5.3 Biological Resources

5.3.1 Introduction

In March 2017, VCS Environmental prepared a Biological Technical Report (Technical Report) for the proposed Project, which provides a summary of the existing conditions present on the 2,977~~50~~-acre site during surveys conducted December 8 and 14, 2016, and January 6, 2017. The Technical Report also includes an assessment of the potential presence of sensitive biological resources, and an analysis of the potential impacts to those resources both on the plan level for the Project site and the project level for the backbone infrastructure improvements within the Infrastructure Improvement Areas (IIAs). The Technical Report presents the current biological resources present within the Project site, including habitat communities, jurisdictional waters, and the potential occurrence of listed and special status plant and wildlife species. The potential biological impacts with respect to federal, state, and local laws and regulations which should be considered in the overall Project site, as well as impacts due to implementation of the Infrastructure Improvements are also identified in the Technical Report. The Technical Report also recommends, as appropriate, Best Management Practices (BMPs), avoidance, minimization, and other measures to reduce or avoid potential impacts.

The findings and recommendations presented in the Technical Report are summarized in this section. The Technical Report is included as Appendix F of the D~~raft~~ EIR. Figure 3-4a, found in Section 3 Project Description depicts, the 11 acres added to Planning Area 5 and 14.2 acres added to Planning Area 6 to account for inclusion of the eastern lake shoreline/levee within the specific plan boundary, consistent with the existing adopted specific plan boundary Amendments 1 through 10. This area was designated as preservation/mitigation area in response to public and agency comments submitted on the D~~raft~~ EIR. Section 5.3 figures have not been revised to include this area within the boundary line; however, the tables have been revised to reflect updated acreages and noted where applicable.

5.3.2 ~~E~~Environmental Setting~~xisting Conditions~~

The Project site is located within the Elsinore Valley that is generally bound on the west by the east flank of the rugged Santa Ana Mountains and on the east by gently sloping hills. The San Jacinto River cuts through the valley, and discharges flow into the Lake (Lake Elsinore). As the Lake rises, lake water flows to Temescal Canyon Wash begins via an outflow channel. As discussed within the City of Lake Elsinore General Plan, the Back Basin area contains a mixture of land developed for residential, commercial, industrial, recreational, agricultural and undeveloped land remaining in its natural state. Within the Elsinore Valley, approximately 14 natural vegetative communities, in addition to developed sites and agricultural uses, occur in the City and its Sphere of Influence (SOI). Each of these habitats provides cover, food, and water necessary to meet biological requirements of a variety of animal species. The local area climate is semi-arid Mediterranean, characterized by hot summers, mild winters, and low humidity. During summer, average temperatures range from 70's to 90's; in the winter, cool temperatures in the 50's prevail. The warmest month of the year is August with an average maximum temperature of 98.30 degrees Fahrenheit, while the coldest month of the year is generally December with an average minimum temperature of 37.30 degrees Fahrenheit. Temperature variations between night and day tend to be

relatively big during summer with a difference that can be 37 degrees Fahrenheit, and more moderate variations during winter with an average difference of 28 degrees Fahrenheit. The average precipitation in the City of Lake Elsinore is 12.09 inches. Rainfall in the City of Lake Elsinore is fairly evenly distributed throughout the year. The wettest month of the year is typically February with an average rainfall of 2.96 inches.

The Project site is located in the City of Lake Elsinore within southwestern Riverside County, and is generally bound by Lakeshore Drive to the north, Mission Trail and Corydon Road to the east, and Union Street to the South. The Project site is adjacent to the southeasterly shore of the Lake and regionally accessible from Interstate 15 at Diamond Drive/Railroad Canyon Road. It is within the Back Basin of the Lake and within the boundaries of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

5.3.3 Existing Conditions

The Project site includes a mix of developed and undeveloped areas. Developed areas include active sports-related facilities such as skydiving, hang-gliding, motocross and an 18-hole golf course, in addition to residential development (both rural and medium to high density). Much of the Project site remains undeveloped including the 356-acre wetland facility, the area that formed part of the lake bed prior to implementation of the Lake Elsinore Management Project, native habitat, and native habitat/open space areas that have previously been preserved as mitigation for Back Basin development or to achieve the MSHCP 770-acre requirement.

The Infrastructure Improvement Areas include a mix of disturbed and vegetated areas. The proposed Cereal Street, Lucerne Street and Malaga Road/Sylvester Street alignments generally follow existing dirt roads and include the immediately adjacent vegetation. The roads surround the existing Summerly Development (including The Links at Summerly Golf Course) and follow the edge of the skydiving airport runway. The existing berm follows the edge of the 356-acre wetland and was built to keep off-road vehicles out of the wetlands. Moderately dense vegetation grows along most of the berm.

The Project site supports 14 vegetation communities/land cover types. These vegetation communities/land cover types include Tamarisk Scrub, Mixed Scrub, Mulefat Scrub, Willow Scrub, Southern Cottonwood – Willow Riparian Forest, Riversidean Sage Scrub, Riversidean Sage Scrub-disturbed, Mitigation Areas, Ruderal, Saltgrass Ruderal, Emergent Marsh, Ornamental Woodland, Borrow Site, and Disturbed/Developed (see Figure 5.3-1, Existing Vegetation).

The vegetation/land covers within the Infrastructure Improvements Area currently include nine of the 14 vegetation communities/land cover types observed within the Project site: Tamarisk Scrub, Mulefat Scrub, Willow Scrub, Mitigation Areas, Emergent Marsh, Former Channel/Ruderal, Ruderal, Borrow Site, and Disturbed/Developed (Figure 5.3-2, Vegetation in Infrastructure Improvement Areas).

The topography throughout the Project site is generally flat, with little change in elevation overall, except for the rocky hillside of Rome Hill in the southwestern portion of the Project site. The lake levee,

constructed as part of the LEMP, provides a high point in elevation adjacent to the Lake's open water. There is similarly some relief to the elevation in the 356-acre wetland, particularly the berm surrounding the wetlands, which functions to contain open water within the habitat. The United States Department of Agriculture Natural Resources Conservation Service lists 43 soil types (series) for the Survey Area (Figures 5.3-2a and 5.3-2b). The soil types within the Survey Area are predominantly loams ranging from rocky to silty in texture and many saline-alkaline.

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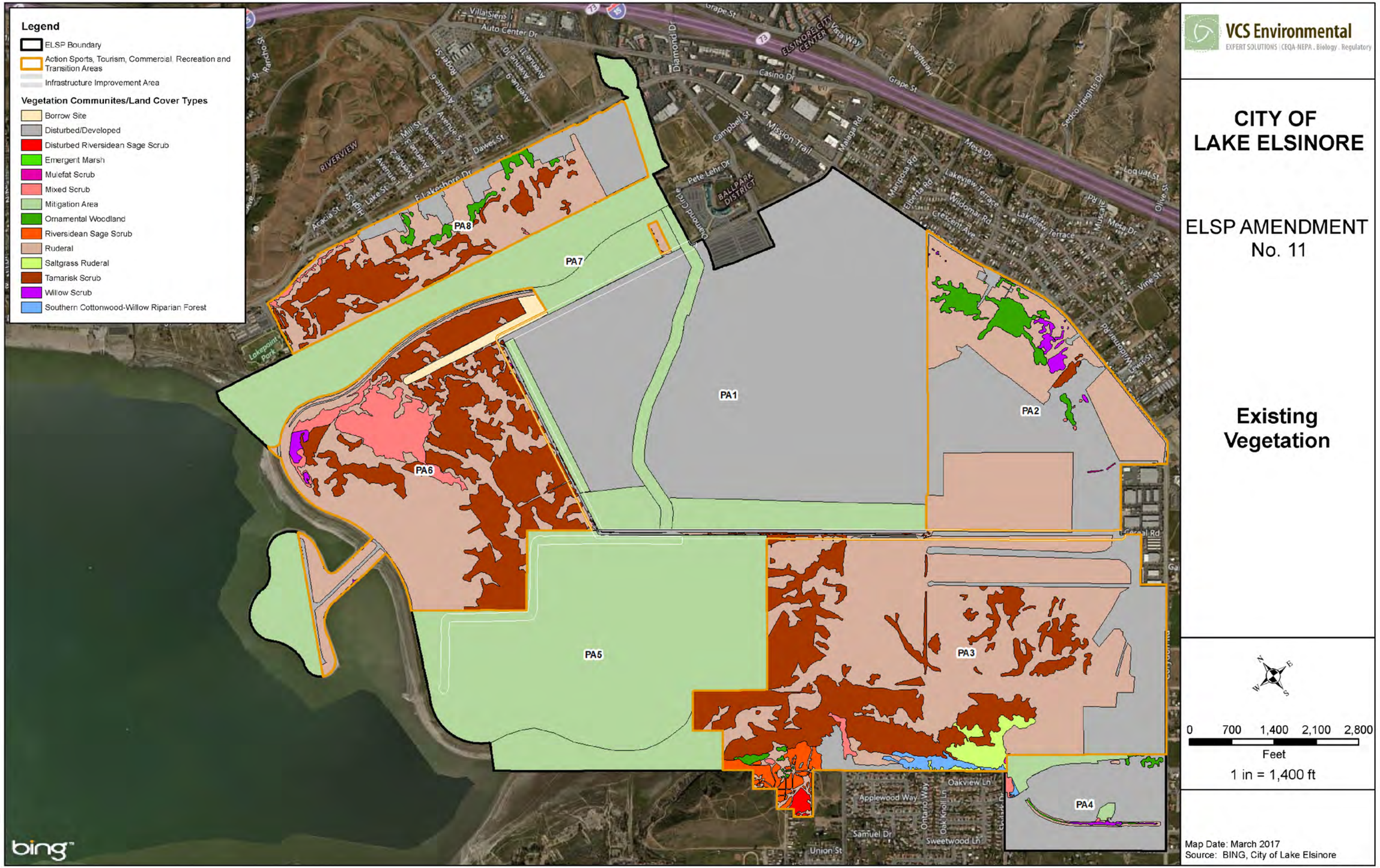

