2.1 - Literature Review

Prior to conducting biological resource surveys, a literature review is conducted of the environmental and regulatory setting for the biological survey area. The literature review provides a baseline from which to evaluate the biological resources potentially occurring within the biological survey area, and within the local and regional vicinity.

The literature review began with a thorough examination of existing technical reports associated with the WLCSP and surrounding area. Recent and historical aerial imagery was reviewed, as well as the topographic electronic and hard copies of the Lakeview, Sunnymead, and El Casco, California USGS 7.5-minute topographic quadrangle maps. Aerial imagery provided by Google Earth (Google 2011) was used to confirm the current locations of developed and undeveloped land, as well as verifying mapping efforts conducted for the local area.

A list of special status plant and wildlife species and their habitats, known to occur near the project site was compiled. The primary source for this data was the CDFW's California Natural Diversity Database (CNDDB 2013), which is a sensitive species and plant community database. FCS-MBA conducted a query of the CNDDB records based on a 7-mile radius surrounding the project site that included the Lakeview, Sunnymead, and El Casco, California USGS 7.5-minute topographic quadrangle maps. The CNDDB GIS database together with ArcGIS software was used to confirm the locations of CNDDB records. The California Native Plant Society (CNPS 2013) online inventory database and Consortium of California Herbaria were also queried for the project site and vicinity. The CNPS online inventory provided additional sensitive species information for many species that have not been reported to the CNDDB database. Additional information regarding recorded occurrences of sensitive plant and wildlife species was also obtained from the RCA (2013). The locations of previously documented observations for sensitive plant and wildlife species were identified and plotted onto aerial and topographic maps to determine connectivity of suitable habitat and/or likely dispersing routes between the locations of observations and the project site.

The literature review also included a thorough review of the regulatory setting for the proposed project, including all relevant federal, state, and local policies pertaining to biological resources and pursuant to CEQA review.

The Western Riverside County Multiple Species Conservation Plan (MSHCP) was also thoroughly reviewed. This includes the 146 species covered under the plan. The WLSCP was reviewed to determine consistency with the MSHCP. Geographic Information System (GIS) software was used to map the project site in relation to MSHCP areas including Criteria Cells (core habitat and wildlife movement corridors) and areas proposed for conservation. The Riverside County Integrated Project (RCIP) Conservation Summary Report Generator was queried to determine habitat assessment and potential survey requirements for the project site (Appendix H).

The MSHCP also requires that an assessment be completed of the potentially significant effects of the project on riparian/riverine areas, and vernal pools. According to the MSHCP, the documentation for the assessment shall include mapping and a description of the functions and values of the mapped areas with respect to the species listed in Section 6.1.2, protection of species associated with riparian/riverine areas and vernal pools.

As part of the MSHCP requirements, an Urban/Wildlands Interface Analysis is also required to address the indirect effects associated with locating proposed development in proximity to MSHCP conservation areas. The development may result in edge effects, which could potentially affect biological resources within the MSHCP Conservation Area. According to the MSHCP, the analysis should include an assessment of the potential indirect project impacts that may result from drainage features, toxics, noise, invasive species, barriers, access, and grading/development, as listed and described in the MSHCP's Section 6.1.4, Guidelines Pertaining to Urban/Wildlands Interface. For this study, the Urban/Wildlands Interface Analysis was extended eastward to include indirect effects adjacent to Gilman Springs Road.

Aerial photography was reviewed prior to conducting the reconnaissance-level surveys to identify any potential natural drainage features and water bodies that may qualify as riparian/riverine. In general, the surface drainage features indicated as blue-line streams on USGS topographic quadrangle maps that were observed or expected to exhibit evidence of flow, as they can potentially support riparian/riverine areas. The WLCSP was evaluated for any riparian/riverine and vernal pool habitat in 2005, 2007, 2011, and 2012 as shown in Table 1 in Section 3.1, Survey Dates and Weather Conditions.

2.2 - Reconnaissance-Level Surveys

FCS-MBA originally assessed portions of the WLCSP in 2005 and has since conducted numerous additional surveys, which are summarized in Table 1 of Section 3.1, Survey Dates and Weather Conditions, and graphically presented in Exhibit 5. The WLCSP as currently designed was completely surveyed in 2012 to document current site conditions, including the offsite facilities and the CDFW Conservation Buffer. These areas were surveyed to determine the plant communities present, the suitability for Narrow Endemic and Criteria Area plant species, the presence of riparian areas, and

the presence of suitable habitat for burrowing owl and Los Angeles pocket mouse. The 1,000-foot Indirect Impact Zone was not physically surveyed during the 2012 reconnaissance-level surveys. Since the information pertaining to these areas was specifically used for indirect impacts, a reconnaissance-level survey was not required. Information for this area is based on literature review, aerial photography, vegetation interpretation, soils maps, and reconnaissance from adjacent areas. This area was spot-checked during focused surveys conducted in 2013. In limited areas, FCS-MBA conducted focused surveys and included that information in the final assessment.

2.2.1 - Plant Communities

Plant communities were mapped using 7.5-minute USGS topographic base maps and aerial photography (2011). The plant communities within the survey area were classified according to Holland's Preliminary Descriptions of the Terrestrial Natural Communities of California (1986) and Oberbauer's Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions (1996). Vegetation communities were based on a minimum mapping unit size of 0.1 acre. Patches of vegetation less than 0.1 acre were incorporated in the surrounding vegetation community.

2.2.2 - Plants

Common plant species observed during reconnaissance-level surveys were identified by visual characteristics and morphology in the field and recorded in a field notebook. Uncommon and less familiar plants were identified offsite using taxonomical guides. A list of all species observed within the survey area was compiled from the survey data and provided in Appendix A, Floral and Faunal Compendia. Taxonomic nomenclature used in this study follows Baldwin et al (2012). Common plant names, when not available from Baldwin, were taken from other regionally specific references. In this report, scientific names are provided immediately following common names of plant species for the first reference only.

2.2.3 - Wildlife

Wildlife species detected during field surveys by sight, calls, tracks, scat, or other sign were recorded during surveys in a field notebook by all biologists working on the project. Field guides were used to assist with identification of species during surveys. Although common names of wildlife species are fairly well standardized, scientific names are used in this report and are provided in Appendix A, Floral and Faunal Compendia.

2.2.4 - Jurisdictional Waters and Wetlands

A Delineation of Jurisdictional Waters and Wetlands was conducted in accordance with regulations set forth in 33 Code of Federal Regulations (CFR) Part 328 and appropriate USACE guidance documents and California Fish and Game Code. Aerial photographs (2011) of the WLCSP were procured and compared with the Sunnymead and El Casco, California, USGS 7.5-minute topographic quadrangle maps to identify potential drainage features within the WLCSP as indicated from topographic changes or visible drainage patterns. The National Wetland Inventory was also reviewed to determine whether any wetland areas had been documented within the vicinity of the WLCSP.

The United States Department of Agriculture (USDA) Soil Survey Map was reviewed to identify the soil series that occur on the WLCSP. The previous jurisdictional delineation report (MBA 2007b) was also reviewed to identify previous site conditions and estimated jurisdictional limits.

Biologists Scott Crawford and Steve Hongola and Regulatory Specialist Tom Mullen completed surveys to delineate jurisdictional waters and wetlands for the WLCSP in 2007 (May 10 and September 18). On March 14, 2012, MBA conducted another site visit and assessment to update the previous documentation because more than four years had passed since the site was last evaluated and portions of the specific plan boundary had changed slightly.

Information from the previous surveys is included herein to understand the function and value of the drainage features onsite. This delineation work was conducted in accordance with procedures and criteria set forth in the "Interim Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region" and the "1987 Corps of Engineers Wetlands Delineation Manual" (Wetlands Delineation Manual or Manual), which define jurisdictional wetlands as features containing three parameters: hydrophytic vegetation, hydric soils, and wetland hydrology. Data was collected in 2007 using a Magellan Explorist 600 global positioning system (GPS) unit with an accuracy of ±10 feet. Data collected in 2012 used a Trimble GeoXt GPS unit with an accuracy of ±1 foot (data sheets are available upon request). Potential drainage features and wetlands were also mapped on recent aerial photographs (2011). Other tools used included a 30-meter tape measure, shovel, Munsell color chart, and digital camera.

USACE jurisdiction is based on the presence of a clearly defined ordinary high water mark (OHWM) and direct or indirect surface connectivity to downstream Traditional Navigable Waterway (TNW) of the US. Determination regarding offsite connectivity to downstream TNWs was made by (1) examining USACE online *Solid Waste Agency of Northern Cook County v. US Army Corps of Engineers*, 531 US 159 (2001) (SWANCC) determinations, (2) by examining both present and historical aerial photography, or (3) by physically following offsite drainage courses to their downstream confluence.

The CFG Code mandates that, "it is unlawful for any person to substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambeds, without first notifying the department of such activity." CDFW jurisdiction includes ephemeral, intermittent, and perennial watercourses, including dry washes, characterized by the presence of hydrophytic vegetation, the location of definable bed and banks, and the presence of existing fish or wildlife resources.

Furthermore, CDFW jurisdiction is often extended to habitats adjacent to watercourses, such as oak woodlands in canyon bottoms or willow woodlands that function as part of the riparian system. Historic court cases have further extended CDFW jurisdiction to include watercourses that seemingly disappear, but re-emerge elsewhere. Under the CDFW definition, a watercourse need not exhibit evidence of an ordinary high water mark (OHWM) to be claimed as jurisdiction. However, CDFW does not regulate isolated wetlands; that is, those that are not associated with a river, stream, or lake.

Measurements were entered into GIS ArcView software to identify the location and dimensions of potentially jurisdictional areas. The ArcView application was then used to compute federal jurisdiction in acres. Acreage computations were verified using a 200-scale aerial photograph and field data.

For a more detailed description of survey methods used to complete the delineation of jurisdictional waters and wetlands, please refer to the Delineation of Jurisdictional Waters and Wetlands WLCSP (MBA 2013a)

2.2.5 - Wildlife Movement Corridor

Wildlife corridors link together areas of suitable habitat that are otherwise separated by rugged terrain, changes in vegetation, or human disturbance. The fragmentation of open space areas by urbanization creates isolated "islands" of wildlife habitat. In the absence of habitat linkages that allow movement to adjoining open space areas, various studies have concluded that some wildlife species, especially the larger and more mobile mammals, will not likely persist over time in fragmented or isolated habitat areas because they prohibit the infusion of new individuals and genetic information (MacArthur and Wilson 1967, Soule 1987, Harris and Gallagher 1989, Bennett 1990). Corridors effectively act as links between different populations of a species. A group of smaller populations (termed "demes") linked together via a system of corridors is termed a "metapopulation." The long-term health of each deme within the metapopulation is dependent upon its size and the frequency of interchange of individuals (immigration vs. emigration). The smaller the deme, the more important immigration becomes, because prolonged inbreeding with the same individuals can reduce genetic variability. Immigrant individuals that move into the deme from adjoining demes mate with individuals and supply that deme with new genes and gene combinations that increases overall genetic diversity. An increase in a population's genetic variability is generally associated with an increase in a population's health.

Corridors mitigate the effects of habitat fragmentation by (1) allowing animals to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity; (2) providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) will result in population or local species extinction; and (3) serving as travel routes for individual animals as they move within their home ranges in search of food, water, mates, and other needs (Noss 1983, Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories: (1) dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions); (2) seasonal migration; and (3) movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover). A number of terms have been used in various wildlife movement studies, such as "wildlife corridor," "travel route," "habitat linkage," and "wildlife crossing" to refer to areas in which wildlife move from one area to another. To clarify the meaning of these terms and facilitate the discussion on wildlife movement in this study, these terms are defined as follows:

Travel Route: A landscape feature (such as a ridgeline, drainage, canyon, or riparian strip) within a larger natural habitat area that is used frequently by animals to facilitate movement and provide access to necessary resources (e.g., water, food, cover, den sites). The travel route is generally preferred because it provides the least amount of topographic resistance in moving from one area to another; it contains adequate food, water, and/or cover while moving between habitat areas; and provides a relative direct link between target habitat areas.

Wildlife Corridor: A piece of habitat, usually linear in nature that connects two or more habitat patches that would otherwise be fragmented or isolated from one another. Wildlife corridors are usually bounded by urban land areas or other areas unsuitable for wildlife. The corridor generally contains suitable cover, food, and/or water to support species and facilitate movement while in the corridor. Larger, landscape-level corridors (often referred to as "habitat or landscape linkages") can provide both transitory and resident habitat for a variety of species.

Wildlife Crossing: A small, narrow area, relatively short in length and generally constricted in nature, that allows wildlife to pass under or through an obstacle or barrier that otherwise hinders or prevents movement. Crossings typically are manmade and include culverts, underpasses, drainage pipes, and tunnels to provide access across or under roads, highways, pipelines, or other physical obstacles. These are often "choke points" along a movement corridor.

The survey area was assessed to determine if a wildlife corridor occurs on or within a portion of the WLCSP. Since the WLCSP is the only portion of the survey area that will have project-related impacts, the CDFW conservation area and indirect impact zone were not included in this assessment.

SECTION 3: ENVIRONMENTAL SETTING

The WLCSP survey area contains significant evidence of previous human disturbance (MBA 2012). Current land use includes dry-land grain farming, isolated residential development, and commercial development. The majority of the WLCSP consists of dry-land farming. Some rural residences are located in the northwestern portion of the WLCSP along Redlands Boulevard, Theodore Street and north of Alessandro Road. There are two relatively undisturbed portions of the WLCSP. One is located in the northern portion of the WLCSP and is associated with the lands owned by the Metropolitan Water District (MWD) and another undisturbed area in the extreme southwestern portion of the WLCSP associated with rocky hills south of Alessandro Road and west of Theodore Street in the Mount Russell area.

Various portions of the WLCSP survey area also contain abandoned structures associated with previous agricultural activities, including concrete pads, fences, discarded equipment, and abandoned greenhouse structures. Many of the potential offsite facilities such as water and sewer lines and access to potential water reservoirs are proposed along existing street rights-of-way in the City of Moreno Valley. Potential debris basins are located along the eastern side of Gilman Springs Road to prevent debris and sediment from the Badlands from disrupting traffic on Gilman Springs Road after significant storm events.

The CDFW Conservation Buffer area, south of the WLCSP, is very similar in history and conditions to the WLCSP. The majority of this area is being used for of dry-land farming. The SDG&E natural gas compressor station is located in the northern portion of the CDFW Conservation Buffer area and consists of a 19-acre operational compressor station surrounded by landscape vegetation for a total of approximately 192 acres. The southwestern most portion of the Conservation Buffer currently contains an undeveloped open space area dominated by non-native grasslands, although historic aerial photographs show the area intermittently tilled over the last 80 years.

General land use in the vicinity of the WLCSP includes agricultural lands and scattered rural residences to the north, suburban residential development to the west, the SJWA and the Lake Perris State Recreation Area (LPSRA) to the south and southwest respectively, undeveloped foothills to the east, and the Norton Younglove Reserve to the northeast.

3.1 - Survey Dates and Weather Conditions

In support of the MSHCP and CEQA consistency analyses, FCS-MBA biologists conducted habitat assessment field surveys over the entire WLCSP and additional areas to provide information on potential indirect impacts. The main focus was on sensitive habitats and any areas with the potential to support sensitive flora or fauna species over multiple years. In addition, FCS-MBA biologists conducted focused surveys for burrowing owl, Los Angeles pocket mouse, and a comprehensive sensitive plant survey. A delineation of jurisdictional waters and wetlands was also conducted. Table 1 below summarizes the survey dates, the type of survey, and FCS-MBA lead staff. Information on where the surveys were performed as the project evolved through time are presented in Exhibit 5.

Table 1: Summary of Survey Types, Dates, Locations, and Staff

Report Year	Field Survey Date(s)	Survey	Parcel Name	Staff
2005	May 10, 20, 23 Aug 29	Biological Resource Assessment Survey	Bel Lago	S. Crawford
2005	May 10	MSHCP Habitat Assessment	Bel Lago	S. Crawford
2005	May 10, 20, 23 Aug 29	Burrowing Owl Focused Surveys	Bel Lago	S. Crawford
2005	May 10, Aug 29	Jurisdictional Delineation Riparian/Riverine and Vernal Pool Habitat	Bel Lago	S. Crawford
2005	August 21 through 26	Los Angeles Pocket Mouse Focused Surveys	Bel Lago	K. Rios
2006	August 16, 26	MSHCP Habitat Assessment	Tentative Tract Map 34848 (Bel Lago South)	M. Romich J. Hickman S. Hongola
2006	August 16, 17, 19, 22	Burrowing Owl Focused Surveys	Tentative Tract Map 34848 (Bel Lago South)	M. Romich J. Hickman S. Hongola
2007	May 1, 2, 3, 4	Burrowing Owl Focused Surveys	Highland Fairview Corporate Park Property	S. Crawford K. Workman S. Hongola K. Osmundson
2007	May 10	Jurisdictional Delineation Riparian/Riverine and Vernal Pool Habitat	Highland Fairview Corporate Park Property - Logistics Building Area	K. Osmundson
2007	September 18	Jurisdictional Delineation Riparian/Riverine and Vernal Pool Habitat	Highland Fairview Corporate Park Property	T. Mullen
2007	May 15 July 19	MSHCP Habitat Assessment	Highland Fairview Corporate Park Properties	K. Lord
2007	May 15-18, 22-24, 30-31, June 1, 5-7, 12-14, 19-20, 26, July 3, 6, 11, 12	Burrowing Owl Focused Surveys	Highland Fairview Properties	S. Crawford
2007	September 27 2006	MSHCP Habitat Assessment	398-Acre Anderson Property	K. Workman S. Hongola
2007	August 15, 16, 22, 23 2006	Burrowing Owl Focused Survey	398-Acre Anderson Property	K. Workman K. Osmundson

Table 1 (cont.): Summary of Survey Types, Dates, Locations, and Staff

Report Year	Field Survey Date(s)	Survey	Parcel Name	Staff
2008	January 10	MSHCP Habitat Assessment	Highland Fairview Properties	K. Lord
2010	June 9, 10, 11, 16, 22, 23, 24	Sensitive Plant Surveys	Highland Specific Plan	S. Crawford
2010	June 9 through 24	Burrowing Owl Focused Surveys	Highland Specific Plan	S. Crawford
2010	June 27, 28, 29, 30, Jul 1, 2	Los Angeles Pocket Mouse Focused Surveys	Highland Specific Plan	K. Rios
2011	October 24	MSHCP Habitat Assessment	Highland Specific Plan	S. Crawford D. Hameister
2012	March 16	Delineation of Jurisdictional Waters and Wetlands	WLCSP	S. Crawford
2012	June 28, July 5, 6 and 9	Burrowing Owl Focused Surveys	WLCSP	T. Molioo D. Lloyd D. Hameister
2012	July 1-6	Los Angeles Pocket Mouse Focused Surveys	WLCSP	K. Rios
2013	June 13, 20, 21, 27, July 3, 7, and 9	Burrowing Owl Focused Surveys	WLCSP	D. Hameister T. Molioo S. Crawford Z. Ziade L. Westmoreland C. Lytle
2013	July 8-11	Los Angeles Pocket Mouse Focused Surveys	WLCSP	K. Rios S. Crawford

3.2 - Topographic Features

The WLCSP is located at the northern extent of the San Jacinto and Moreno Valleys, northeast of Mount Russell, and southwest of the Badlands. A natural depression lake (Mystic Lake, highly modified in modern times) is located south of the WLCSP and LPSRA lies directly to the southwest. The WLCSP is relatively flat with minimal topographic relief, and a slight slope to the south. It has an elevation range of approximately 1,440 to 1,800 feet above sea level.

Local nuisance-flow and storm water runoff generally flows south. The southwestern portion of the survey area (west of Redlands Boulevard) drains to the western side of Mount Russell. The rest of the survey area flows on the east side of Mount Russell towards Mystic Lake.

3.3 - Soils

The WLCSP contains 22 different soil-mapping units belonging to 10 different soil series (Exhibit 6). A soil series is a group of soils with similar profiles. These profiles include major horizons with similar thickness, arrangement, and other distinct characteristics. The survey area is dominated by San Emigdio loam (SgA and SgC) and San Emigdio fine sandy loam (SeC2), with smaller inclusions of Arbuckle loam (AkC), Badland (BaG), Gorgonio loamy sand (GhC), Greenfield sandy loam (GyA, GyC2, GyD2), Hanford coarse sandy loam (HcC and HcD2), Metz loamy sand (MdC and MeD), Metz loamy fine sand (MfA), Metz gravelly sandy loam (MID), Ramona sandy loam (RdD2), Rockland (RtF), San Emigdio fine sandy loam (SeA and SeD2), and San Timoteo loam (SmE2). Hydric soil conditions were not observed during the field evaluations.

3.4 - Level of Disturbance

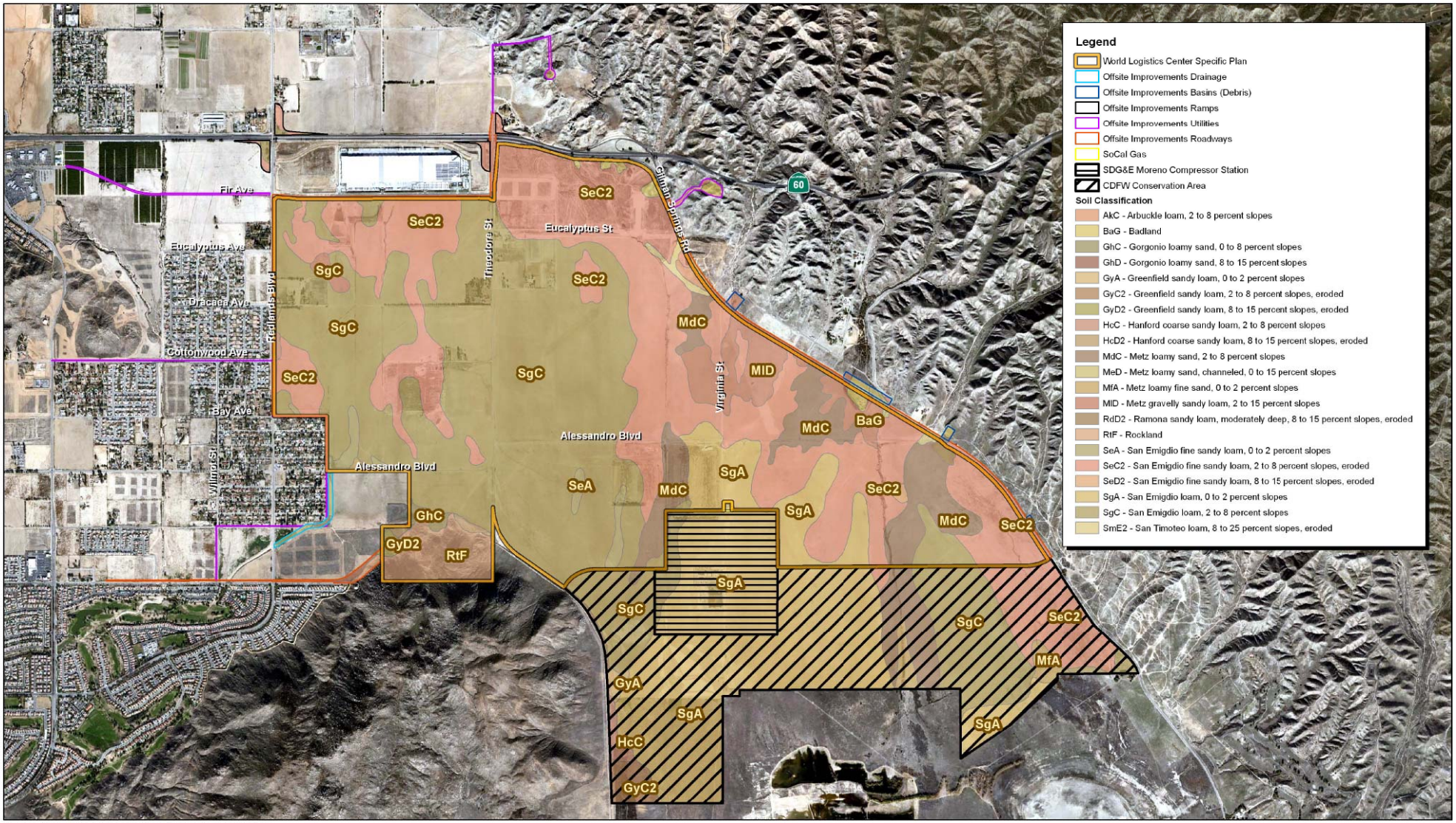
Generally, the WLCSP is highly disturbed and the majority of the land has been routinely disked as part of an ongoing agricultural practice over the last 100-years. Approximately 70 percent of the WLCSP is dry land farmed. There are some areas within the WLCSP that have been left fallow for a number of years, which has reverted back to a non-native grassland habitat, albeit relatively poor quality habitat. The disturbed nature of the WLCSP provides low-quality habitat for a number of common wildlife species that are adapted to low-quality habitat. The WLCSP also contains numerous dirt and paved access roads as well as scattered single-family rural residences.

3.5 - Plant Communities

Eleven vegetation communities/land use types occur within the survey area including: extensive agriculture (e.g., dry land farming), non-native grassland, urban/developed, disturbed, Riversidean sage scrub, mulefat scrub, non-vegetated channel, southern willow scrub, ornamental, open water, and northern mixed chaparral. The names and definitions of plant communities are discussed below are based on Holland (1986), Oberbauer (1996), the MSHCP, MBA, and FCS-MBA.

For the purposes of this document, the vegetation communities within the survey area are described below followed by Table 2, which provides a more detailed breakdown of the vegetation types within each of the three project sections (see Exhibit 7).

A complete list of all plant and wildlife species observed during the habitat assessment for the survey area is provided in Appendix A, Floral and Faunal Compendia.



Source: Source: Google Earth Pro, 2012. USDA Soils Data.

FirstCarbon SOLUTIONS

2,200 1,100 0 2,200 Feet

Exhibit 6
USDA Soils Map

3.5.1 - Extensive Agriculture (3,280 acres)

Extensive agriculture includes areas where there is evidence of intense soil surface disturbance associated with agricultural uses. Vegetation is typically agricultural in nature, such as a row crop or grain and is routinely disked.

The extensive agriculture within the survey area is dry land farmed and lacks any supplemental irrigation. This community is generally dominated by winter wheat (*Triticum aestivum*), but also has small inclusions of non-native vegetation along the margins of the fields. These areas cannot be reached by farming equipment and unlike the active wheat fields, they are not disked regularly. Vegetation along these margins will have a high predominance of non-native or weedy species that are indicators of heavy soil disturbance, such as horse nettle (*Solanum elaeagnifolium*), bindweed (*Convolvulus arvensis*), and short-podded mustard (*Hirschfeldia incana*). These areas are not large enough to be considered a separate plant community. The Holland classification code for extensive agriculture is 18300.

The extensive agriculture community in the survey area also contains various interstitial ditches that are excluded from regular heavy-agricultural equipment disturbances, such as disking. These areas are less frequently disturbed and contain larger, more established, ruderal vegetation, such as tree tobacco (*Nicotiana glauca*) and tree of heaven (*Ailanthus altissima*), in addition to the fast growing Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), lamb's quarters (*Chenopodium album*), sow thistle (*Sonchus oleraceus*), and short-podded mustard. The interstitial ditch areas are not large enough nor are they contiguous to other riparian habitat to constitute a separate plant community; therefore, they are considered part of the extensive agricultural plant community.

Extensive agriculture comprises approximately 57 percent of the survey area and is disked at least once each year. During years of plentiful rainfall, more than one crop may be planted and harvested. The majority of the extensive agriculture is nearly contiguous and is located within the central portion of the survey area (3,280 acres). There are a few small patches of this community located along the eastern side of Gilman Springs Road, just south of the Eucalyptus Street intersection.

3.5.2 - Non-Native Grassland (1,741 acres)

Non-native grassland is characterized by a dense to sparse cover of non-native annual grasses often associated with numerous weedy species and native annual forbs (wildflowers), especially in years with plentiful rain. Seed germination occurs with the onset of winter rains. Some plant growth occurs in winter, but most growth and flowering occurs in the spring. Plants then die in the summer, and persist as seeds in the uppermost layers of soil until the next rainy season. Dominant plant genera typically found within non-native grasslands include brome (*Bromus* spp.), wild oat (*Avena* spp.), fescue (*Vulpia* sp.), and barley (*Hordeum* sp.). The Holland classification code is 42200.

Plant species observed within the non-native grassland community include non-native grasses such as ripgut brome, slender oats, and red brome, and weedy species such as short-podded mustard, Jimson weed (*Datura stramonium*), and common sunflower (*Helianthus annuus*).

Non-native grassland occupies approximately 1,741 acres within the survey area. These areas as commonly located along the outer margins of the survey area east of Gilman Springs Road and areas south of the WLCSP. There is a small hillside area in the southwestern portion of the project site that is not used for farming. This area as well as the MWD land located in the northeast corner of the project site contain non-native grasslands.

3.5.3 - Urban/Developed (520 acres)

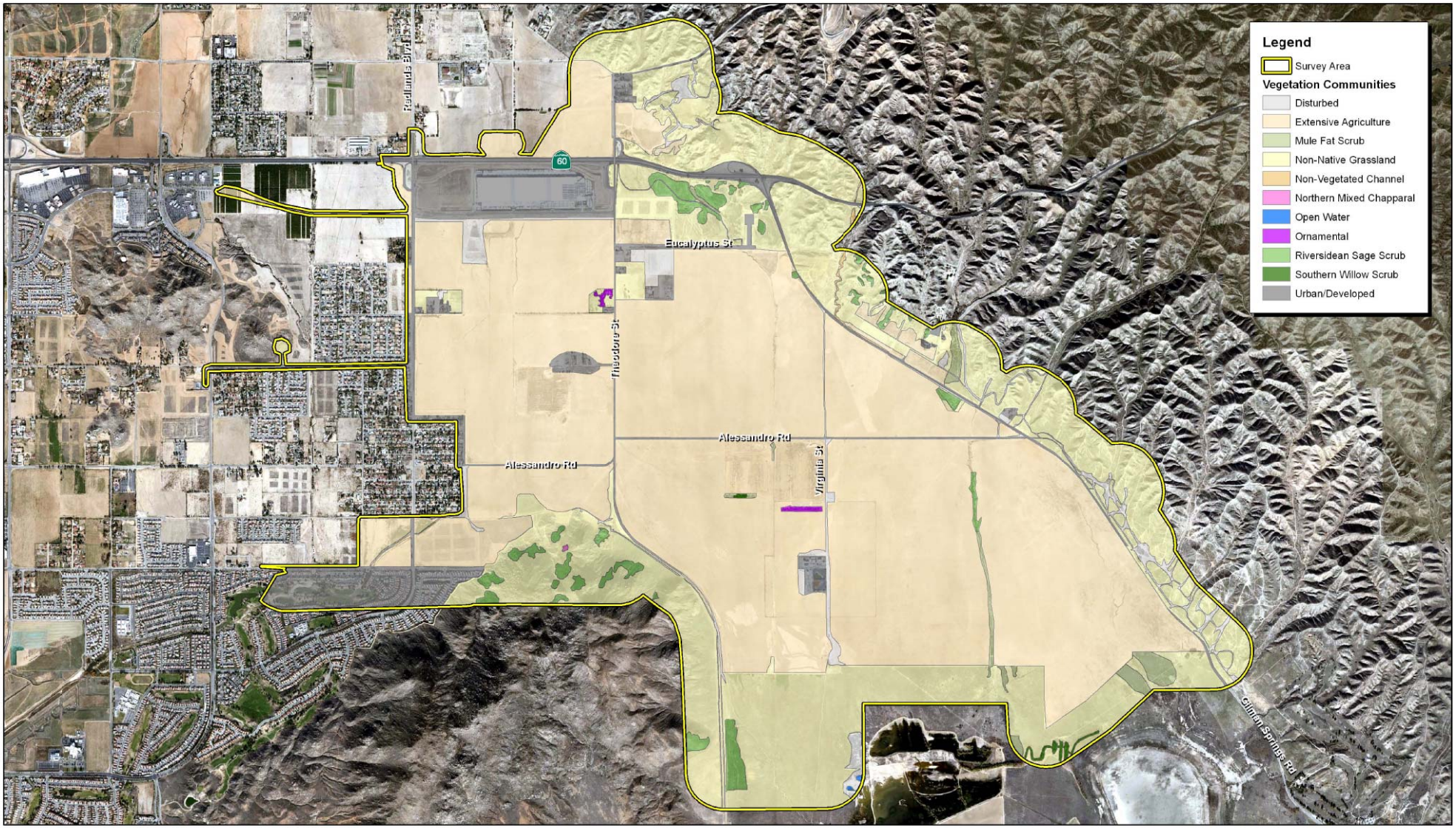
The urban/developed area includes any form of human disturbance associated with development that results in permanent impacts to natural communities. By definition, urban/developed areas include roads, buildings and structures, pavement, and concrete. The urban/developed areas are not associated with any native vegetation and provide only limited habitat value, primarily as cover, nesting, and perching opportunities for birds and common terrestrial wildlife that have adapted to urban, agricultural, or other disturbed areas associated with development. These areas constitute marginal habitat and because they typically lack vegetation are more adequately described as a land use type and not a plant community.

Urban/developed portions of the survey area encompass approximately 520 acres and consist of existing rural residences, abandoned foundations and structures associated with previous agricultural practices, and paved access roads. The limited amount of vegetation observed in this land use type consists of landscape plants such as California fan palm (*Washingtonia filifera*), Oregon ash (*Fraxinus latifolia*), and Peruvian pepper tree (*Schinus molle*). The Holland classification code is 12000.

The survey area contains limited land that has remained as urban/developed. Much of the previous development within the survey area has been abandoned and removed, but still remains in a disturbed state and is scattered within the northwestern portion of the survey area. The majority of the urban/developed area is associated with the recently constructed Highland Fairview Corporate Park (Skechers Distribution Facility) in the northeast portion of the survey area. This area is excluded from the WLCSP, but is designated as an additional survey area. The urban/developed community within the CDFW Conservation Buffer is directly associated with the SDG&E compressor station area and associated paved access roads.

3.5.4 - Disturbed Habitat (155 acres)

Disturbed areas are characterized by a lack of significant vegetative cover, as the result of previous human disturbance or significant natural disturbance. These areas are typically unvegetated, but unlike urban/developed areas, there is a potential to naturally revegetate and may provide useable habitat in the future. Although such areas may exhibit patches of sparse ruderal vegetation and an occasional scattering of native plant specimens, this type of "habitat" is not a plant community and is considered to be of little or no value to wildlife. This land use type does not have a Holland Classification Code.



Source: Google Earth Pro, 2012. FCS-MBA Field Survey and GIS Data, 2014.

FirstCarbon SOLUTIONS

2,400 1,200 0 2,400 Feet

Exhibit 7
Vegetation Communities

Plant species commonly found in disturbed areas include tree tobacco, Russian thistle, telegraph weed, sow thistle, and short-podded mustard.

Disturbed areas within the survey area are closely related to areas described as urban/developed. There is a large disturbed area associated with the flood control facility located south of the Skechers development. Another disturbed area is associated with the area surrounding the SDG&E compressor station. A third disturbed area is located near the rural residence and abandoned nursery located at the southeastern corner of Eucalyptus Street and Theodore Street. The remaining disturbed areas are associated with dirt access roads through the survey area. There are 155 acres of disturbed habitat within the survey area.

3.5.5 - Riversidean Sage Scrub (98 acres)

Riversidean sage scrub is a native plant community that is widespread throughout Riverside County. Vegetation typically consists of low-growing, drought deciduous, and evergreen shrubs that occur on steep and/or gentle sloping topography. This community may be found on xeric sites with severely drained soils, or clays that release stored soil moisture slowly. Stands of Riversidean sage scrub range from fairly open to dense, and are typically dominated by California sagebrush (*Artemisia californica*) and California buckwheat (*Eriogonum fasciculatum*), and are often found integrated with chaparral, scrub, grassland and ruderal type plant communities (Holland 1986). The Holland classification code is 32720.

The dominant species observed within the Riversidean sage scrub plant community include native shrubs such as brittlebush (*Encelia farinosa*), California buckwheat, black sage (*Salvia mellifera*), and coastal goldenbush (*Isocoma menziesii*). Other species observed include four-winged saltbush (*Atriplex canescens*), scale broom (*Lepidospartum squamatum*), and California aster (*Lessingia filaginifolia*), in addition to non-native grasses such as ripgut brome (*Bromus diandrus*), slender oats (*Avena barbata*), red brome (*Bromus rubens*), and non-native ruderal species such as short-podded mustard.

There are five areas within the survey area that contain Riversidean sage scrub. The largest contiguous patch of this community occurs within the MWD lands in the northern portion of the survey area. A large area of scattered patches of this community occurs in the hillside area in the southwestern portion of the survey area. A moderate size patch occurs in the southern portion of the CDFW conservation area. The smallest area is located within Drainage Feature 9 on the eastern side of the survey area. There are several small patches present on the east side of Gilman Springs Road. The quality of habitat within Riversidean sage scrub can generally be considered moderate based upon vegetation characteristics such as plant density, diversity of species, and level of disturbance. There are 98 acres of Riversidean sage scrub within the survey area.

3.5.6 - Mule Fat Scrub (47 acres)

Mule fat scrub is a riparian scrub community that is strongly dominated by mulefat and is typically associated with intermittent stream channels and moderate depth to the water table. Mule fat scrub is a widespread natural community throughout California and usually occurs below 2,000 feet. The Holland classification code is 63310.