Source: City of Lake Elsinore ELSPA No. 11 EIR

Existing Vegetation, Figure 5.3-1

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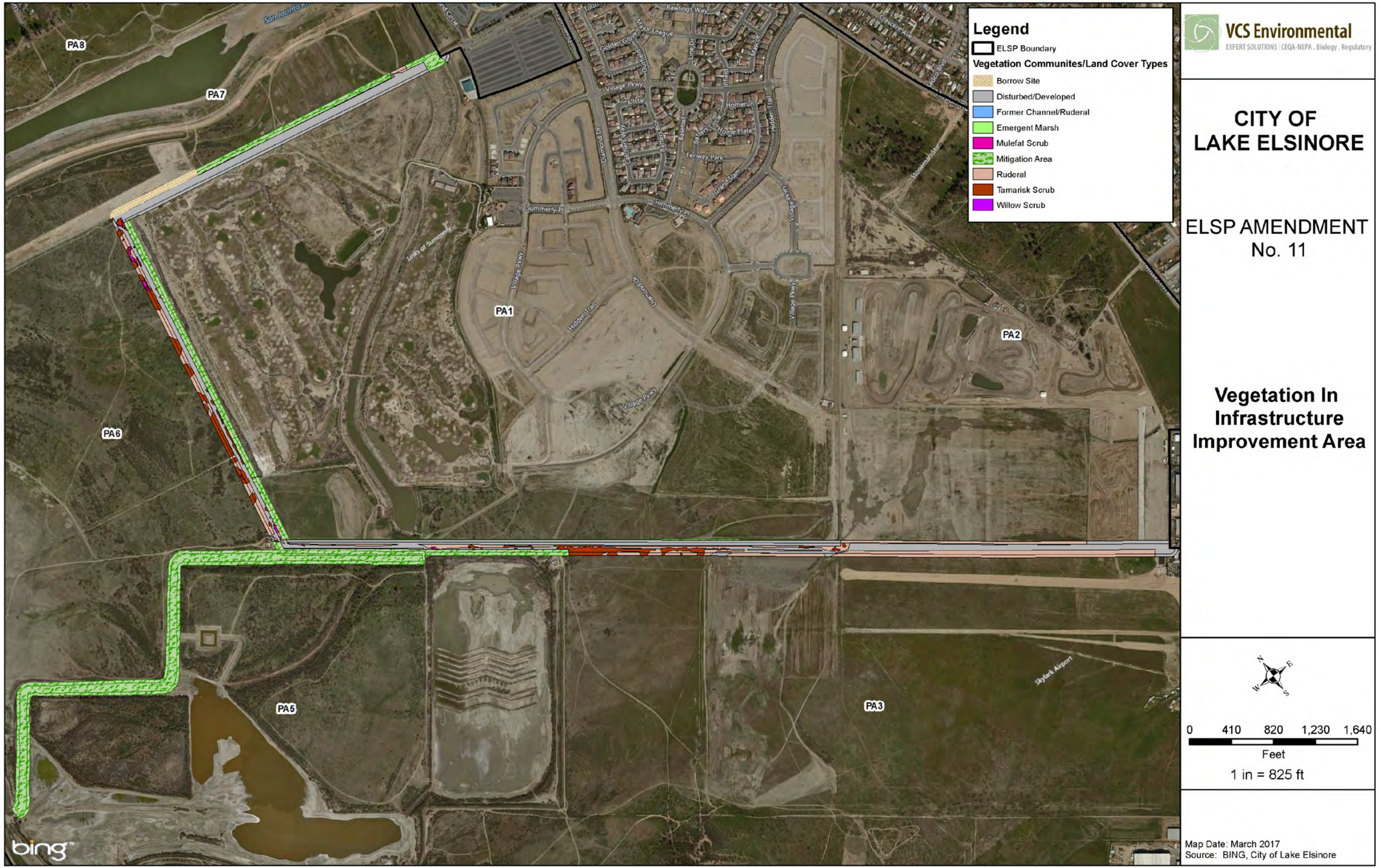

Source: City of Lake Elsinore ELSPA No. 11 EIR

Vegetation in Infrastructure Improvement Area, Figure 5.3-2

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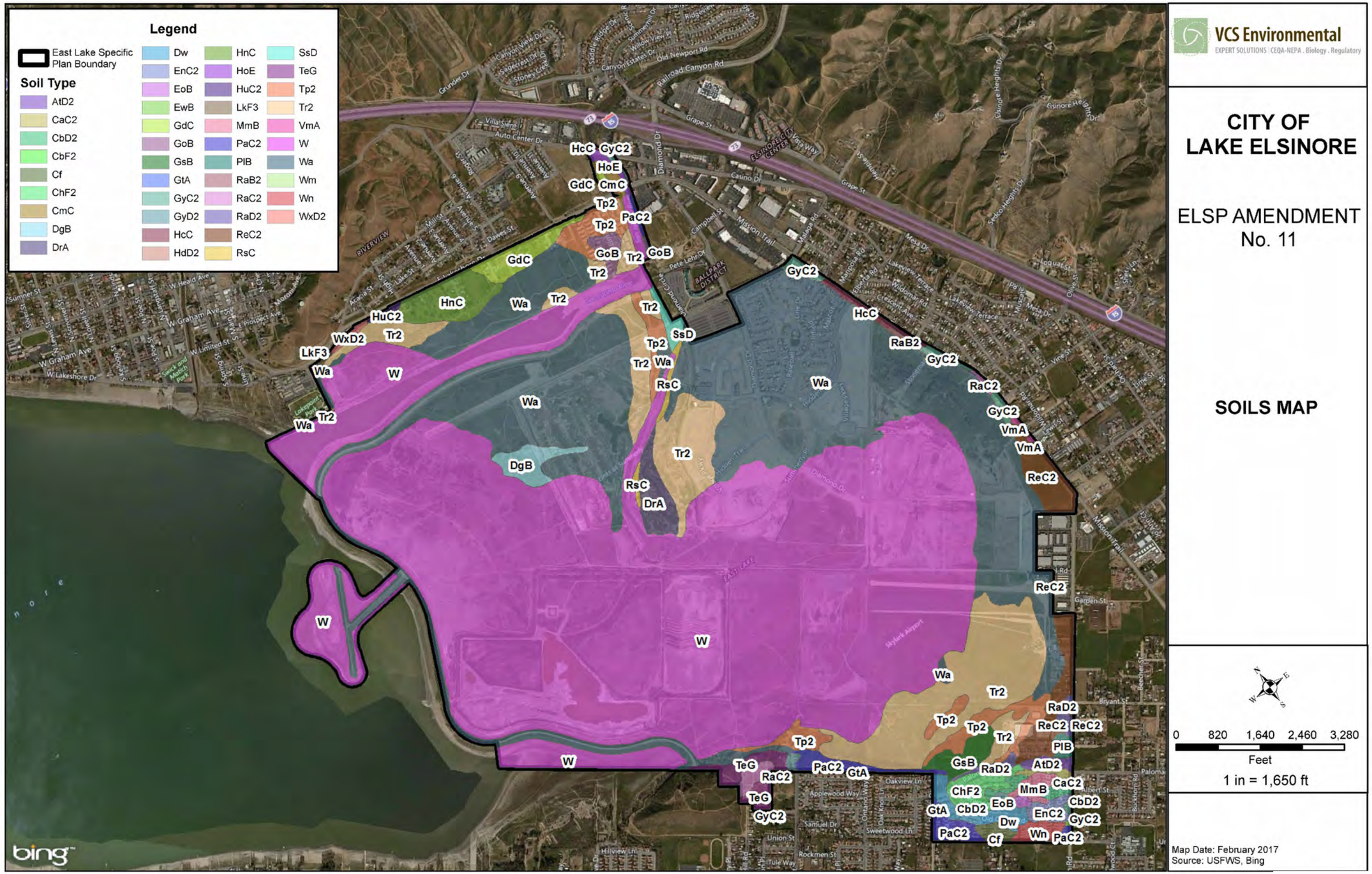

Source: City of Lake Elsinore ELSPA No. 11 EIR

Figure 5.3-2a

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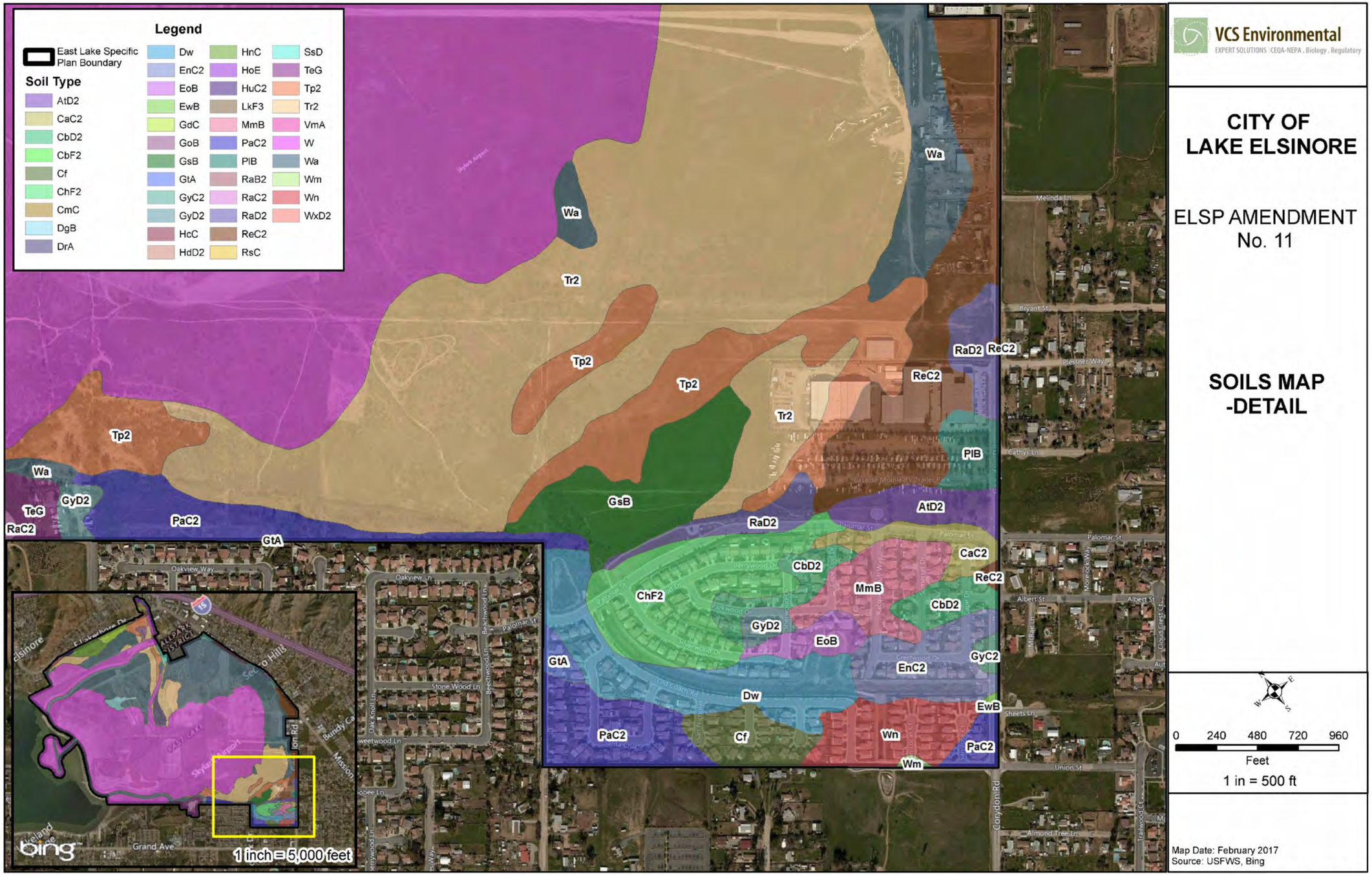

Source: City of Lake Elsinore ELSPA No. 11 EIR

Figure 5.3-2b

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Other topographic variety in the Project site include the historic San Jacinto River channel, the Lake Elsinore inlet channel, and the lowered elevation of The Links at Summerly Golf Course which provides flood storage capacity. Elevations onsite range from approximately 1240 feet to 1440 feet mean sea level (MSL).

The Project site is located within Subunit 3 (Elsinore) of Elsinore Area Plan of the Western Riverside County MSHCP. The Project site is partially located within MSHCP Criteria Areas, proposed extension of the existing Core 3, and proposed Linkage 8. Portions of the Project site are located within MSHCP survey areas for the western burrowing owl (*Athene cunicularia hypugaea*) pursuant to Section 6.3.2 of the MSHCP, Narrow Endemic plant species pursuant to Section 6.1.3 of the MSHCP, and Criteria Area plant species pursuant to Section 6.3.2 of the MSHCP. Additionally, portions of the Project site are considered "Riparian/Riverine Areas and Vernal Pools" pursuant to Section 6.1.2 Riparian/Riverine Areas and Vernal Pools of the MSHCP.

Sensitive Plant Species Observed

No sensitive plant species were observed during the 2016 survey. Although sensitive plant species were not observed, this does not preclude them from being present in the Project site or the Infrastructure Improvement Areas. The 2016/2017 survey was not conducted during an appropriate time to observe many of the sensitive plant species with potential to occur onsite. Additionally, there are past observations of sensitive plant species within the Project site including smooth tarplant [within the Summerly development area, later mitigated and planted within the seasonal pool area].

Sensitive Plant Species with Potential to Occur

Sensitive plant species include federally or state listed threatened or endangered species, those species listed on the California Native Plant Society's rare, endangered plant inventory, and MSHCP species. Species with the potential to occur on-site were analyzed based on distribution, habitat requirements, and existing site conditions, and are listed as an appendix to the Technical Report in Appendix F of this EIR. No sensitive plant species were observed within the Project site during the VCS surveys. Two special status species of plants are considered to have relatively high potential to occur within the Project site within their respective suitable habitats based on recent past observations within the Project site or immediately adjacent to the Project site including:

- little mousetail, an MSHCP Criteria Area Species; and
- smooth tarplant, an MSHCP Criteria Area Species.

In addition, there are several special status species of plants with moderate potential to occur within the Project site. The Project site includes MSHCP sensitive soils included within the Traver-Domino-Willows soil association. These soils are known to support sensitive plant species.

Sensitive Wildlife Species Observed

Sensitive wildlife species observed during the December 8 and 14, 2016 and January 6, 2017 surveys included the following five species:

- burrowing owl (CDFW Species of Special Concern and MSHCP Covered Species; two individuals identified in occupied burrows);
- northern harrier (CDFW Species of Special Concern when nesting and MSHCP Covered Species);
- American white pelican (CDFW Species of Special Concern for a nesting colony);
- loggerhead shrike (a CDFW Species of Special Concern and MSHCP Covered Species); and
- San Diego black-tailed jackrabbit (CDFW Species of Special Concern and MSHCP Covered Species).

The San Diego black-tailed jackrabbit, northern harrier, and loggerhead shrike were observed within and/or within the immediate vicinity of the Infrastructure Improvement Areas.

Sensitive Wildlife Species with Potential to Occur

Sensitive wildlife species include the following classifications: federally or state listed threatened or endangered species, California species of special concern, fully protected and protected species (as designated by CDFW), and MSHCP species. Species with the potential to occur on-site were analyzed based on distribution, habitat requirements, and existing site conditions.

Five special status animal species were observed within the Project site during the December 8 and 14, 2016 and January 6, 2017 surveys: burrowing owl, northern harrier, American white pelican, loggerhead shrike, and San Diego black-tailed jackrabbit. At least three additional special status animal species have a relatively high potential to occur within the Project site within their respective suitable habitats based on recent past observations in the Project site including:

- California horned lark, on the CDFW Watch List and an MSHCP Covered Species;
- black-crowned night heron, an MSHCP Planning Species; and
- least Bell's vireo, federally endangered, state endangered, and an MSHCP Covered Species.

All three of these species have potential to occur within the Infrastructure Improvement Areas. There are several animal species with at least moderate potential to occur within the Project site.

Sensitive wildlife species with potential to occur within the Project site are listed in more detail as an appendix to the Technical Report in Appendix F of this EIR.

Burrowing Owl

Two BUOWs were observed within the Project site during the VCS survey. Each BUOW was observed at a burrow with characteristic sign of BUOW occupation/use. The Project site is considered to host suitable habitat for BUOW. The two burrowing owls were not observed within the Infrastructure Improvement Areas.

Special Status Vegetation Communities

Three special-status vegetation communities designated by CDFW were reported in the CNDDB within two miles of the Project site: Southern Sycamore Alder Riparian Woodland, Southern Cottonwood Willow Riparian Forest, and Southern Coast Live Oak Riparian Forest. Of these three special-status vegetation communities designated by CDFW, only Southern Cottonwood Willow Riparian Forest was previously

documented within the Project site according to records on the CNDDB. This vegetation community was confirmed present in the Project site during the field survey conducted in support of the Technical Report. Given the phased development timing of the project and the fluctuating nature of burrowing owl populations, the number of burrowing owls occupying the site may change over time as local populations and environmental conditions fluctuate. Therefore, although only two BUOWs were observed during the VCS survey, the proposed project may impact and require mitigation measures for more, or less, than the two BUOW individuals observed during the Project's surveys.

Soils Mapping

The United States Department of Agriculture Natural Resources Conservation Service lists 43 soil types (series) for the Survey Area (Figures 5.3-2a and 5.3-2b shown above). The soil types within the Survey Area are predominantly loams ranging from rocky to silty in texture and many saline-alkaline. The MSHCP identifies two general classes of soil known to be associated with listed and sensitive plant species in certain regions of the MSHCP Plan Area, including clay soils and Traver-Domino-Willows association soils [clay soils digitized within the MSHCP Plan Area included the Bosanko, Auld, Altamont, and Porterville series].

The Traver-Domino-Willows association includes saline-alkali soils largely located along floodplain areas of the San Jacinto River (including the inlet to Lake Elsinore). Sensitive plants supported by the Traver-Domino-Willows soil association include two federally-listed species: San Jacinto Valley crownscale (Atriplex coronata var. notatior) and spreading navarretia (Navarretia fossalis). Other sensitive plant species found in this association include Parish's brittlescale (Atriplex parishii), Davidson's saltscale (Atriplex serenana var. davidsonii), and vernal barley (Hordeum intercedens).

Please see below for the soil type descriptions for the five soil types mapped within the Survey Area considered MSHCP sensitive:

Domino Silt Loam (Dw) [0.5% Survey Area]

The Domino series consists of moderately deep, moderately well drained soils over limecemented hardpans. Domino soils are in basin areas and have slopes up to 2 percent. The Domino soil mapped is located in the southern portion of the Survey Area. A majority of mapped Domino soil has been developed (residential development).

Traver Loamy Fine Sand, eroded (Tp2) [2.2% Survey Area] and Traver Loamy Fine Sand, salinealkali (Tr2) [8.3% Survey Area]

The Traver series is a member of a coarse-loamy, mixed, thermic family of Natric Haploxeralfs. The soils have light brownish gray, calcareous, fine sandy loam A horizons, light brownish gray, calcareous, fine sandy loam Bt horizons which overlie very pale brown, calcareous fine sandy loam C horizons. The alluvium is from granitic bedrock. The Traver soils are located in the southern and north portions of the Survey Area.

Willows Silty Clay, saline-alkali (Wm) [0.0% Survey Area] and Willows Silty Clay, strongly salinealkali (Wn) [0.2% Survey Area]

Willows Silty Clay is a silty clay soil typically associated with basin floors with slopes up to 2 percent. The alluvium is typically derived from mixed sources. These poorly draining soils are slightly to strongly saline in nature. The areas mapped within the Survey Area as Willows Silty Clay have been developed (residential development).

Soils considered MSHCP sensitive within the Infrastructure Improvement Area include the Traver Loamy Fine Sand, eroded (Tp2) and Traver Loamy Fine Sand, saline-alkali (Tr2).

Definition of Wetland and Riparian Systems

The Project site is known to contain both Waters of the United States (WoUS) and Waters of the State (WoS), including wetland and riparian systems. In the Back Basin, areas under elevation 1265' MSL are considered WoS and areas under elevation 1246' MSL are considered WoUS. The jurisdictional areas tied to elevation are in addition to surface drainage features that also occur within the Project site. These areas are referred to as "Other Waters" herein.

Waters of the United States (WoUS)

The Project site was assessed for jurisdictional wetland and non-wetland WoUS. To determine the presence of a wetland, three indicators are required for a feature to be determined to be a wetland: (1) hydrophytic vegetation, (2) hydric soils, and (3) wetland hydrology. The methodology published in the United States Army Corps of Engineers (Corps) 1987 Wetland Delineation Manual and the Arid West Supplement sets the standards for meeting each of the three indicators, which normally require that 50 percent or more dominant plant species typical of a wetland, soils exhibiting characteristics of saturation, and hydrological indicators be present. Future implementing development projects with impacts to WoUS are regulated under Sections 401 and 404 of the Clean Water Act through the Corps and Regional Water Quality Control Board (RWQCB). Due to the anticipated phased implementation of the Planning Areas following certification of this Specific Plan Amendment and the planning level nature of this Specific Plan Amendment, soils pits were not utilized for determining the presence of wetlands, except within the Infrastructure Improvements limit. Therefore, outside of the Infrastructure Improvements limit, all areas exhibiting hydrophytic vegetation and wetland hydrology were considered potential wetlands. These areas outside of the Infrastructure Improvement Areas would be subject to verification through a focused delineation for each development, prior to new development within the Planning Areas.

Jurisdictional non-wetland WoUS are typically determined through the observation of an Ordinary High Water Mark (OHWM), which is defined as the "line on the shore established by the fluctuation of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas." Future implementing development projects with impacts to WoUS are regulated under Sections 401 and 404 of the Clean Water Act also by connectivity with adjacent watersheds.

The Lake Elsinore Management Plan also identifies Corps jurisdiction over all future implementing development projects occurring below elevation 1246', wetlands, or within "other jurisdictional areas" (OHWM as described above) within the Back Basin. These areas are depicted in Figure 5.3-3, Existing WoUS.

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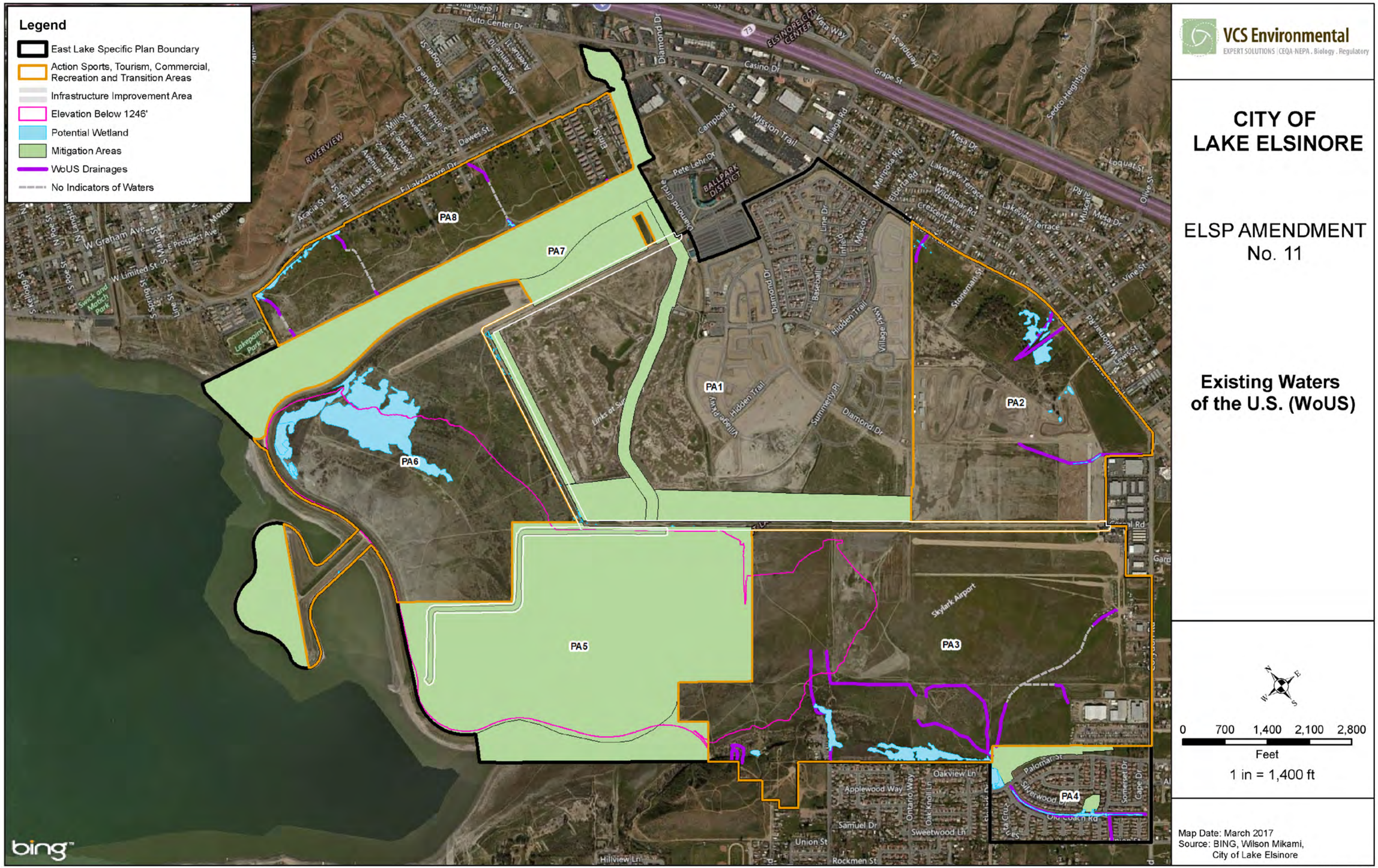