The mule fat scrub within the survey area is generally characterized by dense stands of mule fat with various shrubs, weeds, and non-native grasses sparsely intermixed. The dominant species observed within the mule fat scrub community are mule fat (*Baccharis salicifolia*) and tree tobacco. Other species observed include cheeseweed (*Malva parviflora*), wild radish (*Raphanus raphanistrum*), Russian thistle, common sunflower, and short-podded mustard, in addition to non-native grasses such as ripgut brome, slender oats, and red brome. Drainage Feature 9 also contains scattered occurrences of scale broom and four-winged saltbush.

A small patch of mule fat scrub occurs south of Alessandro Road, just north of the SDG&E compressor station. Drainage 9 contains a narrow stand of mule fat scrub in the southeastern portion of the survey area. Due to the disturbed nature of the surrounding habitat and linear nature of the habitat, the mule fat scrub is low to moderate in habitat value. Mule fat scrub occupies approximately 47 acres of the survey area.

3.5.7 - Southern Willow Scrub (8 acres)

Southern willow scrub plant communities are characterized by dense, broad-leafed, winter-deciduous riparian thickets of vegetation, and are dominated by several species of willow tree. Scattered emergent Fremont cottonwood (*Populus fremontii*) and California sycamore (*Platanus racemosa*) are associated with this community. Most stands are too dense to allow much understory development. Southern willow scrub is typically found on loose, sandy, or fine gravelly alluvium deposits near stream channels during flood flows. This plant community requires repeated flooding to prevent conversion to a more mature Southern Cottonwood-Sycamore Riparian Forest plant community. Southern willow scrub is listed as a sensitive plant community by CDFW; the Holland classification code is 63320.

Plant species identified within the community include sandbar willow (*Salix exigua*), black willow (*Salix goodingii*), mule fat, Freemont's cottonwood, Mexican fan palm (*Washingtonia robusta*), olive (*Olea europaea*), phacelia (*Phacelia* sp.), and common sunflower.

There is a single patch of southern willow scrub that comprises approximately 0.9 acre within the central portion of the WLCSP. This community is composed of a single isolated stand within a human-made, catch basin that occurs south of Alessandro Boulevard and west of Virginia Street. This stand was a direct result of nuisance flow and agricultural runoff from concrete cattle containment areas adjacent to the catch basin. This area no longer receives runoff from the previous cattle facility and habitat quality is progressively getting worse due to a lack of available moisture. Therefore, this patch of habitat is considered of low-habitat value. The remainder of the southern willow scrub habitat is either within additional survey area or within the CDFW Conservation Buffer.

3.5.8 - Non-Vegetated Channel (7 acres)

Non-vegetated channel is a habitat type that is virtually devoid of vegetation due to continual scouring from a flowing channel. Generally, vegetation occurs along the periphery of this habitat, often transitioning into a riparian associated scrub community. Due to continued scouring, the

sparse vegetation that does occur often consists of short grasses or hydrophytic vegetation adapted to unstable environments. The Holland classification code is 13200.

This habitat mainly contains cobbles and boulders along the channel bottom and banks. The substrate contains sparse sandy deposits with limited vegetative cover and therefore provides low quality habitat for sensitive plant and wildlife species.

The survey area contains two non-vegetated channels. One occurs in the southwestern corner of the survey area, just outside of the WLCSP. The second area is located just north of the intersection of Virginia Street and Gilman Springs Road. Non-vegetated channel occupies approximately seven acres of the survey area.

3.5.9 - Ornamental (5 acres)

An ornamental plant community is typically described as a large stand of non-native ornamental trees or shrubs. These areas are often artificially created, but can be naturally occurring. Plant species vary from project site to project site, but are generally non-native and are often associated with landscape plants. The closest Holland classification code is 11000, which is typically associated with Eucalyptus woodlands, which is a landscape tree.

There are two distinct areas within the survey area that contain ornamental vegetation. The first area is located within rural residential development just west of Theodore Street and south of Eucalyptus Avenue. This portion of the survey area contains a stand of olive trees. The second area occurs within a human-made catch basin in the center of the WLCSP and is likely naturally occurring and likely began growing several decades ago.

The ornamental areas are not associated with any native vegetation and provides only limited habitat value, primarily as cover, nesting, and perching opportunities for birds and common terrestrial wildlife that have adapted to urban, agricultural, or other disturbed areas associated with development. This land use type comprises approximately 5 acres of the survey area.

3.5.10 - Open Water (1 acre)

Open water is characterized by ponded or flowing water with little to no vegetative cover. These areas are specifically associated with freshwater drainage features and typically provide habitat for aquatic plant and wildlife species. The Holland Classification Code is 13140.

There is a one-acre area of open water located in the southern portion of the SJWA. The open water areas within the survey area are artificially created ponded areas.

3.5.11 - Northern Mixed Chaparral (1 acre)

Northern mixed chaparral is characterized by broad-leaved shrubs forming dense, often nearly impenetrable vegetation dominated by scrub oak (*Quercus dumosa*), chamise (*Adenostoma fasciculatum*), and any one of several species of manzanita (*Arctostaphylos* sp.*)* and lilacs (*Ceanothus* sp.). Plants are typically deep-rooted and little or no understory vegetation is present. This

vegetation community is adapted to repeated fires, to which many species respond by stump sprouting. A dense cover of annual herbs may appear during the first growing season after a fire, followed in subsequent years by perennial herbs, short-lived shrubs, and re-establishment of dominance by the original shrub species. The Holland Classification Code is 37110.

There is 1 acre of northern mixed chaparral limited to the southwestern portion of the WLCSP. This vegetation community is located on a north-facing slope in the hills at the southwestern corner of the WLCSP.

Table 2: Vegetation Communities in Acres

Vegetation Community	WLCSP	Offsite Improvements	CDFW Conservation Buffer	SDG&E Moreno Compressor Station	Indirect Impact Zone	Additional Survey Areas	Totals
Extensive Agriculture	2,221	25	730	165	111	228	3,480
Non-Native Grassland	215	26	154	0	410	936	1,741
Urban/Developed	73	37	1	14	35	360	520
Disturbed	45	14	8	11	26	51	155
Riversidean Sage Scrub	47	0	11	0	22	18	98
Mule Fat Scrub	5	0	6	0	5	31	47
Southern Willow Scrub	1	0	0	0	0	7	8
Non-Vegetated Channel	0	2	0	0	1	4	7
Ornamental	2	0	0	3	0	0	6
Open Water	0	0	0	0	0	1	1
Northern Mixed Chaparral	1	0	0	0	0	0	1
Totals	**2,610.0***	**104.0***	**910.0***	**193.0***	**610.0***	**1,636.0***	**6,063.0***

Note:
* Rounded to the nearest whole number.

3.6 - Wildlife

Wildlife activity within the WLCSP was moderate and typical for the times of year the habitat assessments were conducted. In general, the WLCSP provides relatively low habitat value for wildlife species that may occur in the region. Wildlife species that are expected to occur in the WLCSP are limited primarily to common species that frequent disturbed habitats and urbanized settings. Common species may include reptilian species such as side-blotched lizard (*Uta stansburiana*) and western fence lizard (*Sceloporus occidentalis*), and avian species such as red-tailed hawk (*Buteo jamaicensis*), American crow (*Corvus brachyrhynchos*), house finch (*Carpodacus mexicanus*), and Say's phoebe (*Sayornis saya*). Mammalian species observed within the survey area include desert cottontail (*Sylvilagus audubonii*), California ground squirrel (*Otospermophilus beecheyi*), and coyote (*Canis latrans*). A complete list of wildlife species observed within the site during the field survey is provided in Appendix A, Floral and Faunal Compendia.

3.6.1 - WLCSP and Offsite Facilities

Wildlife in the WLCSP and the offsite facilities is generally consistent with the general discussion above. Due to the amount of agricultural activities over the past 100 years, there is a limited number of species that are present although many species discussed above occur along the margins of the agricultural fields and along the limited drainage areas. In addition to the more common species discussed above, the San Diego gopher snake (*Pituophis cantenifer annectens*), white-tailed kite (*Elanus leucurus*), barn owl (*Tyto alba*), loggerhead shrike (*Lanius ludovicianus*), and Botta's pocket gopher (*Thomomys bottae*) were recorded to occur within the WLCSP and the offsite facility areas. There is an average-sized passerine bird population within areas that contain native vegetation with a severely limited number of larger mammals, largely due to the extensive agricultural activities.

3.6.2 - CDFW Conservation Buffer

Based on extensive surveys of the CDFW Conservation Buffer area, similar wildlife species that were recorded within the WLCSP are also present in the CDFW Conservation Buffer. There are a limited number of mammals probably due to the extensive agricultural pursuits of the past. The number of passerine birds is high and probably represents both year-round species and transitory birds associated and attracted to the adjacent SJWA to the south.

The SJWA is 20,000 acres of restored wetlands and open water ponds; it is the first state wildlife area to use reclaimed water to enhance its wetlands (www.dfg.ca.gov/lands/wa/region6/sanjacinto). The SJWA is located south of the WLCSP and encompasses the CDFW Conservation Buffer Area. The SJWA contains several habitat areas, including wetlands, restored riparian habitat, grasslands, sage scrub, and marshes and provides habitat for the several threatened and endangered wildlife species including Stephens' kangaroo rat (*Dipodomys stephensi*), Swainson's hawk (*Buteo swainsonii*), and the bald eagle (*Haliaeetus leucocephalus*). The SJWA contains an important inland wetland, which provides habitat for many wetland plant species and wildlife species including aquatic birds, amphibians, and fish.

Mystic Lake, a large crescent-shaped, intermittent water body within the reserve area, serves as a significant wetland habitat for numerous birds including migratory waterfowl such as ducks, grebes and occasional geese. Seasonal upland game hunting is allowed within the SJWA and Lake Perris State Recreation Area. Other uses of the SJWA include wildlife observation, nature study, fishing, hiking, photography, field trials, hunting dog training classes, and conservation of wildlife and wildlife habitat. Birds species commonly found seasonally in the SJWA include a wide variety of ducks, shore birds and gulls, upland game species, and a variety of passerine birds including those found in the WLCSP and CDFW Conservation Buffer Areas.

Neither the SJWA or Mystic Lake is included in the WLCSP and no impacts are associated with these areas. Consideration for these natural areas is warranted under the CEQA process because of the high quality of habitat associated with these conservation areas in relatively close proximity to the WLCSP.

3.6.3 - Indirect Impact Zone

In general, the distribution of wildlife species in this adjacent 610-acre area was similar to the WLCSP and the CDFW Conservation Buffer area, with a very limited distribution of mammals (primarily burrowing mammals) and a higher incidence of passerine birds.

3.7 - Jurisdictional Drainage Features

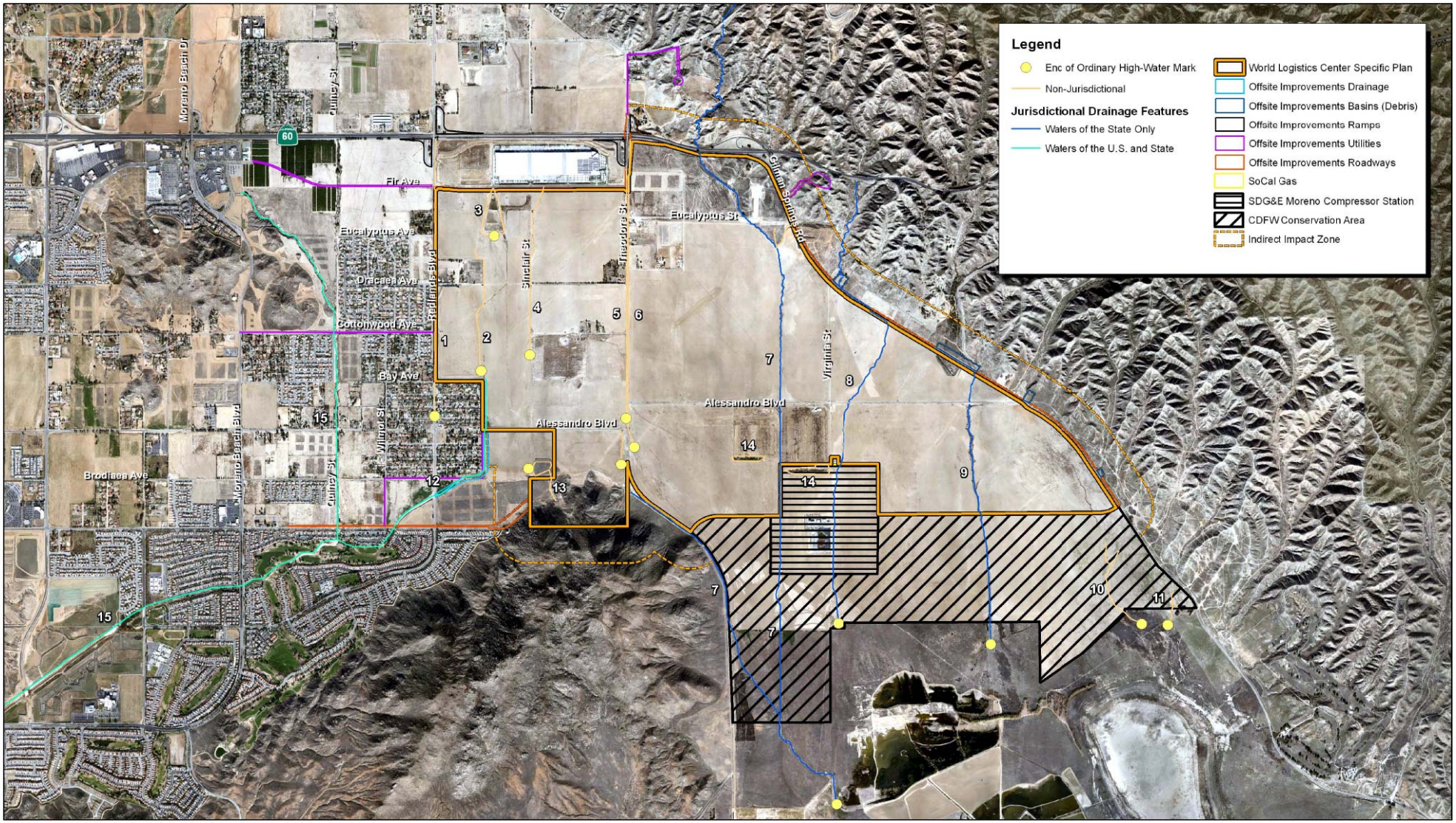
Based on current site conditions and a new survey area (2013), a total of 15 individual features were assessed to determine if the USACE, CDFW, and/or RWQCB would have jurisdiction over all or part of any drainage feature within the WLCSP survey area.

The 15 drainage features consist of two ephemeral drainages, three roadside ditches, seven isolated drainages, and three isolated features. Only two of the drainage features (Drainage 12 and 15) contain direct connectivity to a downstream Traditional Navigable Water (TNW) and are associated with offsite improvements necessary for project construction. The remaining 13 drainage features lack any direct connectivity to any downstream TNWs or any other Relatively Permanent Water (RPW). The three roadside ditches lack any riparian or native vegetation and only convey nuisance flows from localized runoff from the adjacent road. These flows eventually return to sheet flow within the survey area and have no direct connectivity.

The three isolated features include a water quality detention basin and two basins associated with previous cattle activities. The water quality basin is a temporary facility that was constructed to treat onsite flows during the construction of the Skechers logistic facility located northwest of the survey area. The two isolated basins were previously used to collect runoff from a now-abandoned cattle facility. The facility included concrete lined areas to contain cattle in a dairy operation. The animal waste products would flow downhill and collect in the basins to protect downstream water quality. The concrete pens and holding facilities have been removed and the basins are no longer functioning. The basins do not have any recent evidence of ponding or other similar hydrologic indicators.

The remaining seven drainage features originate onsite or immediately north of the survey area. These features are mostly human-made and are used to control downstream flows or to reduce erosion impacts to adjacent agricultural fields. The soft soils within the survey area are highly erosive and the depth of the erosional features varies from two to three feet up to 30 feet. All seven drainage features eventually sheet flow into open grassland habitat with no direct connectivity to any downstream waters of the US or waters of the State.

A total of 15 drainage features were identified within the survey area. Two of these features (Drainages 12 and 15) were determined to connect to downstream TNW or RPWs via surface flow connection and therefore are under USACE jurisdiction. Exhibit 8 illustrates the drainage feature locations within the survey area.



Source: Google Earth Pro, 2012. FCS-MBA Field Survey and GIS Data, 2014.

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2,500 1,250 0 2,500 Feet

Exhibit 8
Jurisdictional Drainage Feature Map

SECTION 4: WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS

4.1 - Overview

The MSHCP is a comprehensive, multi-jurisdictional Habitat Conservation Plan focusing on conservation of species and their associated habitats in western Riverside County. The MSHCP's goal is to maintain biological and ecological diversity within a rapidly urbanizing region.

The approval of the MSHCP and execution of the Implementing Agreement by the wildlife agencies allows signatories of the Implementing Agreement to issue "take" authorizations for all species covered by the MSHCP, including state- and federal-listed species as well as other identified sensitive species and/or their habitats. Each city or local jurisdiction will impose a Development Mitigation Fee for projects within their jurisdiction. With payment of the mitigation fee to the Western Riverside County Regional Conservation Authority (WRCRCA) and compliance with the survey requirements of the MSHCP where required, full mitigation in compliance with the CEQA, National Environmental Policy Act (NEPA), CESA, and FESA will be granted.

The Development Mitigation Fee varies according to project size and project description. The fee for commercial warehouse development is based on a price per square foot. Payment of the mitigation fee and compliance with the requirements of Section 6.0 of the MSHCP are intended to provide full mitigation under CEQA, NEPA, CESA, and FESA for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the USFWS, the CDFW, and/or any other appropriate participating regulatory agencies and as set forth in the Implementing Agreement for the MSHCP.

The MSHCP has been subdivided into 16 Area Plans with 59 subunits within the Area Plans. Within each of the Area Plans and their subunits are Criteria Cells and Cell Groups, each with a proposed conservation requirement for appropriate species. USGS quarter sections (i.e., approximate 160-acre Cells) were then overlain on the Conceptual Reserve Design such that each Cell is an area in real space with a legal description but without being tied to a specific County assessor's legal parcel. Cells were then either aggregated into a Cell Group or retained as individual Cells depending upon the level of conservation and configuration of the particular Cell or Cell Group. Variable target acreage ranges, planning species and biological issues and considerations were identified for each Area Plan Subunit. The variable target acreage ranges were generally based on the difference between the area of the Criteria Area for the particular Subunit and the area of the Conceptual Reserve Design for the particular Subunit.

The MSHCP Conservation Area is comprised of a variety of existing and proposed Cores, Extensions of Existing Cores, Linkages, Constrained Linkages, and Non-contiguous Habitat Blocks. These features are generally referenced as Cores and Linkages. The following definitions apply:

Core: A block of Habitat of appropriate size, configuration, and vegetation characteristics to generally support the life history requirements of one or more Covered Species.

Extension of Existing Core: A block of Habitat contiguous with an existing Core Area, which serves to provide additional Habitat for species in the adjacent existing Core and to reduce exposed edge.

Non-contiguous Habitat: A block of Habitat not connected to other Habitat areas via a Linkage Block or Constrained Linkage.

Constrained Linkage: A constricted connection expected to provide for movement of identified Planning Species between Core Areas, where options for assembly of the connection are limited due to existing patterns of use.

Linkage: A connection between Core Areas with adequate size, configuration and vegetation characteristics to generally provide for "Live-In" Habitat and/or provide for genetic flow for identified Planning Species. Areas identified as Linkages in MSHCP may provide movement Habitat but not Live-In Habitat for some species, thereby functioning more as movement corridors.

The survey area occurs within the Reche Canyon/Badlands Area Plan and falls within both the Badlands North Area Plan Subunit and the San Jacinto Wildlife Area/Mystic Lake Area Plan Subunit. Proposed Core 3 is located to the north and east of the WLCSP and Existing Core H is located to the south. Small portions of the WLCSP fall within both Core Areas (Exhibit 9). No existing or proposed linkages, or constrained linkage areas are in the near vicinity. The closest is Proposed Constrained Linkage 20, approximately two miles south of Mystic Lake. The survey area falls within 12 Criteria Cells; however, only three Criteria Cells are within the WLCSP Area (1204, 1297, and 1364). Two proposed offsite detention basins also potentially encroach into two Criteria Cells (1204 and 1297) (Exhibit 10).

The CDFW Conservation Buffer (northern portion of the SJWA) is within 10 Criteria Cells (Exhibit 10). The cells were specifically created as a part of the MSHCP to coincide with the lands sold in 2001 to act as a buffer between the SJWA and future development to the north and include (1364, 1370, 1377, 1386, 1389, 1390, 1477, 1482, 1483, and 1577). The Indirect Impact Zone encroaches on five of these Criteria Cells (1204, 1297, 1302, 1390, and 1364).

Proposed Core 3 (Badlands/Potrero) is located in the northeast region of the MSHCP. This Core consists mainly of private lands but also contains a few PQP parcels including the DeAnza Cycle Park. The Core is connected to Proposed Linkage 12 (north San Timoteo Creek), Proposed Linkage 4 (Reche Canyon), Proposed Constrained Linkage 22 (east San Timoteo Creek), Existing Core H (Lake Perris), Existing Core K (San Jacinto Mountains), Proposed Linkage 11 (Soboba/Gilman Springs), and Proposed Constrained Linkage 21.

Proposed Core 3 also functions as a Linkage, connecting the San Bernardino National Forest to the southwest with San Bernardino County and other conserved areas to the north of the Core. With a total acreage of approximately 24,920 acres, Proposed Core 3 is one of the largest MSHCP Core Areas. In addition, the Core is contiguous with Existing Core H (Lake Perris/Mystic Lake) and Existing Core K (San Jacinto Mountains), thus greatly enlarging the functional area of the Core. The Core has both a large proportion of its area unaffected by edge (approximately 23,420 acres of the total 24,940 acres) and is only partially constrained by existing agricultural use.

Existing Core H is comprised of Lake Perris State Recreation Area, San Jacinto Wildlife Area, private lands and lands with pre-existing conservation agreements. It provides Live-In Habitat for certain species, contains soils suitable for some Narrow Endemic Plant Species, supports vernal pool complexes, and may provide a connection to Core Areas in the Badlands and the middle reach of the San Jacinto River. Maintenance of habitat quality, floodplain process along the San Jacinto River, and conservation of vernal pool complexes are important for these species. This Core Area likely provides for Live-In Habitat for small rodents and common mammals, including bobcat and San Diego black-tailed jackrabbit.

4.2 - Habitat Assessment Results

This habitat assessment focuses on the sensitive biological resources that could potentially occur within the WLCSP and offsite facilities as indicated in the Riverside County Assessor's Parcel Report (Appendix H, Riverside County Integrated Project [RCIP] Conservation Summary Report and Attachment). These resources include burrowing owl, Los Angeles pocket mouse, ten Criteria Area plant species and six Narrow Endemic plant species. FCS-MBA conducted focused surveys for burrowing owl on the portions of the WLCSP and offsite facilities that contain potentially suitable habitat in 2005, 2006, 2007, 2010, 2012, and 2013. FCS-MBA also conducted focused surveys for Los Angeles pocket mouse in suitable habitat areas in 2005, 2010, 2012, and 2013. None of the Criteria Area or Narrow Endemic plant species have a moderate or high potential to occur in the WLCSP and offsite facilities based on surveys conducted in 2010 (MBA 2010).

Surveys for burrowing owl, Los Angeles pocket mouse, ten Criteria Area plant species and six Narrow Endemic plant species were not conducted within the CDFW Conservation Buffer or the Indirect impact zone because there are no project-related activities within these areas. Therefore, there is no further discussion of the CDFW Conservation Buffer or the Indirect Impact Zone.

This habitat assessment also addresses the presence/absence of riparian/riverine areas and vernal pools in the WLCSP and offsite facilities, identifies any migratory corridors and linkages on or in the vicinity of the WLCSP and offsite facilities, and includes an urban/wildlands interface analysis.

4.2.1 - Burrowing Owl (MSHCP Section 6.3.2)

The burrowing owl is an avian species of special concern that is protected by the MBTA and CFG Code Section 3503. This species typically occurs in grassland and scrub habitats characterized by low-growing vegetation with an abundance of small mammal burrows, including the California ground squirrel. It often prefers areas with moderate disturbance and/or berms or drainage features. Reasons for burrowing owl population decline include habitat destruction, insecticide poisoning, rodenticide (particularly squirrel eradication), and shooting.

The WLCSP and offsite facilities contain suitable habitat for burrowing owl, such as flat, open, valley floor plains occupied by non-native grasslands, fallow fields, and agricultural lands. Details of the methodologies for the focused surveys are discussed in Appendix D, Burrowing Owl Focused Surveys. The studies for burrowing owl in 2013 encompassed the entire 3,436 acres of the WLCSP and the associated offsite areas and a 500-foot buffer as required by the MSHCP protocol for surveys. A

burrow survey, consisting of 100-foot-wide transects was walked to identify all suitable burrows within the project site. Due to the drought conditions during the 2013 rain season, the winter wheat crop was extremely poor in quality and made it possible to observe burrows while conducting transect surveys at 100-foot intervals. Burrow surveys were conducted by six MBA staff over a three-day period. The survey area for burrowing owl was adjusted to include suitable habitat with suitable burrows. A more complete description of the burrowing owl survey protocol is included in Appendix D, 2013 Burrowing Owl Survey Report (FCS-MBA 2013).

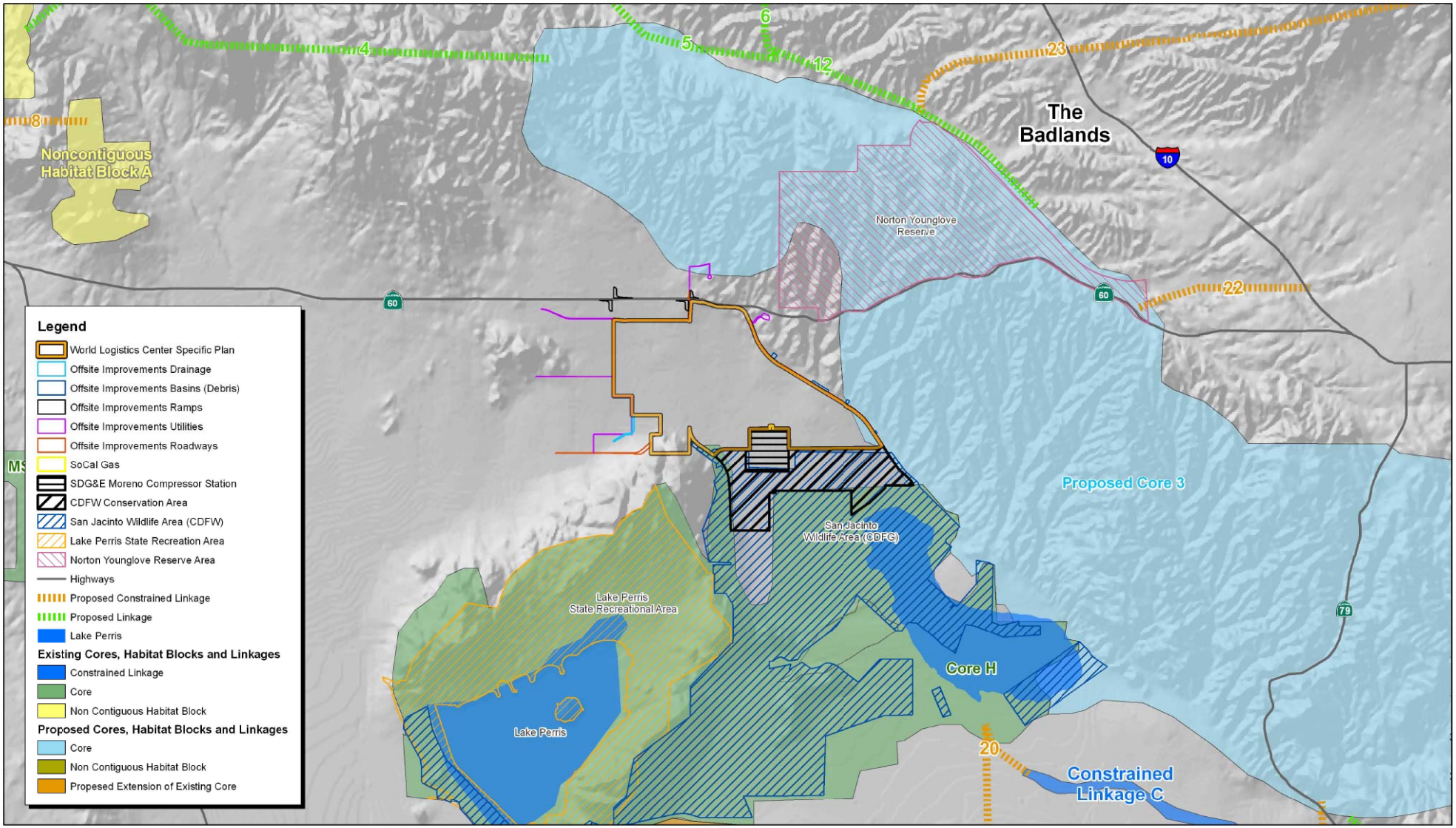
A single pair of burrowing owls was observed during the 2013 focused surveys for burrowing owl. The owls were observed within an earthen berm located just south of Alessandro Road west of Virginia Street. Evidence of burrowing owl predation was observed during the surveys. It is assumed that a juvenile burrowing owl was predated after fledging from the nest.

Focused surveys for burrowing owl conducted in June-July 2012 did not locate any owls. During focused surveys conducted by MBA in 2005 (approximately 1,778-acre survey area), a single breeding pair of burrowing owls was observed within an ephemeral drainage feature (Drainage 4) that longitudinally traverses the western portion of the survey area. The owls were observed perching and in flight along the western bank of the drainage feature, immediately south of its intersection with Dracaea Avenue. Since this area is now actively disked, it is no longer suitable habitat. In addition, focused burrow and burrowing owl surveys conducted by MBA in 2006 (750 acres), 2007 (2,904 acres), and 2010 (3,814 acres) had negative findings (Appendix D, Burrowing Owl Focused Surveys). Burrowing owls were recorded to occur in 2008 (246 acres), just south of the Highland Fairview Corporate Park (Skechers Logistic Center; Fierro pers. comm.). A single burrowing owl was observed within the temporary detention basin located south of the Highland Fairview Corporate Park during a March 2012 site visit associated with the Jurisdictional Delineation.

The disked and fallow fields within the WLCSP survey area continue to provide suitable foraging habitat for burrowing owl. The WLCSP and some of the offsite facilities contain numerous California ground squirrel and desert cottontail burrows, which are potentially suitable for burrowing and nesting by the owls. Therefore, this species appears to be present within selective portions of the WLCSP and offsite facilities. It has been intermittently observed within the WLCSP and is not considered a permanent resident within the entire WLCSP.

4.2.2 - Los Angeles Pocket Mouse (MSHCP Section 6.3.2)

Los Angeles pocket mouse is a California species of special concern that inhabits lower elevation grasslands and scrub communities within Los Angeles, San Bernardino, and Riverside counties. Los Angeles pocket mouse is the smallest of the pocket mice subspecies and is adapted for arid or semi-arid environments and nocturnal activity. The primary habitat requirement for the subspecies is a suitable burrowing substrate of fine sandy soils. Los Angeles pocket mouse is commonly found in low elevation open grasslands, coastal sage scrub, and alluvial fan sage scrub. The subspecies is recorded to have been observed approximately two miles southeast of the WLCSP (CDFW 2012).



Source: USGS NED, Riverside County MSHCP, California Dept. of Fish and Game, Census 2000 data.

FirstCarbon SOLUTIONS

1.2 0.6 0 1.2 Miles

Exhibit 9
Regional Linkages Map

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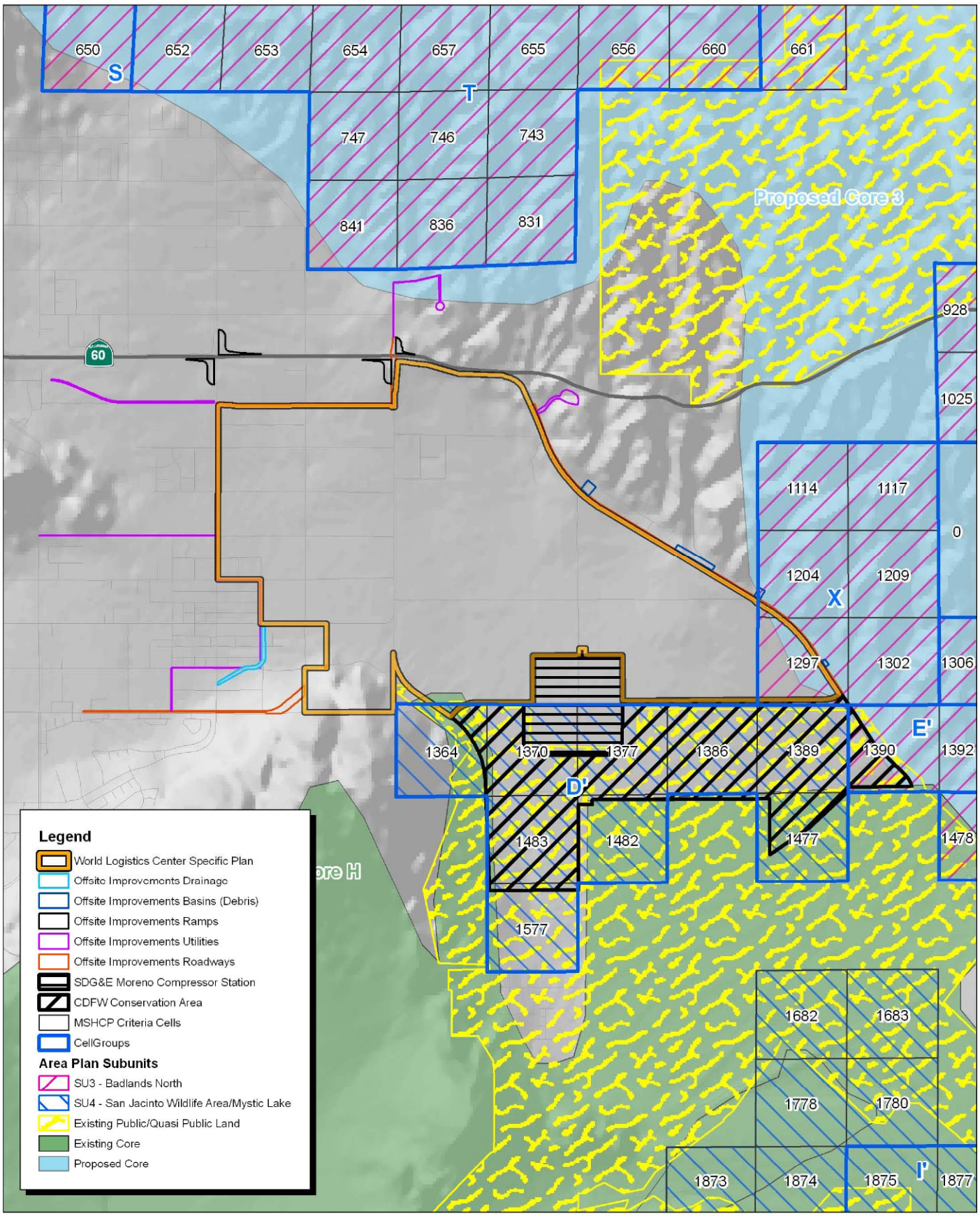

Source: USGS NED, Riverside County MSHCP, Census 2000 data.

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MICHAEL BRANDMAN ASSOCIATES

4,000 2,000 0 4,000
Feet

Exhibit 10
MSHCP Criteria Areas Map

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The majority of the WLCSP and offsite facilities does not contain suitable habitat for Los Angeles pocket mouse due to regular disturbance associated with agriculture, and the absence of fine sand soils. Drainage Feature 9 and an offsite detention basin north of Gilman Springs Road, however, are not subject to regular agricultural disturbance and contain Riversidean sage scrub and appropriate soils; therefore, these drainage features within the WLCSP contains marginally suitable habitat for Los Angeles pocket mouse. No areas within the CDFW Conservation Buffer of the Indirect impact zone were surveyed for Los Angeles pocket mouse because there will be no project-related impacts to those areas.

FCS-MBA has conducted surveys for Los Angeles pocket mouse in 2005, 2010, 2012, and 2013. In 2005, MBA conducted focused trapping surveys for Los Angeles pocket mouse in the Bel Lago portion of the Specific Plan. A total of 121 traps were set throughout the drainage features. In 2010, MBA conducted focused trapping surveys in the same location as in 2005 and in two additional drainage features within the WLCSP. A total of 122 traps were set among the three drainage features. Only Drainage Feature 9 has suitable Riversidean sage scrub and soils, and the other two drainage features only contained suitable soils. The 2012 trapping effort was conducted in the Drainage Feature 7 and 9 similar to the areas in 2010. No Los Angeles pocket mice were trapped. The 2013 trapping effort was conducted within Drainage 9 and within a drainage feature located within a proposed offsite detention basin located northeast of Gilman Springs Road. A total of 75 traps were set within the two drainage features. No Los Angeles pocket mice were trapped.

No Los Angeles pocket mice were trapped during the focused surveys in any of the four trapping sessions (2005, 2010, 2012, and 2013); therefore, this species is absent from the WLCSP and offsite facilities (Appendix C, Los Angeles Pocket Mouse Focused Surveys).

There is no suitable habitat between the known occurrence of Los Angeles pocket mouse and the WLCSP. The known populations of Los Angeles pocket mouse are located within the southern portion of the SJWA, which is more than 2 miles from the southern WLCSP boundary. The area between the known recorded occurrences of Los Angeles pocket mouse and the WLCSP is actively disked farmland. Therefore, there is no habitat connectivity between the known occurrences of Los Angeles pocket mouse and the WLCSP.