Source: City of Lake Elsinore ELSPA No. 11 EIR

Existing Waters of the U.S., Figure 5.3-3

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Approximately 689-acres of the Project site occur below elevation 1246' and would be subject to Corps jurisdiction. Furthermore, 0.09 acres of "other Corps jurisdictional areas" were observed within the 1246' elevation and 2.41 acres were observed outside of the 1246' elevation, all of which would be considered WoUS. Additionally, 27.90 acres of potential wetlands and 345.72 acres within the Mitigation Areas were observed within the 1246' elevation and 28.98 acres of potential wetlands and 379.70 acres within the Mitigation Areas were observed outside of the 1246' elevation, all of which would be considered WoUS. Potential wetlands, as discussed above, were assumed based on the presence of hydrology and vegetation indicators being positive; soil pits were not utilized for the plan level analysis. Acreages of Corps jurisdiction are further described in Table 5.3-1 below. Due to the anticipated delay in implementing the Planning Areas following approval of the ELSPA No. 11, these acreages are approximate and are intended for planning purposes only. A focused delineation for each development would be necessary prior to new development within the Planning Areas.

Table 5.3-1. Waters of the United States within the Project Site

Feature*	Total Acreage
Below Elevation 1246'	--
Other WoUS	0.09
Potential Wetlands	27.90
Mitigation Areas***	~~345.72~~370.92
Above Elevation 1246'	--
Other WoUS	2.32
Potential Wetlands	28.98
Mitigation Areas	379.70
Totals	--
Below Elevation 1246'	688.88
Other WoUS**	2.41
Potential Wetlands**	53.88
Mitigation Areas***	~~725.00~~750.02

*includes the Infrastructure Improvement Areas.

**includes overlap with the Below Elevation 1246' feature.

***Includes Added Shoreline/Levee Area shown in Figure 3-4a although portions of Levee may have actual elevations above 1246'.

The Infrastructure Improvements are anticipated to commence shortly after certification of this EIR and the approval of the SPA No. 11; therefore, a focused delineation was conducted within the improvement limits. Portions of these improvements occur within elevation 1246' and/or within "other jurisdictional areas". 17.68 acres of the Infrastructure Improvements occur below elevation 1246' and would be subject to Corps jurisdiction. Additionally, the Infrastructure Improvement Areas would not impact wetlands observed within the 1246' elevation but would impact 0.23 acres of wetlands observed outside of the 1246' elevation. Acreages of Corps jurisdiction are further described in Table 5.3-2 below.

Table 5.3-2. Waters of the United States within the Infrastructure Improvement Areas

Feature	Total Acreage
Below Elevation 1246’	17.68
Other WoUS	0.00
Wetland	0.00
Mitigation Areas	17.86
Above Elevation 1246’	--
Other WoUS	0.00
Wetland	0.23
Mitigation Areas	15.16
Totals	--
Below Elevation 1246’	0.00
Other WoUS*	0.00
Wetland*	0.23
Mitigation Areas	33.02

*includes overlap with the Below Elevation 1246’ feature.

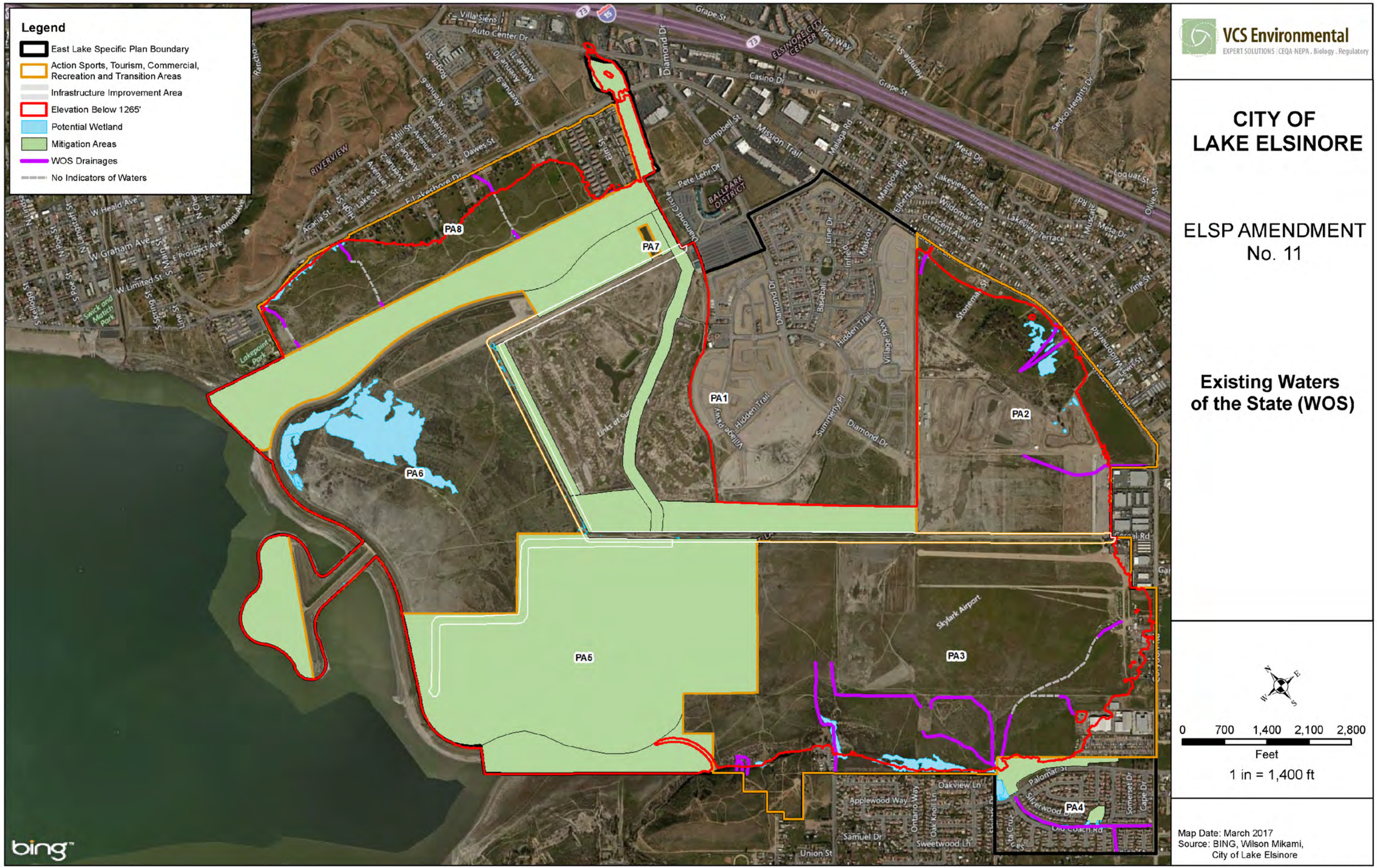
Waters of the State (WoS)

CDFW and RWQCB have jurisdiction over WoS (California Fish and Game Code §§1600 et seq.; California Code of Regulations, Title 14, §720; Porter-Cologne Water Quality Control Act). Section 1602 of the California Fish and Game Code (FGC) applies to natural rivers, streams, and lakes:

> “An entity may not substantially divert or obstruct the natural flow of, or substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake, or deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake”

CDFW defines a stream as “a body of water that flows perennially or episodically and that is defined by the area in which water currently flows, or has flowed, over a given course during the historic hydrologic course regime, and where the width of its course can reasonably be identified by physical or biological indicators” (Brady and Vyverberg 2013). CDFW regulates wetland areas only to the extent that those wetlands are part of a stream, river, or lake as defined by the CDFW. Furthermore, CDFW has identified that all areas under elevation 1265’ adjacent to the Lake are subject to their jurisdiction.

To determine the areas where waters flow or have flowed and the width of its course, the delineators conducted a site visit to walk and drive the entire site; reviewed previous biological, cultural, and construction reports on the site; and reviewed historical aerial imagery. Based on the collective results of these investigations, areas that exhibited physical or biological indicators determined to be within the jurisdiction were mapped. The VCS delineators concluded that the site does exhibit the characteristics of a stream, river, or lake, and therefore WoS are present, which are shown on Figure 5.3-4, Existing WoS.



Source: City of Lake Elsinore ELSPA No. 11 EIR

Existing Waters of the State, Figure 5.3-4

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2,615.40 acres of the Project site occur below elevation 1265' and would be subject to CDFW jurisdiction. Furthermore, 2.59 acres of rivers, streams, or lakes were observed within the 1265' elevation and 1.96 acres were observed above of the 1265' elevation, which are subject to CDFW and RWQCB jurisdiction. Acreages of WoS are further detailed in Table 5.3-3 below, specifically identifying the vegetation communities present within WoS and below elevation 1265'. Due to the anticipated delay in implementing the Planning Areas following approval of the ELSPA No. 11, these acreages are approximate and are intended for planning purposes only. A focused delineation for each development would be necessary prior to new development within the Planning Areas.

Table 5.3-3. Waters of the State within the Project site

Feature*	Total Acreage
Below Elevation 1265'	2,615.40
Rivers, Streams, or Lakes	2.59
Riparian/Potential Wetland	51.39
Mitigation Areas***	~~707.74~~732.94
Above Elevation 1265'	--
Rivers, Streams or Lakes**	1.96
Riparian/Potential Wetland	5.33
Mitigation Areas	17.67
Totals	--
Below Elevation 1265'	2,279.04
Riverine**	4.55
Riparian/Potential Wetland**	56.72
Mitigation Areas***	~~725.00~~750.02

*includes the Infrastructure Improvement Areas.

**includes overlap with the Below Elevation 1265' feature.

***Includes Added Shoreline/Levee Area shown in Figure 3-4a although portions of Levee may have actual elevations above 1265'.

The Infrastructure Improvements are anticipated to commence shortly after certification of the EIR and the approval of the SPA No. 11; therefore, a focused delineation was conducted within the improvement limits. Portions of these improvements occur within elevation 1265' and/or within WoS. 77.44 acres of the improvement limits occur below elevation 1265' and would be subject to CDFW jurisdiction. Acreages of WoS are further detailed in Table 5.3-4 below, specifically identifying the vegetation communities present within WoS and below elevation 1265'.