4.2.3 - Criteria Area Plant Species (MSHCP Section 6.3.2)

Criteria Area Plant species are those plant species that require a habitat assessment and/or focused plant surveys under the MSHCP for each individual Criteria Cell, as opposed to all 106 special status plant species listed under the MSHCP. The following ten Criteria Area Species were assessed for their potential to occur on the WLCSP and offsite facilities:

- Mud nama (*Nama stenocarpum*)
- Little mousetail (*Myosurus minimus apus*)
- Coulter's goldfields (*Lasthenia glabrata* sub. *coulteri*)
- Thread-leafed brodiaea (*Brodiaea filifolia*)
- Davidson's saltscale (*Atriplex serenana davidsonii*)
- Parish's brittlescale (*Atriplex parishii*)

- San Jacinto valley crownscale (*Atriplex coronata notatior*)
- Round-leafed filaree (*Erodium macrophyllum*)
- Smooth tarplant (*Hemizonia pungens laevis*)
- Nevin's Barberry (*Mahonia nevinii*)

Mud Nama

Mud nama is a small annual herb that is confined to the western US. This species grows on the muddy embankments of ponds and lakes and is also reported to use river embankments. It typically occurs between 5 and 500 meters in elevation.

No ponds, lakes, or regularly muddy embankments occur within the WLCSP and offsite facilities. Therefore, mud nama is not likely to occur on the WLCSP and associated offsite areas.

Little Mousetail

Little mousetail is distributed in scattered areas from Orange and San Bernardino counties, south to coastal San Diego County from sea level to 1,500 meters in elevation. In southern California, little mousetail occurs in association with vernal pools and within the alkali vernal pools and alkali annual grassland components of alkali vernal plains. Little mousetail is found in areas that have semi-regular inundation.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, little mousetail is not likely to occur on the WLCSP and associated offsite areas.

Coulter's Goldfields

Coulter's goldfields is distributed from sea level to about 1,000 meters in elevation, from coastal San Luis Obispo County south through coastal Santa Barbara County, Ventura County, Los Angeles to San Diego County and northwestern Baja California,. Coulter's goldfields are associated with low-lying alkali habitats along the coast and inland valleys. The majority of the populations are associated with coastal salt marsh. In Riverside County, Coulter's goldfields occur primarily in highly alkaline, silty-clay soils in association with the Traver-Domino-Willows soil association. Most Riverside County populations are associated with the Willows soil series. Coulter's goldfields occur primarily in the alkali vernal plains community. These are floodplains dominated by alkali scrub, alkali playas, vernal pools, and, alkali grasslands. These habitats form mosaics that are largely dependent on salinity and micro-elevational differences.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, Coulter's goldfields are not likely to occur in the WLCSP and associated offsite areas.

Thread-leafed Brodiaea

Thread-leaved brodiaea is endemic to southwestern cismontane California, ranging from the foothills of the San Gabriel Mountains at Glendora (Los Angeles County), east to Arrowhead Hot Springs in the western foothills of the San Bernardino Mountains (San Bernardino County), and south through

eastern Orange and western Riverside Counties to Carlsbad and just south of Lake Hodges in northwestern San Diego County. This species occurs from near sea level to 600 meters in elevation. The species typically occurs on gentle hillsides, valleys, and floodplains in semi-alkaline mudflats, vernal pools, mesic southern needlegrass grassland, mixed native-nonnative grassland, and alkali grassland plant communities in association with clay, loamy sand, or alkaline silty-clay soils. In Orange County and San Diego County, the distribution of thread-leaved brodiaea is highly correlated with specific clay soil series.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, thread-leafed brodiaea is not likely to occur on the WLCSP and associated offsite areas.

Davidson's Saltscale

Davidson's saltscale is known to occur in cismontane habitat in southwestern California, Ventura County, and western Orange County into western Riverside County. Historically, this species has also been reported in coastal Santa Barbara County, Los Angeles County, and possibly in San Diego County. In Riverside County, Davidson's saltscale is found in the Domino-Willows-Traver Soils series in association with the alkali vernal pools, alkali annual grassland, alkali playa, and alkali scrub components of alkali vernal plains.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, Davidson's saltscale is not likely to occur on the WLCSP and associated offsite areas.

Parish's Brittlescale

Parish's brittlescale is currently known to occur only in western Riverside County. Historically, Parish's brittlescale was distributed sporadically in cismontane southern California from the Los Angeles Basin (Los Angeles and Orange Counties), and Riverside County. Parish's brittlescale is found in alkaline habitats. In western Riverside County it is found primarily along the San Jacinto River and at Salt Creek within the Domino-Willows-Tracer Soils series in association with the alkali vernal pools, alkali annual grassland, alkali playa, and alkali scrub components of alkali vernal plains

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, Parish's brittlescale is not likely to occur on the WLCSP and associated offsite areas.

San Jacinto Valley Crownscale

San Jacinto Valley crownscale is endemic to western Riverside County and is restricted to the San Jacinto, Perris, Menifee and Elsinore Valleys. San Jacinto Valley crownscale occurs primarily in floodplains dominated by alkali scrub, alkali playas, vernal pools, and, to a lesser extent, alkali grasslands. San Jacinto Valley crownscale is restricted to highly alkaline, silty-clay soils in association with the Traver-Domino-Willows soil association; the majority of the populations being associated with the Willows soil series.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, San Jacinto Valley crownscale is not likely to occur on the WLCSP and associated offsite areas.

Round-Leafed Filaree

The round-leafed filaree is an annual that typically grows in valley and foothill grasslands in open habitat on friable clay soils. Round-leafed filaree (also known as large-leafed filaree) is apparently well distributed in central and northern California, but is very rare in Southern California. The species is presumed to be declining in Southern California due to loss of its friable clay microhabitat. All populations in Southern California are recommended for protection despite the sizeable populations to the north. Oftentimes the distinctive clay soils where this species can occur include other sensitive species such as small-flowered morning glory (*Convolvulus simulans*). The very crumbly clay soil is itself quite rare in the region and undoubtedly accounts for the rarity of several species restricted to this substrate.

No friable clay soils occur within the WLCSP and offsite facilities. Therefore, round-leafed filaree is not likely to occur in the WLCSP and associated offsite areas.

Smooth Tarplant

Smooth tarplant is found in southwestern California and northwestern Baja California, Mexico. It occurs in Los Angeles, San Bernardino, Riverside, and San Diego Counties. Smooth tarplant occurs in a variety of habitats including alkali scrub, alkali playas, riparian woodland, watercourses, and grasslands with alkaline affinities. The majority of the populations in western Riverside County are associated with alkali vernal plains.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, smooth tarplant is not likely to occur on the WLCSP and associated offsite areas.

Nevin's Barberry

Nevin's barberry (*Mahonia nevinii*) is endemic to southwestern cismontane southern California. It occurs in restricted localized populations from the interior foothills of the San Gabriel Mountains of Los Angeles County and San Bernardino County southeast to near the foothills of the Agua Tibia Mountains of southwestern Riverside County, from 300 and 659 meters in elevation. Scattered naturalized populations have been established outside this range. Nevin's barberry is found in coarse soils and rocky slopes in chaparral and gravelly wash margins in alluvial scrub.

No alluvial scrub or rocky chaparral slopes occur within the WLCSP and offsite facilities. This was confirmed by the field studies conducted on the properties. Therefore, Nevin's barberry is not likely to occur in the WLCSP and associated offsite areas.

Conclusion Regarding Cell Criteria Plant Species

Based on the current conditions, there is no suitable or high quality habitat for any of the above-mentioned Cell Criteria plant species. These plants are not likely to occur within the project and should be considered absent from the WLCSP and associated offsite areas.

4.2.4 - Narrow Endemic Plant Species (MSHCP 6.1.3)

A narrow endemic is a species that is confined to a specific geographic region, soil type, and/or habitat. There are a total of 14 narrow endemic plant species throughout the MSHCP that require additional assessment top determine their presence or absence. The following six Narrow Endemic Plant Species were assessed for their potential to occur on the WLCSP and offsite facilities based on suitable habitat:

- San Diego ambrosia (*Ambrosia pumila*)
- Wright's trichocoronis (*Trichocoronis wrightii wrightii*)
- California orcutt grass (*Orcuttia californica*)
- Spreading navarretia (*Navarretia fossalis*)
- Many-stemmed dudleya (*Dudleya multicaulis*)
- Munz's onion (*Allium munzii*)

San Diego Ambrosia

San Diego ambrosia is a federally endangered species. It occurs in open habitats in coarse substrates near drainage features, and in upland areas on clay slopes or on the dry margins of vernal pools. This species occurs in a variety of associations that are dominated by sparse grasslands or marginal wetland habitats such as river terraces, pools, and alkali playas. In Riverside County, San Diego ambrosia is associated with open, gently sloped grasslands and is generally associated with alkaline soils. Three populations of San Diego ambrosia have been mapped in Riverside County. The species is threatened by habitat loss due to urbanization, fragmentation, isolation, and associated impacts from non-native species competition. While it is considered to be tenacious in appropriate habitat, it is thought to be a weak competitor with invasive herbaceous and non-native grass species.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, San Diego ambrosia is not likely to occur on the WLCSP and associated offsite areas.

Wright's Trichocoronis

The historic range of Wright's trichocoronis (*Trichocoronis wrightii*) includes the Great Valley of central California, western Riverside County, and the Edwards Plateau of central Texas and adjacent Mexico. Wright's trichocoronis appears to be extirpated from central California. California plants may represent a distinct species from the plants of Texas and north central Mexico. In western Riverside County, Wright's trichocoronis is found in the alkali vernal plains and associated with alkali playa, alkali annual grassland, and alkali vernal pool habitats. This species occupies the more mesic portions of these habitats.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, Wright's trichocoronis is not likely to occur in the WLCSP and offsite facilities.

California Orcutt Grass

California Orcutt grass occurs in southwestern California from eastern Ventura County east through Los Angeles County to Riverside County, and south to San Diego County from near sea level to 625 meters in elevation. All known Californica Orcutt grass localities are associated with vernal pools. In Riverside County, this species is found in southern basaltic claypan vernal pools at the Santa Rosa Plateau, and alkaline vernal pools as at Skunk Hollow and at Salt Creek west of Hemet.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, California Orcutt grass is not likely to occur on the WLCSP and associated offsite areas.

Spreading Navarretia

Spreading navarretia occurs from northwestern Los Angeles County and western Riverside County, south through coastal San Diego County to San Quintin in northwestern Baja California, Mexico, from near sea level to 1,300 meters. The primary habitat this species is associated with is vernal pools, depressions, and ditches in areas that once supported vernal pools. In western Riverside County, spreading navarretia has been found in relatively undisturbed and moderately disturbed vernal pools, within a larger vernal floodplains dominated by annual alkali grassland or alkali playa. The alkali vernal playa/pool habitat found in the Hemet area contains silty clay soils in the Willows and Travers series, which are usually saline-alkaline in nature. The combination of these seasonal ponded areas and the soil type provide suitable habitat for this plant.

No vernal pools, vernal pool conditions, or alkaline conditions occur within the WLCSP and offsite facilities. Therefore, spreading navarretia is not likely to occur on the WLCSP and associated offsite areas.

Many-Stemmed Dudleya

Many-stemmed dudleya is endemic to southwestern California from western Los Angeles County south through extreme southwestern San Bernardino, Orange, and western Riverside Counties south to extreme northern San Diego County. It ranges from near sea level to about 600 meters in elevation. Many-stemmed dudleya is often associated with clay soils in barrens, rocky places, or thinly vegetated openings in chaparral, coastal sage scrub, and southern needlegrass grasslands. The majority of many-stemmed dudleya populations are associated with coastal sage scrub or open coastal sage scrub.

No clay soils occur within the WLCSP and offsite facilities. Therefore, many-stemmed dudleya is not likely to occur in the WLCSP and associated offsite areas. This was confirmed by field studies.

Munz's Onion

Munz's onion is endemic to southwestern Riverside County. This species is restricted to heavy clay soils which are scattered in a band several miles wide and extending some 40 miles southeast from Corona through Temescal Canyon and along the Elsinore Fault Zone to the southwestern foothills of the San Jacinto Mountains from 300 to 1,000 meters in elevation. Munz's onion is found in grassy openings in coastal sage scrub, chaparral, juniper woodland, valley and foothill grasslands.

No clay soils occur within the WLCSP and offsite facilities. Therefore, Munz's onion is not likely to occur on the WLCSP and offsite facilities.

Conclusion Regarding Narrow Endemic Plant Species

Based on the current conditions, there is no suitable or high quality habitat for any of the above-mentioned narrow endemic plant species. These plants are not likely to occur within the project and should be considered absent. None of these plants were ever found during any of the field studies conducted on the property since 2005.

4.2.5 - Riparian/Riverine Habitat and Vernal Pools (MSHCP 6.1.2)

The MSHCP requires an independent evaluation of riparian/riverine and vernal pool habitats that is in addition to a typical jurisdictional delineation required by the USACE and CDFW.

Riparian/Riverine

The WLCSP and offsite facilities contain two types of riparian/riverine habitat. The first type consists of unvegetated drainage features, which are described as riverine systems. The second type consists of drainage features with riparian vegetation such as mule fat scrub and southern willow scrub. Both of these Riparian/Riverine types within the WLCSP are isolated, disturbed, low to moderate in vegetative cover, and generally of poor to moderate habitat quality. Fifteen drainage features were evaluated to determine if they meet the requirements to be considered a riparian/riverine area (Exhibit 11). A brief description of each of these drainage features is provided below.

Ten of the drainage features (drainage features 1, 2, 3, 4, 5, 6, 10, 11, 13, and 14) were determined to be upland erosion features or isolated ponded areas and surface flows do not directly connect to any downstream drainage features. Drainage features 2, 3, 4, 5, 6, and 14 terminate within the project site. Drainage features 1, 7, 8, 9, 10, 11, and 13 terminate within an off-site area. Drainage features 12 and 15 are the only two drainage features that were evaluated that clearly have connectivity to a downstream drainage feature.

Drainage features 7, 9, and 14 contain a measurable amount (greater than 0.10 acre) of riparian habitat. The remaining drainage features are relatively unvegetated or contain sparse vegetation that does not function as a separate vegetation community. The riparian habitat within drainage features 7, 9, and 14 is disturbed with minimal canopy cover, a mix of native and non-native species, and is isolated from any upstream or downstream riparian habitat. Southern willow scrub is typically considered suitable habitat for a number of wildlife species that commonly occur in Riparian/ Riverine habitats throughout southern California. These wildlife species include sensitive avian

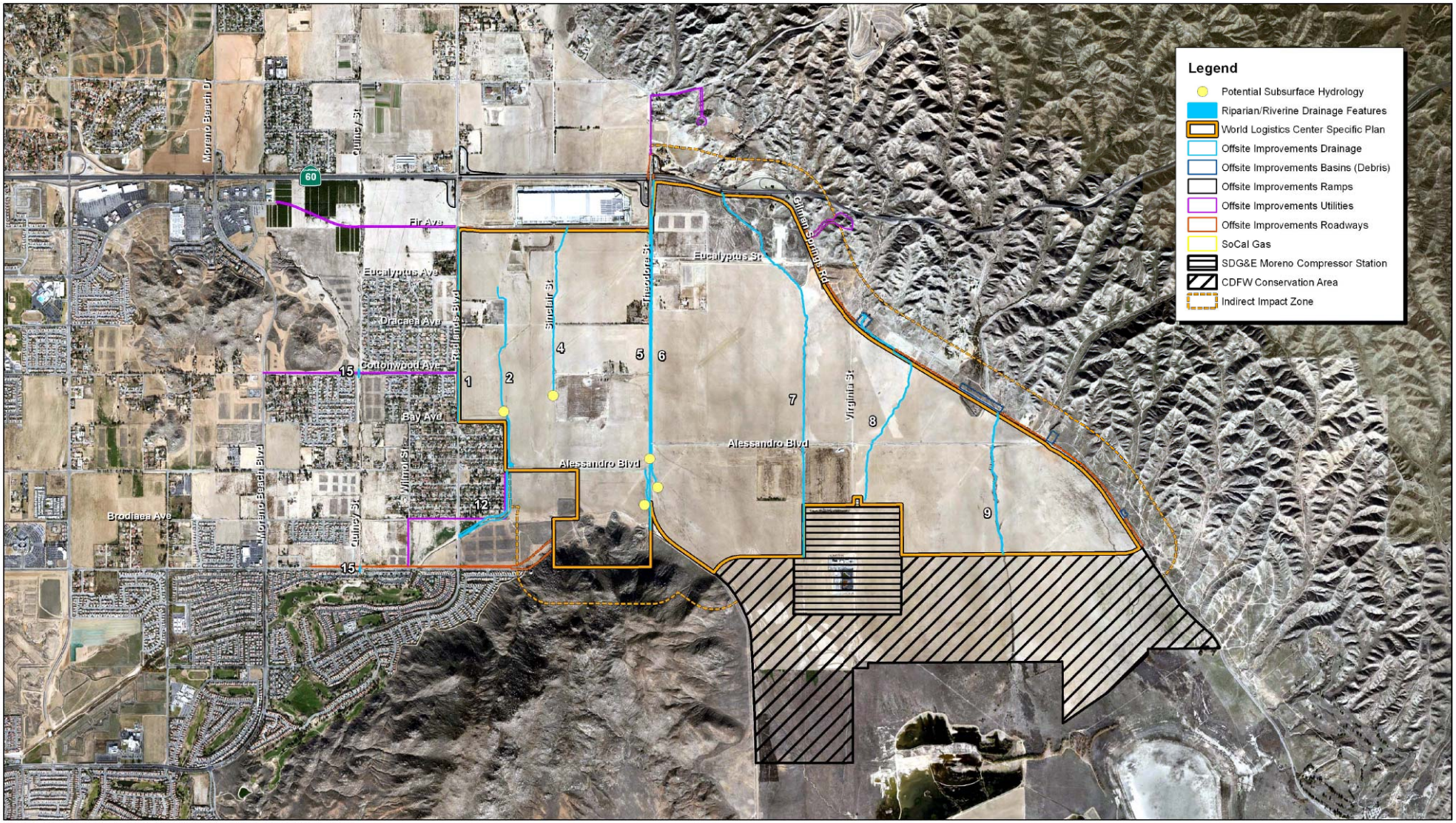
species such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. The riparian habitat within the WLCSP is considered low in habitat quality because it is isolated, small in size, and lacks significant vegetation density. The closest area that contains suitable habitat for these species is more than 2 miles to the southeast and there is no direct habitat connection to any suitable offsite habitat. Given these characteristics, riparian wildlife species have a low potential to occur, and impacts to least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo are not anticipated.

Drainage features 3, 13, and 14 are completely isolated and are contained within an earthen berm with no evidence of downstream flows. Therefore, these three features are not considered riparian/riverine areas. Drainage features 10 and 11 originate within the CDFW Conservation Area and outside of the WLCSP and will not be impacted, and further analysis is not required. All potential riparian/riverine features within the WLCSP may be permanently impacted by the proposed project development. Table 3 provides details on the 10 features determined to be riparian/riverine areas that could potentially be impacted by the WLCSP proposed activities. Drainage features 1, 2, 4, 5, 6, 7, 8, 9, 12, and 15 were considered to be riparian/riverine areas within the WLCSP, and a program-level DBESP was completed to assess impacts, potential avoidance measures, and mitigation (see Appendix F). Since there is no specific hydrologic information to substantiate the isolation of the 10 features to any downstream conservation areas, they are all assumed to be riparian/riverine areas until further analysis and project specific DBESPs are prepared as outlined in Appendix F.

Drainage 1 – This feature is a roadside ditch that conveys nuisance flows on the east side of Redlands Boulevard. Currently, the ditch is contained within a concreted-lined swale and has intermittent areas with an earthen bed and bank. This ditch has no vegetation and leaves the site in an underground storm drain facility. This roadside ditch typically conveys flows during any storm event because most of the drainage is currently paved (see Photos 9 and 10).

Drainage 2 – This feature is an upland swale that conveys nuisance flows within an actively disked agricultural field and only receives flows every 5 to 7 years. This swale contains periodic sign of erosion, but is mostly an unvegetated swale with minimal evidence of flows. This drainage begins to sheet flow just north of Bay Avenue and has no surface hydrologic connection to any downstream drainage feature (see Photos 11 and 12).

Drainage 3 – This feature is a temporary detention basin used to treat nuisance flow from the adjacent Skechers logistic facility. The flows within this feature are completely contained within the facility and there is no downstream connection to any other drainage features. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature (see Photo 13).



Source: Google Earth Pro, 2012. FCS-MBA Field Survey and GIS Data, 2014.

FirstCarbon SOLUTIONS

2,500 1,250 0 2,500 Feet

Exhibit 11
Riparian/Riverine Feature Map

Drainage 4 – The drainage feature previously originated from an underground storm drain beneath SR-60. The previous flows from this feature have been redirected into the detention basin associated with Drainage 3. Drainage 4 currently conveys flows from local runoff within the WLCSP footprint and only receives flows every 5 to 7 years. This feature has evidence of a historic channel near the intersection of Dracaea Avenue and Sinclair Street. However, this feature sheet flows just south of Cottonwood Avenue and has no surface hydrologic connection to any downstream drainage features (see Photos 14 and 15).

Drainage 5 – This drainage is a roadside ditch located along the western side of Theodore Street. This drainage originates at the eastbound Theodore Street off-ramp from SR-60. This feature conveys nuisance flows from Theodore Street and immediate vicinity during large storm events and may only receive flows every 5 to 7 years. This feature contains an intermittent bed and bank feature, but terminates just south of Alessandro Boulevard. This feature has no surface hydrologic connection to any downstream drainage (see Photos 16 and 17).

Drainage 6 – This feature is also a roadside ditch located along the eastern side of Theodore Street. This drainage originates from an underground storm drainage beneath SR-60. It conveys nuisance flow from Theodore Street and immediate vicinity and may only receive flows every 5 to 7 years. This feature contains an intermittent bed and bank feature, but terminates southeast of Alessandro Boulevard within an active agricultural field. This feature has no surface hydrologic connection to any downstream drainage (see Photos 18 and 19).

Drainage 7 – This feature originates from the western portion of the badlands; it flows beneath SR-60 and contains intermittent riparian habitat along the northern portion of the WLCSP. The drainage continues to the south in a relatively un-vegetated channel until it crosses Alessandro Boulevard. There is a portion of the drainage that contains a small stand of mulefat scrub (about 400 linear feet), but terminates before the southern boundary of the WLSCP. This feature has been diverted from its natural state and is now considered an agricultural drainage feature located between Theodore Street and Virginia Street. Drainage 7 also has a small tributary that collects runoff from Davis Road. There is a small portion of this tributary in the southern portion of the WLCSP that begins just south of Alessandro Boulevard where Theodore Street terminates into Davis Road. This tributary is relatively unvegetated with a few weedy species such as tree tobacco and short-podded mustard. The tributary flows into the main portion of Drainage 7 in an off-site area south of the WLCSP, and since there is a hydrologic connection between the two drainage features, they are combined into one feature. This feature has no aboveground hydrologic connection to any downstream drainage and aboveground flows terminate west of Mystic Lake (see Photos 20 and 21).

Drainage 8 – This feature originates in the badlands and flows to the south. The culvert at the Gilman Springs crossing is partially blocked and sheet flows across Gilman Springs Road. The drainage is collected within a disked agricultural field and flows to the south along Virginia Street. This feature contains an intermittent bed and bank feature, but terminates at the southern end of the CDFW conservation buffer within the SJWA prior to entering Mystic Lake. This feature has no surface hydrologic connection to any downstream drainage (see Photo 22).

Drainage 9 – This feature originates as an intermittent ephemeral drainage from a semi-buried underground culvert beneath Gilman Springs Road. A large amount of natural flows spills over Gilman Springs Road and flows into Drainage 9 just south of Alessandro Boulevard. South of Alessandro Boulevard, Drainage 9 becomes greatly incised with nearly vertical side slopes and is approximately 30 to 40 feet deep. As the drainage flows to the south, it gets smaller to point where there is no noticeable evidence of flows prior to entering Mystic Lake. This feature has no surface hydrologic connection to any downstream drainage. Drainage 9 contains elements of both an unvegetated channel and mule fat scrub. The upstream portion of Drainage 9 contains an unvegetated channel approximately 1,600 linear feet in length. The mulefat scrub habitat within this drainage is approximately 3,700 linear feet in length (see Photos 23 and 24).

Drainage 10 – This drainage is an isolated feature that contains some evidence of erosion and is caused by a change in slope within highly erosive soils. This feature terminates as the topography levels resulting in sheet flows. This feature contains a few scattered tree tobacco, but otherwise has no change in soils or vegetation. This feature has no surface hydrologic connection to any downstream drainage and may only receive flows every 5 to 7 years (see Photo 25). This feature is located completely within the SJWA and will not be impacted by the WLCSP.

Drainage 11 - This drainage is an isolated feature and similar to Drainage 10. This feature contains some evidence of erosion and is likely caused by runoff associated with Gilman Springs Road. This feature terminates as the topography levels resulting in sheet flows. This feature has no surface hydrologic connection to any downstream drainage and may only receive flows every 5 to 7 years. This feature does not contribute to function or value to any downstream drainage features and is not considered a riparian/riverine feature (see Photo 26). This feature is located completely within the SJWA and will not be impacted by the WLCSP.

Drainage 12– This feature originates as a roadside ditch located along the eastern side of Merwin Street. This drainage originates onsite and may be an extension of Drainage 2, which sheet flows north of Bay Avenue. Highland Fairview installed several earthen berms to protect the adjacent residential development from flooding during large storm events. The sheet flow from the adjacent agricultural fields is directed into this feature, which previously was just an upland swale. The additional flows have created an incised bed and bank feature and is now referred to as Drainage 12. This feature contains an intermittent bed and bank feature, but it is one of the few drainage features that continues off-site. This feature flows into the Perris Valley Storm Drain, which outlets into the San Jacinto River and eventually flows into the Railroad Canyon Reservoir (see Photos 27 and 28).

Drainage 13 - This drainage is an isolated feature. This feature contains some evidence of erosion and is likely caused by runoff associated with the steep hillsides to the south. This feature terminates as the topography levels resulting in sheet flows. This feature has no surface hydrologic connection to any downstream drainage and may only receive flows every 5 to 7 years. This feature does not contribute to function or value to any downstream drainage features, and it does not drain toward any existing criteria cells or conservation areas and is not considered a riparian/riverine feature (see Photo 29).

Drainage 14 includes two isolated basins that were previously used to collect runoff from a cattle-holding facility. These basins were artificially created as isolated, human-made, catch basins that received nuisance flows and agricultural runoff from concrete cattle containment areas adjacent to the basin, which have subsequently been removed. There is no evidence of prolonged ponding within the Drainage 14 basins and for this reason, it is not suitable habitat for any of the sensitive fairy shrimp species. The vegetation in the western catch basin consists of sparse southern willow scrub but is not of sufficient size to support any sensitive riparian species, such as least Bell's vireo, southwestern willow flycatcher, and yellow-billed cuckoo. As stated in Section 6.1.2 of the MSHCP, "With the exception of wetlands created for the purpose of providing wetlands habitat or resulting from human actions to create open waters or from the alteration of natural stream courses, areas demonstrating characteristics as described above which are artificially created are not included in these definitions." Therefore, the artificially created catch basins, which were used to collect cattle waste, are not considered Riparian/Riverine areas (see Photo 30).

Drainage 15 – This feature is a trapezoidal flood control facility that conveys nuisance flow from adjacent residential development. It originates from an underground storm drains associated with the adjacent residential development. This feature contains an intermittent bed and bank feature with little to no vegetation. It flows into the Perris Valley Storm Drain, which outlets into the San Jacinto River and which eventually flows into the Railroad Canyon Reservoir (see Photo 31).

Table 3: Riparian/Riverine Areas Within the WLCSP

Drainage Feature	Drainage Type	Flow Description	Riparian/Riverine Habitat	Average Width (Feet)	Overall Length (Feet)	Total Acres[1]
Drainage 1	Roadside Ditch	Terminates in Storm Drain	0.26 acre Ephemeral	2	5,250	0.26
Drainage 2	Upland Swale	Terminates On-site	0.21 acre Ephemeral	2	4,230	0.21
Drainage 4	Upland Swale	Terminates On-site	0.23 acre Ephemeral	2	4,640	0.23
Drainage 5	Roadside Ditch	Terminates On-site	0.42 acres Ephemeral	3	7,720	0.42
Drainage 6	Roadside Ditch	Terminates On-site	0.42 acre Ephemeral	2	8,370	0.42
Drainage 7	Ephemeral Drainage	Terminates off-site	0.31 acre Riparian/ 0.83 acre Ephemeral	4	12,460	1.14
Drainage 8	Ephemeral Drainage	Terminates Off-site	0.57 acre Ephemeral	4	6,200	0.57
Drainage 9	Ephemeral Drainage	Terminates Off-site	0.71 acre Riparian/ 0.19 acre Ephemeral	10	4,000	0.90
Drainage 12	Ephemeral Drainage	Continues Off-site	0.53 acre Ephemeral	6	3,830	0.53
Drainage 15	Ephemeral Drainage	Continues Off-site	0.01 acre Ephemeral	5	375	0.01

Table 3 (cont.): Riparian/Riverine Areas Within the WLCSP

Drainage Feature	Drainage Type	Flow Description	Riparian/Riverine Habitat	Average Width (Feet)	Overall Length (Feet)	Total Acres[1]
Totals	—	—	**1.02 acres Riparian/3.67 acres Ephemeral**		**57,075**	**3.67**

Note:
[1] All features within the WLCSP area may be permanently impacted. Total acreage represents existing and potential permanent impacts.

The mule fat scrub portions of the WLCSP and the offsite areas found in Drainage features 7 and 9 are poor in habitat quality, due to the small size of the stands, the sparse vegetative cover within the communities, the isolation of the individual stands, and the disturbance from the adjacent agricultural uses. Given the above characteristics, riparian wildlife species have a low potential to occur; impacts to any of the mule fat scrub plant communities due to the development are not anticipated to have impacts on least Bell's vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), or western yellow-billed cuckoo (*Coccyzus americanus occidentalis*).

Southern willow scrub is typically considered suitable habitat for a number of wildlife species that commonly occur in Riparian/Riverine habitats throughout southern California. These wildlife species include sensitive avian species such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. Drainage feature 14 (an abandoned basin) is considered low in habitat quality because it is isolated, small in size (0.86 acre), and lacks significant vegetation density. The closest area that contains suitable habitat for these riparian species is more than 2 miles to the southeast, and there is no direct habitat connection to any suitable offsite habitat. Given these characteristics, riparian wildlife species have a low potential to occur, and impacts to least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo are not anticipated. In addition, since this basin is a man-made feature, it is not considered riparian/riverine habitat and does not have to be evaluated further under the MSHCP process.

Vernal Pool

FCS-MBA also conducted a vernal pool habitat assessment within the WLCSP and offsite facilities. As defined by the MSHCP, vernal pools are "seasonal wetlands that occur in depression areas that have wetlands indicators of all three parameters (soils, vegetation, and hydrology) during the wetter portion of the growing season but normally lack wetlands indicators of hydrology and/or vegetation during the drier portion of the growing season." No vernal pools or other ephemeral ponds were observed in the WLCSP or any of the offsite areas during the habitat assessment survey. In addition, no suitable habitat for any fairy shrimp species was identified within any of the WLCSP and offsite facilities due to the lack of sufficient ponding lengths.

The basins associated with Drainage 14, were previously created and solely used to store cattle waste associated with an adjacent temporary cattle-holding facility. This facility was removed during the early 2000s and no longer contains cattle waste. There are no plants associated with vernal pools within the basin. Because of the high percolation rate, this area does not hold water long enough to provide the necessary hydrology associated with the creation and maintenance of a vernal pool. There are no drainage features that convey natural flows into these basins. Therefore, the basins only source of hydrology is from natural rainfall within the limits of the basin.

The southern willow scrub associated with Drainage 14 does not contain hydric soils or wetland hydrology indicators. The vegetation within the basin is sparse, with a 30- to 40-percent canopy cover of native willows. The small patch of riparian habitat also contains about 50 percent native willows and 50 percent non-native ornamental trees such as Peruvian pepper tree (*Schinus molle*). The southern willow scrub habitat is 0.9 acre in size (rounded up to 1 acre in the document). There is no suitable habitat for any riparian/riverine avian species, such as least Bell's vireo (*Vireo bellii pusillus),* southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), due to the limited size of the basin. There is also no suitable habitat within the immediate vicinity (approximately 2 miles) and there is no direct habitat connection to any suitable offsite habitat. Based on these factors, there is no suitable nesting habitat and limited resting habitat for the listed riparian species covered under the MSHCP in Section 6.1.2.

The term "functioning riparian habitat" describes a patch or area of riparian habitat that functions as a riparian habitat. It provides suitable habitat for plant and wildlife species that are commonly found in riparian habitats. Even low- quality riparian habitat may provide functional riparian habitat if it supports a population of riparian species. The riparian habitat onsite is extremely small and completely isolated from riparian habitat in the eastern portion of the City of Moreno Valley.

The riparian vegetation onsite does not support wildlife species commonly found within riparian habitat such as common yellow-throat (*Geothlypis trichas sinuosa*), yellow warbler (*Dendroica petechia brewsteri*), yellow-breasted chat (*Icteria virens*), and summer tanager (*Piranga rubra*), as described in the Birds as Indicators of Riparian Vegetation (no date) condition in the western U.S. Bureau of Land Management, Partners in Flight, Boise, Idaho. Therefore, even though the WLCSP contains small patches of riparian vegetation, it does not function as a riparian habitat. A few plants in an isolated area do not create a functional habitat.

4.2.6 - Urban/Wildlands Interface Analysis (MSHCP 6.1.4)

This section addresses the indirect effects associated with locating development in proximity to MSHCP Conservation Areas. The WLCSP and the proposed offsite facilities are bordered to the east by Proposed Core 3 and to the south by the SJWA and Existing Core H (Exhibit 10). Moreover, portions of the WLCSP fall within the boundaries of all the aforementioned Conservation Areas. Therefore, those projects that are located immediately adjacent to a core or proposed core area will require project design features to minimize potentially significant impacts associated with the urban/Wildlands interface.

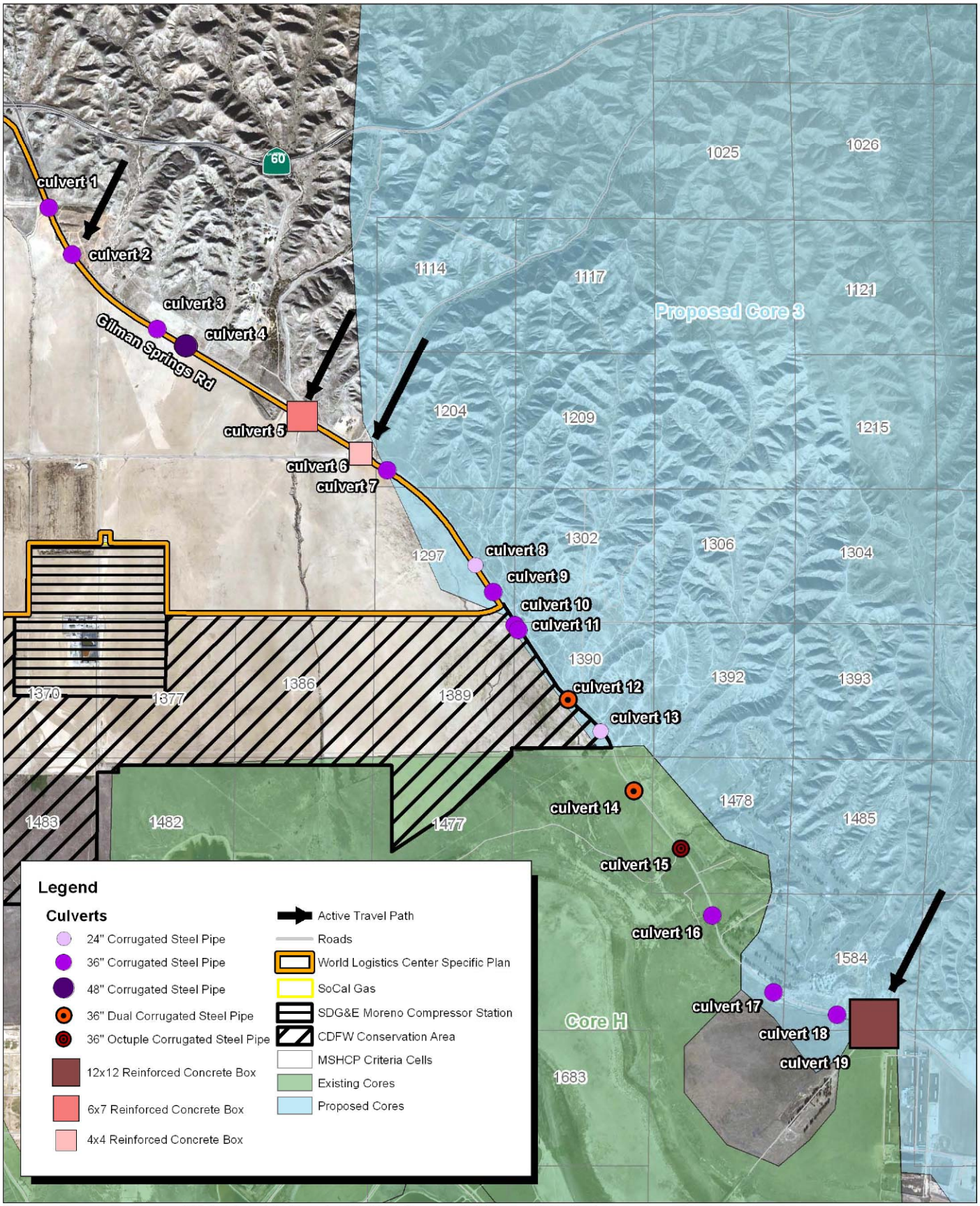
4.2.7 - Migratory Corridors/Linkages

The WLCSP and the proposed offsite facilities do not occur within an existing or proposed linkage or constrained linkage areas, as designated by the MSHCP. The WLCSP and offsite facilities contain no significant cover of native plant communities and currently experiences heavy disturbance associated with agricultural activities. Additionally, the WLCSP and offsite facilities are adjacent to SR-60 and Gilman Springs Road and are bordered by agricultural and residential development to the west. The nearest linkage area as identified under the MSHCP is Proposed Linkage 5 and is located approximately 3 miles north of the northern boundary of the WLCSP and approximately 3.6 miles south of the WLCSP is Proposed Constrained Linkage 20 (Exhibit 9).

During FCS's 10-years of conducting field surveys with the WLCSP, there has been little to no significant sign of wildlife movement from the Badlands to the WLCSP. Evidence such as numerous tracks and scat deposits along a narrow pathway is commonly observed in areas that are frequently used by wildlife species for crossings or corridors. The presence of only minimal sign of wildlife crossings with Culverts 2, 5, and 6 and no evidence within the remaining culverts (Culverts 1, 3, 4, 7, and 8) within the WLCSP can be attributed to lack of suitable vegetative cover necessary to provide cover refugia for small to medium wildlife species (Exhibit 12). Also, all of the existing culverts have been blocked or partially blocked for many years. Only recently have these culverts been replaced and cleared. Although the culverts are now cleared of sediment, recent growth of Russian thistle has blocked many of the culverts. The development of the WLCSP and offsite facilities will not impede the movement of wildlife associated with a wildlife corridor or existing/proposed linkage; therefore, the proposed project will not directly impact any wildlife movement corridor or linkage as described in the MSHCP.

Table 4 was prepared to provide more details regarding wildlife movement and wildlife crossings within the WLCSP along Gilman Springs Road. Currently, along the eastern side of the WLCSP there are nine underground crossings beneath Gilman Springs Road, including one 24-inch corrugated steel pipes (CSP) (Culvert,9), five 36-inch CSPs (Culverts 1, 2, 3, 7, and 8), one 48-inch CSP (Culvert 4), one 4-foot by 4-foot reinforced box culvert (RBC) (Culvert 6), and one 7-foot by 6-foot RCB (Culvert 5) (see Exhibit 12). These 9 culverts are all within the WLCSP development footprint. The remaining 10 culverts are located in undeveloped portions of the WLCSP or are located in off-site areas southeast of the WLCSP.

All culvert crossings along Gilman Springs Road from Eucalyptus Avenue to the southern boundary of the CDFW conservation buffer area were recently replaced as part of the Gilman Springs Road Safety Improvement Corridor (14 in total), which was completed in December 2013. All underground crossing were replaced or cleaned out as part of the County's road improvement project. There are currently no fences or extensive barriers on either side of Gilman Springs Road prohibiting wildlife from crossing. There are small stretches of K-rail along both sides of Gilman Springs Road at both reinforced concrete box culverts (Culvert 5 and Culvert 6). Four culverts (Culverts 1, 4, 6, and 7) are significantly blocked by recent Russian thistle growth.

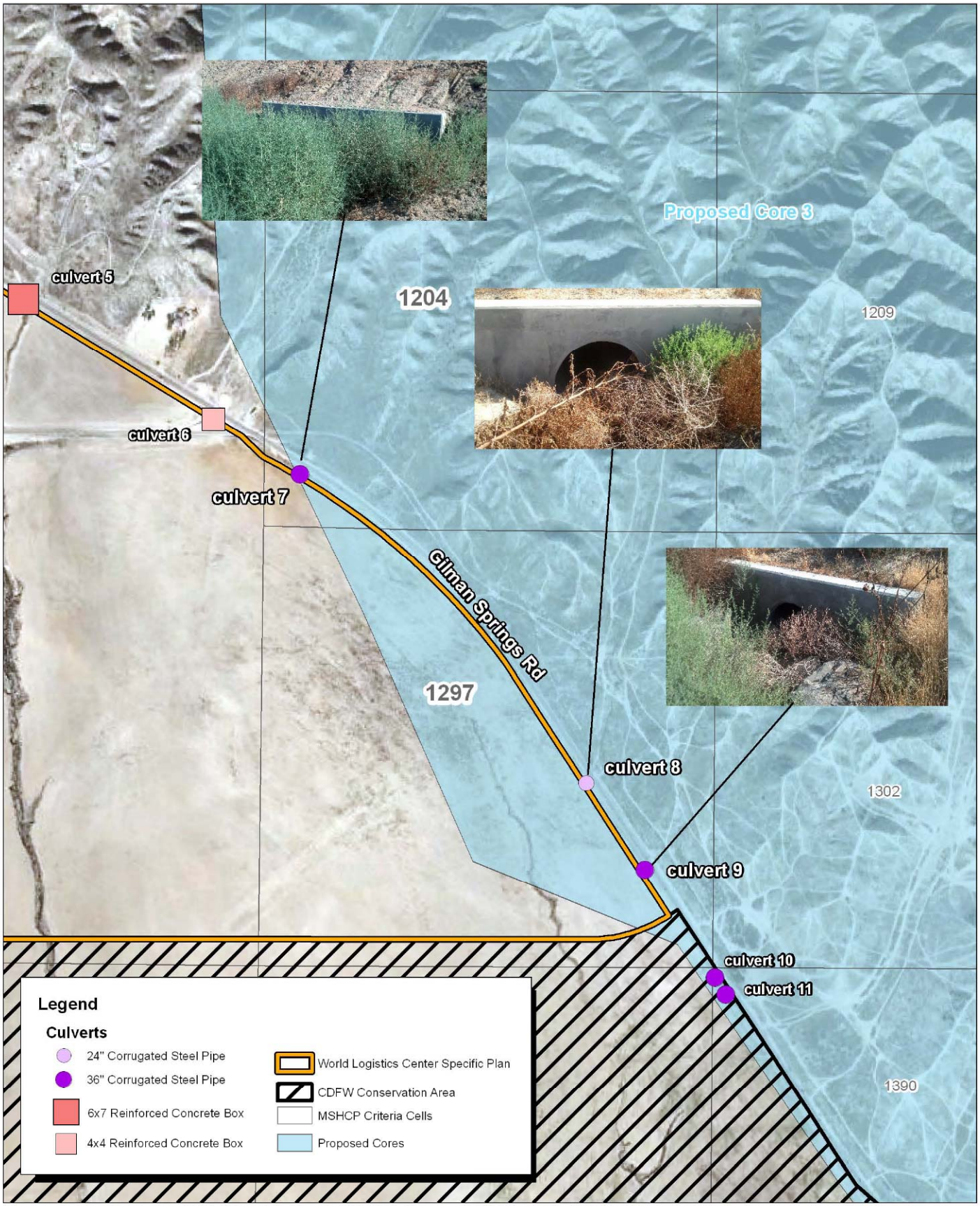


Source: Google Earth Pro, 2012. Riverside County MSHCP, Census 2000 data, FCS-MBA.

FirstCarbon® SOLUTIONS
MICHAEL BRANDMAN ASSOCIATES

2,600 1,300 0 2,600
Feet

Exhibit 12
Local Wildlife Movement/ Wildlife Crossings



Source: Google Earth Pro, 2012. Riverside County MSHCP, Census 2000 data, FCS-MBA.

FirstCarbon® SOLUTIONS
MICHAEL BRANDMAN ASSOCIATES

800 400 0 800 Feet

Exhibit 13
WLCSP Wildlife Crossings Within Cell Criteria Areas 1204 and 1297

Evidence of wildlife usage is limited to Culverts 2, 5, 6, 15, and 19 and includes tracks and travel paths. Culverts 2, 5, and 6 are within the WLCSP and Culverts 15 and 19 are located outside of the WLCSP. Culvert 2 contains evidence of California ground squirrel and desert cottontail. Culverts 5, 6, 15, and 19 exhibit evidence of more varieties of wildlife species, including coyote, California ground squirrel, desert cottontail, as well as an unknown bird species (most likely raven).

A more detailed assessment was conducted on crossings that occur in Criteria Cells 1204 and 1297 as well as Proposed Core Area 3 and include Culverts 7, 8, and 9 (Exhibit 13). Culverts 7 and 9 are completely covered with vegetation and are not likely used by wildlife because of the blockage. Culvert 8 has approximately 50 percent blockage of the culvert on both sides but has significant cover of spider webs, which also indicates a general lack of use. Therefore, wildlife movement between the Badlands and the SJWA within the WLCSP is limited to Culverts 5 and 6, both of which flow into Drainage 9.

Table 4: Culvert Crossing Along Gilman Springs Road

Culvert Feature	Culvert Type	Culvert Size	Upstream Habitat	Flow Destination	Vegetation Blockage	Evidence of Wildlife Movement	Project Frontage Location
Culvert 1	Corrugated Metal Pipe	36 inches	Large canyon area	Drainage 7	100%	No	Within
Culvert 2	Corrugated Metal Pipe	36 inches	Small canyon area	none	50%	Yes	Within
Culvert 3	Corrugated Metal Pipe	36 inches	Flat open area	none	50%	No	Within
Culvert 4	Corrugated Metal Pipe	48 inches	Flat open area	Drainage 8	100%	No	Within
Culvert 5	Reinforced Concrete Box	7' x 6'	Large canyon area	Drainage 9	50%	Yes	Within
Culvert 6	Reinforced Concrete Box	4' x 4'	Large canyon area	Drainage 9	100%	Yes	Within
Culvert 7	Corrugated Metal Pipe	36 inches	Small canyon area	none	100%	No	Within
Culvert 8	Corrugated Metal Pipe	36 inches	Small canyon area	none	50%	No	Within
Culvert 9	Corrugated Metal Pipe	24 inches	Flat open area	None	100%	No	Within
Culvert 10	Corrugated Metal Pipe	36 inches	Flat open area	None	50%	No	Outside
Culvert 11	Corrugated Metal Pipe	36 inches	Flat open area	None	50%	No	Outside
Culvert 12	Corrugated Metal Pipe	Dual 36 inches	Flat open area	None	50%	No	Outside

Table 4 (cont.): Culvert Crossing Along Gilman Springs Road

Culvert Feature	Culvert Type	Culvert Size	Upstream Habitat	Flow Destination	Vegetation Blockage	Evidence of Wildlife Movement	Project Frontage Location
Culvert 13	Corrugated Metal Pipe	24 inches	Small canyon area	None	50%	No	Outside
Culvert 14	Corrugated Metal Pipe	Dual 36 inches	Large canyon area	None	50%	No	Outside
Culvert 15	Corrugated Metal Pipe	Octuple 36 inches	Large canyon area	None	0%	Yes	Outside
Culvert 16	Corrugated Metal Pipe	36 inches	Flat open area	None	50%	No	Outside
Culvert 17	Corrugated Metal Pipe	36 inches	Flat open area	None	50%	No	Outside
Culvert 18	Corrugated Metal Pipe	36 inches	Flat open area	None	50%	No	Outside
Culvert 19	Reinforced Concrete Box	12' x 12'	Large canyon area	Mystic Lake	0%	Yes	Outside

Because of the location of the WLCSP, there is a potential to impede daily activity of local wildlife species traveling from the adjacent Badlands south toward Mystic Lake within Drainage 9. This is more appropriately referred to as a travel path and not a wildlife movement corridor. Other than coyote, there was no evidence of use by medium to large wildlife species such as bobcat, mountain lion, or deer.

Although not specifically designated a wildlife corridor or linkage as defined under the MSHCP, the area along Gilman Springs Road that connects Core Area H and Proposed Core Area 3 is considered a significant wildlife crossing by the RCA. There is a significant 12-foot by 12-foot RBC and a series of underground CSPs that assist in wildlife movement beneath Gilman Springs Road southeast of the WLCSP. These include a two 24-inch CSPs, four 36-inch CSPs, two dual 36-inch CSPs, and one octuple 36-inch CSP. Based on the current sizes of culverts, larger mammals are capable of crossing Gilman Springs Road at either of the large box culverts or surficially.

The WLCSP development will not directly impede wildlife movement between the Badlands and the SJWA, but there may be an increase in truck traffic that may potentially affect wildlife crossing across Gilman Springs Road.

4.2.8 - Biological Compliance Issues Not Covered by the MSHCP

Protected Plant and Wildlife Species

The material provided in Table 5 analyzes the potential for sensitive, federally listed, and state listed, plant and wildlife species to occur in the WLCSP and offsite facilities. The analysis was based on a compilation of the observations made during the reconnaissance-level surveys and the analyses in

the technical studies for the WLCSP and offsite facilities. The list of species analyzed is based on a search of the CDFW California Natural Diversity Database (CNDDB) listings within the Lakeview, Sunnymead, and El Casco California, USGS topographic quadrangles, in addition to potentially occurring species identified by MBA biologists. The discussion below summarizes the findings of the Table 5 and Table 4 in relation to state and federal species classifications.

Federally Endangered Plant Species

Of the species listed in Table 5, two federally endangered plant species, San Jacinto Valley crownscale and slender-horned spineflower, were analyzed for their potential to occur in the WLCSP and offsite facilities. No evidence of these federally endangered plant species were found in the WLCSP and offsite facilities during reconnaissance-level surveys. In addition, no suitable habitat for this species occurs onsite due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional federally endangered plant species were analyzed for their potential to occur in the WLCSP and offsite facilities because no additional federally endangered plant species are known to occur on or in the vicinity of the site. No suitable habitat was found in the WLCSP and offsite facilities to support other federally endangered plant species. Therefore, federally endangered plant species are not likely to occur in the WLCSP and offsite facilities. No impacts are anticipated.

Detention Basins and Enhancement Areas

Four federally endangered wildlife species in Table 5 were analyzed for their potential to occur in the WLCSP and offsite facilities: Riverside fairy shrimp, southwestern willow flycatcher, least Bell's vireo, and Stephens' kangaroo rat. No evidence of any federally endangered wildlife species was found in the WLCSP and offsite facilities. Stephens' kangaroo rat is the only federally listed wildlife species potentially occurring onsite. Although no sign of Stephens' kangaroo rat was identified in the WLCSP and offsite facilities, it was determined that this species may range through the general area since several known recorded occurrences of this species are within one mile of the project site. This species is commonly found in ruderal and minimally disturbed areas. Low quality habitat was observed along existing roadsides. Since the WLCSP and offsite facilities is within the known range of this species, and low quality habitat was identified onsite, there is a moderate potential for Stephens' kangaroo rat to occupy some portion of the WLCSP and offsite facilities. There are potential adverse but not significant impacts to Stephens' kangaroo rat, since this species is covered under an existing HCP.

No suitable habitat for Riverside fairy shrimp, southwestern willow flycatcher, and least Bell's vireo, occurs onsite due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional federally endangered wildlife species were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities because no additional federally endangered wildlife species are known to occur on or in the vicinity of the site. No impacts are anticipated.

Federally Threatened Plant Species

One federally threatened plant species, thread-leaved brodiaea in Table 2 was analyzed for its potential to occur in the WLCSP and offsite facilities. No evidence of this federally threatened plant

species was found in the WLCSP and offsite facilities. In addition, no suitable habitat for this federally threatened plant species occurs onsite due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional federally threatened plant species in Table 5 were analyzed for their potential to occur in the WLCSP and offsite facilities because no additional federally threatened plant species are known to occur on or in the vicinity of the site. No suitable habitat was found in the WLCSP and offsite facilities to support other federally threatened plant species. Therefore, federally threatened plant species are not likely to occur in the WLCSP and offsite facilities and no impacts are anticipated

Federally Threatened Wildlife Species

Coastal California gnatcatchers are known to occur within moderate to high quality coastal sage scrub in the vicinity of the WLCSP and offsite facilities. Some suitable habitat occurs onsite for coastal California gnatcatcher. There is marginal Riversidean sage scrub in the north near SR-60 and Gilman Springs Road and in the proposed Open Space Area adjacent to the LPSRA south of Brodiaea Avenue, west of Theodore Street and east of Redlands Boulevard. No additional federally threatened wildlife species in Table 5 were analyzed for their potential to occur in the WLCSP. There are potential adverse but not significant impacts to coastal California gnatcatcher.

Federally Proposed Endangered, Proposed Threatened, Federal Candidate, and Federal Species of Concern

The USFWS has also developed several categories for sensitive species not yet determined to have reached endangered or threatened status. Generally, federally proposed endangered or threatened species are species considered unofficially endangered or threatened (i.e., final regulatory action formally listing such species has not yet occurred). Federal candidate species are species who are candidates for becoming listed as endangered or threatened, and federal species of concern are species whose numbers are considered low enough to have approached federal candidate status.

Protected Plant Species

No federal plant species of concern in Table 5 were analyzed for their potential to occur in the WLCSP and offsite facilities. No evidence of any federal plant species of concern was found in the WLCSP and offsite facilities. In addition, no suitable habitat for any federal plant species of concern occurs within the WLCSP and offsite facilities due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional federal plant species of concern were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities because no additional federal plant species of concern are known to occur on or in the vicinity of the site. Therefore, federal plant species of concern are not likely to occur in the WLCSP and offsite facilities, and no impacts are anticipated.

Protected Wildlife Species

There were no federal wildlife species of concern analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities. Only the western yellow-billed cuckoo was identified in Table 5. This species is not likely to occur in the WLCSP and offsite facilities and is also a covered species under the MSHCP.

No other evidence of any federal wildlife species of concern was found in the WLCSP and offsite facilities. In addition, no suitable habitat for any federal wildlife species of concern occurs within the WLCSP and offsite facilities due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional federal wildlife species of concern were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities because no additional federal wildlife species of concern are known to occur on or in the vicinity of the site. Therefore, federal wildlife species of concern are not likely to occur in the WLCSP and offsite facilities and there is no potential impact to federal species of concern.

Table 5: Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS	CDFW	CNPS					
Atriplex coronata var. *notatior*	San Jacinto valley crownscale	FE	—	1B.1	Occurs in playas, chenopod scrub, grasslands, and vernal pools. Specifically found in dry alkali flats in the San Jacinto River Valley. Elevation limits: 1,200 to 1,500 feet.	Annual herb	Apr to Aug	Covered	**Not Likely to Occur.** No alkali flats occur in the WLCSP. Recorded approximately 2.5 miles southeast of the WLCSP (CNDDB 2012) and 1.5 miles south of the survey area boundary (RCA 2013).
Brodiaea filifolia	Thread-leaved brodiaea	FT	SE	1B.1	Occurs in coastal scrub, cismontane woodland, grasslands, and vernal pools. Usually associated with annual grassland and vernal pools in clay soils. Elevation limits: 75 to 2,500 feet.	Perennial herb bulbiferous	Mar to Jun	Covered	**Not Likely to Occur.** No clay soils or vernal pools occur in the WLCSP. Recorded approximately 5 miles south of the WLCSP (CNDDB 2012) and 4 miles south according to the BMP (RCA 2013).
Calochortus plummerae	Plummer's mariposa lily	—	—	4.2	Occurs in coastal scrub, chaparral, grasslands, cismontane woodlands, and lower montane coniferous forests. Found in rocky and sandy soils, usually of granitic or alluvial material. Very common after fire. Elevation limits: 300 to 4,500 feet.	Bulbiferous herb	May to Jul	Not Covered	**Moderate Potential to Occur.** The portion of the WLCSP that contains sandy soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 2 miles east of the WLCSP. (CNDDB 2012)

Table 5 (cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS	CDFW	CNPS					
Centromadia pungens ssp. laevis	Smooth tarplant	—	—	1B.1	Occurs in grasslands, chenopod scrub, meadows, playas, and riparian woodland. Prefers alkali meadow and alkali scrub. Elevation limits: 0 to 1,500 feet.	Annual herb	Apr to Sep	Covered	**Not Likely to Occur.** No alkali soils occur in the WLCSP. Recorded approximately 3 miles west of the WLCSP (CNDDB 2012) and 2.5 miles south by the BMP (RCA 2013).
Chorizanthe parryi var. *parryi*	Parry's spineflower	—	—	1B.1	Occurs in coastal scrub and chaparral. Found on dry slopes and flats, sometimes at interface of two vegetation types, on dry, sandy soils. Elevation limits: 150 to 5,000 feet.	Annual herb	Apr to Jun	Covered	**Moderate Potential to Occur.** The portion of the WLCSP that contains sandy soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 4.5 miles northwest of WLCSP. (CNDDB 2012)
Dodecahema leptoceras	Slender-horned spineflower	FE	SE	1B.1	Occurs in chaparral and alluvial fan sage scrub. Prefers flood deposited terraces and washes. Elevation limits: 600 to 2,300 feet.	Annual herb	Apr to Jun	Covered	**Low Potential to Occur.** The WLCSP contains several natural drainages; one contains a mixture of RSS and mule fat scrub. The remaining drainages are generally devoid of vegetation. Recorded approximately 7 miles northwest of the WLCSP. (CNDDB 2012)

Table 5 (cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS	CDFW	CNPS					
Lasthenia glabrata ssp. coulteri	Coulter's goldfields	—	—	1B.1	Occurs in coastal salt marshes, playas, grasslands, and vernal pools. Usually found on alkali soils in playas, sinks, and grasslands. Elevation limits: 1 to 4,500 feet.	Annual herb	Feb to Jun	Covered	**Not Likely to Occur.** No alkali soils, marshes, or vernal pools occur in the WLCSP. Observed approximately 2 miles south of WLCSP (CNDDB 2012) and as close as .75 miles to the south of the WLCSP survey area according to the BMP (RCA 2013).
Lepidium virginicum var. *robinsonii*	Robinson's pepper-grass	—	—	4.3	Occurs in chaparral and coastal scrub on dry soils. Elevation limits: 1 to 3,000 feet.	Annual herb	Jan to Jul	Not Covered	**Low Potential to Occur.** The portion of the WLCSP that contains sandy soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 7 miles northwest of WLCSP. (CNDDB 2012)
Nama stenocarpum	Mud nama	—	—	2B.2	Occurs in marshes, swamps, lakeshores, riverbanks, and intermittently wet areas. Elevation limits: 15 to 1,500 feet.	Annual/perennial herb	Jan to Jul	Covered	**Not Likely to Occur.** No lakes, marshes or riverine areas occur in the WLCSP. The drainage features onsite do not remain wet long enough to be considered suitable habitat. Recorded approximately 2.5 miles

Table 5 (cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS	CDFW	CNPS					
									southeast of WLCSP. (CNDDB 2012)
Symphyotrichum defoliatum	San Bernardino aster	—	—	1B.2	Occurs in meadows, seeps, marshes, swamps, coastal scrub, cismontane woodland, lower montane coniferous forest, and grasslands. Found in vernally mesic areas near ditches, streams, and springs. Elevation limits: 6 to 6,000 feet.	Rhizomatous herb	Jul to Nov	Not Covered	**Not Likely to Occur.** The ditches and erosion features in the WLCSP are heavily disturbed. Recorded 2.5 miles northeast of the WLCSP. (CNDDB 2012)
Trichocoronis wrightii var. *wrightii*	Wright's trichocoronis	—	—	2B.1	Occurs in marshes and swamps, riparian forest, meadows, seeps, and vernal pools. Found in mud flats of vernal lakes, drying riverbeds, and alkali meadows. Elevation limits: 10 to 1,300 feet.	Annual herb	May to Sep	Covered	**Not Likely to Occur.** No marshes, riverine or vernal pool areas occur in the WLCSP. Recorded approximately 4 miles south of the WLCSP. (CNDDB 2012)

U.S. Fish and Wildlife Service
FE Federal Endangered
FT Federal Threatened
PE Proposed Endangered
PT Proposed Threatened
FC Federal Candidate
FSC Species of Concern*
*No longer recognized as a federal designation.

California Department of Fish and Game
CE California Endangered
CT California Threatened
CR California Rare

California Native Plant Society
1A Plants presumed extinct in California.
1B Plants rare, threatened, or endangered in California and elsewhere.
2 Plants rare, threatened, or endangered in California, but more common elsewhere.
3 Plants about which we need more information.
4 Plants of limited distribution.

Table 5 (cont.): Special Status Plant Species

Species		Status			Preferred Habitat	Life Form	Bloom Period	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	USFWS	CDFW	CNPS					
Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity (within 3 miles) of the WLCSP and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the site. **Low Potential to Occur** - There is a historical record of the species in the vicinity of the WLCSP and potentially suitable habitat onsite, but existing conditions (e.g., density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation) substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species. **Moderate Potential to Occur** - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the WLCSP, but there is not a recorded occurrence of the species within the immediate vicinity (within three miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity. **High Potential to Occur** - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the WLCSP (within 3 miles). **Species Present** - The species was observed in the WLCSP at the time of the survey or during a previous biological survey.									

Table 6: Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Branchiopods							
Streptocephalus woottoni	Riverside fairy shrimp	FE	—	CDFW: CSC	Occurs in tectonic swales and earth slump basins in grassland and coastal sage scrub. Inhabits seasonally astatic pools filled by winter/spring rains. Hatches in warm water later in the season.	Covered	**Not Likely to Occur.** No vernal pools occur in the WLCSP. Observed farther than 5 miles south of the WLCSP.
Reptiles and Amphibians							
Aspidoscelis hyperythra	Orange-throated whiptail	—	—	CDFW: CSC	Inhabits low-elevation coastal scrub, chaparral, and valley-foothill hardwood habitats. Prefers washes and other sandy areas with patches of brush and rocks. Also near perennial plants where termites, its major food, can be found.	Covered	**Low Potential to Occur.** Limited coastal scrub is present in the WLCSP. Woody vegetation onsite is very sparse and is not considered sufficient to support the species. The nearest occurrence of the species was recorded approximately 0.3 mile north of the WLCSP; however, in the eighteen years since the observation, the previous site conditions have changed to become unsuitable habitat (CNDDB 2012).
Crotalus ruber ruber	Northern red-diamond rattlesnake	—	—	CDFW: CSC	Inhabits chaparral, woodland, grassland, and desert habitats. Occurs in rocky areas and dense vegetation. Needs rodent burrows, cracks in rocks, or surface cover objects.	Covered	**Not Likely to Occur.** No rocky areas and dense native plant communities occur in the WLCSP and the site is regularly disturbed. Recorded approximately 1 mile south of the WLCSP; however, the observation occurred over 80 years ago (CNDDB 2012). The BMP has recently found the species in the same area as the CNDDB sighting (RCA 2013)

Table 6 (cont.): Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Phrynosoma coronatum blainvillei	Coast horned lizard	—	—	CDFW: CSC	Inhabits coastal sage scrub and chaparral in arid and semi-arid climates. Prefers friable, rocky, or shallow sandy soils.	Covered	**Low Potential to Occur.** The portion of the WLCSP that contains sandy soils or rocky soils and chaparral/RSS along the western border of the project in an area slated as open space. Recorded approximately 4 miles northwest of the WLCSP (CNDDB 2012)
Spea hammondii	Western spadefoot	—	—	CDFW: CSC	Occurs primarily in grassland habitats, but also found in valley-foothill hardwood woodlands. Vernal pools are essential for breeding and egg-laying.	Covered	**Not Likely to Occur.** No vernal pools or native woodlands occur in the WLCSP. Recorded approximately 2 miles south and west of the WLCSP (CNDDB 2012). The BMP studies have occurrences approximately .7 miles south of the survey area boundary (RCA 2013)
Birds							
Agelaius tricolor	Tricolored blackbird	—	—	CDFW: CSC	Highly colonial species. Requires open water, protected nesting substrate, and foraging areas with insect prey within a few miles of the colony.	Covered	**Low Potential to Occur.** No open water or protected nesting habitat is located in the WLCSP. Numerous nesting pairs were recorded within the wheat fields on the southeastern portion of the WLCSP in 1995. The wheat has since been removed and no suitable nesting vegetation remains (CNDDB 2012).
Aimophila ruficeps canescens	Southern California rufous-crowned sparrow	—	—	CDFW: CSC	Resident in coastal sage scrub and sparse mixed chaparral. Frequents relatively steep, often rocky hillsides with grass and forb patches.	Covered	**Low Potential to Occur.** While sparse RSS and chaparral are present within the WLCSP, no steep slopes are present in the WLCSP. Recorded approximately 4 miles west of the WLCSP (CNDDB 2012). The BMP database has the species less than 1.0 miles from the WLCSP survey area boundary (RCA 2013).

Table 6 (cont.): Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Amphispiza belli belli	Bell's sage sparrow	—	—	CDFW: CSC	Nests in chaparral dominated by fairly dense stands of chamise. Found in coastal sage scrub in southern portion of range. Nests typically located on the ground beneath shrub or in shrub 6 to 18 inches above ground.	Covered	**Not Likely to Occur.** No dense stands chaparral or coastal sage scrub vegetation occurs in the WLCSP. Recorded approximately 4 miles northwest of the WLCSP (CNDDB 2012) and according to the BMP 4 miles south of the WLCSP survey area (RCA 2013).
Athene cunicularia	Burrowing owl	—	—	CDFW: CSC	Occupies burrows in open, dry annual or perennial grasslands, deserts and scrublands characterized by low-growing vegetation. Subterranean nester, dependent upon burrowing mammals, most notably the California ground squirrel.	Covered	**Present.** Despite the heavy disturbance the WLCSP contains flat topography with sparse, low-lying vegetation and various California ground squirrel burrows. Observed within the WLCSP in 2005; however, focused surveys conducted in 2010 and 2012 found the WLCSP and surroundings to be unoccupied. The 2013 survey of the WLCSP again found a pair of owls (MBA 2013b)
Aquila chrysaetos	Golden eagle	—	—	CDFW: FP	Open mountains, foothills, plains	Covered	**Low Potential to Occur.** The WLCSP contains open flat area that is considered marginally suitable foraging habitat, but not suitable nesting habitat. Recorded approximately 1 mile south of the WLCSP (RCA 2013)
Buteo swainsonii	Swainson's hawk	—	ST	—	Grasslands and riparian areas	Covered	**Low Potential to Occur.** The WLCSP contains open flat area that is considered marginally suitable foraging habitat, but not suitable nesting habitat. Recorded approximately 1 mile south of the WLCSP (RCA 2013)
Buteo regalis	Ferruginous hawk	—	—	CDFW: CSC	Winters in open grasslands, sagebrush flats, desert scrub, low foothills, and fringes of pinyon-juniper habitats.	Covered	**Low Potential to Occur.** The WLCSP contains open flat area that is considered marginally suitable foraging habitat, but not suitable nesting habitat. Recorded approximately 1 mile

Table 6 (cont.): Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
							northeast of the WLCSP (CNDDB 2012) and 2 miles south of the WLCSP according to BMP records (RCA 2013).
Coccyzus americanus occidentalis	Western yellow-billed cuckoo	FC	SE	—	Riparian forest nester, along the broad, lower flood-bottoms of larger river systems. Specifically nests in riparian jungles of willow, often mixed with cottonwoods, with lower story of blackberry, nettles, or wild grape.	Covered	**Not Likely to Occur.** No riparian plant communities occur in the WLCSP. Recorded approximately 5.5 miles northwest of the WLCSP (CNDDB 2012).
Elanus leucurus	White-tailed kite	—	—	CDFW: FP	Nests in rolling foothills/valley margins with scattered oaks and river bottomlands or marshes next to deciduous woodlands. Prefers open grasslands, meadows, or marshes for foraging close to isolated, dense-topped trees for nesting and perching.	Covered	**Present.** The WLCSP contains suitable foraging habitat, but few dense-topped trees occur in the vicinity of the site. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012). The BMP indicates that the species is found 1.0 mile from the WLCSP survey area boundary (2013). Species was observed foraging within the southern portion of the survey area adjacent to the SJWA.
Empidonax traillii extimus	Southwestern willow flycatcher	FE	SE	—	Nests in riparian woodlands in southern California.	Covered	**Not Likely to Occur.** No riparian plant communities occur in the WLCSP. Recorded approximately 6.5 miles east of the WLCSP (CNDDB 2012).
Eremophila alpestris actia	California horned lark	—	—	CDFW: CSC	Inhabits short-grass prairie, bald hills, mountain meadows, open coastal plains, fallow grain fields, and alkali flats.	Covered	**Present.** The WLCSP contains flat, fallow grain fields that constitute suitable nesting habitat. Observed in the WLCSP during the reconnaissance-level surveys (MBA 2012).

Table 6 (cont.): Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Falco columbarius	Merlin	—	—	CDFW: CSC	Winters in seacoast, tidal estuaries, open woodlands, savannahs, edges of grasslands and deserts, farms and ranches. Clumps of trees or windbreaks are required for roosting in open country.	Covered	**Low Potential to Occur.** Portions of the WLCSP contain windbreak trees and open farmland. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012). The BMP database has the species less than a mile south of the WLCSP survey area (RCA 2013).
Falco mexicanus	Prairie falcon	—	—	CDFW: CSC	Inhabits dry, open terrain, either flat or hilly. Breeding sites located on cliffs.	Covered	**Low Potential to Occur.** The WLCSP contains marginally suitable foraging habitat but no suitable nesting habitat. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012).
Falco peregrinus anatum	Peregrine falcon	FD	SE	CDFW: FP	Nests near wetlands, lakes, rivers, or other water; on cliffs, banks, dunes, mounds, and human-made structures. Nest consists of a scrape on a depression or ledge in an open site.	Covered	**Low Potential to Occur.** The WLCSP contains marginal nesting habitat. Known to occur in the San Jacinto Valley but not recorded within 7 miles of the site (CNDDB 2012). The BMP indicates the species is within 1.0 mile of the southern boundary of the survey area (RCA 2013).
Icteria virens	Yellow-breasted chat	—	—	CDFW: CSC	Summer resident; inhabits riparian thickets of willow and other brushy tangles near watercourses. Specifically nests in low, dense riparian vegetation, consisting of willow, blackberry, wild grape. Forages and nests within 10 feet of ground.	Covered	**Not Likely to Occur.** No riparian plant communities occur in the WLCSP. Recorded approximately 5.5 miles northwest of the WLCSP (CNDDB 2012).

Table 6 (cont.): Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Lanius ludovicianus	Loggerhead shrike	—	—	CDFW: CSC	Inhabits broken woodlands, savannah, pinyon-juniper, Joshua tree and riparian woodlands, desert oases, scrub and washes. Prefers open country for hunting, with perches for scanning, and fairly dense shrubs and brush for nesting.	Covered	**Present.** The WLCSP contains flat, open area that is suitable foraging habitat but not suitable nesting habitat. Observed by MBA during previous surveys, approximately within the WLCSP (MBA 2012).
Plegadis chihi	White-faced ibis	—	—	CDFW: CSC	Rookery sites include shallow freshwater marshes. Nests in dense tule thickets interspersed with areas of shallow water for foraging.	Covered	**Not Likely to Occur.** No marshes or bodies of water occur in the WLCSP. Recorded approximately 3 miles southeast of the WLCSP (CNDDB 2012).
Polioptila californica californica	Coastal California gnatcatcher	FT	—	CDFW: CSC	Obligate, permanent resident of coastal sage scrub below 2,500 feet in southern California. Prefers low coastal sage scrub in arid washes and on mesas and slopes.	Covered	**Low Potential to Occur.** There is limited and sparse coastal sage scrub vegetation occurs in the WLCSP. Recorded approximately 4 miles northwest of the WLCSP (CNDDB 2012) and less that 0.5 mile of the WLCSP survey area according to BMP (RCA 2013).
Vireo bellii pusillus	Least Bell's vireo	FE	SE	—	Summer resident in low riparian vegetation in the vicinity of water or in dry river bottoms; below 2,000 feet. Nests placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis, and mesquite.	Covered	**Not Likely to Occur.** No riparian plant communities or significant riparian vegetation occur in the WLCSP. Recorded approximately 3 miles northeast of the WLCSP (CNDDB 2012) and was recorded by the BMP at 2 miles from the closest WLCSP border (RCA 2013).
Mammals							
Chaetodipus fallax fallax	Northwestern San Diego pocket mouse	—	—	CDFW: CSC	Inhabits coastal scrub, chaparral, and grasslands. Prefers sandy, herbaceous areas, usually in association with rocks or coarse gravel.	Covered	**Present.** Sandy to loamy soils occur in the WLCSP. There are limited areas of RSS and chaparral and herbaceous areas are severely limited due to agricultural activities. Species was caught within Drainage 9 (MBA 2013).

Table 6 (cont.): Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Dipodomys stephensi	Stephens' kangaroo rat	FE	ST	—	Primarily found in annual and perennial grasslands, but also occurs in coastal scrub and sagebrush with sparse canopy cover. Prefers buckwheat, chamise, brome grass, and filaree. Will burrow into firm soil.	Covered under SKRHCP	**Moderate Potential to Occur.** The WLCSP contains areas similar to grasslands with very sparse canopy, but is heavily disturbed. Recorded approximately adjacent to the general WLCSP on the west and south (CNDDB 2012).
Lasiurus xanthinus	Western yellow bat	—	—	CDFW: CSC	Occurs in valley foothill riparian, desert riparian, desert wash, and palm oasis habitats below 1,800 feet. Roosts in trees.	Not Covered	**Not Likely to Occur.** No riparian or native plant communities occur in the WLCSP. Recorded approximately 3.5 miles southwest of the WLCSP (CNDDB 2012).
Lepus californicus bennettii	San Diego black-tailed jackrabbit	—	—	CDFW: CSC	Inhabits coastal sage scrub habitats. Specifically, intermediate canopy stages of shrub, open shrub, herbaceous and tree, and herbaceous edge habitats.	Covered	**Present** Recorded within the MWD lands in the northern portion of the WLCSP during burrowing owl surveys (MBA 2013).
Onychomys torridus ramona	Southern grasshopper mouse	—	—	CDFW: CSC	Inhabits desert areas, especially scrub habitats with friable soils. Prefers low to moderate shrub cover. Feeds almost exclusively on arthropods, especially scorpions and orthopteran insects.	Not Covered	**Not Likely to Occur.** No shrub or scrub habitat occurs in the WLCSP. Additionally, the site is regularly disturbed by disking. Recorded approximately 4 miles southeast of the WLCSP (CNDDB 2012).
Perognathus longimembris brevinasus	Los Angeles pocket mouse	—	—	CDFW: CSC	Inhabits lower elevation grasslands and coastal sage communities. Prefers open ground with fine sandy soils.	Covered	**Low Potential to Occur.** The sandy soils that occur in the WLCSP are limited to existing drainages with the proper coastal sage communities. Three years of trapping did not produce any Los Angeles pocket mice. Recorded approximately 3 miles south of the WLCSP (CNDDB 2012). It was observed in BMP trapping within 2 miles of the survey area (RCA 2013).