Table 5.3-4. Waters of the State within the Infrastructure Improvement Areas

Feature	Total Acreage
Below Elevation 1265’	77.44
Riverine	0.00
Riparian/ Wetland	0.23
Mitigation Areas	33.02
Above Elevation 1265’	--
Riverine	0.00
Riparian/ Wetland	0.00
Mitigation Areas	0.00
Totals	--
Below Elevation 1265’	77.44
Riverine*	0.00
Riparian/ Wetland*	0.23
Mitigation Areas	33.02

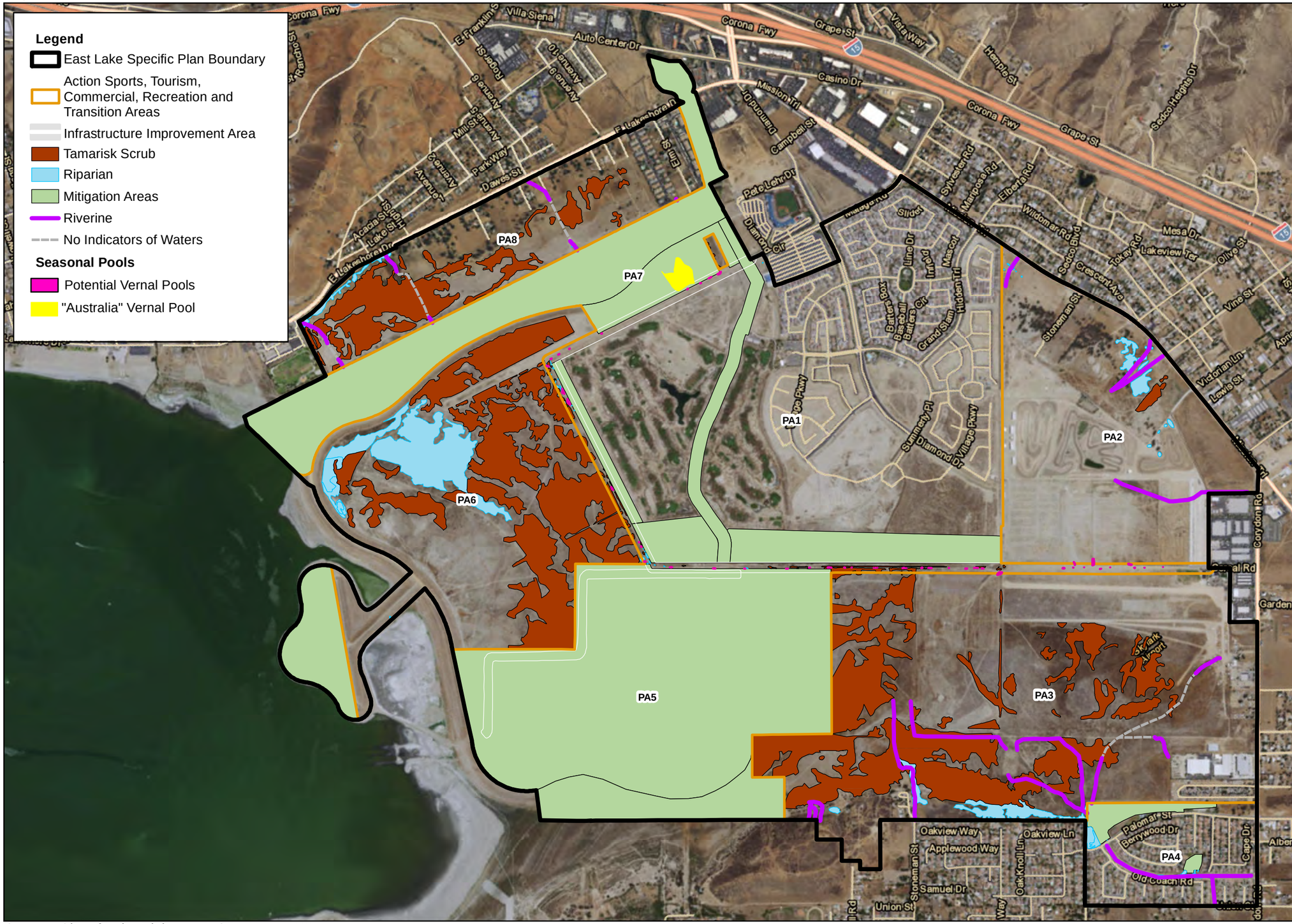
*includes overlap with the Below Elevation 1265’ feature.

Riparian/Riverine Areas and Vernal Pools

Section 6.1.2 of the MSHCP states that "riparian/riverine resources are lands which contain Habitat dominated by trees, shrubs, persistent emergent [wetland plant species], or emergent mosses and lichens, which occur close to or which depend upon moisture from a nearby freshwater source; or areas with freshwater after flow during all or a portion of the year" and “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.” To determine the areas where “Riparian/Riverine Areas and Vernal Pools” are present, the delineators conducted a site visit to walk and drive the entire site; reviewed previous biological, cultural, and construction reports on the site; and reviewed historical aerial imagery. Based on the collective results of these investigations, areas that showed evidence of these resources were determined to be subject to the MSHCP and were mapped.

Riparian/Riverine Areas

Approximately 61.27 acres of riparian/riverine areas and 342.84 acres of Tamarisk Scrub are located within the Project site. Please note, VCS concluded that the presence of Tamarisk Scrub, which is generally associated with groundwater in the Project site, met the definition of riparian/riverine under the MSCHP. However, Tamarisk Scrub has been categorized separately due to its listing as an invasive species. “Riparian/Riverine Areas and Vernal Pools” are shown on Figure 5.3-5, Existing Riparian & Riverine Areas and Vernal Pools, with features and acreages detailed in Table 5.3-5.



VCS Environmental
EXPERT SOLUTIONS | CEQA-NEPA . Biology . Regulatory

CITY OF LAKE ELSINORE

ELSP AMENDMENT No. 11

Existing Riparian & Riverine Areas and Vernal Pools

0 750 1,500 2,250 3,000
Feet
1 in = 1,500 ft

Map Date: March 2017
Source:Wilson Mikami, City of Lake Elsinore

Source: City of Lake Elsinore ELSPA No. 11 EIR

Existing Riparian & Riverine Areas and Vernal Pools, Figure 5.3-5

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Table 5.3-5. Riparian/Riverine within Project site

Feature*	Total Acreage
Riverine**	4.55
Riparian**	56.72
Mitigation Areas***	725.00 750.02
Tamarisk Scrub**	342.84

*includes the Infrastructure Improvement Areas.

**includes overlap with the Below Elevation 1265' feature.

***Includes Added Shoreline/Levee Area shown in Figure 3-4a. This area may contain areas that do not meet the Riparian/Riverine criteria as defined by the MSHCP.

The Infrastructure Improvements are anticipated to commence shortly after certification of this EIR and the approval of the SPA No. 11; therefore, a focused delineation was conducted within the improvement limits. 0.23 acres of riparian/riverine areas and 4.67 acres of Tamarisk Scrub occur within the improvement limits. Acreages of riparian/riverine areas are further detailed in Table 5.3-6 below, including the vegetation communities present both above and below elevation 1265'.

Table 5.3-6. Riparian/Riverine within the Infrastructure Improvement Areas

Feature	Total Acreage
Riverine*	0.00
Riparian*	0.23
Mitigation Areas	33.02
Tamarisk Scrub*	4.67

*includes overlap with the Below Elevation 1265' feature.

Vernal Pools

The Project site contains potential vernal pools or depressions as defined under MSHCP vernal pool features. A focused delineation for each future implementing development project would be necessary prior to project entitlement. The Infrastructure Improvements are anticipated to commence shortly after certification of this EIR and the approval of the SPA No. 11; therefore, the delineation conducted within the improvement limits identified numerous road-ruts that have the potential to support sensitive species. Focused vernal pool surveys should be conducted prior to new development and during the appropriate time of year. Please note, while vernal pools are categorized in the Riparian/Riverine Areas and Vernal Pools subsection of the Technical Report, they may also be considered jurisdictional WoS and WoUS. The Back Basin has a history of off-road disturbance and surveys conducted for Summerly and Waterbury showed no vernal pool features in the numerous seasonal depressions. However, each future

implementing development project would need to survey depressional areas to confirm no vernal pools are present. Potential vernal pools are identified in Figure 5.3-5, Existing Riparian & Riverine Areas and Vernal Pools. Acreage of potential vernal pool/seasonal depressions in the Project site and infrastructure improvement areas are provided below in Table 5.3-7 and 5.3-8 respectively.

Table 5.3-7. Vernal Pools/Seasonal Depressions within the Project site

Feature*	Total Acreage
Vernal Pools/Seasonal Depressions	0.32

*includes the Infrastructure Improvement Areas

Table 5.3-8. Vernal Pools/Seasonal Depressions within the Infrastructure Improvement Areas

Feature	Total Acreage
Vernal Pools/Seasonal Depressions	0.24

Regional Connectivity/Wildlife Movement

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. Corridors effectively act as links between different populations of a species. 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:

- Allowing wildlife to move between remaining habitats, which allows depleted populations to be replenished and promotes genetic diversity;
- Providing escape routes from fire, predators, and human disturbances, thus reducing the risk that catastrophic events (such as fires or disease) would result in population or local species extinction; and
- Serving as travel routes for individual wildlife species as they move within their home ranges in search of food, water, mates, and other needs (Fahrig and Merriam 1985, Simberloff and Cox 1987, Harris and Gallagher 1989).

Wildlife movement activities usually fall into one of three movement categories:

- Dispersal (e.g., juvenile animals from natal areas, individuals extending range distributions);
- Seasonal migration; and
- Movements related to home range activities (foraging for food or water, defending territories, searching for mates, breeding areas, or cover).

Regional conservation under the MSHCP includes identifying and conserving linkages between core areas. Core Areas are blocks of habitat which generally support the life history requirements of one or more MSHCP Covered Species and a Linkage is specifically a connection between Core Areas with adequate size, configuration, and vegetation characteristics to generally provide "Live-In" habitat and/or provide for genetic flow for identified MSHCP planning species (linkages typically function for movement of species and "live-in" habitat).

Wildlife Movement within the Project Site

The Project site includes MSHCP Elsinore Area Plan Subunit 3, the proposed extension of existing Core 3, and proposed Linkage 8. The northern portion of the extension provides for movement of species along the lower San Jacinto River to proposed Linkage 8. Additionally, the Lake is the permanent and seasonal home to a wide variety of birds and functions as a way station on the Pacific flyway for migrating waterfowl traveling from Alaska to South America. The Project site includes a portion of the Lake inlet channel and is located adjacent to the Lake. The historic San Jacinto River channel consists largely of the 25-acre mitigation site which would be conserved under a conservation easement.

It is expected that the Project site functions in local wildlife movement, including dispersal and movements related to home range activities. MSHCP Criteria requirements within the Back Basin, including the Project site require the preservation of 770 acres and, as discussed with the resource agencies, the Back Basin is not considered a wildlife management corridor for mammals and as such, conservation within the Back Basin would be based on acreage and not protection of any particular habitat or wildlife movement corridor.