Table 6 (cont.): Special Status Wildlife Species

Species		Status			Required Habitat	MSHCP Coverage	Potential to Occur/Known Occurrence/Suitable Habitat
Scientific Name	Common Name	Federal	State	Other			
Taxidea taxus	American badger	—	—	CDFW: CSC	Most abundant in drier open stages of most shrub, forest, and herbaceous habitats. Needs sufficient food, friable soils, and open, uncultivated ground. Preys on burrowing rodents.	Not covered	**Low potential to occur.** The WLCSP contains limited amounts of vegetation and the ground is cultivated. Recorded approximately 8.5 miles northwest of the WLCSP (CNDDB 2012). RCA data lists the closest recorded occurrence, just outside the 1,000-foot buffer area. Most likely limited to the badlands area north and east of the project site.

Federal
FE Federal Endangered
FT Federal Threatened
FSC Federal Species of Concern
PFT Proposed Federal Threatened
FC Candidate for Federal Listing
FD Delisted

State
SE State Endangered
ST State Threatened

Other
CDFW: CSC California Species of Concern
CDFW: FP Fully Protected Species
CDFW: P Protected Species

Not Likely to Occur - There are no present or historical records of the species occurring on or in the immediate vicinity (within 3 miles) of the WLCSP and the diagnostic habitats strongly associated with the species do not occur on or in the immediate vicinity of the site.
Low Potential to Occur - There is a historical record of the species in the vicinity of the WLCSP and potentially suitable habitat onsite, but existing conditions (e.g., density of cover, prevalence of non-native species, evidence of disturbance, limited habitat area, isolation) substantially reduce the possibility that the species may occur. The site is above or below the recognized elevation limits for this species.
Moderate Potential to Occur - The diagnostic habitats associated with the species occur on or in the immediate vicinity of the WLCSP, but there is not a recorded occurrence of the species within the immediate vicinity (within three miles). Some species that contain extremely limited distributions may be considered moderate, even if there is a recorded occurrence in the immediate vicinity.
High Potential to Occur - There is both suitable habitat associated with the species and a historical record of the species on or in the immediate vicinity of the WLCSP (within 3 miles).
Species Present - The species was observed in the WLCSP at the time of the survey or during a previous biological survey.

California State Endangered Plant Species

Two California State endangered plant species in Table 5 were analyzed for their potential to occur in the WLCSP and offsite facilities: slender-horned spine-flower and thread-leaved brodiaea. No evidence of these State listed plant species was found in the WLCSP and offsite facilities. In addition, no suitable habitat for these State-listed plant species occurs within the WLCSP and offsite facilities due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional State listed plant species were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities because no additional State listed plant species are known to occur on or in the vicinity of the site. No suitable habitat was found in the WLCSP and offsite facilities to support other State listed plant species. Therefore, State listed plant species are not likely to occur in the WLCSP and offsite facilities and no impact would occur.

California State Endangered Wildlife Species

Four California State endangered wildlife species in Table 5 were analyzed for their potential to occur in the WLCSP and offsite facilities: western yellow-billed cuckoo, southwestern willow flycatcher, least Bell's vireo, and American peregrine falcon. No evidence of these California State endangered wildlife species was found in the WLCSP and offsite facilities. In addition, no suitable habitat for these California State endangered wildlife species occurs within the WLCSP and offsite facilities due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. No additional California State endangered wildlife species were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities because no additional California State endangered wildlife species are known to occur on or in the vicinity of the site. No suitable habitat was found in the WLCSP and offsite facilities to support other California State endangered wildlife species. Therefore, California State endangered wildlife species are not likely to occur in the WLCSP and offsite facilities and no impact is anticipated.

California State Threatened Plant Species

No California State threatened plant species are known to occur on or in the vicinity of the project site. Additionally, no suitable habitat occurs within the WLCSP and offsite facilities for any California State threatened plant species. Therefore, no California State threatened plant species were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities and no impact is anticipated.

California State Threatened Wildlife Species

Two California State threatened wildlife species in Table 5 were analyzed for their potential to occur in the WLCSP and offsite facilities: Swainson's hawk and Stephens' kangaroo rat. The project site contains low-quality foraging habitat and no Swainson's hawks were observed during any of the surveys conducted within the WLCPA. Since there are known recorded occurrences of Swainson's hawk within a mile of the project site, it is likely that this species may forage on the project site and therefore, there is a moderate potential for this species to occur within the WLCSP. However, there is little to no suitable nesting habitat within the WLCSP.

Although no sign of Stephens' kangaroo rat was identified in the WLCSP and offsite facilities, it was determined that this species may range through the general area. This species is commonly found in

ruderal and minimally disturbed areas. Marginal habitat was observed along existing roadsides and within active pasture areas. Since the WLCSP and offsite facilities is within the known range of this species, and marginal habitat was identified onsite, there is a moderate potential for Stephens' kangaroo rat to occupy some portion of the WLCSP and offsite facilities.

No additional California State threatened wildlife species were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities because no additional California State threatened wildlife species are known to occur on or in the vicinity of the site. No suitable habitat was found in the WLCSP and offsite facilities to support other California State threatened wildlife species. Therefore, except for the Swainson's hawk and Stephens' kangaroo rat, California State threatened wildlife species are not likely to occur in the WLCSP and offsite facilities. Impacts to Swainson's hawk and Stephens' kangaroo rat are not anticipated but any potential impacts would be adverse but not significant.

Special-Status Species

Special-status species are plant and wildlife species that have not been afforded legal protection under the FESA, CESA, or any other local regulations, or are considered rare, threatened, or endangered by any other resource agency, or organization in the scientific community. As it pertains to the technical reports prepared by FCS-MBA for the project (focused surveys), the following describes applicable classifications of special-status species not listed above for FESA and CESA.

California State Fully Protected Species

The classification of Fully Protected was California's initial effort in the 1960s to identify and provide additional protection to those animals that were rare or faced possible extinction. The list of fully protected species included fish, mammals, amphibians, reptiles, birds, and mammals. Most fully protected species are currently listed as threatened or endangered species under the more recent endangered species laws and regulations.

Fully Protected species may not be taken or possessed at any time and no licenses or permits may be issued for their take except under Multiple Species Habitat Conservation Plans or for collecting these species for necessary scientific research and relocation of a species for the protection of livestock.

California State Fully Protected Wildlife Species

Three California State Fully Protected wildlife species in Table 5 were analyzed for their potential to occur in the WLCSP and offsite facilities: golden eagle, white-tailed kite, and American peregrine falcon.

No suitable nesting habitat for golden eagle, white-tailed kite or American peregrine falcon occurs within the WLCSP and offsite facilities due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, non-native low-quality vegetation. However, some foraging habitat occurs within the WLCSP and offsite facilities. No additional California State fully protected wildlife species were analyzed in Table 4 for their potential to occur in the WLCSP and offsite facilities because no additional California State fully protected wildlife species are known to occur on or in the vicinity of the site. No suitable habitat was found in the WLCSP and offsite facilities to

support other California State fully protected wildlife species. Therefore, California State fully protected wildlife species are not likely to nest in the WLCSP and offsite facilities and no impacts are anticipated to nesting areas. However, the proposed project will remove suitable foraging habitat.

California Rare Plants and Wildlife Species of Concern

California Species of Concern (CSC) applies to animals not listed under the FESA or CESA, but are declining at a rate that could result in federal or state listing or historically occur in low numbers and known threats to their persistence currently exist.

California Rare Plant Species

No California rare plant species are known to occur on or in the vicinity of the WLCSP and offsite facilities. Additionally, no suitable habitat occurs within the WLCSP and offsite facilities for any California rare plant species. Therefore, no California rare plant species were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities.

California Wildlife Species of Concern

Twenty-one California Wildlife Species of Concern were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities:

- Orange-throated whiptail
- Coast horned lizard
- Tricolored blackbird
- Bell's sage sparrow
- Ferruginous hawk
- Merlin
- Yellow-breasted chat
- White-faced ibis
- Western yellow bat
- Southern grasshopper mouse
- American badger
- Northern red-diamond rattlesnake
- Western spadefoot
- Southern California rufous-crowned sparrow
- Burrowing owl
- California horned lark
- Prairie falcon
- Loggerhead shrike
- Northwestern San Diego pocket mouse
- San Diego black-tailed jackrabbit
- Los Angeles pocket mouse

The WLCSP and offsite facilities contains suitable foraging habitat for loggerhead shrike, ferruginous hawk, merlin, prairie falcon, California horned lark, and burrowing owl. The WLCSP and offsite facilities contain no suitable nesting habitat for ferruginous hawk, merlin, or prairie falcon. Suitable ground-nesting habitat occurs within the WLCSP and offsite facilities for burrowing owl and California horned lark. Burrowing owl was identified in the WLCSP and offsite facilities during focused surveys conducted in 2013, it was determined that this species may continue to range through the general area. Several California horned larks and loggerhead shrikes were observed foraging within the WLCSP and offsite facilities. A San Diego black-tailed jack rabbit was observed within the MWD lands located in the northern portion of the WLCSP.

No suitable habitat for western spadefoot, Bell's sage sparrow, yellow-breasted chat, white-faced ibis, western yellow bat, southern grasshopper mouse, and American badger occurs within the WLCSP and offsite facilities due to historic agricultural activities, recent periodic disking of the site,

and dominance of sparse, non-native low-quality vegetation. The western yellow bat, southern grasshopper mouse, and American badger are not covered under the MSHCP. However, since there is no suitable habitat, no impact is expected to occur. The remaining species are covered under the MSHCP and since there is no suitable habitat and the species are covered under the MSHCP, no impact is anticipated.

There is limited suitable habitat for orange-throated whiptail, northern red-diamond rattlesnake, coast horned lizard, southern rufous-crowned sparrow, Los Angeles pocket mouse in the WLCSP and offsite facilities. These species are generally associated with coastal sage scrub, which is extremely limited in the WLCSP to the north near SR-60 and Gilman Springs Road and in the proposed Open Space Area adjacent to the LPSRA between Theodore Street and Redlands Boulevard, just south of Brodiaea Avenue. Focused surveys for Los Angeles pocket mouse in 2005, 2010, 2012, and 2013 (MBA) were negative. Northwestern San Diego pocket mouse was trapped during the 2013 trapping efforts for Los Angeles pocket mouse. Therefore, this species is considered present within the coastal sage scrub habitat associated with Drainage 9.

The orange-throated whiptail is covered under the MSHCP. There is extremely limited habitat for the orange-throated whiptail in an area that is currently proposed for inclusion in an open space area. There is no significant impact to the orange-throated whiptail. There is low potential for these species to occur and no significant impact is anticipated.

No additional California State wildlife species of concern were analyzed in Table 5 for their potential to occur in the WLCSP and offsite facilities because no additional California Wildlife Species of Concern are known to occur on or in the vicinity of the site. No suitable habitat was found in the WLCSP and offsite facilities to support other California Wildlife Species of Concern. Therefore, except for the burrowing owl, loggerhead shrike, California horned lark, and northwestern San Diego pocket mouse, California Wildlife Species of Concern are not likely to occur in the WLCSP and offsite facilities.

California Native Plant Society

The California Native Plant Society (CNPS) is a non-profit organization whose collaborative efforts in research help maintain an inventory of rare and endangered plants that occur throughout California. The CNPS has developed their own classification system in defining the degree of endangerment for sensitive plant species that models that of the FESA and CESA. Plants considered to be rare, threatened, or endangered in California are designated as List 1B or List 2 plant species. Plants for which more information is needed to determine their status are designated List 3 species. Plants with limited distribution are designated as List 4 species.

CNPS Listed Plant Species

Eight CNPS List 1B plant species in Table 5 were analyzed for potential to occur in the WLCSP and offsite facilities: San Jacinto Valley crownscale, thread-leaved brodiaea, Plummer's mariposa lily, smooth tarplant, slender-horned spineflower, Coulter's goldfields, Robinson's peppergrass, and San Bernardino aster.

Two CNPS List 2 plant species, mud nama and Wright's trichocoronis in Table 5 were analyzed for potential to occur in the WLCSP and offsite facilities.

One CNPS List 3 plant species, Parry's spineflower in Table 5 was also analyzed for potential to occur in the WLCSP and offsite facilities.

Three of the eleven plant species (Plummer's mariposa lily, Robinson's pepper-grass, and San Bernardino aster) are not covered by the MSHCP. Plummer's mariposa lily has a moderate potential to occur and Robinson' pepper-grass has a low potential to occur based on habitat type and soils requirements. San Bernardino aster is not likely to occur within the WLCSP due to a lack of suitable habitat.

These species were not identified during sensitive plant surveys (MBA 2010). The 2010 sensitive plant survey was conducted based on the 2010 site boundary and the then-current existing conditions. Several areas within the current WLCSP were not surveyed because they were either not included in the proposed development footprint (such as offsite improvement areas) or were not within areas of suitable habitat. Therefore, areas that contained suitable habitat, but are outside of the proposed development footprint, or areas that were not accessible during the survey, were not included. Since all areas of the WLCSP were not surveyed, additional plant surveys are recommended on a project-by-project basis. There has been below-average rainfall in the area since the 2010 plant surveys were conducted. Project-level surveys will be required prior to submittal of the CEQA documents as part of the project-specific environmental review process.

The Sensitive Plant Focused Survey Report only discusses the plant communities in which focused plant surveys were conducted. Many of the areas within the Extensive Agricultural Areas and the Urban/Developed areas contain elements of Riversidean sage scrub, non-native grasslands, and riparian habitat, but not in a sufficient amount to be considered a separate plant community. The remaining nine plant communities found within the WLCSP, either do not provide suitable habitat or are not within the proposed project impact area; these plant communities will not be directly or indirectly impacted by project development.

Updated focused plant surveys are warranted on a project-level basis, especially if existing site conditions change over time. If the agricultural fields are left fallow, suitable habitat for a number of sensitive plant species may develop. Therefore, although currently not anticipated as a potentially significant impact, additional focused plant surveys will be required on a project-by-project basis as specific developments are proposed and subsequent or supplemental CEQA documentation is required.

The potential habitat for Plummer's mariposa lily is confined to RSS and sandy-rocky soils, which are confined to three areas within the project site. The first area is a proposed conservation area on the southwestern portion of the WLCSP. No impacts would occur to Plummer's mariposa lily at this location. The next area is located on the MWD land in the northeastern portion of the WLCSP. The third area is located within a previous agricultural detention facility located along the eastern portion of the project site, adjacent to Gilman Springs Road. These last two areas provide marginal quality

habitat for Plummer's mariposa lily, and although the 2010 survey was negative for this species, the potential for this species to occur within the project site cannot be completely ruled out and impacts associated with Plummer's mariposa lily may be considered significant.

No evidence of any CNPS List 1B, List 2, or List 3 plant species covered under the MSHCP were observed in the WLCSP and offsite facilities during focused surveys in 2010. In addition, these species are not likely to occur in the WLCSP and offsite facilities due to historic agricultural activities, recent periodic disking of the site, and dominance of sparse, low quality non-native vegetation. Therefore, CNPS List plant species covered under the MSHCP are not likely to occur in the WLCSP and offsite facilities and no significant impact is anticipated.

Migratory Bird Treaty Act and Section 3503 of the State Fish and Game Code

The WLCSP and offsite facilities contains suitable nesting habitat for ground-nesting birds such as burrowing owl and horned lark. The large trees located adjacent to the remaining rural residential homes within the WLCSP and offsite facilities provide suitable habitat for other migratory birds and will be impacted by construction activities.

Raptor Foraging Habitat

The WLCSP and offsite facilities contain flat, open areas with sparse vegetation, which could be considered poor quality foraging habitat for some raptors species. This is due to the regular, heavy disturbance associated with the various agricultural activities in the WLCSP and offsite facilities resulting in a rather limited prey base. Although the WLCSP area is approximately 2,610 acres in size, the burrow evaluation associated with the burrowing owl survey indicates large expanses of the WLCSP lack any burrows or evidence of a large prey base. The expansive foraging habitat surrounding the WLCSP including the CDFW Conservation Buffer Area, the SJWA, LPSRA and the extensive Badlands to the east, makes the loss of poor quality foraging habitat adverse but not a significant impact to raptor foraging habitat. The WLCSP has a recorded occurrence of white-tailed kite and there are numerous observations of golden eagle surrounding Mystic Lake. Therefore, there is a potential for indirect impacts to these fully protected species with the removal of the poor quality foraging habitat onsite. Impacts to white-tailed kite and golden eagle are potentially significant impacts.

Jurisdictional Waters

A formal jurisdictional delineation was conducted within the WLCSP and offsite facilities by MBA in September 2007 and March 2012. A total of 15 primary drainage features were identified during these combined surveys. A number of sub-drainages or tributaries were also identified. Jurisdiction for each drainage and/or sub-drainage or tributary was evaluated for jurisdiction under Section 404 and 401 of the CWA as administered by USACE and RWQCB, respectively; the Porter Cologne Act as administered by the RWQCB; and Section 1600 of the Fish and Game Code as administered by CDFW.

Based on 2012 findings, two drainage features (Drainage 12 and 15) were determined to be jurisdictional waters of the U.S. under Section 404 and 401 of the CWA. Drainage 15 is included in this discussion because it may occur within two offsite utility improvements. Approximately 500 linear feet of the drainage feature was included in the survey area. Approximately 5,430 linear feet

of Drainage 12 is included in the survey area (0.5 acres). This includes approximately 1,300 linear feet within the WLCSP, and the remaining 4,130 linear feet will be part of the offsite improvements. The remaining 13 drainage features are considered isolated features with no direct connectivity to downstream traditional navigable waters or have no significant nexus. Drainage features 1, 5, and 6 are roadside ditches that are also isolated features. Drainage features 3, 4, 10, 11, and 13 are upland swales with evidence of periodic erosion but no evidence of annual flows and no clearly defined bed and bank feature. No jurisdictional wetlands were identified within the entire WLCSP. However, the regulatory agencies makes all final jurisdictional determinations.

Drainage features 3, 4, 10, 11, and 13 do not have a clearly defined bed and bank feature and do not have any riparian habitat or evidence of flows. These features are better described as upland swales with occasional eroded areas. Under the Porter Cologne Act, the RWQCB takes jurisdiction of drainage features that would normally be under USACE jurisdiction, but are considered isolated. Drainages 7, 8, 9, 12, and 15 were determined to be waters of the state and subject to the jurisdiction of both the CDFW and RWQCB. Drainages 1, 2, 4, 5, 6, may be considered jurisdictional by the CDFW and RWQCB. The jurisdictional limits of waters of the state are not required to have downstream connectivity. There are up to approximately 5.67 acres of waters of the state, which includes areas with a clearly defined bed and bank feature within the WLCSP and offsite facilities. However, the CDFW makes all final Section 1600 jurisdictional determinations.

Project components affecting streambed and bank subject to CDFW jurisdiction, including riparian habitat, would require a Streambed Alteration Agreement (SAA) from CDFW.

When impacts are identified during project-specific applications, the proponent will apply for appropriate permits. Mitigation ratios will be determined following standard guidelines and mitigation will include a mixture of onsite habitat creation, offsite habitat creation, or the purchase of offsite mitigation credits at an approved mitigation bank. Compensatory mitigation will be no less than a 1:1 replacement ratio to guarantee a no net loss of riparian habitat, but this mitigation ratio is negotiated during permit the acquisition process on a project-by-project basis.

The WLCSP also incorporates a number of potential offsite improvements. All offsite improvements east of Redlands Boulevard may potentially impact drainage features likely considered jurisdictional by USACE, RWQCB, and CDFW. Once these offsite improvements have been finalized, a project-specific jurisdictional delineation will be required in order to document the existing conditions, potential impacts, and recommended mitigation measures.

Nesting Birds

The extensive agriculture plant communities in the WLCSP and offsite facilities provide suitable nesting habitat for ground-nesting avian species such as western meadowlark (*Sturnella neglecta*) and burrowing owl. Suitable habitat for shrub and tree nesting species such as red-tailed hawk, black phoebe (*Sayornis nigricans*), and house finch occur along the edges of existing development surrounding the WLCSP and offsite facilities as well as isolated, remnant patches of vegetation in undisturbed portions of the WLCSP and offsite facilities. Therefore, portions of the WLCSP and

offsite facilities and immediately adjacent to the WLCSP and offsite facilities provide suitable nesting habitat for migratory birds protected under the MBTA and CFG Code

Stephens' Kangaroo Rat

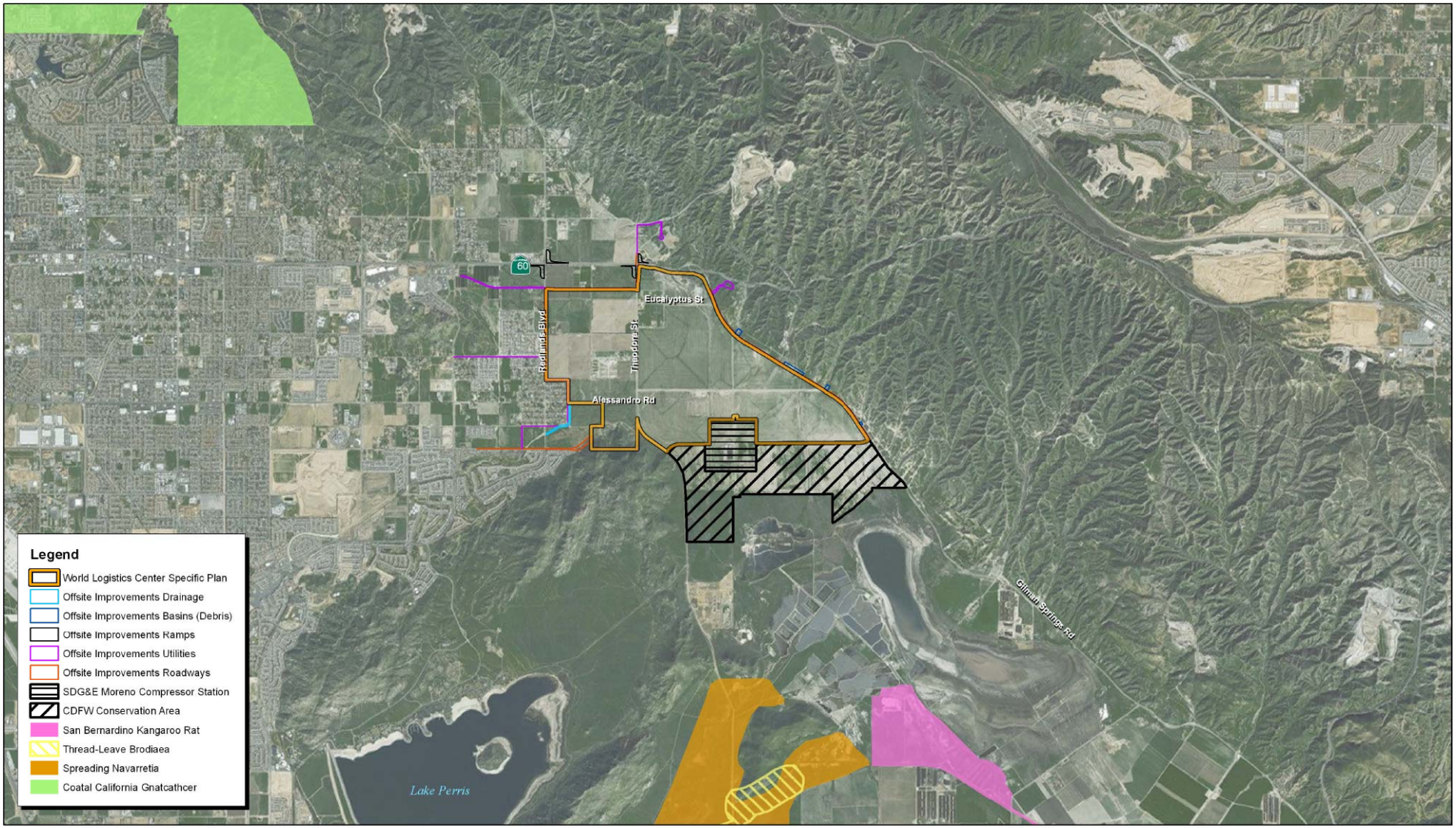
The WLCSP and some offsite facilities border the Core Reserve Area for the Stephens' kangaroo rat HCP to the south, but the area itself is not located within a core area. However, it is located within the fee area of the HCP. No focused surveys were conducted for Stephens' kangaroo rat. A single woodrat was trapped in an offsite area associated with the upstream portion of Drainage 8, north of Gilman Springs Road. A single desert wood rat was trapped during the 2013 Los Angeles pocket mouse focused surveys. The primary species trapped was northwestern San Diego pocket mouse and silky pocket mouse. With adherence to the Stephens' kangaroo rat HCP's Implementing Agreement and payment of the County's per-acre mitigation fee, potential impacts are covered under an existing incidental take permit, and no further action is required.

The WLCSP and offsite facilities is located north of Core Reserve Area for Stephens' kangaroo rat but is not a part of the Core Reserve. Although this area will be subject to development, it is not close enough to the Core Reserve Area to be directly impacted and is not close enough to have any indirect impacts as well.

USFWS Designated Critical Habitat

No USFWS designated Critical Habitat for any species is present within the WLCSP and offsite facilities (Exhibit 14).

Critical habitat for coastal California gnatcatcher occurs approximately three miles northwest of the WLCSP. Critical habitat for spreading navarretia occurs approximately 3 miles south of the WLCSP. Critical habitat for thread-leafed brodiaea occurs approximately 3 miles south of the WLCSP. Critical habitat for San Bernardino kangaroo rat occurs approximately 3 miles southeast of the WLCSP.



Source: ESRI Aerial Imagery. USFWS Data.

FirstCarbon SOLUTIONS

1 0.5 0 1 Miles

Exhibit 14
Critical Habitat Map

SECTION 5: JOINT PROJECT REVIEW

5.1 - The Relationship of the Project to the MSHCP Conservation Criteria

The City of Moreno Valley, unlike other participants in the MSHCP, does not implement the HANS process, but relies on City Resolution 2004-07, Section A.2 (Appendix J) regarding contributions to the MSHCP Conservation Area. The Joint Project Review Process (JPR), the City of Moreno Valley equivalent to the HANS process, applies to property that may be needed for inclusion in the MSHCP Conservation Area or subjected to other MSHCP Criteria and shall be implemented by the City of Moreno Valley. Under the MSHCP program, the Western Riverside County RCA, the County, cities, or various State and Federal Agencies may obtain interests in property needed to implement the MSHCP over time (interest may be obtained in fee, conservation easement, deed restriction, land exchange, flood control easement or other type of interest acceptable to the RCA, the County, cities, acquiring State and/or Federal Agency, and property owner).

If it is determined that all or a portion of property is needed for inclusion in the MSHCP Conservation Area, various incentives may be available to the property owner in lieu of or in addition to monetary compensation in exchange for the conveyance of a property interest. These incentives may include, but shall not be limited to, the waiver and/or reduction of certain development fees, monetary compensation for entering into an option agreement, fast track processing, density bonuses, clustering, density transfers (and property reassessment and tax credits if determined to be feasible). The incentives are intended to provide a form of compensation to property owners who convey their property. As a property interest is obtained, it will become part of the MSHCP Conservation Area.

The establishment of Criteria Area boundaries is intended to facilitate the process by which the City of Moreno Valley will evaluate property that may be needed for inclusion in the MSHCP Conservation Area. The Criteria Area is an area significantly larger than what will be the MSHCP Conservation Area, within which property will be evaluated using MSHCP Conservation Criteria.

The Criteria Area is an analytical tool that assists in determining which properties to evaluate for acquisition and Conservation under the MSHCP and does not impose land use restrictions. The process ensures that an early determination will be made of what properties are needed for the MSHCP Conservation Area, that the owners of property needed for the MSHCP Conservation Area are compensated, and that owners of land not needed for the MSHCP Conservation Area shall receive Take Authorization for Covered Species Adequately Conserved through the Permits issued to the City of Moreno Valley pursuant to the MSHCP.

Development of property outside of the MSHCP Conservation Area (both within and outside of the Criteria Area) shall receive Take Authorization for Covered Species Adequately Conserved provided payment of a mitigation fee is made (or any credit for land conveyed is obtained) and compliance with the MSHCP occurs. Payment of the mitigation fee and compliance with the requirements of the MSHCP are intended to provide full mitigation under CEQA, NEPA, FESA, and CESA for impacts to the species and habitats covered by the MSHCP pursuant to agreements with the USFWS, the CDFW

and/or any other appropriate participating regulatory agencies and as set forth in the Implementing Agreement for the MSHCP.

The WLCSP occurs within the Reche Canyon/Badlands Area Plan and falls within both the Badlands North Area Plan Subunit and the SJWA/Mystic Lake Area Plan Subunit. No existing or proposed linkage, or constrained linkage areas are in the near vicinity (Exhibit 9). Proposed Core 3 is located to the north and east of the WLCSP and Existing Core H is located to the south. Portions of the survey area fall within 12 Criteria Cells (Exhibit 10) all associated with existing or proposed core areas. Only three of the Criteria Cells fall within the boundaries of the WLCSP or proposed offsite facility areas (1204, 1297, and 1364)

Eleven Criteria Cells are within the CDFW Conservation Buffer Area (1297, 1364, 1370, 1377, 1386, 1389, 1390, 1477, 1482, 1483, and 1577) and would not be impacted by the WLCSP. They would be further protected by the General Plan Amendment and Zone Change and permanently set aside as open space. The San Jacinto Wildlife Refuge and adjacent lands were analyzed for indirect impacts only and would not have any direct impacts that would be calculated in the JPR process.

Table 7: Area Plan Subunit, Cell Group, and Criteria Cells within WLCSP, Offsite Facilities, and the CDFW Conservation Buffer

Area Plan Subunit	Cell Group	Criteria Cells
Badlands North Area Plan Subunit 3	Cell Group E'	1390
	Cell Group X	1297
		1204
San Jacinto Wildlife Area/Mystic Lake Area Plan Subunit 4	Cell Group D'	1364
		1370
		1377
		1386
		1389
		1482
		1483
		1477
		1577

The portions of the WLCSP study within Cell Group D' are within the SJWA/Mystic Lake Area Plan Subunit 4. Only 4.0 acres of Criteria Cell 1364 are within the WLCSP boundary. This Cell Group supports Existing Core H. Approximately 1,260 acres of the WLCSP survey area occur within Cell Group D' (Exhibit 10). This portion within Cell Group D' is located within the extended boundaries of the SJWA and the SDG&E lands. These areas within Cell Group D' are not a part of the WLCSP, but are to be considered in a City of Moreno Valley General Plan Amendment that would rezone these

areas as permanent open space and public facilities. This area with the exception of the SDG&E lands is currently owned by the State of California through a sale by Highland Fairview in 2001 and is now protected as PQP Conserved Land under the MSHCP (Exhibit 10). Any changes or development to the 193 acres of public facilities lands would be subject to separate MSHCP and CEQA requirements .

Although this land cannot be used as MSHCP compensation for the proposed development, it was intended as and does provide a buffer area between the WLCSP area and the existing SJWA. The General Plan Amendment formalizes this situation.

The portions of the WLCSP survey area in Cell Groups E' and X are located within the Badlands North Area Plan Subunit 3. These Cell Groups support Proposed Core 3 (Exhibit 15). Approximately 51 acres of the WLCSP survey area occurs within Cell Group E', a total of 1,260 acres occurs in Cell Group D' and approximately 296 acres is within Cell Group X (Exhibit 10). With regard to the WLCSP Development Area, the proposed development may potentially impact 4.0 acres located in the northeastern corner of Criteria Cell 1364 within Cell Group D' and 296 acres located in the southwestern corner of Criteria Cell 1390 within Cell Group X. The remaining development portion of the WLCSP is outside of any Criteria Cells or Cell Groups. Any development adjacent to any of the cells must incorporate measures to minimize edge effects in accordance with the Urban/Wildlands Discussion of Section 6.2.4 of the MSHCP. These areas and others along Gilman Springs Road and in the adjacent Lake Perris State Recreation Area will also be addressed under both MSHCP requirements under the Urban/Wildlands Interface and in a detailed indirect impacts discussion in Section 7.4 of the MSHCP.

5.1.1 - Reche Canyon/Badlands Area Plan

The Reche Canyon/Badlands Area Plan is in the northern portion of western Riverside County, south of the City of San Bernardino, west of the Pass Area Plan and the San Jacinto Valley Area Plan, north of the Mead Valley Area Plan and the Lakeview/Nuevo Area Plan, and east of the Highgrove Area Plan, the Cities of Norco and Riverside Area Plan, and the March Area Plan. The City of Moreno Valley sits entirely within the Reche Canyon/Badlands Area Plan. Additionally, the Planning Area incorporates lands within the LPSRA and SJWA. The Area Plan is separated into four Area Plan Subunits. The WLCSP is located within portions of Area Plan Subunit 3: Badlands North and Area Plan Subunit 4: San Jacinto Wildlife Area/Mystic Lake.

The target conservation acreage range for the Reche Canyon/Badlands Area Plan is 30,815 to 35,905 acres; it is composed of approximately 20,295 acres of existing PQP Lands and 10,520 to 15,610 acres of Additional Reserve Lands. The target acreage range within the City of Moreno Valley is 80 to 130 acres. The City of Moreno Valley target acreage is included within the 10,520 to 15,610 acre target conservation range on Additional Reserve Lands for the entire Area Plan. Based on Table 3 of the RCA Annual Report for 2012, the City has already conserved 1030 acres and easily meets their conservation obligations under the MSHCP.

The CDFW Conservation Area includes approximately 910 acres of the SJWA, which is designated as Additional Reserve Land. All of this area is within the boundaries of the City of Moreno Valley and the conservation of this area more than fulfills the target acreage range for the City.

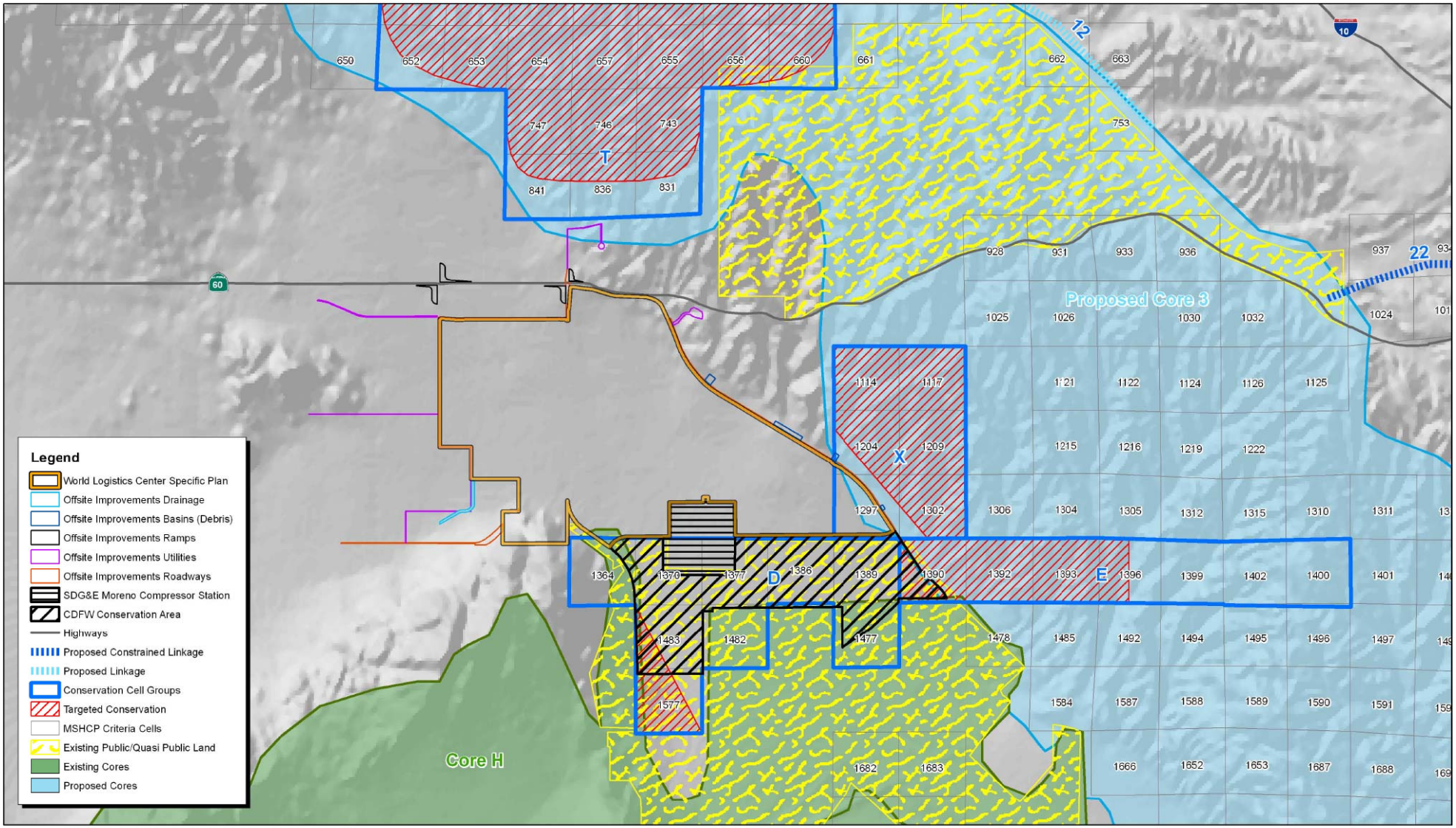
Area Plan Subunit 3: Badlands - North

Area Plan Subunit 3 of the Reche Canyon/Badlands Area Plan includes lands within the northeastern and eastern portions of the Area Plan within the Badlands. Area Plan Subunit 3 contains a total of 88 Criteria Cells organized into 16 Cell Groups and 4 independent cells. The MSHCP conservation objectives for Area Plan Subunit 3 include conserving land within the Badlands area, north to the vicinity of SR-60, south to southeastern extent of the SJWA, west to the eastern boundary of the SJWA, and east to the Laborde Canyon vicinity. Target acreage range required for Additional Reserve Lands within Area Plan Subunit 3 is 8,270 to 10,895 acres. Plant and Wildlife Planning Species within Area Plan Subunit 3 include:

- Nevin's barberry
- Bell's sage sparrow
- Cactus wren
- Loggerhead shrike
- Southern California rufous-crowned sparrow
- Los Angeles pocket mouse
- San Bernardino kangaroo rat (*Dipodomys merriami parvus*)
- Stephens' kangaroo rat
- Bobcat (*Lynx rufus*)
- Mountain lion

Under the MSHCP, additional biological issues and considerations are proposed for conservation for each Area Plan Subunit. The biological issues and considerations emphasized in Area Plan Subunit 3 include:

- Conserving large habitat blocks in the Badlands.
- Maintain Core Area for bobcat.
- Maintaining core and linkage areas for mountain lion.
- Determining potential for populations of San Bernardino kangaroo rat along San Timoteo Creek.
- Maintain linkage area to SJWA for Stephens' kangaroo rat.
- Determine presence of potential Core Area for Los Angeles pocket mouse in San Timoteo Creek and tributaries to the Badlands.
- Maintain Core Area for Nevin's barberry.



Source: USGS NED, Riverside County MSHCP, Census 2000 data, FCS-MBA.

FirstCarbon SOLUTIONS

3,750 1,875 0 3,750 Feet

Exhibit 15
Target MSHCP Conservation Areas Map

The eastern boundary of the WLCSP overlaps the boundary of Area Plan Subunit 3. The portions of the WLCSP within Area Plan Subunit 3 are all along the southwestern edge of the Subunit and collectively comprise at most one percent of the target acreage range proposed for conservation. Since the Specific Plan area encroaches on a limited portion of the boundary of the Area Plan Subunit and since these portions of the WLCSP are subject to existing edge effects, impacts from development are anticipated to be less than significant. Therefore, development of the WLCSP does not conflict with the long-term conservation goals for bobcat or mountain lion or any of the other species listed above. The WLCSP and proposed offsite facilities do not provide habitat for the San Bernardino kangaroo rat, contains small pockets of marginal quality habitat for Stephens' kangaroo rat and does not support Los Angeles pocket mouse or Nevin's barberry.

Cell Group E' and Criteria Cell 1390

Conservation within Cell Group E' will contribute to assembly of Proposed Core 3 and will focus on chaparral, coastal sage scrub, grassland, and Riversidean alluvial fan sage scrub habitat. Areas conserved within this Cell Group will be connected to habitat proposed for conservation in Cell Group X to the north, habitat proposed for conservation in Cell Group C' also to the north, and to habitat proposed for conservation in Cell Group F' to the south. Conservation within Cell Group E' will range from 45 percent to 55 percent of the Cell Group focusing in the western portion (Exhibit 15).

Within the western-most portion of Cell Group E', and specifically within Criteria Cell 1390, the CDFW Conservation Buffer area encroaches on 51.3 acres. This portion of the WLCSP survey area is within the northeastern portion of the SJWA, which is PQP Conserved Land and is designated as conserved by CDFW. Current plans call for a rezoning of this area but it is not included within the WLCSP and therefore with no development it would be consistent with the MSHCP (Exhibit 15).

Cell Group X: Criteria Cells 1204 and 1297

Conservation within Cell Group X will contribute to assembly of Proposed Core 3. Conservation within this Cell Group will focus on chaparral, coastal sage scrub, and grassland habitat. Areas conserved within Cell Group X will be connected to habitat proposed for conservation in Cell Groups C' to the east, V to the northeast, and to chaparral and grassland habitat proposed for conservation in Cell Group E' to the south. Conservation within Cell Group X will range from 65 percent to 75 percent of the Cell Group focusing in the northeastern portion of the Cell Group (Exhibit 15).

Within the southwestern portion of Cell Group X, and specifically within Criteria Cells 1204 and 1297, the WLCSP development and one potential debris basin encroaches on 100.0 acres of the cells. Under the MSHCP, conservation for Cell Group X is proposed for the northeastern portions of the Cell Group. The WLCSP development is not within the targeted conservation areas and, therefore, will not adversely affect the City/County's ability to achieve the goals of the MSHCP (Exhibit 15). In addition, the portion of the WLCSP within Cell Group X does not contain the chaparral, coastal sage scrub, and grassland habitat required for conservation.

Area Plan Subunit 4: San Jacinto Wildlife Area/Mystic Lake

Area Plan Subunit 4 of the Reche Canyon/Badlands Area Plan includes lands within the southeastern portions of the Area Plan within the SJWA. Area Plan Subunit 4 contains a total of 26 Criteria Cells organized into 3 Cell Groups and 12 independent cells. The MSHCP conservation objectives for Area Plan Subunit 4 include conserving land within the SJWA and Mystic Lake. The target acreage range required for Additional Reserve Lands within Area Plan Subunit 4 is 860 to 1,750 acres. Plant and Wildlife Planning Species within Area Plan Subunit 4 include:

- California Orcutt grass
- Los Angeles pocket mouse
- Smooth tarplant (*Hemizonia pungens*)
- Thread-leaved brodiaea
- Wright's trichocoronis
- Stephens' kangaroo rat
- Loggerhead shrike
- Northern harrier (*Circus cyaneus*)
- Peregrine falcon (*Falco peregrinus*)
- Tricolored blackbird (*Agelaius tricolor*)
- White-tailed kite (*Elanus leucurus*)
- Black-crowned night heron (*Nycticorax nycticorax*)
- California horned-lark (*Eremophila alpestris actia*)
- Coulter's goldfields
- San Jacinto Valley crownscale
- Spreading navarretia
- Vernal barley (*Hordeum intercedens*)
- American bittern (*Botaurus lentiginosus*)
- Burrowing owl
- Bobcat
- Mountain plover (*Charadrius montanus*)
- Osprey (*Pandion haliaetus*)
- Prairie falcon (*Falco mexicanus*)
- White-faced ibis (*Plegadis chihi*)
- Davidson's saltscale (*Atriplex serenana* var. *davidsonii*)
- Double-crested cormorant (*Phalacrocorax auritus*)

The biological issues and considerations emphasized in Area Plan Subunit 4 include:

- Conservation of alkali playa and other habitat to augment existing conservation in the SJWA and Mystic Lake.
- Conservation of existing vernal pool complexes associated with the San Jacinto River floodplain in the SJWA and Mystic Lake area. Conservation should focus on vernal pool surface area and supporting watersheds.
- Provide for a connection of intact habitat between the SJWA and the adjacent Badlands to the north.
- Conservation of Willow-Domino-Travers soils supporting sensitive plants such as San Jacinto Valley crownscale, Davidson saltscale, Coulter's goldfields, spreading navarretia, vernal barley and Wright's trichocoronis.
- Provide for and maintain a continuous linkage along the San Jacinto River from the southern to the southeastern boundary of the Reche Canyon/Badlands Area Plan.

- Maintain linkage area for bobcat.
- Maintain a linkage area for Stephens' kangaroo rat to SJWA.
- Determine the potential presence of potential Core Area for Los Angeles pocket mouse in connection between the Badlands and the SJWA.

The CDFW Conservation Buffer Area is within Area Plan Subunit 4 and consists of grasslands and agricultural lands with minor constituents of Riversidean sage scrub and mule fat scrub conserved as part of the northern portion of the SJWA. A small portion of Criteria Cell 1364 within Subunit 4 would be potentially impacted by WLC Specific Plan development. The WLCSP itself and the CDFW Conservation Buffer Area are not within or along the San Jacinto River floodplain, and do not contain any alkali playa habitat or vernal pool complexes under the definition provided by the MSHCP.

There is no Willow-Domino-Travers soil within the WLCSP survey area; therefore, San Jacinto Valley crownscale, Davidson saltscale, Coulter's goldfields, spreading navarretia, vernal barley and/or Wright's trichocoronis are not likely to occur in the WLCSP.

The WLCSP survey area is located immediately north of portions of the Stephens' kangaroo rat preserve within the SJWA. The portions of the WLCSP adjacent to the preserve are currently subject to regular disking and other disturbances associated with agricultural uses. The regular disturbances have resulted in limited suitable habitat for Stephens' kangaroo rat within the WLCSP. The presence of a habitat linkage for this species within the WLCSP is unlikely and population fragmentation is not anticipated.

Portions of the CDFW Conservation Buffer area contain suitable habitat for Los Angeles pocket mouse and burrowing owl. The results of MBA's focused surveys concluded that the WLCSP does not currently support any Los Angeles pocket mouse, but does provide suitable burrowing owl habitat.

Cell Group D': Criteria Cells 1364, 1370, 1377, 1386, 1389, 1477, 1482, 1483, and 1577

Conservation within Cell Group D' will contribute to assembly of areas proposed for conservation for Existing Core H. Conservation within Cell Group D' will focus on agricultural land. Conservation within this Cell Group will be approximately 5 percent of Cell Group D' focused on the southern and western portion of the Cell Group.

Within Cell Group D', the WLCSP survey area, including the CDFW Conservation area, is within Criteria Cells 1364, 1370, 1377, 1386, 1389, 1477, 1482, 1483, and 1577. A 4.0-acre area in the northeast portion of Criteria Cell 1364 is within the WLCSP. This area will contain a proposed detention basin and will have no permanent development. Under the MSHCP, conservation for Cell Group D' is proposed for the southern and western portions of the Cell Group. The CDFW Conservation Buffer area includes approximately 60 percent of the northern portion of the Cell Group; therefore, future development of the 4.0 acres in Criteria Cell 1364 of the WLCSP is consistent with the conservation goals for this cell group.

The majority of Cell Group D' is within the northern extent of SJWA, a PQP Conserved Land. No development is proposed on the CDFW Conservation Area because it is outside of the WLCSP. The General Plan Amendment and Zone Change would change zoning on the area to an open space designation. Any development proposed in the WLCSP adjacent to the SJWA must incorporate urban edge design features to minimize any potential impacts to the SJWA.

5.1.2 - Proposed Core 3

Proposed Core 3 (in Section 5, Western Riverside County MSHCP Consistency Analysis, 5.1, Overview) consists mainly of private lands but also contains a few PQP parcels including De Anza Cycle Park, and functions as a Linkage, connecting the San Bernardino National Forest to the southwest with San Bernardino County and other conserved areas to the north of the Core. With a total acreage of approximately 24,920 acres, Proposed Core 3 is one of the largest MSHCP Core Areas. It is contiguous with Existing Core H (Lake Perris State Recreation Area [LPSRA]) and Existing Core K (San Jacinto Wildlife Area [SJWA]/Mystic Lake), thus greatly enlarging the functional area of the Core. Within the Core, important live-in and movement habitat is provided for Bell's sage sparrow (*Amphispiza belli*), loggerhead shrike (*Lanius ludovicianus*), cactus wren (*Campylorhynchus brunneicapillus*), Stephens' kangaroo rat, southern California rufous-crowned sparrow (*Aimophila ruficeps*), and mountain lion (*Puma concolor*), which have key populations in the Badlands. Management of edge conditions will be necessary in the Badlands to maintain high quality habitat for these species in areas that may be affected by covered facilities including Lambs Canyon Road, San Timoteo Canyon Road, and Gilman Springs Road. The planning species for which habitat is provided within Proposed Core 3 include the following:

- Nevin's barberry
- Cactus wren
- Southern California rufous-crowned sparrow
- San Bernardino kangaroo rat
- Mountain lion
- Bell's sage sparrow
- Loggerhead shrike
- Los Angeles pocket mouse
- Stephens' kangaroo rat
- Bobcat

No significant impacts to any population of the above planning species are anticipated as a result of the implementation of the WLCSP or any of the proposed offsite improvements.

Minimizing edge effects are considered a significant goal of Proposed Core 3. Approximately 39.3 acres of the WLCSP occur within the western extent of Proposed Core 3. The portions of the Proposed Core 3 along Gilman Springs Road (generally on the east side of the road) are currently subject to significant edge effects associated with traffic, and the impacts caused by development of the WLCSP would not dramatically increase the edge exposure. Edge effects in these areas are not considered significant because development will be small and restricted to auxiliary infrastructure such as proposed debris basins. All development in the WLCSP will implement measures that minimize edge effects associated with urban development in wildlands. The minimization efforts are addressed in Section 4.2.6, Urban/Wildlands Interface Analysis, of this report.

The WLCSP is located adjacent to the junction of Proposed Core 3 and Existing Core H. Development would not impede the movement of wildlife or reduce the continuous area of the two cores, which

are both goals of Proposed Core 3. Additionally, the portion of the WLCSP located adjacent to the junction of Proposed Core 3 and Existing Core H would occur outside of the boundaries and will remain undeveloped, facilitating connectivity between the two Cores.

The WLCSP occupies less than 0.1 percent of Proposed Core 3 and no significant impacts to the goals of the Proposed Core 3 would occur.

5.1.3 - Existing Core H

Existing Core H is comprised of LPSRA, SJWA, private lands, and lands with pre-existing conservation agreements. It provides live-in habitat for several species, contains soils suitable for some Narrow Endemic plant species, supports vernal pool complexes and may provide a connection to Core Areas in the Badlands and the middle reach of the San Jacinto River. Maintenance of habitat quality, floodplain processes along the San Jacinto River, and conservation of vernal pool complexes are important for the planning species. The Core Area provides potentially suitable live-in habitat for small rodents and common mammals.

Approximately 4.0 acres of the WLCSP are located within the northern extent of Existing Core H, near the junction of Theodore Street and Alessandro Boulevard, which is within Criteria Cell 1364. The portion of the WLCSP in Existing Core H contains potentially suitable habitat for small rodents, common mammals, and burrowing owl. No vernal pool complexes or floodplain processes occur on the WLCSP and there is no suitable habitat for any narrow endemic plant species. An area of 100.3 acres is associated with the CDFW Conservation area and is within Existing Core H, but will not be developed, because it is part of the SJWA and outside of the Specific Plan boundaries. This represents less than 0.2 percent of Existing Core H and no significant impacts to the goals of this core area would occur.

5.2 - Joint Project Review (MSHCP 6.1.1)

Portions of the WLCSP are located within Criteria Cells as designated under the MSHCP. In general, if a project applicant's site falls within Criteria areas, the applicant is required to file a Habitat Acquisition and Negotiation Strategy (HANS) application, which includes a habitat assessment of the WLCSP to determine if all or part of the property is necessary for inclusion in any MSHCP Conservation Area. In lieu of the Hans process, the project will be reviewed through the Joint Project Review (JPR) process. The Western Riverside County Regional Conservation Authority (RCA), the County, cities, or various State and federal agencies must determine whether all or part of the property is needed for inclusion in a MSHCP Conservation Area. If it is determined that all or part of the property is needed, the property owner will enter into negotiations with the appropriate agencies to determine the extent of development allowed within the WLCSP that will not significantly impact the function of the subject conservation areas. This section summarizes the location of the WLCSP in relation to areas proposed for conservation by the Western Riverside MSHCP.

The WLCSP includes proposed development within Criteria Cells 1204, 1297, and 1364. While these portions of the Criteria Cells are not targeted for long-term conservation, completion of the JPR

review would need to be completed before development occurred in those cells. The portion of the CDFW Conservation Buffer area that occurs within Cell Group D' (within Area Plan Subunit 4 of Existing Core H) is located in the SJWA, an existing PQP Conserved Land. This portion of the survey area has been designated as conserved by CDFW and development of this area would not be consistent with the MSHCP and has not been proposed by the applicant. The completion of the General Plan Amendment and Zone change would complete the proposed conservation on the CDFW Conservation Buffer lands.

5.2.1 - Anticipated Impacts

Based on our review of the MSHCP, development of the WLCSP would not conflict with the conservation goals established by the MSHCP for Cell Group X or Cell Group E'. In addition, no conflict from development would occur in relation to the Reche Canyon/Badlands Area Plan, the Area Plan Subunit 4, the Area Plan Subunit 3, Proposed Core 3, or Existing Core H.

No development will occur in the portion of the CDFW Conservation Area that lies within Cell Group D' and the SJWA because it is already conserved with the exception of 4.0 acres within Criteria Cell 1364 adjacent to Theodore Road and Alessandro Boulevard. Based on the DBESP included in this document (Appendix F), this area is currently proposed as a detention basin, which would be consistent with the MSHCP. Additionally, any development that would occur adjacent to the SJWA property will incorporate urban edge design features outlined in the Specific Plan to minimize any potential impacts to the SJWA.

SECTION 6: IMPACT ASSESSMENT

Since the WLCSP is a program level EIR document, project-specific impacts are not available at this time. The following impact section provides a general description of project impacts. Project-related impacts will only occur within the WLCSP and selected offsite facilities. The CDFW Conservation Buffer Area and Indirect Impact Zone that form the southern margins of the survey area buffer beyond the margins of the WLCSP were included to address potential indirect impacts considered under the MSHCP and in a CEQA analysis. The WLCSP; Offsite Facilities; and the CDFW Conservation Buffer Area are considered under a City of Moreno Valley General Plan Amendment. The 6,063-acre WLCSP survey area evaluated in the Draft EIR consists of three separate areas/land uses totaling 3,713 acres (Exhibit 16):

1. The WLCSP on approximately 2,610 acres with 40.6 million square feet of logistics-related warehousing (2,383 acres of LD-logistics development, 37 acres of LL-light logistics, 74.3 acres of Open Space, and 116 acres of street right-of-way);
2. The existing 1,083-acre CDFW property and portions of the SDG&E land to be designated as permanent open space in the City General Plan; and
3. The existing 19-acre Moreno Compressor Plant and 1-acre natural gas facility to be designated as Public Facility in the City's General Plan.

The remaining 2,350 acres consists of offsite improvements (104 acres), indirect impact zone (610 acres), or other portions of the WLCSP that were evaluated but are no longer part of the WLCSP project (1,636 acres). Neither the CDFW Conservation Buffer Area nor the Moreno Compressor Plant would have any proposed development under the proposed project and no biological impacts would directly occur. These changes in land use under the General Plan Amendment are consistent with the MSHCP and no further analysis is needed.

Direct and indirect project-related impacts associated with the WLCSP however require a complete MSHCP Consistency Analysis as well an assessment of impacts under the CEQA process. The following impacts are associated with the proposed WLCSP.

The acreage numbers in the JPR document have been reduced compared to the initial acreage included within the project description of the Draft EIR because the project boundary was changed. A portion of the southwestern corner of the WLCSP was modified with a new project boundary.

6.1 - Western Riverside County MSHCP Consistency

6.1.1 - Burrowing Owl

FCS-MBA biologists conducted burrowing owl focused surveys in 2005, 2006, 2007, 2010, 2012, and 2013 (Appendix D, Burrowing Owl Focused Surveys). The surveys were conducted according to the protocol established for western Riverside County, CDFW, and the Burrowing Owl Consortium, which requires a focused burrow survey and four presence/absence surveys between March 1 and August

31. A pair of burrowing owl was noted in the 2005 focused surveys within Drainage Area 4. No burrowing owl or sign of burrowing owl were observed in the WLCSP during the subsequent focused surveys in 2006, 2007, 2010, and 2012. Another pair of burrowing owls was recently observed within the project site during the 2013 protocol survey.

In addition, burrowing owl were observed in 2008 (Fiero pers. comm.) as well as during an MBA site visit in March 2012 associated with the jurisdictional delineation (Crawford pers. comm.). Therefore, portions of the WLCSP are considered occupied, but this species is not considered a permanent resident within the survey area. The burrowing owl onsite have only been observed along drainage margins and/or roadside berms. Burrowing owl and burrowing owl burrows have typically not been found in any large amount within the large open agricultural fields throughout the WLCSP, but when observed, have been restricted to margins of the agricultural fields.

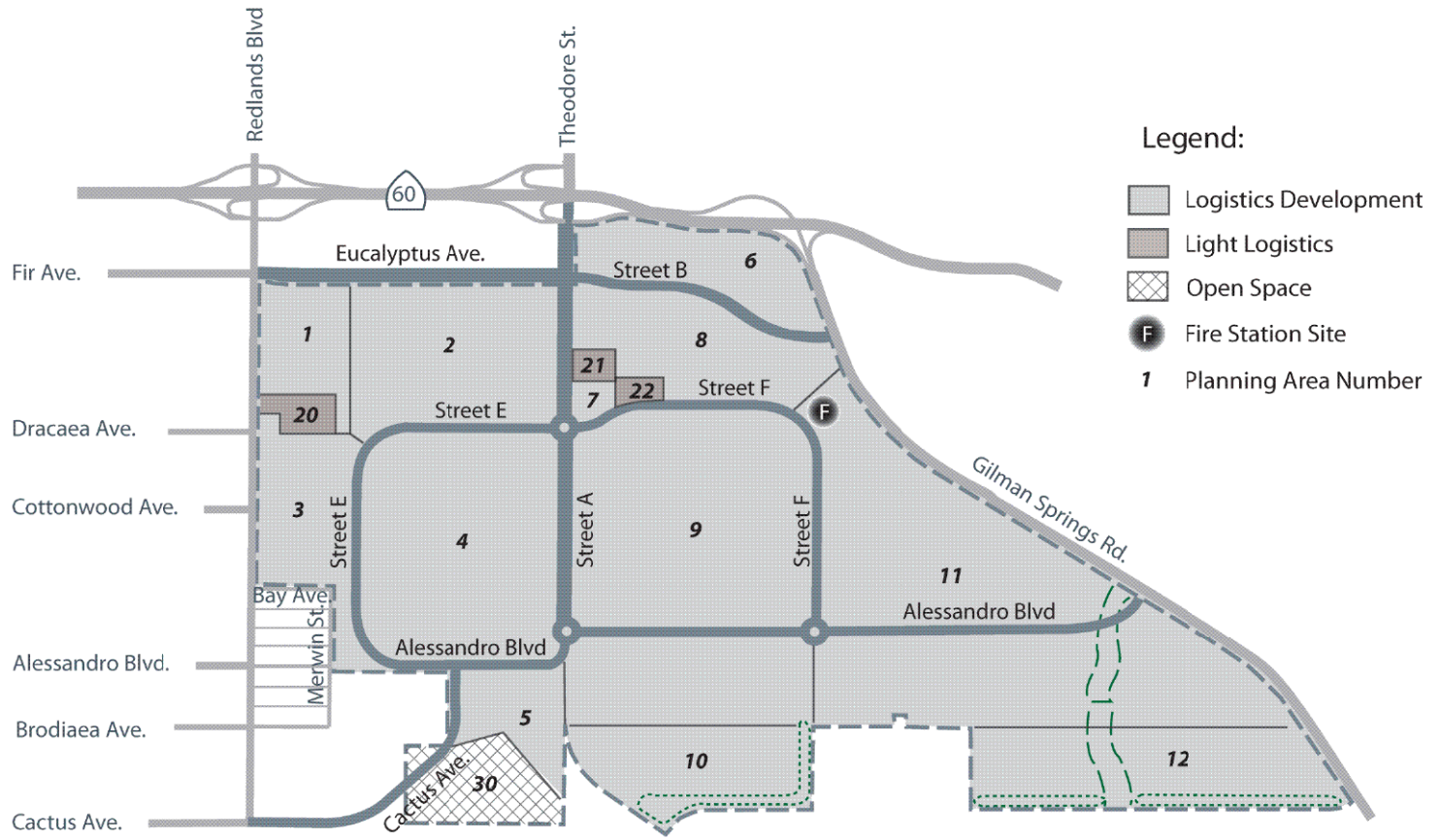
Since there have been no observations of burrowing owl within any of the Cell Criteria Areas and no more than one pair of burrowing owls observed during any single year within the rest of the WLCSP area, a DBESP for impacts to burrowing owl will not be required as part of this Specific Plan. If a pair of burrowing owls are observed within a project site prior to construction, active or passive relocation will be required to avoid construction related impacts. Active and/or passive relocation will follow the most currently acceptable protocols as approved by the City of Moreno Valley (see Appendix K: Burrowing Owl Relocation Plan).

All burrowing owl observations within the project site are associated with artificially created berms. The recorded sightings have been within a bank of an existing drainage feature, a berm within the recently constructed detention basin associated with the Skechers Building (Drainage 3), and a roadside berm just south of Alessandro Boulevard.

The proposed detention basins will be constructed with similar manufactured berms. Based on historic observations of burrowing owl within the project site, it is reasonable to assume that construction of similar berms will continue to provide optimum burrow habitat for resident burrowing owls.

In addition, since there have been no recorded occurrences of burrowing owl in the northern portion of the SJWA there is no concern for competition with other burrowing owls. It is reasonable to assume that the created detention basins will provide more than a sufficient amount of foraging habitat to support a single pair of burrowing owl. Since the southern 250 -feet of the WLCSP will not contain any building development and construction activities will be restricted to detention basins and associated access roads, it would be more appropriate to include the buffer area in a deed restriction rather than a conservation easement.

A project-specific MSHCP analysis for future projects covered under the WLCSP may require updated burrowing owl surveys at the discretion of the City of Moreno Valley, in consultation with the RCA and CDFW, and should be conducted in the same year approvals for plot plans, grading permits and tentative tract maps are sought.



Planning Area	Land Use	Area	Building SF
Logistics Development			
1	LD	77.8	1,100,000
2	LD	193.5	4,200,000
3	LD	120.3	1,600,000
4	LD	301.5	5,600,000
5	LD	64.2	1,100,000
6	LD	115.3	500,000
7	LD	10.3	50,000
8	LD	142.9	2,150,000
9	LD	485.8	10,400,000
10	LD	139.9	2,200,000
11	LD	500.0	8,000,000
12	LD	231.3	3,500,000
		2,382.8	**40,400,000**

Planning Area	Land Use	Area	Building SF
Light Logistics			
20	LL	16.1	45,500
21	LL	10.5	77,250
22	LL	10.5	77,250
		37.1	**200,000**
Open Space			
30	OS	74.3	
		74.3	
Right of Way			
ROW		115.8	
		115.8	
Grand Total		**2,610.0**	**40,600,000**

June 18, 2014

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Exhibit 16
Land Use Plan

In some instances, a 30-day pre-construction survey may be sufficient to determine presence/ absence, especially if the specific project site contains low quality habitat.

In the event that more than three pairs of burrowing owl are observed within a specific proposed project site during either focused surveys or pre-construction surveys, 90 percent of the suitable habitat within that specific project site will require conservation and avoidance until the conservation goals for Burrowing Owl under the MSHCP have been met. If 90 percent cannot be avoided, then a DBESP will be required for impacts to burrowing owl. The DBESP will require appropriate avoidance, minimization, and mitigation measures necessary to reduce impacts to burrowing owl and provide a biological equivalent or superior preservation for the long-term conservation of the species. The avoidance, minimization, and mitigation measures will be consistent with MSHCP requirements and will be prepared based on the 2012 CDFW staff report in consultation with CDFW (see Appendix K).

If offsite purchase of mitigation land is required, mitigation credits from a CDFW approved mitigation bank, such as the San Jacinto Basin Regional Conservation District, or similar conservation agency, will be purchased.

In addition, conducting a 30-day pre-construction clearance survey prior to any ground disturbance activity for each specific proposed project site will be required to avoid any direct impact to this species. Presence/absence surveys methods will follow the current MSHCP standards. All active/passive relocation efforts, if necessary, will be coordinated in consultation with CDFW and will generally follow the 2012 CDFW staff report. This may include onsite conservation or offsite purchase of additional land in order to conserve burrowing owl under the MSHCP. Mitigation requirements will be negotiated with City of Moreno Valley, in consultation with RCA and CDFW at the time of future project development. At no time will the CDFW Conservation Buffer Area be considered as any form of mitigation for any project with the WLCSP.

In addition, for those areas within the WLCSP that continue to provide suitable habitat for burrowing owl, regardless of whether the habitat is occupied, will require pre-construction surveys within 30 days of ground-disturbing activity associated with any of the proposed projects associated with the Specific Plan. Based on previous observations within the WLCSP, no more than one pair of burrowing owl has been observed during a single nesting season.

The General Plan Amendment land use changes for the CDFW Conservation Buffer Area and the Moreno Compressor Plant are consistent with the long-term conservation goals of the MSHCP and no additional lands need to be conserved for impacts to burrowing owl.

6.1.2 - Mammalian Species

Los Angeles Pocket Mouse

MBA biologists conducted focused surveys for Los Angeles pocket mouse in 2005, 2010, 2012, and 2013 (Appendix C, Los Angeles Pocket Mouse Focused Surveys). The surveys were conducted according to the established USFWS protocols for Pacific pocket mouse (*Perognathus longimembris longimembris*), a similar sub-species. The current focused protocol requires trapping for five

consecutive nights: conducted when the animal is active aboveground at night, during a new moon phase, if possible. No Los Angeles pocket mouse was observed in the WLCSP survey area during any of the focused surveys. Therefore, the entire WLCSP is considered unoccupied, and no further surveys are needed for development of the WLCSP and the associated land use changes to be consistent with the long-term conservation goals of the MSHCP and no additional lands need to be conserved.

6.1.3 - Narrow Endemic Plant Species

The WLCSP is not within any areas that require focused surveys for Narrow Endemic Plant Species. Based on WLCSP conditions of soil, hydrology, and vegetation communities, no Narrow Endemic plant species are anticipated to occur on the WLCSP and no additional action is required to be consistent with the long-term goals of the MSHCP (MBA 2010). Due to a lack of suitable habitat, no additional surveys are required and no additional lands need to be conserved. In the event that suitable habitat occurs within the WLCSP over time, either through natural or artificial conditions, an updated habitat assessment may be required on a project-by-project basis to determine if future focused plant surveys are required. This assessment can be completed as part of the project-specific MSHCP habitat assessment that will be required for each project covered under the Specific Plan.

6.1.4 - Criteria Area Plant Species

The WLCSP is not within any areas that require focused surveys for Cell Criteria Plant Species. Based on WLCSP conditions of soil, hydrology, and vegetation communities, no Criteria Area plant species are anticipated to occur on the WLCSP and no additional action is required to be consistent with the long-term goals of the MSHCP (MBA 2010). Due to a lack of suitable habitat, no additional surveys are required. In the event that suitable habitat occurs within the WLCSP over time, either through natural or artificial conditions, an updated habitat assessment may be required on a project-by-project basis to determine if future focused plant surveys are required. This assessment can be completed as part of the project-specific MSHCP habitat assessment that will be required for each project covered under the Specific Plan.

6.1.5 - Riparian/Riverine Areas and Vernal Pools

Drainage features 1, 2, 4, 5, 6, 7, 8, 9, 10, 11, 12 and 15 contain riparian habitat and/or riverine characteristics and are hence considered riparian/riverine areas, as designated by the MSHCP. Since drainage features 10 and 11 are outside of the WLCSP development footprint, they will not be impacted and will not require any further discussion. Since the remaining nine drainage features will be permanently impacted, a program-level DBESP was prepared as part of the MSHCP Consistency Analysis under separate cover (Appendix F). The DBESP includes a suite of appropriate mitigation options to ensure a no net loss of habitat. Mitigation may include onsite stream restoration or habitat creation incorporated into the detention basin areas, offsite habitat creation, or the purchase of mitigation credits at an approved mitigation bank. Project-specific mitigation ratios will be developed on a project-by-project basis, but will be no less that a 1:1 ratio.

The conceptual drainage plan for the WLCSP development consists of a series of collection basins throughout the development that will treat the first flush storm events and convey storm flows to a

series of detention basins along the southern boundary of the WLCSP. The basins will be designed to provide water quality as well an area for creation of riparian habitat. Based on the size of the proposed detention basins, only the inlet and outlet structures will require routine maintenance. This allows the majority of the detention basins to remain undisturbed, which allows for long-term conservation of the riparian habitat (see Exhibit 17).

If impacts to these features cannot be avoided at the time of project-specific development, further analysis and a project-level DBESP will be prepared, and, if necessary, appropriate mitigation will be required.

The WLCSP does not contain habitat suitable for covered riparian species, such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. Therefore, no DBESP will be required for riparian species and no additional lands need to be conserved

No vernal pools or ephemeral ponds were observed on the WLCSP and no suitable habitat for any fairy shrimp species was identified onsite. No additional mitigation regarding vernal pools or vernal pool species is recommended to be consistent with the long-term goals of the MSHCP.

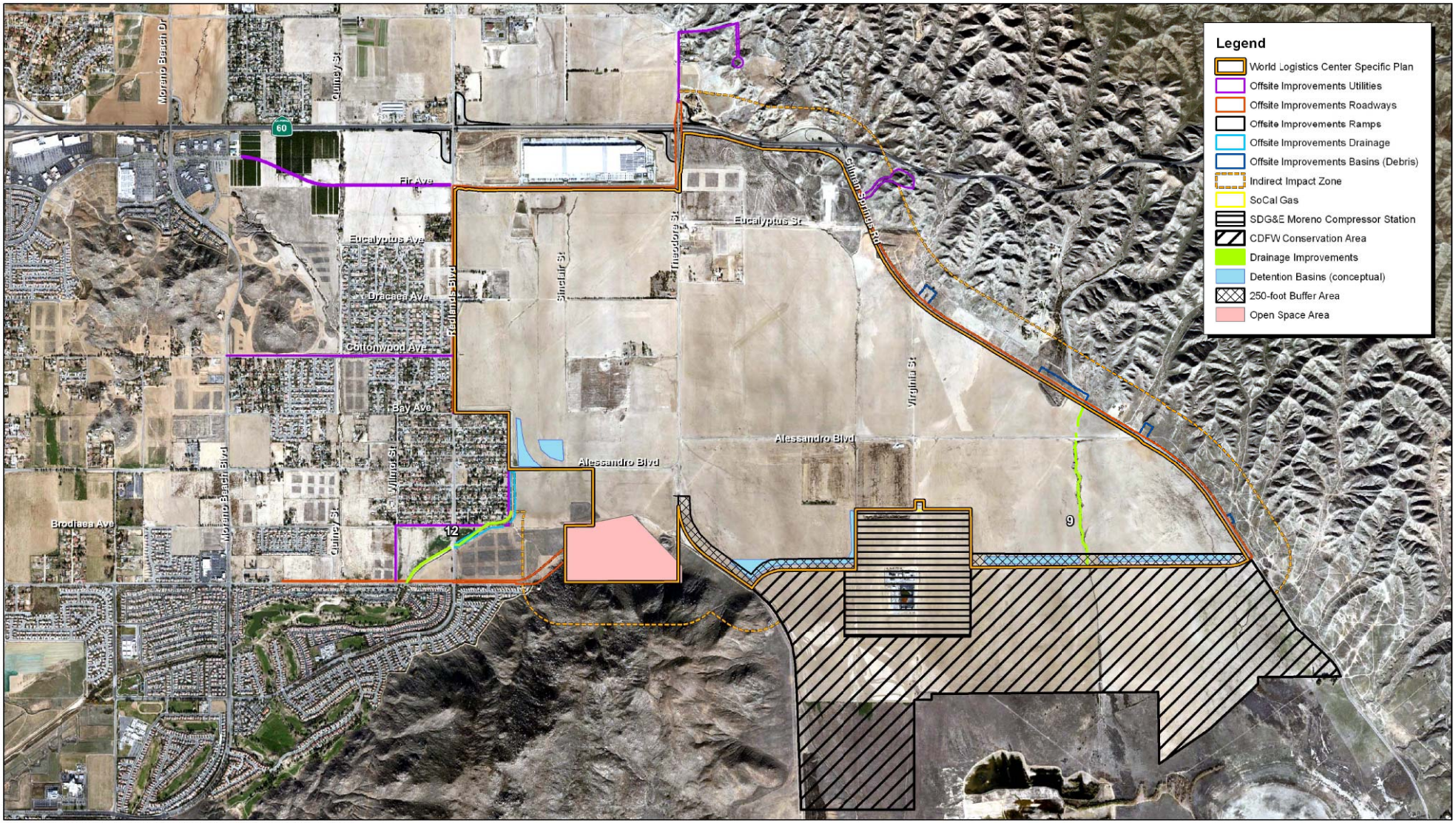
6.1.6 - Urban/Wildlands Interface Guidelines

The CDFW Conservation Buffer area, the SJWA, and the Indirect Impact Zone are outside the boundaries of the WLCSP and will not be directly impacted. These lands are located on the southern and eastern portion of the WLCSP and are generally undeveloped, minimally disturbed property that provides habitat for various resident and migratory wildlife species. The CDFW Conservation Buffer is currently subject to agricultural uses and is regularly disturbed by disking and related activities, but is not proposed for development. The Indirect Impact Zone east of Gilman Springs Road is a combination of non-native grasslands and highly disturbed areas due to off-road vehicles and resultant erosion. The Indirect Impact Zone in the southwest corner of the WLCSP also contains non-native grasslands, but also contains moderate quality Riversidean sage scrub.