5.3.4 Regulatory Context

5.3.4.1 Federal

Endangered Species Act (ESA)

The ESA (16 U.S.C. §1531 et seq.) was signed on December 28, 1973, and established a national policy that all federal agencies work toward conservation of species of wildlife, plants, and biotic communities endangered or threatened throughout all or a significant portion of their range, and the conservation of the ecosystems on which they depend. "Endangered" means any species which is in danger of extinction throughout all or a significant portion of its range. "Threatened" means any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range. All species of plants and animals, except pest insects, are eligible for listing as endangered or threatened. The ESA prohibits "take" (harm or harassment [including to pursue, hunt, shoot, wound, kill, trap, capture, or collect, or attempt to engage in any such conduct] of individuals of a protected species and, under certain circumstances, the destruction of habitat) of a federally listed Endangered or Threatened species without incidental take permits or authorization through Section 7 Consultation. The USFWS is responsible for identifying endangered or threatened species and their critical habitats under their jurisdiction, implementing conservation programs to conserve identified species, and rendering opinions regarding impacts of proposed development and federal actions on endangered, threatened, or

candidate plant and wildlife species. The U.S. National Oceanic and Atmospheric Administration (NOAA) Fisheries Service is responsible for rendering opinions regarding impacts on identified special-status anadromous[1] fish.

Executive Order 1318 and Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 – 712 et seq.) implements the provisions of treaties between the United States, Great Britain, Mexico, Japan, and the Soviet Union, and authorizes the U.S. Secretary of the Interior to protect and regulate the taking of migratory birds. It establishes seasons and bag limits for hunted species and protects migratory birds, their occupied nests, and their eggs (16 USC 703; 50 CFR 10, 21). Executive Order (EO) 13186, signed January 10, 2001, directs each federal agency taking actions that would have or are likely to have a negative impact on migratory bird populations to work with USFWS to develop a Memorandum of Understanding (MOU) to promote the conservation of migratory bird populations.

Bald and Golden Eagle Protection Act

The Bald and Golden Eagle Protection Act (16 U.S.C. 668-668c), enacted in 1940, and amended several times since then, prohibits anyone, without a permit issued by the Secretary of the Interior, from "taking" bald eagles, including their parts, nests, or eggs. The Act provides criminal penalties for persons who "take, possess, sell, purchase, barter, offer to sell, purchase or barter, transport, export or import, at any time or any manner, any bald eagle ... [or any golden eagle], alive or dead, or any part, nest, or egg thereof." The Act defines "take" as "pursue, shoot, shoot at, poison, wound, kill, capture, trap, collect, molest or disturb."

Clean Water Act

The Federal Clean Water Act was enacted as an amendment to the federal Water Pollution Control Act of 1972, which outlined the basic structure for regulating discharges of pollutants to WoUS. The Clean Water Act now serves as the primary federal law protecting the quality of the nation's surface waters, including lakes, rivers, and coastal wetlands, all of which pertain to the survival and viability of plants, wildlife, and ecological communities. Under Section 404 of the Clean Water Act, applicants must obtain a permit from the Corps for all discharges of dredged or fill material into WoUS, including wetlands, before proceeding with a proposed activity. The Corps may issue either an individual permit evaluated on a case-by-case basis or a general permit evaluated at a program level for a series of related activities. General permits are preauthorized and are issued to cover multiple instances of similar activities expected to cause only minimal adverse environmental effects. Nationwide Permits (NWPs) are a type of general permit issued to cover particular fill activities. Each NWP specifies particular conditions that must be met in order for the NWP to apply to a particular project. Section 404 of the Clean Water Act (CWA) establishes a program to regulate the discharge of dredged or fill material into WoUS, including wetlands as described above.

[1] Anadromous fish are born in fresh water, migrate to the ocean to grow into adults, and then return to fresh water to spawn.

Activities in WoUS regulated under this program include fill for development, water resource projects (such as dams and levees), infrastructure development (such as highways and airports) and mining projects. Section 404 requires a permit before dredged or fill material may be discharged into WoUS, unless the activity is exempt from Section 404 regulations (e.g. certain farming and forestry activities). States also have a role in Section 404 decisions, through State program general permits, water quality certification, or program assumption. The basic premise of the program is that no discharge of dredged or fill material may be permitted if: (1) a practicable alternative exists that is less damaging to the aquatic environment or (2) the nation's waters would be significantly degraded. In other words, when you apply for a permit, you must show that you have, to the extent practicable:

- Taken steps to avoid wetland impacts;
- Minimized potential impacts on wetlands; and

Proposed activities are regulated through a permit review process. An individual permit is required for potentially significant impacts. Individual permits are reviewed by the Corps, which evaluates applications under a public interest review, as well as the environmental criteria set forth in the CWA Section 404(b)(1) Guidelines. However, for most discharges that would have only minimal adverse effects, a general permit may be suitable. General permits are issued on a nationwide, regional, or State basis for particular categories of activities. The general permit process eliminates individual review and allows certain activities to proceed with little or no delay, provided that the general or specific conditions for the general permit are met. The Corps_administers day-to-day program, including individual and general permit decisions; conducts or verifies jurisdictional determinations; develops policy and guidance; and enforces Section 404 provisions. Compliance with Clean Water Act Section 404 requires compliance with several other environmental laws and regulations. The Corps cannot issue an individual permit or verify the use of a general permit until the requirements of NEPA, ESA, and the National Historic Preservation Act (see chapter 10, "Cultural Resources") have been met. In addition, the Corps cannot issue or verify any permit until a water quality certification, or a waiver of certification, has been issued pursuant to the Clean Water Act, Section 401. In general, to obtain a Clean Water Act, Section 404 permit, applicants must demonstrate that the discharge of dredged or fill material would not significantly degrade the nation's waters and there are no practicable alternatives less damaging to the aquatic environment. Applicants are also required to describe steps taken to minimize impacts to water bodies and wetlands and provide appropriate and practicable mitigation, such as restoring or creating wetlands, for any remaining, unavoidable impacts. Permits would not be granted for proposals that are found to be contrary to the public interest. Compliance with the Endangered Species Act and/or Section 106 of the National Historic Preservation Act may also be required before a Section 404 permit can be issued.

Section 401 Water Quality Certification – Regional Water Quality Control Board

The Clean Water Act, in Section 401, specifies that states must certify that any activity subject to a permit issued by a federal agency, such as the Corps, meets all state water quality standards. In California, the State Water Resources Board and the regional water quality control boards are responsible for taking certification actions for activities subject to any permit issued by the Corps pursuant to Section 404 (or for any other Corps' permit, such as permits issued pursuant to Section 10 of the Rivers and Harbors Act of

1899). Such certification actions, also known as "401 certification" or water quality certification, include issuing a 401 certification that the activity subject to the federal permit complies with state water quality standards, issuing a 401 certification with conditions, denying a 401 certification, or denying a 401 certification without prejudice, should procedural matters preclude taking timely action on a 401 certification application. Should a 401 certification be denied, the federal permit is deemed denied also. Regional boards or their executive officers may issue 401 certifications. The State Board issues 401 certifications for projects that would take place in two or more regions. The regulations governing California's issuance of 401 certifications were updated in 2000, and are contained in Sections 3830 through 3869 of Title 23 of the California Code of Regulations.

Executive Order 11990—Protection of Wetlands

Executive Order 11990 (issued in 1977) is an overall wetland policy for all agencies managing federal lands, sponsoring federal projects, or providing federal funds to state and local projects. It requires federal agencies to follow procedures for avoidance, mitigation, and preservation, with public input, before proposing new construction in wetlands. Compliance with Section 404 permit requirements may constitute compliance with the requirements of Executive Order 11990.

5.3.4.2 State

California Endangered Species Act

The California Endangered Species Act (CESA) (California Fish and Game Code Section 2050 et seq.) prohibits the take of any species listed by CDFW as endangered, threatened, or candidate for such listing. Take is defined in DFG Code Section 86 as "hunt, pursue, catch, capture, or kill, or attempt to hunt pursue, catch, capture, or kill." CDFW may authorize, by permit, the take of endangered species, threatened species, and candidate species if both of the following conditions are met: (1) the take is incidental to an otherwise lawful activity and (2) the impacts of the authorized take shall be minimized and fully mitigated. The measures required to meet this obligation shall be roughly proportional in extent to the impact of the authorized taking on the species. Where various measures are available to meet this obligation, the measures required shall maintain the applicant's objectives to the greatest extent possible. All required measures shall be capable of successful implementation.

CDFW and USFWS Species of Concern

The CDFW has also produced a species of special concern list to serve as a species watch list. Species on this list are either of limited distribution or their habitats have been reduced substantially, such that a threat to their populations may be imminent. Species of special concern may receive special attention during environmental review, but they do not have formal statutory protection. At the federal level, USFWS also uses the label species of concern, an informal term that refers to species which might be in need of concentrated conservation actions. As the Species of Concern designated by USFWS do not receive formal legal protection, the use of the term does not necessarily ensure that the species would be proposed for listing as a threatened or endangered species.

California Fish and Game Code Sections 3503 and 3503.5

Under Section 3503 of the California Fish and Game Code, it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird. Birds of prey are protected under the Section 3503.5 which states that it is "unlawful to take, possess, or destroy any birds in the order Falconiformes or Strigiformes (birds of prey) or to take, possess, or destroy the nest or eggs of any such bird except as otherwise provided by this code or any regulation adopted pursuant thereto." Construction disturbance during the breeding season could result in the incidental loss of fertile eggs or nestlings, or otherwise lead to nest abandonment. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered "take" by the California Fish and Game Code.

California Fish and Game Code Section 1602

The Department of Fish and Game (DFG) is responsible for conserving, protecting, and managing California's fish, wildlife, and native plant resources. To meet this responsibility, the Fish and Game Code (Section 1602) requires an entity to notify DFG of any proposed activity that may substantially modify a river, stream, or lake. Notification is required by any person, business, state or local government agency, or public utility that proposes an activity that will:

- Substantially divert or obstruct the natural flow of any river, stream or lake;
- Substantially change or use any material from the bed, channel, or bank of, any river, stream, or lake; or
- Deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it may pass into any river, stream, or lake.

The notification requirement applies to any work undertaken in or near a river, stream, or lake that flows at least intermittently through a bed or channel. This includes ephemeral streams, desert washes, and watercourses with a subsurface flow. It may also apply to work undertaken within the flood plain of a body of water. The Department must comply with the California Environmental Quality Act (CEQA) (Pub. Resources Code, § 21000, et seq.) before it may issue a final Lake or Streambed Alteration Agreement. Issuance of a final Lake or Streambed Alteration Agreement occurs after the Department receives a draft Lake or Streambed Alteration Agreement from the applicant and the Department signs it.

California State Wetlands Conservation Policy

The Governor of California issued an executive order on August 23, 1993, that created a California State Wetlands Conservation Policy. This policy is implemented by an interagency task force that is jointly headed by the State Resources Agency and the California Environmental Protection Agency (Cal-EPA). The policy has three goals:

- To ensure no overall net loss and a long-term net gain in wetlands acreage and values in a manner that fosters creativity, stewardship, and respect for private property;
- To reduce the procedural complexity of state and federal wetlands conservation program administration; and

- To encourage partnerships that make restoration, landowner incentives, and cooperative planning the primary focus of wetlands conservation.

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act) comports with the federal Clean Water Act. The Porter-Cologne Act, passed in 1975, provides for the development and periodic review of water quality control plans (also known as "basin plans") that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters. Basin plans are implemented primarily by using the NPDES permitting system to regulate waste discharges so that water quality objectives are met.

5.3.4.3 Local

City of Lake Elsinore General Plan

The City of Lake Elsinore General Plan includes goals, policies and implementation programs to preserve plants, wildlife, and biological communities. For a discussion of General Plan goals, policies and implementation programs applicable to biological resources, see Section 5.3.7 below.

Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP)

The Stephens' Kangaroo Rat is a federally-listed endangered species, which is also listed as a threatened species by the State of California. The Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP) is implemented by the Riverside County Habitat Conservation Agency (RCHCA) which was formed in 1990 for the purpose of planning, acquiring, administering, operating and maintaining land and facilities for ecosystem conservation and the creation of habitat reserves for the SKR and other endangered, threatened, and candidate species. The RCHCA is a Joint Powers Agreement agency comprised of the cities of Corona, Hemet, Lake Elsinore, Menifee, Moreno Valley, Murrieta, Perris, Riverside, Temecula, Wildomar and the County of Riverside. The City of Lake Elsinore joined the Riverside County Habitat Conservation Agency Joint Exercise Powers Agreement on May 15, 1990. In March of 1996, the RCHCA adopted a Long-Term HCP for the SKR which was approved by the USFWS and California Department of Fish and Game (now called the California Department of Fish and Wildlife) (CDFW) on May 6, 1996. At the time of approval, the HCP covered approximately 533,954 acres within RCHCA-member jurisdictions, including an estimated 30,000 acres of occupied SKR habitat. The western portion of the Project area is located within the boundary of the adopted SKR HCP area and would be required to comply with applicable provisions of this plan.

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

In 2004, the City adopted the MSHCP, a comprehensive multi-jurisdictional effort that focuses on conservation of 146 species and their associated habitats within western Riverside County. The Plan seeks to conserve biological resources by establishing a network of Conservation Areas (consisting of Core Reserves and Linkages) that would reserve in perpetuity open space to be maintained pursuant to the guidelines and regulations regarding land use, habitat preservation, and species conservation. Overall, the

Plan area covers approximately 1.26 million acres, which is broken down into 16 area plans. The City and its SOI are completely within the Elsinore Area Plan, which also encompasses the entirety of the City of Canyon Lake and additional unincorporated County land outside the City's SOI. The MSHCP provides a strategy for balancing the need to conserve open space and the need to convert open space to non-open space uses while protecting the region's economy; preserving land owner rights; providing for the long-term management of plant, fish, and wildlife species, especially those that are listed or may be listed in the future under the Federal Endangered Species Act (FESA) or the CESA; providing and maintaining multi-use open space that would contribute to the quality of life of residents of and visitors to the plan area; and accommodating a growing population while minimizing costs to project proponents and society at large.

The MSHCP serves as the Habitat Conservation Plan pursuant to Section 10(a)(1)(B) of the Federal Endangered Species Act of 1973, as well as a Natural Communities Conservation Plan (NCCP) under the NCCP Act of 2001. The MSHCP allows for the Permittees (i.e., City of Lake Elsinore, County of Riverside, the other 14 participating cities, etc.) to authorize "take" of plant and wildlife species identified within the Plan area for private and public works projects. Under the MSHCP, the U.S. Fish and Wildlife Service and CDFW , herein referred to as the Wildlife Agencies, have granted take authorization in exchange for the assembly and management of the MSHCP Conservation Area. One of the conditions of the permits associated with the MSHCP is that the City and other Permittees must contribute to the MSHCP Reserve Assembly. The permits were issued based upon an ultimate Reserve System of 500,000 acres. Of that 500,000 acres, 347,000 acres are designated Public/Quasi-Public lands and are already conserved. The acquisition of the remaining 153,000 acres is the responsibility of the Permittees. The City is focusing on adding lands to existing and proposed cores and linkages within the Elsinore Area Plan. To meet the goals and objectives of the MSHCP and to comply with the permits issued on this regional Plan, acquisitions of the Reserve Assembly are anticipated over a 25-year time period, with an Adaptive Management Program including restoration and enhancement being implemented over the 75-year term of the two permits. The objective of the approved MSHCP is to provide landowners, developers, and those who build public infrastructure with a streamlined regulatory process, certainty, and identified project mitigation. Pursuant to the MSHCP and its permits, the City reviews proposed development in the Criteria Area to determine consistency with the MSHCP. In some circumstances, development within areas described for conservation may be allowed assuming proper MSHCP processing has been completed. The City assists in processing projects consistent with the Plan, including review through the City of Lake Elsinore Acquisition Process (LEAP) and pursuant to Section 6.0 of the MSHCP. Consistency reviews for proposed development within Criteria Cells also require a Joint Project Review with the Regional Conservation Authority. Plan wide MSHCP requirements for implementing development projects include the following: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool Guidelines (MSHCP, § 6.1.2), Protection of Narrow Endemic Plant Species Guidelines (MSHCP, § 6.1.3), Additional Survey Needs and Procedures (MSHCP, § 6.3.2), Urban/Wildlands Interface Guidelines (MSHCP, § 6.1.4), Vegetation Mapping (MSHCP, § 6.3.1) requirements, Fuels Management Guidelines (MSHCP, § 6.4), and payment of the MSHCP Local Development Mitigation Fee (MSHCP Ordinance, § 4). MSHCP Section 6.1.4 Urban/Wildlands Interface also contains provisions for development to address impacts from drainage, toxics, lighting, noise, invasive

species, barriers (for restricting public access, domestic animal predation, illegal trespass and dumping), and grading/land development on MSHCP conservation areas.

Back Basin 770 ~~Agreement~~Plan

In 2003, when the draft MSHCP mapping was first released to the public, the original cell criterion for the Back Basin was not acceptable to the City of Lake Elsinore because it would have created severe economic impacts to the City based on its effect on the longstanding Lake Elsinore East Lake Specific Plan. To rectify this situation, a series of meetings were held between the City of Lake Elsinore, Jim Bartel of the U.S. Fish and Wildlife Service (USFWS), Ron Rempel of the CDFW and staff and consultants from Riverside County and representatives of Laing-CP Lake Elsinore, who was developing the Summerly project at the time. A letter from CDFW to Lake Elsinore dated October 2013 provides further information on CDFW's understanding of the history of the 770 Plan (Included as Appendix F(1)).

As a result of the City's discussions with the agencies, it was determined that conservation in the Back Basin was not tied to protection of specific habitat or wildlife movement corridors, but rather to the need to conserve a minimum of 770-acres in the Back Basin in order to meet the numeric requirements for the MSHCP (~~Back Basin~~ 770 ~~Agreement~~Plan). As described in CDFW's October 2013 letter to the City (AppendixF(1)), conservation in the ELSP site conservation lands used to achieve the 770 Plan should target lands that benefit shorebirds or wetland/marsh associated species, vernal pool species, sensitive plant species, and/or Planning Species for Subunit 3 and Proposed Extension of Existing Core 3, as described in the MSHCP. All lands should be managed consistent with the MSHCP and protected, in perpetuity, and will be reviewed and approved by CDFW, USFWS, and RCA. Several specific geographic areas in the Back Basin have been previously identified for conservation toward fulfillment of the 770-acre requirement, including Planning Area 5, most of Planning Area 7, and smaller portions of other Planning Areas as Preservation/ Mitigation Areas. These areas are depicted as "Mitigation Area" on Figure 5.3-1 and described in more detail in ELSPA No. 11 Section 2.5.4 which provides the following description of the currently identified areas:

> Wetland Mitigation Area
>
> Within Planning Area 5 is the commonly referred to "356-acre Wetland Mitigation Area" which is actually approximately 369.3 acres in size. This area contains the existing U.S. Army Corps of Engineers' man-made wetlands created as part of the Lake Elsinore Management Project. The wetlands provide habitat for birds, small mammals, reptiles and amphibians. No development shall occur within the Wetland Mitigation Area except for those improvements that are necessitated to implement the Lake Elsinore Management Project, as permitted by the U.S. Army Corps of Engineers or to enhance the existing 356-acre Wetland Mitigation Area.
>
> San Jacinto River Corridor and River/Lake Corridor
>
> Located within the Links at Summerly Golf Course in Planning Area 1, the approximately 25-acre San Jacinto River Corridor follows the historic drainage course of the river and provides an

approximately 200-foot wide wetlands and wildlife corridor function. This corridor is separated from urban land uses to enhance its biological value and wetlands function.

In addition to the 25-acre San Jacinto River Corridor, an approximately 10-acre, 165-foot wide River/Lake Corridor wetland is located on the western edge of Planning Area 1, adjacent to Planning Area 6.

Lake Elsinore Inlet Channel

As part of the Lake Elsinore Management Project, the U.S. Army Corps of Engineers created a "lake type inlet" with the purpose of conveying discharge from the San Jacinto River into Lake Elsinore. The 130-acre inlet channel and portion of the San Jacinto River are located in Planning Area 7 and are designated as a Preservation/Mitigation Area. Recreational water sports will continue to be allowable uses within the inlet channel.

"Australia" Vernal Pool Mitigation Area

Located within Planning Area 7, the City-owned 33-acre preservation area contains the "Australia" shaped vernal pool and additional mitigation capability for sensitive plant species.

11.66-acre TR 30846 (Serenity Park)

The 11.66 mitigation area located at the southeast corner of the Eastlake Specific Plan between Corydon and Skylark, which was dedicated as part of the Serenity Project.

"T" Peninsula Area

The 11.5-acre mitigation area located at the end of the "T" Peninsula in Planning Area 6 will be used to provide biological habitat functions and will be conserved and managed in accordance with the adopted Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP).

Open Space Buffers

Located along the southerly boundary of Planning Area 1, an approximately 71-acre open space buffer separates the Summerly Residential Neighborhood and The Links at Summerly golf course from the 356-acre Wetland Mitigation Area immediately to the south of Planning Area 1. It will provide drainage, flood retention and biological habitat functions.

An additional open space buffer to separate the 356-acre Wetland Mitigation Area from adjacent uses has been included in the ELSP as follows:

- City-owned land along the southern edge of Planning Area 5 between the 356-acres and the southwestern boundary of the ELSP. (Approximately 48 acres)

Additionally, future implementing development projects within the Project site may help to achieve the 770-acre requirement by dedicating acreage for managed open space as biological mitigation, consistent with Section 2.5.4.2 of the SPA.

In addition, all future implementing development projects within the Project site would ensure consistency with the MSHCP by obtaining a consistency determination and any other additional approvals required by the MSHCP, including processes such as the City's implementation of the HANS (Habitat Evaluation and Acquisition Negotiation Strategy) process known as the LEAP process, when appropriate. Applicable plan-wide requirements may include:

- Protection of Species Associated with Riparian/Riverine Areas and Vernal Pool Guidelines (MSHCP, § 6.1.2);
- Protection of Narrow Endemic Plant Species Guidelines (MSHCP, § 6.1.3);
- Additional Survey Needs and Procedures (MSHCP, § 6.3.2);
- Urban/Wildlands Interface Guidelines (MSHCP, § 6.1.4);
- Vegetation Mapping (MSHCP, § 6.3.1) requirements; and
- Fuels Management Guidelines (MSHCP, § 6.4), and Payment of the MSHCP Local Development Mitigation Fee (MSHCP Ordinance, § 4).

Lake Elsinore Municipal Code (LEMC) - Title 19, Chapter 19.04

Chapter 19.04 (Habitat Conservation of the Lake Elsinore Municipal Code addresses the City's implementation of the Stephens' Kangaroo Rat Habitat Conservation Plan in western Riverside County. Chapter 19.04 requires all applicants for development permits within the boundaries of the plan area to pay an impact and mitigation fee of $500.00 per gross acre located within the parcel to be developed and the area disturbed by related off-site improvements except as provided in LEMC 19.04.100. No development permit for real property located within the boundaries of the plan area shall be issued or approved without the payment of the impact and mitigation fees and the submission of the biological survey as required by this chapter.