Due to disturbed nature of the surrounding undeveloped land, the potential for significant impacts related to the Urban/Wildlands Interface is greatly reduced. To further minimize indirect impacts to the adjacent Core H and Proposed Core 3, recommendations pertaining to urban/wildlands interface described above in Section 4.2.6, Urban/Wildlands Interface Analysis, should be implemented. With these guidelines implemented, no significant impacts are likely to occur to the adjacent wildlands or the CDFW Conservation Area. A detailed description of recommendations pertaining to an urban/ wildlands interface is described below:

Drainage Features

Development of the WLCSP and offsite facilities shall incorporate a comprehensive system of underground storm drains to handle storm runoff from the proposed project. Flows exiting the WLSCP shall mimic existing conditions.



Source: Google Earth Pro, 2012. FCS-MBA Field Survey and GIS Data, 2014.

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2,500 1,250 0 2,500 Feet

Exhibit 17
Detention Basins and Enhancement Areas

There are six watershed areas and associated drainage courses that deliver flows across the WLCSP. The existing capacity of the drainages at the project boundary was determined. Flows in excess of this capacity currently flow overland and sheetflow across the WLCSP project boundary in the current condition. Detention basins and spreading area facilities shall be designed to reduce the proposed condition flows to pre-project conditions at the WLCSP project boundary. The detention basins are proposed near the WLCSP project boundary as discussed in the DBESP. They are designed to capture project runoff and the discharge pipe shall be sized so the rate of release will not exceed pre-project conditions. Since the discharge pipe creates a concentrated point of release, there shall be a spreading area or flow-dissipating device at the outlet to mimic existing conditions.

The design, operation, and maintenance of a drainage feature system for the proposed project shall be adequate to mitigate the potential discharge of water into any MSHCP Conservation Area and will keep existing flows traveling offsite.

The project applicant shall obtain a statewide general National Pollutant Discharge Elimination System (NPDES) construction permit for all construction activities associated with the proposed project. Additionally, all development within the WLCSP and offsite facilities shall be subject to future requirements adopted by the City of Moreno Valley to implement the NPDES program.

Toxics

Development plans for the WLCSP and offsite facilities shall be designed to include Water Quality Best Management Practices (BMPs) such as vegetated earthen channels, storm drain stenciling, street sweeping, and education. Detention basins shall be designed to filter potential toxics in the storm water. These BMPs shall be implemented as part of the storm water pollution prevention measures for the project, in accordance with all appropriate NPDES requirements.

Development of the WLCSP and offsite facilities would most likely result in the additional use of hazardous materials in limited quantities associated with normal logistics use such as janitorial and cleaning products, solvents, herbicides, and insecticides. However, compliance with regulations, standards, and guidelines established by the Environmental Protection Agency (EPA), State, county, and local agencies relating to the storage, use, and disposal of hazardous waste shall reduce the potential risk of hazardous materials exposure to a level that is less than significant.

A Health Risk Assessment (HRA) (MBA 2013) was completed for the project to analyze human health risks associated with airborne hazards. A HRA is a guide that helps to determine if current or future exposure to a chemical or substance could affect the health of a human population.

Comparable data on these types of air quality exposures in wildlife is difficult to obtain, although there are a number of studies from Europe that infer that air quality emissions can cause both genetic changes and nutritional stress in birds and mice (Dudley and Stolton 1995; Gordon et al. 2012; Constantini 2006; Soloman et al. 1998). The results of these studies are not comparable to the exposures at the WLCSP and no scientifically proven statements can be made on the effects to wildlife. Therefore, because the impacts are speculative, no mitigation measures can be specified.

Because of the nature of a logistics center, additional diesel trucks within the project sites will increase the risk of diesel/fuel spills. Development within the proposed project site will increase the impervious surface due to the construction of the projects' buildings, roadways, and associated improvements. The improvements will have the potential to increase stormwater runoff. Underground drainage systems and detention and infiltration basins are proposed to convey the stormwater runoff and mitigate the increased pollution potential and nuisance flows due to the proposed land development. Ultimately, for the proposed condition, the peak flows, volumes, and velocities at downstream discharge points where the flows exit the southerly project boundary will mimic the existing condition.

Prior to issuance of future discretionary permits for any development along the southern boundary of the WLCSP, the project developer of such sites, in cooperation with the Master Property Owners Association (MPOA), shall establish and annually fund a Water Quality Monitoring Plan to confirm that project runoff will not have adverse effects on the adjacent SJWA. This program shall include at least quarterly sampling during the entire WLCSP buildout along the southern boundary of the site (i.e., at the identified outlet structures of the project detention basins) during wet season flows and/or when water is present, as well as sampling of any dry-season flows that are observed entering the SJWA property from the project property. The program shall also include at least twice-yearly sampling after completion of construction, and a pre-construction survey must be completed to determine general water quality baseline conditions prior to and during development of the southern portion of the WLCSP. This sampling shall be consistent with and/or comply with the requirements of applicable Storm Water Pollution Prevention Plans (SWPPPs) for the development site.

The project developer of sites along the southern border of the WLCSP shall be responsible for preventing or eliminating any toxic pollutants (not including sediment) found to exceed applicable established public health standards. In addition, the discharge from the project shall not cause or contribute to an exceedance of Receiving Water Quality Objectives for the potential pollutants associated with the project. Once development is complete, the developer shall retain qualified personnel to conduct regular (i.e., at least twice yearly) water sampling/testing of any basins and their outfalls to ensure the SJWA will not be affected by water pollution from the project site. The City Planning and/or Land Development Division shall file an annual water quality report with the Moreno Valley City Council, State Department of Recreation (Mystic Lake Manager), and Eastern Municipal Water District. This measure shall be implemented to the satisfaction of the City Planning and/or Land Development Division based on consultation with the project developer, Eastern Municipal Water District, the Regional Water Quality Control Board-Santa Ana Region, and the Mystic Lake Manager.

Lighting

The lighting standards for the WLCSP are in compliance with the City of Moreno Valley Municipal Code and in compliance with Ordinance 851, state that in general lighting must be low-intensity light fixtures fitted with hooded shields. Ordinance 851 was implemented by the City in 2012 to establish regulations and standards for outdoor lighting, which will reduce light pollution and trespass

generated by residential and non-residential lighting fixtures and devices, while maintaining dark skies.

Lighting shall be the minimum intensity needed for a particular purpose (e.g., security), and directed toward the intended use. Outdoor lighting proposed for buildings adjacent to open space areas such as the CDFW Conservation Buffer Area and areas adjacent to the LPSRA and the Gilman Springs Road adjacent areas shall be designed so that all direct beams are confined to building sites or streets in the case of streetlights.

Because of the size of the WLC project and its proximity to the SJWA, additional mitigation considerations are necessary. The potentially significant impacts associated with project lighting will require additional project-level analysis to demonstrate that the lighting designs selected for each project will be sufficient to minimize light pollution into the SJWA. In addition, it should be noted that future projects will be built out over a long period of time and project lighting technology may be different that current design standards, therefore, it is not appropriate to require project-level lighting designs at this time. All project-level lighting designs will minimize light pollution into the SJWA as well as all adjacent residential developments.

- Lighting associated with planned development of the eastern and southern portions of the project area could have various direct and indirect impacts on local wildlife, depending on the species and the nature of light exposure. There is a host of scientific and academic research on the effects of night lighting on various species, but the subject species and lighting conditions vary widely, and such research data cannot be applied directly to the relationship of the WLCSP and the SJWA.
- Available research suggests that night lighting can have a wide range of effects on wildlife, including mammals, birds, bats, amphibians, insects, fish, even plants. Effects range from reduced health by upsetting diurnal rhythms, reduced clutch size, egg size, or survival success of nesting birds, to actual mortality from increased predation under higher ambient light levels. Bats and certain insects are also attracted to outdoor night lighting, which may adversely affect their survival or cause them to become dependent on the lighting. Small mammals would also be attracted to these areas, and might suffer increased predation or road kill crossing streets.
- The WLCSP project shall adequately shield its lighting and all direct rays shall be confined to the building sites, especially along the south sides of the southern-most buildings to be built within the WLCSP. The WLCSP does not specify building lighting in this sensitive area, because no building locations or building designs are planned yet. However, the WLCSP does specify that lighting in this area will be less than 0.25-foot candle of spillover at five feet from any property line.
- The lighting guidelines of the WLCSP state that in general lighting must be low-intensity light fixtures fitted with shields. It shall be the minimum intensity needed for a particular purpose (e.g., security), and directed toward the intended use. Outdoor lighting proposed for buildings adjacent to open space areas shall be designed so that all direct beams are be confined to

building sites. The level of onsite lighting and lighting fixtures must comply with the applicable requirements and policies of City of Moreno Valley Municipal Code and the newly adopted Ordinance 851, which states, "direct project lighting must not intrude into the open space conservation areas."

- Night lighting shall also be minimized or precluded during construction if possible to prevent additional lighting impacts to wildlife.
- Streetlights, parking lot lighting, and other project-related illumination sources shall be positioned, directed, and shielded to avoid "light spill" into MSHCP conservation areas including those contained within Existing Core H to the south of the project area, and Proposed Core 3 (Section 6.1.1, Proposed Core 3) to the east of the project area. Lighting installed according to these guidelines will be consistent with MSHCP guidelines.

In addition to night lighting issues associated with construction and operation, the proposed facilities are to include photovoltaic panels to provide electricity for the facilities and aid in the sustainability of the project and reduce additional GHG emissions.

The photovoltaic panels will likely be located on the top of the proposed buildings. Since the WLCSP is a program-level document, the specific location and design of the photovoltaic panels will be completed when the project-level documents are prepared and environmental analysis will be done for each project at that time. Until such project-level documents are prepared, it is impossible to accurately predict whether solar panels will be on every building, where on any particular building such panels may be located or what the solar technology will be as the project builds out over a 15-year period.

There is a potential for glare from solar panels to confuse migratory birds into attempting to land in the area of the panels, although this is generally associated with mirrored panels associated with Concentrated Solar Projects. Low glare and high solar transmission films to increase solar capacity and prevent unnecessary glare shall be used for a solar panels at the site(s).

Noise

Development within the WLCSP and offsite facilities shall incorporate landscape elements including trees, shrubs, and groundcover, which will assist in noise reduction onsite. A noise analysis has been prepared for the project to quantify potential short and long-term noise impacts that could occur as a result of development of the parcel adjacent to open space areas. Based on recent studies (Landrum and Brown 2012) noise contours would exceed 60 A-weighted decibels (dBA) [L_{eq}]) roughly 1,000 feet into the CDFW Conservation Buffer Area during construction of the southernmost areas of Phase 2. There is no projected change in noise contours associated with the operation of the facility over those of the no project condition. Therefore, any noise-related impacts would be temporary in nature and generally limited to construction of Phase 2 facilities along the southern boundary of the WLCSP.

Invasive Species

The project shall incorporate special edge treatments designed to separate development areas from open space areas. Landscape buffers shall be incorporated into the project design to prevent the intrusion of non-native plant species into natural areas. These features will include landscaped medians and planters associate with the proposed development portion of the projects. They will be located around the proposed building footprints and along parking and driveway areas. These features will be in addition to the 250-foot buffer area along the southern boundary of the WLCSP. These landscape features may be artificially irrigated and will be maintained for aesthetic purposes. None of the plant species listed in Section 6.1.4 of the MSHCP shall be used for landscaping for any proposed project element. All landscape plans shall be reviewed by a qualified biologist in consultation with CDFW, RCA, and the City of Moreno Valley to ensure invasive weedy species and other harmful non-native plant species are avoided in the landscape plan for each project-specific development.

Table 8: Invasive Plant Species

Botanical Name	Common Name
Acacia spp. *(all species)*	acacia
Achillea millefolium var. *millefolium*	common yarrow
Ailanthus altissima	tree of heaven
Aptenia cordifolia	red apple
Arctotheca calendula	cape weed
Arctotis spp. *(all species & hybrids)*	African daisy
Arundo donax	giant reed or arundo grass
Asphodelus fistulosus	asphodel
Atriplex glauca	white saltbush
Atriplex semibaccata	Australian saltbush
Carex spp. *(all species*)*	sedge
Carpobrotus chilensis	ice plant
Carpobrotus edulis	sea fig
Centranthus ruber	red valerian
Chrysanthemum coronarium	annual chrysanthemum
Cistus ladanifer (incl. hybrids/varieties)	gum rockrose
Cortaderia jubata (syn. C. Atacamensis)	jubata grass, pampas grass
Cortaderia dioica (syn. C. sellowana)	pampas grass
Cotoneaster spp. *(all species)*	Cotoneaster
Cynodon dactylon (incl. hybrids varieties)	Bermuda grass

Table 8 (cont.): Invasive Plant Species

Botanical Name	Common Name
Cyperus spp. *(all species*)*	nutsedge, umbrella plant
Eucalyptus spp. *(all species)*	eucalyptus or gum tree
Eupatorium coelestinum (syn. Ageratina sp.)	mist flower
Festuca arundinacea	tall fescue
Festuca rubra creeping	creeping red fescue
Foeniculum vulgare	sweet fennel
Fraxinus uhdei (and cultivars)	evergreen ash, shamel ash
Gaura spp. *(all species)*	gaura
Gazania spp. *(all species and hybrids)*	gazania
Genista spp. *(all species)*	broom
Hedera canariensis	Algerian ivy
Hedera helix	English ivy
Hypericum spp. *(all species)*	St. John's wort
Ipomoea acuminata	Mexican morning glory
Lampranthus spectabilis	trailing ice plant
Lantana camara	common garden lantana
Lantana montevidensis (syn. L. sellowiana)	lantana
Limonium perezii	sea lavender
Linaria bipartita	toadflax
Lolium multiflorum	Italian ryegrass
Lolium perenne	perennial ryegrass
Lonicera japonica (incl. 'Halliana')	Japanese honeysuckle
Lotus corniculatus	birdsfoot trefoil
Lupinus arboreus	yellow bush lupine
Lupinus texanus	Texas blue bonnets
Malephora crocea	ice plant
Malephora luteola	ice plant
Mesembryanthemum nodiflorum	little ice plant
Myoporum laetum	myoporum
Myoporum pacificum	shiny myoporum
Myoporum parvifolium (incl. 'Prostratum')	ground cover myoporum
Cytisus spp. *(all species)*	Broom

Table 8 (cont.): Invasive Plant Species

Botanical Name	Common Name
Delosperma 'Alba'	white trailing ice plant
Dimorphotheca spp. *(all species)*	African daisy, Cape marigold
Drosanthemum floribundum rosea	rosea ice plant
Drosanthemum hispidum	purple ice plant
Eichhornia crassipes	water hyacinth
Elaegnus angustifolia	Russian olive
Oenothera berlandieri	Mexican evening primrose
Olea europaea	European olive tree
Opuntia ficus-indica	Indian fig
Osteospermum spp. *(all species)*	trailing African daisy, African daisy
Oxalis pes-caprae	Bermuda buttercup
Parkinsonia aculeata	Mexican palo verde
Pennisetum clandestinum	Kikuyu grass
Pennisetum setaceum	fountain grass
Phoenix canariensis	Canary Island date palm
Phoenix dactylifera	date palm
Plumbago auriculata	cape plumbago
Polygonum spp. *(all species)*	knotweed
Populus nigra 'italica'	Lombardy poplar
Prosopis spp. *(all species*)*	mesquite
Ricinus communis	castorbean
Robinia pseudoacacia	black locust
Rubus procerus	Himalayan blackberry
Sapium sebiferum	Chinese tallow tree
Saponaria officinalis	bouncing bet, soapwort
Schinus molle Peruvian	Peruvian pepper tree, California pepper
Schinus terebinthifolius	Brazilian pepper tree
Spartium junceum	Spanish broom
Tamarix spp. *(all species)*	tamarisk, salt cedar
Trifolium tragiferum	strawberry clover
Tropaelolum majus	garden nasturtium
Ulex europaeus	prickly broom

Table 8 (cont.): Invasive Plant Species

Botanical Name	Common Name
Vinca major	periwinkle
Yucca gloriosa	Spanish dagger
Note: An asterisk (*) indicates some native species of the genera exist that may be appropriate.	

Barriers

The project shall incorporate special edge treatments designed to separate development areas from open space areas. These areas will serve to minimize unauthorized access, domestic animal predation, and illegal trespass and dumping. MSHCP guidelines recommend a setback or a buffer between urban and wildland areas. No specific research has been done on the WLCSP-SJWA interface, but scientific and academic research can provide guidance on the appropriate width of such a buffer under these types of conditions. Typical setbacks to protect wildlife from human presence (though not warehousing) ranges from 50 to 500 feet, but 200 to 215 feet appears adequate for the most sensitive or valuable wetlands. The City of Moreno Valley has setback guidelines in its General Plan of 250 feet. The MSHCP and adopted guidelines of the USFWS and CDFW include a setback of 300 to 500 from nesting birds during construction activities. For example, typical burrowing owl mitigation says, "To adequately avoid active nests, no grading or heavy equipment activity shall take place within at least 250 feet of an active nest during the breeding season (February 1 through August 31) and 160 feet during the non-breeding season."

According to available research, a 250-foot "clear" setback (i.e., no human activity or improvements) appears to be adequate for a WLCSP-SJWA buffer (McElfish 2008). The protection buffer shall be enhanced by additional setback of buildings, and by the presence of the CDFW Conservation Buffer Area, which was originally purchased to provide a buffer between the SJWA and development in Moreno Valley. A minimum 250-foot setback is supported by a compilation of available academic and scientific literature and studies on wildlife impacts from diesel emissions, and also the distance established in nesting bird surveys for setbacks from human activity.

The proposed buffer area within the WLCSP includes a 250-foot development buffer, which will include the proposed detention basins, native vegetation buffer, associated maintenance access roads, and other relevant facilities. The maintenance roads will be designed to prohibit public access and will only be used for property maintenance and emergency purposes. There will also be a 150-foot building setback from the northern edge of the 250-foot development buffer. This total setback of 400 feet to WLCSP buildings will help provide an additional buffer from building lighting and noise.

A total setback of 400 feet within the WLCSP for any permanent buildings shall be enforced on the southern and eastern boundary of the WLCSP. This setback shall provide an additional buffer to address building lighting, noise, and air quality concerns. The 400-foot distance to buildings from

the boundaries of the Specific Plan will effectively mitigate potential direct and indirect impacts on the SJWA and Criteria Cells to indirect noise, light and air quality impacts associated with both the construction and operation of the facilities.

Access

The proposed project shall be designed to prohibit public access into all MSHCP conservation areas including those contained within the SJWA and Existing Core H to the south of the WLCSP and offsite facilities, and Proposed Core 3 to the east of the WLCSP and offsite facilities.

Grading/Land Development

The project shall be designed such that all earth-moving shall be restricted to the development area of the WLCSP. No grading shall be permitted in the open space areas except for Cactus Avenue, trails or trail staging areas when they are designed and approved.

The open space areas include the 250-foot buffer area along the southern portion of the WLCSP as well as the 74.3-acre area (Planning Area 30 in the WLCSP). The Applicant may offer the land for dedication to the State or RCA.

The open space area described as having designated trails or a trail-staging area is the same as Planning Area 30. This statement was included in the event that the City or County plans to include that open space in a regional trail system. Because of comments received on the EIR, the proposed trail system was relocated outside of the open space area.

Fuels Management

Fuels management focuses on hazard reduction for humans and their property (MSHCP, p. 6-72). According to the Fuels Management Guidelines, for new development planned adjacent to all MSHCP conservation areas or other undeveloped areas, brush management shall be incorporated in the development boundaries and shall not encroach into the MSHCP conservation areas (MSHCP, p. 6-72). Any areas planted with fire-resistant, non-invasive plants shall not encroach into the MSHCP conservation area. Accordingly, with implementation of these measures, the project will be consistent with the MSHCP Fuels Management Guidelines.

6.2 - Stephens' Kangaroo Rat

Although the project site has some marginal quality habitat for Stephens' kangaroo rat, impacts to Stephens' kangaroo rat are mitigated through an existing HCP under an existing incidental take permit. Adherence to the Stephens' kangaroo rat Habitat Conservation Plan Implementing Agreement will fully mitigate any potentially significant project-related impacts regardless of presence of suitable or occupied habitat. The Implementing Agreement requires payment of the County's per-acre mitigation fee based on the size of an individual project. Since the WLCSP is not within a core conservation area for Stephens' kangaroo rat, no further action is required.

6.3 - Nesting Birds

The WLCSP contains suitable nesting habitat for several tree-, shrub-, and ground-nesting avian species. Therefore, project-related activities could potentially impact avian species protected under the Migratory Bird Treaty Act.

FCS-MBA recommends that construction activities avoid the avian nesting season, from February to August, if possible. If construction activity must take place during the nesting season, a pre-construction nesting bird survey should be conducted prior to any ground disturbance activities. The survey can be conducted in conjunction with the pre-construction survey for burrowing owl.

If passerine birds are found to be nesting or if there is evidence of nesting behavior within 300 feet of a construction area, a 300-foot buffer will be required around the nest where no vegetation disturbance will be permitted. For raptor species such as hawks and owls, this buffer may be expanded to 500 feet at the discretion of a biological monitor in consultation with CDFW. A qualified biologist will be required to closely monitor nests until it is determined that they are no longer active, at which time construction activity in the vicinity of nests could continue. Construction activity may proceed within the buffer area at the discretion of the biological monitor.

6.4 - Raptor Foraging Habitat

The WLCSP contains low-quality foraging habitat for a number of local and migratory raptor species. The edges of the extensive agricultural areas provides habitat for a number of small mammals, such as ground squirrels and rabbits. Development of the WLCSP will eliminate low-quality foraging habitat for a number of sensitive raptor species that are covered under the MSHCP. Since golden eagle and white-tailed kite are known to occur within the immediate vicinity or on the project site, there is a potential for project-related impacts to these species, including the loss of foraging habitat.

These two species are California fully protected species and any impacts to these species is a significant impact. These two species are covered under the MSHCP and payment of the MSHCP fee may be used by the Western Riverside County Regional Conservation Authority (RCA) to purchase offsite lands that will mitigate for the loss of this foraging habitat.

The loss of such a large piece of open space habitat, even though it is of relatively low quality, may be a potentially significant impact. However, due to the low quality habitat and lack of significant prey-base, the loss of foraging habitat within the WLCSP is not considered a significant impact.

6.5 - Critical Habitat

No USFWS designated Critical Habitat for any species is located within the Survey area (Exhibit 14), therefore, no further action with regard to Critical Habitat is necessary.

6.6 - CEQA Thresholds of Significance

According to the CEQA Guidelines' Appendix G, Environmental Checklist, to determine whether impacts to biological resources are significant environmental effects, the following questions are analyzed and evaluated. Would the project:

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Section 15065(a) of the CEQA Guidelines also states that a project may have a significant effect on the environment when "the project has the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, or reduce the number or restrict the range of a rare or endangered plant or animal." Other significant impacts could include those that would conflict with local, state, or federal resource conservation plans, goals, or regulations.

6.7 - Project Impacts

Potential impacts to biological resources are discussed below, with reference to identified impact thresholds of significance.

6.7.1 - Federally Protected, California State Protected, and Special-Status Plant and Wildlife Species (Impact BIO-1)

Impact BIO-1: **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Threshold a.)**

Sensitive Plant Species

Plummer's mariposa lily is the only sensitive plant species with a moderate potential to occur within the WLCSP that is not covered under the MSHCP. This plant is a CNPS 4.2 plant and has no federal or state legal protection beyond CEQA. There are two locations within the project site that provide marginally suitable habitat for this species (the MWD land and the abandoned detention facility adjacent to Gilman Springs Road. The 2010 survey was conducted during a relatively dry rain season, and negative findings for this species may be questionable.

The potential for this species to occur within the project site cannot be completely ruled out and impacts associated with Plummer's mariposa lily is potentially significant and mitigation is provided. If the survey findings are negative, then no further mitigation will be required. Project-related impacts to a few individuals will not be considered a significant impact. However, impacts to numerous plants that may potentially reduce the population to a less than self-sustaining level is a significant and mitigation measures will be required.

All other sensitive plant and wildlife species potentially impacted by project-related construction are covered under the MSHCP and are included in Section 6.8.6 below.

Nesting Birds

The WLCSP contains suitable nesting habitat for ground-, tree-, and shrub-nesting birds. The proposed project may have a permanent direct impact to nesting bird species protected by the MBTA and CFG Code. Potential impacts include direct impacts resulting from such activities as tree-trimming and removal, and indirect impacts resulting from such construction effects as noise and dust. Project-related impacts to loggerhead shrike and horned lark are limited impacts that would occur to nesting birds during the nesting season. Potential impacts are considered significant and mitigation is provided.

Nitrogen Deposition

Nitrogen deposition is the term used to describe nitrogen-based pollutants that are deposited as a result of emissions from future project related activities. The pollutants are typically in the form of nitrogen oxide (NOx) and ammonia (NH3) derived pollutants, primarily nitric acid (HNO_3). Although there are many types of nitrogen based pollutants resulting from project related emissions, HNO_3 is typically the easiest to measure and use in determining nitrogen deposition rates. Mechanisms by which nitrogen deposition can lead to impacts on sensitive species include [1] direct toxicity, [2] changes in species composition among native plants, and [3] enhancement of invasive species (Fenn et al. 2003; Weiss 2006a). Direct toxicity refers to impacts associated with direct contact with the

nitrogen pollutants. There is no scientific documentation that links direct toxicity to impacts associated with sensitive plant and wildlife species. Therefore, direct toxicity is not considered a significant impact.

An increase in available nitrogen promotes the growth of non-native weedy species, which alone is not considered a significant impact. The increased dominance and growth of invasive annual grasses is especially prevalent in low-biomass vegetation communities that are naturally nitrogen-limited, such vegetation communities that occur in the project vicinity include coastal sage scrub and vernal pools (Weiss 2006a). An increase in nitrogen deposition does not inhibit the growth of native plants, but promotes the rapid growth of non-native invasive species that could out-compete native plants for available water and nutrients. If the increase of non-native plant species is detrimental to the growth of native plants, the result may be a conversion from a native plant community to a non-native plant community. This change in habitat is only considered a significant impact if that change occurs in suitable habitat for a federally threatened or endangered species within USFWS designated critical habitat.

In addition, vernal pools were identified by Weiss (2006a) as a California ecosystem that may be sensitive to nitrogen deposition. Nitrogen deposition in vernal pools stimulates plant growth (including non-native species in adjacent uplands) and the nitrogen is rapidly assimilated by plants and invertebrates within the pools (biomass and dissolved organic nitrogen) (Hobson and Dahlgren 1998). Due to the isolated nature of vernal pools, the nitrogen pollutants accumulate over time and provide a more concentrated level of nitrogen for non-native plants. Since vernal pools are known to provide suitable habitat for a number of federally threatened or endangered species, impacts to vernal pools caused by nitrogen deposition may be considered a significant impact. There are no vernal pools within the project site.

Although non-native plant invasions have affected the vernal pools in the region (the closest recorded occurrence of vernal pool habitat is approximately 3.5 miles to the south), these invasions generally occur in years when precipitation is sparse. In wetter years, the number of non-native plants is reduced as the non-native upland species are intolerant of inundation and the invasion cycle may be reset in some cases. This means that the established non-native plants are not adaptable to an aquatic habitat and die-off during prolonged periods of inundation. Even though the non-native plant species will have an abundance of available nitrogen and optimum growing conditions, the prolonged inundation periods prohibit non-native invasive species growth.

The WLC will consist of mobile, non-point pollution sources (diesel trucks), which will result in a highly random dispersion of emissions that will occur in a broad, regional fashion. Due to the way in which nitrogen is generated by the WLC project, its overall patterns for dispersion, and the multi-variant parameters that would need to be taken into consideration for such an analysis, there is no basis or standards set-forth to study the effects of Nitrogen Dispersion for non-point pollution sources; hence, project-specific conclusions cannot be meaningfully obtained.

Raptor Foraging Habitat

Raptor foraging habitat is protected under the California Fish and Game Code, but since the loss is mitigated under the MSHCP through the payment of fees and purchase of habitat, all impact discussion regarding Raptor Foraging Habitat is included in Section 6.8.6 below.

6.7.2 - Natural Habitats (Impact BIO-2)

Impact BIO-2:	**Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Threshold b.)**

As required by the RCA, a program-level DBESP for impacts to Riparian/Riverine habitat has been prepared and shall be approved by the RCA prior to project approval. The DBESP includes a general discussion of mitigation options for impacts to Riparian/Riverine areas as well as general location and size of the mitigation area and includes a monitoring program.

Drainage Features 1, 2, 4, 5, 6, 7, 8, 9, 12 and 15 contain either mule fat scrub or a clearly defined unvegetated channel with either surficial or potential subsurface downstream connectivity to high-quality habitat, which all are considered riparian/riverine as designated by the MSHCP. As currently designed, the WLCSP will impact all riparian/riverine areas. Therefore impacts to riparian habitat would cause a potentially significant affect and mitigation is provided.

A project-level DBESP for each specific development shall be prepared to document measures to reduce impacts to riparian/riverine habitats in accordance with the MSHCP, if applicable. The project-level DBESP shall include specific measures to reduce impacts to riparian areas and provide mitigation in the form of onsite preservation of riparian areas and/or a combination of compensation through purchase and placement of lands with riparian/riverine habitat into permanent conservation through a conservation easement and/or restoration or enhancement efforts at offsite or onsite locations. Based on the program-level DBESP, a total of 5.67 acres of riparian/riverine areas occur within the WLCSP.

6.7.3 - Jurisdictional Areas (Impact BIO-3)

Impact BIO-3:	**Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Threshold c.)**

Fifteen primary drainage features were evaluated for jurisdiction under Section 404 and 401 of the CWA as administered by USACE and RWQCB, respectively; Porter Cologne as administered by the RWQCB; and Section 1600 of the Fish and Game Code as administered by CDFW.

Only Drainage Features 12 and 15 were determined to be jurisdictional waters of the U.S. under Section 404 and 401 of the CWA, as they connect with the Perris Drain, which flows into Canyon Lake and the San Jacinto River. The remaining 13 drainage features onsite lack direct connectivity to any

downstream navigable waters of the US or relatively permanent waters and do not flow into any tributaries of the above-mentioned features. Therefore, 13 drainage features onsite are considered upland erosion features and are isolated from any downstream drainage features that are under the jurisdiction of the USACE. The eroded features onsite eventually sheet flow within the active agricultural areas or non-native grassland areas and do not have any direct connectivity to Mystic Lake or the San Jacinto River. No jurisdictional wetlands were identified. Projects affecting drainage features 12 and 15 will require regulatory permits under Section 404 and 401 of the CWA as administered by USACE and RWQCB as well as a permit under Section 1600 of the Fish and Game Code. There is approximately 0.6 acre of drainage features under the jurisdiction of the USACE.

Ten drainage features (Drainages 1,2,4,5,6, 7, 8, 9, 12, and 15) were determined to be potential waters of the state subject to CDFW and RWQCB jurisdiction under Section 1600 of the Fish and Game Code and Porter Cologne Act respectively. There are 5.67 acres of streambed and bank found within these drainage features that may be subject to CDFW jurisdiction . Projects affecting clearly defined bed and bank features, subject to CDFW and RWQCB jurisdiction, would require an SAA from CDFW and Waste Discharge Requirements from RWQCB. The 5.67 acres of waters of the State also include the 0.6 acre of waters of the U.S. mentioned above.

The applicant shall secure a jurisdictional determination from the USACE and confirm with the RWQCB and CDFW if drainage features mapped on the property are subject to jurisdictional authority and protection. Jurisdictional features will be avoided to the greatest extent practicable and unavoidable impacts will require mitigation.

The applicant shall consult with USACE, CDFW, and RWQCB to establish the need for permits based on the results of the project-specific jurisdictional delineation and final design plans for each of the proposed facilities. Consultation with the three agencies shall take place and appropriate permits obtained for project-level development. Compensation for losses associated with the altering of drainages on site shall be in agreement with the permit conditions and in coordination with compensation established in Mitigation Measures BIO-3a through Bio-3c.

Compensatory riparian habitat mitigation will be provided at a ratio no less than a 1:1 mitigation ratio to ensure a no net loss of riparian habitat or aquatic resources. Riparian habitat mitigation will be provided concurrent to or prior to impacts. A Compensatory Mitigation Plan will be prepared for all unavoidable impacts and will be consistent with the USACE/EPA's "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule and the USACE's Standard Operating Procedure for Determination of Mitigation Ratios."

Regulatory agency permits under USACE, CDFW, and/or RWQCB will be required. Mitigation for impacts to jurisdictional drainage features will be a combination of onsite habitat creation within a series of drainage improvements, offsite habitat creation, or through the purchase of mitigation credits at an approved conservation bank.

All required mitigation, performance criteria, and other measures will be included in the necessary regulatory permits on a project-by-project basis. This will satisfy mitigation required for Impact BIO-3 on a project-by-project basis as design information becomes available.

6.7.4 - Wildlife Movement, Corridors, and Nursery Sites (Impact BIO-4)

Impact BIO-4:	**Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Threshold d.)**

The proposed project will not directly impact a significant wildlife movement corridor and/or nursery site. There are three underground culverts that provide a crossing of Gilman Springs Road (Culverts 2, 5, and 6). These crossings connect the Badlands area northeast of the WLCSP to the actively disked agricultural fields located in the eastern portion of the WLCSP. Because of the extensive urban and agricultural development within and surrounding the WLCSP, these features are considered wildlife crossings and not wildlife movement corridors. The closest corridor, or Linkage Area as identified by the MSHCP, is located approximately 3 miles north from the site and approximately 3.5 miles south of the site. Although not specifically designated a wildlife corridor or Linkage Area as defined under the MSHCP, the area along Gilman Springs Road that connects Core Area H and Proposed Core Area 3 is considered a significant wildlife crossing by the RCA and begins at the southeastern corner of the CDFW conservation buffer area, which is approximately 3,000 linear feet southeast of the WLCSP development area. Additionally, the proposed project is not anticipated to impact any nursery sites because no evidence of nursery sites was observed on or directly adjacent to the WLCSP. No direct impact is anticipated.

The WLCSP area is located immediately north of the SJWA (Existing Core H) and immediately west of the Badlands (Proposed Core 3). These two conservation areas join southeast of the WLCSP area. RCA has provided comments that indicate any impacts affecting the movement of wildlife between these two Core Areas would be considered significant—not in terms of CEQA, but as part of the Consistency Analysis with the MSHCP. The proposed project will not impede or minimize any significant wildlife corridor for the target species associated within the Reche Canyon/Badlands Area plan, which include Bell's sage sparrow (*Amphispiza belli belli*), cactus wren (*Campylorhynchus brunneicapillus sandiegensis*), loggerhead shrike (*Lanius ludovicianus*), southern California rufous-crowned sparrow (*Aimophila ruficeps canescens*), bobcat (*Lynx rufus*), Los Angeles pocket mouse (*Perognathus longimembris brevinasus*), mountain lion (*Felis concolor*), San Bernardino kangaroo rat (*Dipodomys merriami parvus*), Stephens' kangaroo rat (*Dipodomys stephensi*), and Nevin's barberry (*Berberis nevinii*). There are appropriately sized box culverts along Gilman Springs Road that provided sufficient area for the largest target species (mountain lion). A 7-foot by 6-foot reinforced box culvert occurs within the WLCSP (Culvert #6) and a 12-foot by 12-foot reinforced box culvert occurs within the area between Core Area H and Proposed Core Area 3 (Culvert #19).

Currently, there is no significant direct impact associated with any wildlife movement that connects the Badlands to the SJWA through the WLCSP. However, as a project design feature, Drainage 9 will be designed as an improved drainage feature, which will provide a travel path for local wildlife

species. Depending on the extent of improvements to Gilman Spring Road, this travel path could connect portions of the Badlands northeast of Gilman Springs Road, to the SJWA south of the survey area. Drainage feature improvements within the WLC may include but are not limited to removal of the concrete portion of Alessandro Road, lowering the grade above Alessandro Road to match the downstream portion of the channel, and install energy-dissipating devices to slow the water down, which will reduce erosion and increase available moisture. The increase in available moisture will increase the habitat value for wildlife species and promote travel path usage. This will result in a significant positive impact.

Recently, the Riverside County Transportation Department replaced and/or improved all of the underground crossings beneath Gilman Springs Road that are within the WLCSP. These storm drains improvements typically increase the likelihood of wildlife usage, since these culverts are no longer full of sediment. However, dense vegetation (Russian thistle) has blocked both the upstream and downstream openings prohibiting significant wildlife usage in most of the culverts. With the exception of the box culverts associated with Drainage 9, the remaining underground culverts along the western side of Gilman Springs Road within the development area of the WLCSP will be contained in an underground storm drain system, which will prohibit any future wildlife use of these culverts. The Drainage 9 improvements will continue to allow wildlife species to travel back and forth across Gilman Springs Road; therefore, the installation of the WLCSP will not directly affect wildlife movement.

Gilman Springs Road is the common boundary line between Core H and proposed Core 3. Indirect project-related impacts associated with an increase in truck traffic along Gilman Springs Road constitute a potentially significant impact and will require mitigation measures. As part of the development requirements of the WLCSP, the project will be required to pay for its fair share of road improvements along Gilman Springs Road based on the traffic use associated with the WLCSP. The payment of fees to the County of Riverside will be used for future road improvements along Gilman Springs Road, which may include the installation of adequate undercrossing to promote wildlife movement beneath Gilman Springs Road at appropriate locations as defined by project biologists in consultation with CDFW and USFWS at the time of the design of improvements to Gilman Springs Road.

6.7.5 - Policies or Ordinances Related to Biological Resources (Impact BIO-5)

Impact BIO-5:	**Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Threshold e.)**

Table 9 below provides a discussion of the project's consistency with the City's land use goals and policies contained in the Existing General Plan and Municipal Code. As discussed in the table below, the proposed project is generally consistent with all of the relevant land use policies and ordinances set forth in the Existing General Plan and in the Municipal Code if the project is also consistent with the MSHCP. Impacts under the MSHCP and Stephens' kangaroo rate HCP are considered potentially significant and mitigation is provided.

Table 9: Existing General Plan and Municipal Code Consistency Analysis

Goals, Objectives, Policies, Ordinances		Project Consistency
City of Moreno Valley General Plan		
Objective 7.4	Maintain, protect, and preserve biologically significant habitats where practical, including the San Jacinto Wildlife Area, riparian areas, habitats of rare and endangered species, and other areas of natural significance.	No significant riparian or other biologically sensitive habitat is on or adjacent to the WLCSP. The project is consistent with this objective.
Policy 7.4.1	Require all development, including roads, proposed adjacent to riparian and other biologically sensitive habitats to provide adequate buffers to mitigate impacts to such areas.	No significant riparian or other biologically sensitive habitat is on or adjacent to the WLCSP. The project is consistent with this policy.
Policy 7.4.2	Limit the removal of natural vegetation in hillside areas when retaining natural habitat does not pose threats to public safety.	Limited stands of natural plant communities or stands of native vegetation occur in the WLCSP within hillside areas. These areas are proposed as open space under the proposed action. The project is consistent with this policy.
Policy 7.4.3	Preserve natural drainage courses in their natural state and the natural hydrology, unless the protection of life and property necessitate improvement as concrete channels.	The WLCSP and offsite improvements contain 15 drainages and/or basins. As specific projects are designed within the WLCSP, consistency with the policy will have to be determined on a project-by-project basis.
Policy 7.4.4	Incorporate significant rock formations into the design of hillside developments.	The WLCSP is generally not a hillside area. Limited natural rock formations occur in proposed open space areas. The project is consistent with this policy,
Policy 7.4.5	The City shall fulfill its obligations set forth within any agreement(s) and permit(s) that the City may enter into for the purpose of implementing the Western Riverside County Multi-species Habitat Conservation Plan.	Based on the current numbers, the City of Moreno Valley has fulfilled its obligation for conserved lands covered under the MSHCP.

Table 9 (cont.): Existing General Plan and Municipal Code Consistency Analysis

Goals, Objectives, Policies, Ordinances		Project Consistency
City of Moreno Valley Municipal Code		
Title 3 Revenue and Finance		
Chapter 3.48 MSHCP Fee Program (Ordinance 742 Section 1.1, 2007)	Establish a local development mitigation fee to assist in the maintenance of biological diversity and the natural ecosystem processes that support this diversity; the protection of vegetation communities and natural areas within the city and western Riverside County which are known to support threatened, endangered or key sensitive populations of plant and wildlife species; the maintenance of economic development within the city by providing a streamlined regulatory process from which development can proceed in an orderly process; and the protection of the existing character of the city and the region through the implementation of a system of reserves which will provide for permanent open space, community edges, and habitat conservation for species covered by the MSHCP.	MBA conducted an MSHCP Consistency Analysis for the proposed project in 2012 (Updated in 2013) and found that the WLCSP is within the MSHCP fee area. Impacts are potentially significant and mitigation is provided.
Title 8 Buildings and Construction		
Chapter 8.60 Threatened and Endangered Species (Ordinance 502 Section 2.1, 1996)	Adopt and require certain implementation measures as required by the SKRHCP, the Section 10(a) Permit and the Management Authorization; and to adopt and impose an impact and mitigation fee to provide funds to the Riverside County Habitat Conservation Authority to implement the terms of the SKRHCP.	The WLCSP is located within the known range of SKR. The WLCSP is also located within the SKRHCP fee area and not in the SKRHCP Core Reserve Area. Impacts are potentially significant and mitigation is provided.
Sources: City of Moreno Valley General Plan, 2006; City of Moreno Valley Municipal Code.		

6.7.6 - Adopted HCP or NCCP (Impact BIO-6)

Impact BIO-6: **Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Threshold f.)**

Western Riverside County MSHCP

As a participant of the Western Riverside County MSHCP and Stephens' kangaroo rat HCP, the City of Moreno Valley will only approve projects that are consistent with the goals of both of these plans.

Impacts are considered potentially significant and mitigation is provided. Based on the WLCSP design, there is 2,383 acres of LD-logistics development, 37 acres of LL-light logistics, 74 acres of Open Space, and 116 acres of street right-of-way. Therefore, MSHCP Development Fees will be based on the development of 2,536 acres, but will be calculated on a project-by-project basis.

The mitigation fee is a per unit fee based on the total acreage of commercial or industrial development. The estimated total Development Fee will be based on the 2,536-acre development footprint as proposed in the WLCSP. The current MSHCP Development Fee is at a rate of $6,597/acre. Since the MSHCP Development Fee Rate changes over time and the given the amount of time expected for total build-out (over 15 years), the Development Fee will be based on the current rate at the time of proposed project-specific development.

Stephens' Kangaroo Rat

The WLCSP contains marginally suitable habitat for Stephens' kangaroo rat. Based on the known range of this species, project-related activities have the potential to impact this species and its habitat. Stephens' kangaroo rat is protected under the federal and State ESA and any impacts to this species are considered significant and mitigation is provided.

The WLCSP is within the Fee Area for the Stephens' Kangaroo Rat HCP. While the WLCSP is not within the Stephens' Kangaroo Rat Core Reserve Area, the Stephens' Kangaroo Rat HCP Implementing Agreement requires payment on a per acre basis based on the 2,536-acre development footprint as proposed in the WLCSP. The Development Fee will be based on the current rate at the time of proposed project-specific development

Burrowing Owl

The WLCSP contains suitable habitat for burrowing owl along the margins of the disked agricultural fields. MBA conducted burrowing owl focused surveys in the WLCSP in 2005, 2007, 2010, 2012, and 2013. The WLCSP was determined to be occupied by a single pair of burrowing owl during the 2005, 2012, and 2013 surveys. This species has been recorded to occur within the survey area, but is not considered a permanent resident. Project-related activities could result in a significant impact on the species. Potential impacts are considered significant and mitigation is provided. A general Burrowing Owl Relocation Plan—prepared for the WLCSP to describe the steps taken in the future to assess burrowing owls and provide a detail plan of action if burrowing owl are observed within the WLCSP prior to project-specific construction activities—is included as Appendix K.

If construction is to be initiated during the breeding season (February 1 through August 31) and burrowing owl is determined to occupy any portion of the proposed ground-disturbing activity during the 30-day pre-construction survey, construction activity shall maintain a 250-foot buffer area around any active nest/burrow until it has been determined that the nest/burrow is no longer active, and all juveniles have fledged the nest/burrow. If this avoidance buffer cannot be maintained, consultation with the CDFW shall take place and an appropriate avoidance distance established. No disturbance to active burrows shall occur without appropriate permitting through the MBTA and/or CDFW.

If active burrowing owl burrows are detected outside the breeding season (September through January), or within the breeding season but owls are not nesting or in the process of nesting, active and/or passive relocation may be conducted following consultation with the City of Moreno Valley, CDFW, USFWS, and RCA. A project specific relocation plan will be required by CDFW if active and/or passive relocation is necessary. The relocation plan will outline the basic process and provides options for avoidance and mitigation and will following the general guidelines as described in the Burrowing Owl Relocation Plan (FCS 2014).

Other Issues

Riparian Species

The WLCSP does not contain habitat suitable for covered riparian species in the MSHCP, such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. No impacts to riparian species is anticipated.

Vernal Pools or Ephemeral Ponds

No vernal pools or ephemeral ponds were observed on the WLCSP and no suitable habitat for any fairy shrimp species was identified onsite. No impacts to vernal pools or vernal pool species is anticipated.

Raptor Foraging Habitat

The WLCSP contains low-quality raptor foraging habit for a variety of raptors such as burrowing owl, red-tailed hawk, white-tailed kite, and American kestrel. The prey base is rather limited due to on-going agricultural practices that eliminate burrows for small rodents. The CDFW Conservation Buffer area, similarly also has on-going agricultural practices that presumably would cease in the future. The loss of foraging habitat associated with the development of the WLCSP would be gradual due to phased construction. The abundance of surrounding open lands associated with Core Area H and Proposed Core 3 should provide ample foraging lands for the existing raptor population. The loss of foraging habitat within the WLCSP consists of low-quality habitat (2,610 acres).

When compared to the remaining higher quality open-space areas still available for foraging, such as the adjacent badlands area (16,000 acres) and the SJWA (20,000 acres). The loss of the WLCSP as a foraging area is less than 10 percent of the available foraging habitat in the local area. Due to the limited prey-based, the disturbed nature of the existing habitat onsite, and the amount of area surrounding the WLCSP that will remain in conservation, impacts to raptor foraging habitat is not considered a significant impact and mitigation is not required. However, it should be noted that payment of the MSHCP Development Fee would be used to purchase lands with high quality foraging habitat. These lands will be placed in conservation and will provide for long-term conservation of raptor foraging habitat.

Roadkill

As development occurs within the WLCSP, some local wildlife will be injured or killed by the additional vehicles and trucks on SR-60, Gilman Springs Road, Redlands Boulevard north of Eucalyptus Avenue, and all internal WLCSP roads. There is no accurate way to quantify this impact, since there is no data on existing road kill on these roadways. However, it is reasonable to assume

this impact will increase (from current levels) as WLCSP-related traffic increases. This impact is adverse, but less than significant.

However, as a project design feature, Drainage 9 will remain in place and improvements made to increase riparian habitat was water sources. It will continue to provide habitat as a local travel path for common wildlife species. This travel path will reduce roadkill impacts associated with wildlife species moving onto the site from the Badlands to the SJWA area.

Air Pollution/Diesel Exhaust.

A potential environmental impact on local wildlife may be exposure to vehicular exhaust and especially diesel particulates and toxic air contaminants from truck exhaust as the WLCSP project builds out. New development will produce diesel-related air pollutants that will be released into the atmosphere, including gases and particles of various sizes.

Most of the available (and most applicable) research is on diesel pollutant impacts is on humans. Although the physiology of many animals is very different from humans, data on health effects from diesel pollution is nonetheless instructive when attempting to assess diesel impacts on wildlife. Potential health effects on wildlife depend on the species involved (Dudley and Stolton 1995), but in general, health effects from air pollution/diesel exhaust include impaired cardiac and lung or respiratory function (Gordon et al. 2012), reduced heart function or longevity, decreased clutch size or hatching success, increased incidence of cancer and other mutagenic or teratogenic effects, ingestion of air deposited particulates, reduction in overall biodiversity, reproductive failure, etc. In general, impacts on higher animals are most commonly attributed to food loss and reproductive effects, rather than to direct toxic effects on adults. There are relatively few examples of higher animals suffering direct toxic effects from either atmospheric acidity or gaseous air pollution. However, a number of mammals are known to build up high levels of heavy metals and other pollutants from air pollution.

Diesel emissions contain thousands of pollutant components, and the composition depends on the fuel, vehicle, and driving conditions (Constantini 2006). The main public health concerns are from fine and ultrafine particulate matter, black or elemental carbon, polyaromatic hydrocarbons, like phenanthrene, metallic ashes, gases like nitrogen dioxide, aldehydes like acetaldehyde, acrolein, and crotonaldehyde, volatile organic compounds like benzene and 1,3-butadiene, etc. One of the research limitations is that some health effects from these pollutants take a long time, in some cases even a lifetime, to exhibit themselves. These pollutants can also be emitted from other sources, so in complex urban environments, it can be difficult to trace individual sources of air pollution. In this case, air quality is relatively poor due to the close proximity of SR 60. However, onsite pollution sources are limited to agriculture, so the increase in most of these pollutant species would predominantly be the result of construction and new warehouse uses within the WLCSP. Research suggests that wildlife may be more susceptible to air pollutant impacts than humans, such as their smaller size, higher respiration rates, smaller lung capacities, ingestion of local plant materials that have also been exposed, higher metabolic rates, etc., although some factors like shorter life spans would reduce the length of exposure over time (Soloman et al. 1998). For the purposes of this

analysis, it is assumed that animals within the SJWA may be susceptible to health effects from air pollution, including diesel exhaust.

In 2002, the EPA, compiled a wide range of scientific studies on the health effects of diesel exhaust, including non-carcinogenic effects of diesel exhaust on laboratory animals. Studies found that diesel particulate matter (DPM) had a limited effect on the survival and growth of rats and mice when exposed to DPM for short periods of time. However, rats, mice and hamsters all experienced increased lung to body-weight ratios when exposed to 1.5 micro-grams per cubic meter (mg/m^3) DPM concentrations for extended periods of time. Several studies looked at behavior effects in animals, and found that juvenile rats exposed to diesel emissions (DE) exhibited a decreased ability to move around on their own, and negatively affected their learning in adulthood.

Extended exposure to diesel emissions caused negative effects on the pulmonary functions of rats, hamsters, cats and monkeys. Depending on the species, DE levels of 1.5 to 11.7 mg/m^3 affected lung mechanical properties, diffusing capacity, lung volumes, and ventilator performance of the subject animal. The ability of rats to clear their airways was also severely impaired by DPM concentrations of 1 mg/m^3or greater. Data on the effect of DPM on airway clearance in other animals was limited, but the pathological effects of DPM seemed to be dependent on the relative rates of pulmonary deposition and clearance (rate of breathing) of the subject animal. The studies also showed that DPM can reduce an animal's resistance to respiratory infections. DPM can begin to impair an animal's immune system in as little as 2 to 6 hours with exposures of 5 to 8 mg/m^3 of DPM. The testing data also suggested that DPM may be a factor in increased allergic reactions in animals.

When comparing filtered versus non-filtered DE, studies found that diesel particulates are the main cause of non-cancerous health effects. However, they could not determine if DPM acts additively with the gas, or whether it combines with the gases to create different effects. The studies also found that other airborne contaminants (e.g., criteria pollutants) can be altered by DPM when absorbed by the diesel particles and increase the physical health effects caused by the DPM and other contaminants. These increased health risks were only found in laboratory settings. There was no evidence for DE interacting with other contaminants in normal urban atmospheric settings except for the impaired ability of animals to resist respiratory tract infections. No other non-cancerous effects were found in any of the studies.

Chapter 7 of the EPA document includes studies that concluded diesel emissions also have carcinogenic effects on animals (CARB and EPA 2005). Studies indicated that DE and/or DPM resulted in increased cases of cancer in laboratory animals as well as humans. Rats experienced a trend of increased tumor growth when exposed to concentrations of DE exceeding $1x10^4$ $mg*hr/m^3$. Because tumors were induced at high concentrations, it is believed that they are caused by the lungs experiencing particle overload. The studies also examined the effect of filtered exhaust and discovered that it did not cause tumors. The studies concluded that filtered exhaust either was not a carcinogenic or had low cancer potency. Lastly, the study examined the effect of poorly soluble particles like black carbon, and concluded that long-term exposure of high concentrations of these particles caused tumors, and that the carbon core was the main cause of the carcinogenic response.

In addition to pollutants associated with diesel trucks, passenger vehicles produce additional air pollutants including carbon monoxide, nitrogen oxides, particulates, etc. These pollutants will also have indirect impacts on wildlife resources of the SJWA and the areas east of Gilman Springs Road. Two impacts of most concern would be ozone degradation (e.g., plants having an unusual dry or "burned" look) and the deposition of additional nitrogen, both of which can disrupt plant growth cycles.

Direct air pollutant impacts on wildlife within the northern end of the SJWA will be reduced somewhat because prevailing winds are mainly to the southeast with the remainder mostly to the east (i.e., very little to the south), based on data from the project air quality study (MBA 2013). These winds would have a potentially greater effect on wildlife east of Gilman Springs Road where the distance of travel of DE/DPM would be less than 1,000 feet. However, some diesel and other project-related air pollutants will still be expected to disperse toward the SJWA, including both gases and particulates, from both trucks and passenger vehicles, when prevailing winds are absent.

There appears to be little academic or scientific research on the specific impacts of diesel air pollutant emissions on wildlife (i.e., not laboratory animals) in natural settings, or specific setbacks for wildlife protection areas from warehouse distribution centers or other sources of diesel pollution. Most available research is too limited or specific regarding the type of pollutant and/or the species considered to be impacted (e.g., impacts of one pollutant on one species). The portion of the SJWA adjacent to the WLCSP property is upland agricultural fields, which mainly support foraging birds, including raptors and there appears to be no data on their exposure or effect. Indeed, the northern portion of the SJWA (CDFW Conservation Buffer Area) land serves as an existing buffer and it was acquired by the CDFW in 2001 for that purpose. Additional buffer areas imposed as mitigation are discussed below.

Based on available scientific data, it is reasonable to conclude that the proposed WLCSP project, due to its size and expected amount of truck traffic, will have some impacts on wildlife within the SJWA from project air pollution, including diesel truck exhaust. However, the amount and types of impacts on wildlife species due to DE and/or DPM are poorly studied.

Research by the California Air Resources Board (CARB) indicates that 80 percent of the particulates generally settle out of the atmosphere within 1,000 feet of emission sources. Therefore, diesel particulate deposition may occur within approximately 1,000 feet of truck activities within the WLCSP. This would limit most impacts to the CDFW Conservation Buffer Area and the areas adjacent to Gilman Springs Road. Due to a lack of data on DE and DPM on wildlife and plants, it is speculative to state that the impacts of air quality from the project construction and operation would be significant or insignificant.

Buffer Distances

The MSHCP's urban/wildlands interface analysis encourages buffers between development and areas with sensitive biological resources. The SJWA is considered a very important resource due to its large number and diversity of birds and is a significant portion of Core Area H. Therefore, impacts to the urban/wildlands interface are potentially significant and required mitigation.

6.8 - Mitigation Measures

Feasible mitigation measures are required to minimize the potentially significant impacts identified above. Many of the mitigation measures set forth below are standard mitigation measures approved by the USFWS, CDFW, County of Riverside, and City of Moreno Valley.

6.8.1 - Mitigation Measures for Impact BIO-1

MM BIO-1a A habitat assessment will be required as part of the project-specific MSHCP document and will include sensitive species, not covered under the MSHCP, such as Plummer's mariposa lily.

MM BIO-1b Focused surveys for sensitive plants not covered under the MSCHP are required for any future project located within the Metropolitan Water District land or within the abandoned detention facility adjacent to Gilman Springs Road.

MM BIO-1c If a significant population any sensitive plant species cannot be avoided, an occupied offsite parcel based must be purchased and placed into conservation at a minimum of a 1:1 mitigation ratio. This will often include the establishment of a conservation easement and a non-wasting endowment to maintain the area in perpetuity.

MM BIO-1d A 30-day pre-construction nesting bird survey is required prior to any vegetation removal or ground-disturbance activities. If active nests are observed, construction activity must be prohibited within a 250-foot buffer around passerine birds and a 500-foot buffer around raptor nests until the nestlings have fledged. All construction activity within the vicinity of active nests must be conducted in the presence of a qualified biological monitor. Construction activity may encroach into the buffer area at the discretion of the biological monitor in consultation with CDFW.

This will satisfy mitigation required for Impact BIO-1 and reduce project-related impacts to less than significant levels.

6.8.2 - Mitigation Measures for Impact BIO-2

MM BIO-2a A project-level DBESP will be required for projects that impact any amount of riparian/riverine habitat. To ensure the preservation or improvement of the biological and hydrological functions and values of riparian/riverine habitat onsite, some of the following mitigation measure options will be required:

- MM-DBESP 1 - Onsite creation of riparian habitat at a minimum of 1:1 ratio (due to poor quality habitat onsite), will be established within detention/infiltration basins to reduce storm flows, improve water quality and reduce sediment transportation. These detention basins will be large enough to provide long-term conservation to riparian habitat without the routine maintenance associated with smaller basins. Vegetation removal will only occur at the area surrounding the in-take and out-fall structures of the basins.

- MM-DBESP 2 - Habitat creation activities will include the installation of mule fat scrub or similar riparian scrub habitat to promote higher-quality riparian habitat but still maintain the basins for detention without impacts to the detention function of the basins. The use of these areas as conservation areas would require consent from CDFW and the City of Moreno Valley.
- MM-DBESP 3 - Onsite soils and substrate that will be temporarily removed as a result of removing the drainage features will be retained for post-project re-establishment, so that native seed banks and soil compositions are conserved for optimal regrowth within the basins.
- MM-DBESP 4 - Erosion control measures will be installed within Drainage 9 to reduce the amount of sediment transport.
- MM-DBESP 5 - Additional riparian habitat will be enhanced within Drainage 9 following the installation of the erosion control measures.
- MM-DBESP 6 - During construction, the runoff leaving construction areas will be directed to onsite detention basins and away from downstream drainage features located offsite.
- MM-DBESP 7 - All projects within the WLCSP will be required to prepare a Storm Water Pollution Prevention Plan (SWPPP).
- MM-DBESP 8 - Invasive species identified in Table 6.2 of the MSHCP shall not be included in any landscape palette for land within 250 feet of CDFW-owned lands.
- MM-DBESP 9 - Pedestrian and vehicular access to areas of riparian/riverine habitat will be prohibited except for controlled maintenance access.
- MM-DBESP 10 - No grading shall be permitted within conserved riparian/riverine habitat areas except for grading necessary to establish or enhance said habitat areas.

Because of the poor quality of the existing drainage features, the above mitigation measures will allow the proposed detention basins to function as equivalent or superior to current conditions.

MM BIO-2b Mitigation required for compensation for impacts to riparian/ riverine areas will require a minimum of 1:1 mitigation ratio with a combination of onsite habitat creation, offsite habitat creation, or purchase of mitigation credits through an approved mitigation bank.

All project-specific DBESPs and HMMPs will need to be submitted to RCA staff for review and approval. Project-specific mitigation measures have not been created nor approved because a program level document cannot provide that level of specificity. Long-term conservation mechanisms available today may not be available or necessary when the proposed project is developed. The preferred means of mitigation is to purchase offsite mitigation credits at an

approved mitigation bank. That way, all long-term conservation mechanisms are built into the mitigation purchase.

In the event that onsite or offsite habitat creation is required as mitigation for impacts to riparian/riverine areas, vegetative cover of the final mitigation area will represent a minimum of 70 percent of the surface area of the previous site conditions within the treated area. Under existing conditions, success criteria is 70 percent of the estimated 30 percent side slopes and 5 percent drainage bottom. Therefore, final mitigation should include 21 percent site slope cover and 3 percent on drainage bottoms.

However, based on the proposed available moisture as described in the Master Plan of Drainage Report (CH2M Hill 2013), the amount of riparian habitat available for restoration will far exceed these success criteria. The final success criteria will be required in a formal Habitat Mitigation Monitoring Plan, which will be required on a project-by-project basis.

In addition, if onsite or offsite habitat creation is required, the land must be preserved with a conservation easement or deed restriction. A non-wasting endowment will be established to provide monitoring and maintenance activities in perpetuity for the restoration area. These conservation areas will be deeded to a third-party management agency or similar conservation district to manage the land. The detailed information requested is more appropriate in a project-level document.

If offsite purchase of mitigation land is required, mitigation credits from a CDFW-approved mitigation bank, such as the San Jacinto Basin Regional Conservation District, or similar approved conservation agency, will be purchased and proof of purchase will be submitted to the City.

This will satisfy mitigation required for Impact BIO-2 and reduce project-related impacts to less than significant levels.

6.8.3 - Mitigation Measures for Impact BIO-3

MM BIO-3a A project-level jurisdictional delineation will be required on a project-by-project basis, as necessary.

MM BIO-3b If drainage features subject to USACE, CDFW, and RWQCB jurisdiction are impacted, appropriate regulatory permits will be required.

MM BIO-3c Compensatory riparian habitat mitigation will be provided at a ratio no less than a 1:1 mitigation ratio, but will be established during the permit acquisition process.

This will satisfy mitigation required for Impact BIO-3 and reduce project-related impacts to less than significant levels.

6.8.4 - Mitigation Measure for Impact BIO-4

No mitigation measures are required regarding Impact BIO-4.

6.8.5 - Mitigation Measures for Impact BIO-5

MM BIO-5a Under City of Moreno Valley General Plan Policy 7.4.3, Preserve natural drainage courses in their natural state and the natural hydrology, will be mitigated by Mitigation Measure BIO-2a, BIO-2b, BIO-3a, BIO-3b, and BIO-3c as described above.

MM BIO-5b Under City of Moreno Valley General Plan Ordinance 742 Section 1.1 - Mitigation fees to protect sensitive species covered under the MSHCP, will be mitigated through Mitigation Measure BIO-6a below.

MM BIO-5c Under City of Moreno Valley General Plan Ordinance 502 Section 2.1,Mitigation fees to protect Stephens' kangaroo rat covered under the HCP, will be mitigated through Mitigation Measure BIO-6b below.

These measures will satisfy mitigation required for Impact BIO-5 and reduce project-related impacts to less than significant levels.

6.8.6 - Mitigation Measures for Impact BIO-6

MM BIO-6a Prior to issuance of a project-level grading permit, the applicant shall pay the mandatory MSHCP Development Fee.

MM BIO-6b Prior to issuance of a project-level grading permit, the applicant shall pay the mandatory SKR HCP Fee.

MM BIO-6c A pre-construction clearance survey for burrowing owl shall be conducted by a qualified biologist no more than thirty (30) days prior to any grading or ground disturbing activities for current and future projects with the WLCSP.

MM BIO-6d Construction activity shall maintain a 500-foot buffer area around any active burrowing owl nest/burrow until it has been determined that the nest/burrow is no longer active, and all juveniles have fledged the nest/burrow.

MM BIO-6e If this avoidance buffer cannot be maintained, consultation with the CDFW shall take place and an appropriate avoidance distance established. No disturbance to active burrows shall occur without appropriate permitting through the MBTA and/or CDFW.

MM BIO-6f If active burrowing owl burrows are detected outside the breeding season (September through January), or within the breeding season but owls are not nesting or in the process of nesting, active and/or passive relocation may be conducted following consultation with the CDFW.

MM BIO-6g A relocation plan may be required by CDFW if active and/or passive relocation is necessary. The relocation plan will outline the basic process and provides options for avoidance and mitigation. Artificial burrows should be constructed within the buffer area south of the WLCSP or within the CDFW Conservation Buffer Area south

of the WLCSP. Construction activity may occur within 500 feet of the burrows at the discretion of the biological monitor in consultation with CDFW.

MM BIO-6h The loss of raptor foraging habitat for golden eagle and white-tailed kite will be mitigated through payment of the MSHCP fee as described in Mitigation Measure BIO-6a above.

MM BIO-6i A 250-foot buffer area as described in Mitigation Measure BIO-6d will be established between the WLCSP and the SJWA.

MM BIO-6j The proposed projects shall incorporate design features and measures related to impacts associated with the Urban/Wildlands Interface including drainage features, toxics, lighting, noise, invasive plants, barriers, and grading/land development discussed above in Section 6.1.6 of this document.

MM BIO-6k Prior to approval of any plot plans for development adjacent to the SJWA, the applicant shall demonstrate that direct light rays have been contained within the development area, per requirements of the MSHCP. This measure shall be implemented to the satisfaction of the City Planning Division.

These measures will satisfy mitigation required for Impact BIO-6 and reduce project-related impacts to less than significant levels.

6.8.7 - Level of Significance After Mitigation

Impact BIO-1:	**Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Threshold a.)**

Sensitive Plant Species

Less than significant impact. If construction is proposed within suitable habitat areas for Plummer's mariposa lily, then there is a potential to impact this CNPS list 4.2 plant. Implementation of Mitigation Measure BIO-1a, BIO-1b, and BIO-1c will minimize or avoid impacts to Plummer's mariposa lily, or any other sensitive plant not covered under the MSHCP to a level considered less than significant.

Nesting Birds

Less than significant impact. If construction is proposed during the breeding season, February 15 through August 31, then there is a potential to impact nesting birds protected under the MBTA and CFG Code. Implementation of Mitigation Measure BIO-1d will minimize or avoid impacts to nesting birds to a level considered less than significant.

Nitrogen Deposition

Less than significant impact. If project-specific air quality analysis determines that nitrogen deposition plumes extend to USFWS designated critical habitat, then there is a potential to negatively impact USFWS designated critical habitat. Implementation of Mitigation Measure BIO-1e and BIO-1f will minimize or avoid impacts associated with nitrogen deposition to a level considered less than significant.

Impact BIO-2:	**Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? (Threshold b.)**

Less than significant impact. If construction is proposed within a designated riparian/riverine feature as part of the WLCSP, then a program-level DBESP is required. As individual projects are proposed within the WLCSP the CEQA analysis shall include an analysis of impacts to the riparian/riverine areas identified in this document. If impacts are identified, a project-level DBESP for riparian/riverine areas will be required and shall be approved by the RCA and the resource agencies prior to obtaining authorization to impact any of the riparian/riverine areas. The DBESP shall identify avoidance measures through design, specific compensation for losses and locations for replacement at a ratio of no less than 1:1. Implementation of Mitigation Measure BIO-2a and BIO-2b will minimize or avoid impacts associated with nitrogen deposition to a level considered less than significant.

Impact BIO-3:	**Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? (Threshold c.)**

Less than significant impact. If construction is proposed within a drainage feature that is determined to be under regulatory agency jurisdiction, then there is a potential to impact drainage features protected under the federal Clean Water Act, California Fish and Game Code, and Porter Cologne Act. Implementation of Mitigation Measure BIO-3a, BIO-3b, and BIO-3c will minimize or avoid impacts to jurisdictional features to a level considered less than significant.

Impact BIO-4:	**Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? (Threshold d.)**

No mitigation measures are necessary.

Impact BIO-5	**Would the project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? (Threshold e.)**

Less than significant impact. The City of Moreno Valley has specific Policies and Ordinances that are associated with MSHCP, SKR HCP, and Drainage Features. These Policies and Ordinances are covered under Mitigation Measures BIO-3a, BIO-3b, and BIO-3c, BIO-6a, and BIO-6b. Implementation of these mitigation measures will avoid conflicts with the City of Moreno Valley Policies and Ordinances to a level considered less than significant.

Impact BIO-6:	**Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? (Threshold f.)**

MSHCP Fee

Less than significant impact. Pursuant to the MSHCP, all mandatory MSHCP mitigation fees must be paid prior to construction. With the implementation of Mitigation Measures BIO-6a, the project will be consistent with the MSHCP, and impacts will be minimized to a level considered less than significant.

Stephens' Kangaroo Rat

Less than significant impact. The payment of the SKR-HCP mitigation fee by the applicant will make the proposed project consistent with the SKR-HCP and all impacts to Stephens' kangaroo rat will be fully mitigated. Implementation of Mitigation Measure BIO-6b will minimize impacts to Stephens' kangaroo rat to a level considered less that significant.

Burrowing Owl

Less than significant impact. The WLCSP is currently occupied by a single pair of burrowing owl. Implementation of Mitigation Measure BIO-6c, BIO-6d, BIO-6e, BIO-6f, BIO-6g will minimize the impacts to the burrowing owl to a level considered less than significant.

Raptor Foraging

Less than significant impact. The WLCSP currently provides marginal quality foraging habitat for a number of raptor species. The payment of MSHCP fees allows for the permanent conservation of raptor foraging habitat in the region. Implementation of Mitigation Measure BIO-6a and BIO-6i reduces impacts to raptor foraging habitat for golden eagle and white-tailed kite to a level considered less than significant.

Urban/Wildlands Interface

Less than significant impact. Portions of the WLCSP are located immediately adjacent to core or proposed core conservation areas. Implementation of Mitigation Measure BIO-6j will minimize impacts to the Urban/Wildlands interface to a level considered less than significant.

SECTION 7: CONCLUSION

A Habitat Assessment and MSHCP Consistency Analysis was conducted for the WLCSP, inclusive of the WLCSP property; a 1,000-foot Indirect Impact Zone; and areas to be designated as open space under the General Plan Amendment located in the City of Moreno Valley, Riverside County, California. The 1,000-foot impact zone and additional survey areas are not a part of the WLCSP, but were incorporated in the biological resources assessment as potential indirect impacts are associated with the Urban/Wildlands Interface as required in the MSHCP.

Burrowing owls are considered present within specific portions of the WLCSP. Because of the length of time for final WLCSP buildout, protocol surveys for burrowing owl will be required on a project-by-project basis. A pre-construction clearance survey will be required prior to projects being implemented if suitable habitat is present within the project site regardless whether the site is occupied by burrowing owl. If burrowing owls are present within a project site or immediate vicinity (within 500-feet), a project-specific Burrowing Owl Relocation Plan will be required to address avoidance and monitoring activities during project grading activities. If project related activities will impact burrowing owl on-site, active and/or passive relocation of the owls will be required. A general description of the methodology that will be required if burrowing owl are observed within a project site is found with the Burrowing Owl Relocation Plan (FCS 2014).

Focused protocol surveys for Los Angeles pocket mouse conducted in 2005, 2010, 2012, and 2013 concluded that no Los Angeles pocket mouse are present in the WLCSP. This species is considered absent from the survey area and has not been observed within the general vicinity (RCA 2012), therefore no additional trapping efforts will be required for this species during project-level development.

There is no suitable habitat between the known occurrence of Los Angeles pocket mouse and the WLCSP. The known populations of Los Angeles pocket mouse are located within the southern portion of the SJWA, which is more than 2 miles from the southern WLCSP boundary. The area between the known recorded occurrences of Los Angeles pocket mouse and the WLCSP is actively disked farmland. Therefore, there is no habitat connectivity between the known occurrences of Los Angeles pocket mouse and the WLCSP.

Updated focused plant surveys are warranted on a project-level basis, especially if existing site conditions change over time. If the agricultural fields are left fallow, suitable habitat for a number of sensitive plant species may develop. Therefore, although currently not anticipated as a potentially significant impact, additional focused plant surveys will be required on a project-by-project basis as specific developments are proposed.

Drainage features 1, 2, 4, 5, 6, 7, 8, 9, 12, and 15 are considered riparian/riverine areas, as defined by MSHCP and were analyzed at a programmatic level in the document. If impacts to any of these areas cannot be avoided during specific project implementation, a project-specific DBESP report and relevant mitigation will be required prior to the issuance of a grading permit. Since many of these

areas seem to be degraded over the years, revised evaluations may be required if the proposed development is extended over several years.

The WLCSP does not contain habitat suitable for sensitive riparian species, such as least Bell's vireo, southwestern willow flycatcher, and western yellow-billed cuckoo. Additionally, no vernal pools or ephemeral ponds were observed on the WLCSP and no suitable habitat for any fairy shrimp species was identified onsite. No further action is required for riparian species, vernal pools, and fairy shrimp.

The WLCSP does not contain any wildlife movement corridors or linkages. However, to offset indirect impacts associated with an increase in truck traffic, project design features including the improvement of Drainage 9 and the payment of Highland Fairview's fair share of road improvements along Gilman Springs Road based on the traffic use associated with the WLCSP. The payment of fees to the County of Riverside will be used for future road improvements along Gilman Springs Road, which may include the installation of adequate under crossings, preferably dry, to promote wildlife movement beneath the two Core Conservation Areas at appropriate locations as defined by project biologists in consultation with CDFW and USFWS at the time of the design of improvements to Gilman Springs Road.

Additionally, the WLCSP does not contain suitable habitat for any Criteria Area plant species or Narrow Endemic plant species.

The WLCSP is bordered by Proposed Core 3 to the east and by Existing Core H and SJWA to the south. Moreover, portions of the WLCSP survey area fall within the boundaries of all the aforementioned Conservation Areas. The portions of the WLCSP survey area within the SJWA will not be developed. The remaining portions of the WLCSP that are on or immediately adjacent to conservation areas will incorporate the design features and measures required to minimize potential development impacts to wildlands.

The majority of Cell Group D' is within the northern extent of SJWA, a PQP Conserved Land. This portion of the WLCSP will remain in conservation thus reducing the potential impacts on the Cell Group and satisfying the City of Moreno Valley's Additional Reserve Lands acreage goal.

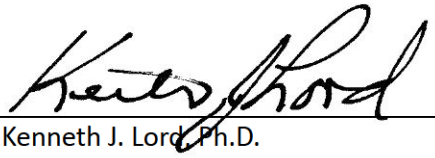
The WLCSP occurs within the Stephens' Kangaroo Rat Habitat Conservation Plan fee area boundary, but not in the Core Area boundary. Since the WLCSP occurs within the fee area only, a SKR HCP mitigation fee will be required.

Prior to tree and shrub vegetation removal, a nesting bird survey is required if vegetation removal or any ground disturbing activities occur during the nesting bird season.

Adherence with the above recommendations (and resulting additional actions, if required) and acceptance of the proposed project by the City of Moreno Valley and the RCA would fulfill requirements for biological resources pursuant to CEQA, FESA, CESA, and the MSHCP and development of the WLCSP would be consistent with the Western Riverside County MSHCP.

SECTION 8: CERTIFICATION

I hereby certify that the statements furnished above and in the attached exhibits present data and information required for this biological evaluation, and that the facts, statements, and information presented are true and correct to the best of my knowledge and belief.

Date: September 26, 2014 Signed: 

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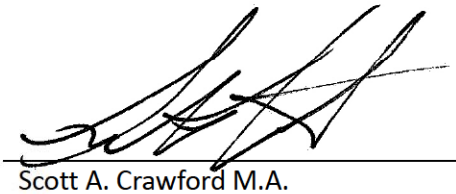
Date: September 26, 2014 Signed: 

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