Lake Elsinore Municipal Code (LEMC) - Title 16, Chapter 16.85

Chapter 16.85 (Local Development Mitigation Fee for Funding the Preservation of Natural Ecosystems) establishes a local development mitigation fee as part of the City's implementation of the MSHCP. To assist in providing revenue to acquire and preserve vegetation communities and natural areas within the City and Western Riverside County that are known to support threatened, endangered or key sensitive populations of plant and wildlife species, the City collects the local development mitigation fee for each future implementing development project or portion thereof to be constructed within the City.

Lake Elsinore Municipal Code (LEMC) - Title 14, Chapter 14.08

The purpose of this chapter is to ensure the future health, safety, and general welfare of the City's citizens by:

- Reducing pollutants in stormwater discharges to the maximum extent practicable;

- Regulating illegal connections and discharges to the storm drain system; and,
- Regulating non-stormwater discharges to the storm drain system.

The intent of this chapter is to protect and enhance the water quality of City watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with the federal Clean Water Act (33 USC 1342).

Lake Elsinore Municipal Code (LEMC) - Title 5, Chapter 5.116

The City has in place a palm tree preservation ordinance that was adopted as City Ordinance No. 1044 and codified as Chapter 5.116 of the Lake Elsinore Municipal Code. The purpose of the program is for the protection of the City's plant life heritage for the benefit of all citizens in the City of Lake Elsinore. The City recognizes the value of significant palm trees (Canary Island Date Palm, California Fan Palm, Windmill Palm, Mediterranean Fan Palm, Senegal Date Palm, Pindo Palm and Pygmy Palm) within the City of Lake Elsinore as natural aesthetic resources that help define the history and character of the City. All residents who wish to remove a palm tree that exceeds five feet in height measured from the ground at the base of the trunk to the base of the crown must obtain a palm tree removal permit prior to removal of the tree.

Lake Elsinore Acquisition Process (LEAP)

With the adoption of the Final MSHCP, the City Council agreed to implement the plan utilizing the Property Owner-Initiated LEAP. LEAP ensures that: 1) an early determination will be made concerning those properties that may be needed for the MSHCP Conservation Area; 2) owners of property needed for MSHCP conservation are compensated, if necessary, through incentives or monetarily; and, 3) owners seeking land not needed for inclusion in the MSHCP Conservation Area, shall receive a Take Authorization for Covered Species Adequately Conserved through the Permits issued to the City pursuant to the MSHCP.

5.3.5 Significance Thresholds

Implementation of the proposed project would result in a significant adverse environmental impact if any of the following occurs as a result of project implementation:

Threshold BIO-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 Wildlife or U.S. Fish and Wildlife Service.*

Threshold BIO-B *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (including protections provided pursuant to Section 1600 et seq.).*

Threshold BIO-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.*

Threshold BIO-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.*

Threshold BIO-E *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

Threshold BIO-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.*

5.3.6 Evaluation of Potential Impacts

Threshold BIO-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 Wildlife or U.S. Fish and Wildlife Service.*

5.3.6.1 Construction Impacts

Given that candidate, sensitive, and special status species and their habitat that occur in the Project site may be avoided by future implementing development projects during the site design process and through implementation of additional avoidance, minimization, and/or mitigation measures, the extent of these future projects' impacts to these sensitive natural communities is not currently known. Therefore, as a conservative worst-case approach, impacts to sensitive natural communities identified within the Project site have been classified as permanent operational impacts where these resources occur and future known impacts may occur. Further information on impacts to sensitive natural communities, not including riparian habitat, is provided in more detail below in Section 5.3.6.4.

Impact BIO-1 *Construction activities related to future implementing development projects within the Project site including grading, vegetation removal, and/or demolition activities would result in potentially significant impacts to surrounding plant and wildlife species including candidate, sensitive, and special status species.*

Impact BIO-2 *Construction of future implementing development projects within the Project site would result in potentially significant impacts to vegetation communities of concern pursuant to the MSHCP.*

Also, there is potential for direct and indirect impacts to special status plants during construction activities within the Project site. The species with the highest likelihood of occurrence within the Project site are little mousetail and smooth tarplant. To avoid impacts to special status plant species that may occur in the Project site including both of these species, focused botanical surveys pursuant to the MSHCP Narrow Endemic and Criteria Area Species Survey requirements would be conducted for future implementing development projects within the Project site as specified in MM BIO-4.

In addition to surveys, compliance with the MSHCP including required mitigation if applicable for all future implementing development projects with special status plant species onsite would reduce potential direct impacts to below a level of significance.

Impact BIO-3 *Construction of future implementing development projects would result in potentially significant impacts to special status plant species during construction.*

Potential Impacts to Special Status Wildlife

Of the federal and state endangered or threatened species with potential to occur within the Project site, the western snowy plover is the only species not covered under the MSHCP. ~~Based on the lack of recent observation (within the last 40 years), it is unlikely the species would occur in the Project site. Although occurrence of western snowy plover is unlikely, any potential for impacts to this species during construction of future implementing development projects would be minimized through implementation of MM BIO-7, which requires all future implementing development projects in the Project site to complete a pre-construction nesting bird survey prior to clearing and grubbing activities within the Project site. Therefore, potential impacts to western snowy plover would be less than significant.~~ Figure 8 of the Biological Technical Report shows historical CNDDB occurrences of plover around the Lake shoreline, consistent with the July 2016 sitings (eBird, https://ebird.org/ebird/hotspot/L1743855). As shown in Figure 3-4, Land Use Plan, the proposed development areas avoid lake shoreline areas by preserving proposed Planning Area 5, Planning Area 7 and approximately 50 percent of the "T Peninsula" in Planning Area 6. Implementation of MM BIO-7 for preconstruction nesting bird surveys and avoidance of development in these areas would ensure potential short-term and long-term impacts to western snowy plover are less than significant. In addition, future implementing development projects would require project-specific biological surveys and environmental review prior to implementation to verify these findings made in this programmatic DEIR.

Impact BIO-4 *Construction of future implementing development projects including clearing, grubbing, and demolition activities ~~would~~may result in~~ less than significant~~ impacts to western snowy plover and other nesting birds in the Project site.*

Three additional special status wildlife with potential to occur in the Project site are not covered by the MSHCP including:

- American white pelican: potential nesting grounds and foraging habitat are not expected to be directly impacted by development within the Project site due to the designated preservation/mitigation areas in Planning Areas 5, 6 and 7 and due to avoidance of shoreline development. In addition, although potential roosting and breeding habitat occurs along the avoided shoreline areas, Lake Elsinore is considered more of a stopover location for migrating pelicans rather than a roosting/breeding ground because the species requires safe roosting and breeding places in the form of well-sequestered islets. Therefore, no direct and no significant indirect impacts are expected based on the general avoidance of shoreline and designated preservation areas that will provide adequate habitat and buffer distances between any potential

birds and development. In addition, future implementing projects would require project-specific biological surveys and environmental review prior to implementation to verify these findings made in this programmatic DEIR.

- Coast patch-nosed snake: potential loss of suitable habitat for this species, which typically includes semi-arid brush areas, canyons, rocky hillsides, and plains would result from the Project. However, suitable habitat for the coast patch-nosed snake would be preserved within Preservation/Mitigation Areas, as shown on Figure 3-4 Proposed Land Use Plan, designated for achieving MSHCP conservation goals of the Back Basin 770 Plan. Preserved suitable habitat would include part of those currently identified mitigation areas associated with the Summerly development known as the "25-acre site" – upstream area and slopes in the "10-acre site" (semi-arid brush); along Rome Hill (rocky hillside) and other areas that fall into that classification (the slopes in the future "71-acre site" plus part of the preservation areas in PA-4, PA-5 and PA-7). Given the potential loss of habitat impacts and implementation of MSHCP Conservation requirements that would retain suitable habitat, impacts to this species would be less than significant. In addition, future implementing projects would require project-specific biological surveys and environmental review prior to implementation to verify these findings made in this programmatic DEIR.

- Two-striped garter snake: potential loss of suitable habitat for this species would result from the Project. However, there is a low potential for occurrence onsite or impacts because suitable habitat is limited to areas adjacent to open water, which would primarily include areas along the Lake shoreline and San Jacinto River inlet channel that are to remain undeveloped. No other open water areas have been observed in the survey area. Given the limited potential for direct impact and no significant indirect impacts expected to this species per the Technical Report, the minimal potential loss of habitat would result in a less than significant impact to this species. In addition, future implementing projects would require project-specific biological surveys and environmental review prior to implementation to verify these findings made in this programmatic DEIR.

- ~~American white pelican: potential nesting grounds and foraging habitat are not expected to be directly impacted by development within the Project site. Therefore, no direct and no significant indirect impacts are expected, and less than significant impacts would result from the Project.~~
- ~~coast patch-nosed snake: potential loss of suitable habitat for this species would result from the Project. With implementation of the MSHCP Conservation requirements, suitable habitat for the coast patch-nosed snake would be preserved within the Back Basin. Given the potential loss of habitat impacts and implementation of MSHCP Conservation requirements, impacts to this species would be less than significant.~~
- ~~two-striped garter snake: potential loss of suitable habitat for this species would result from the Project. There is a low potential for occurrence onsite and suitable habitat is limited to areas adjacent to open water which would primarily remain undeveloped. Given the limited potential for direct impact and no significant indirect impacts expected to this species per the~~

~~Technical Report, the minimal potential loss of habitat would result in a less than significant impact to this species.~~

The remaining special status wildlife with potential to occur in the Project site and the Infrastructure Improvement Areas are covered by the MSHCP; therefore, any potential direct or indirect impacts to these species are expected to be reduced to below significance with MSHCP compliance of future implementing development projects within the Project site.

Impact BIO-5 *Construction of future implementing development projects including clearing, grubbing, and demolition activities would result in less than significant impacts to MSHCP-covered species as well as American white pelican, coast patch-nosed snake, and two-striped garter snake that might occur in portions of the Project site.*

5.3.6.2 Operational Impacts

Potential Impacts to Special Status Plants and Wildlife

There is potential for direct and indirect impacts to special status plants and wildlife within the Project site during operation of the proposed Project, which would result from increased encroachment (i.e. offroading) within undeveloped portions of the Project site as the Project site is made more accessible through installation of new roads and incremental development of the site. Domestic cats may also pose a potential hazard to species where residential areas are situated adjacent to conservation areas. In addition, as the site is developed, less suitable habitat would remain for those special status species identified as occurring in the Project site.

Much of the proposed planning areas are undeveloped and not lit at night, with the exception of proposed PA-1, PA-4 and portions of PA-2, PA-3 and PA-8. New development may increase the overall level of ambient light at night in areas adjacent to open-space conservation/mitigation areas. Species in these areas may be subject to increased predation from diurnal predators foraging for longer periods with light from adjacent development and increase visual acuity by nocturnal predators without proper shielding or buffers. Indirect noise impacts on adjacent open-space conservation/mitigation areas may also pose a source of nuisance or disruption to wildlife breeding, roosting, nesting and/or foraging activities without proper shielding or buffers.

Direct impacts are anticipated to be less than significant based on the Project's obligation to preserve a minimum of 770 acres of Preservation/Mitigation Areas, as shown on Figure 3-4 Proposed Land-Use Plan, and based on the requirement that future implementing development projects must help meet and manage preservation/mitigation areas per ELSPA No. 11 Section 2.5.4.2. It is further anticipated that managing and policing conserved areas to prohibit illegal offroading and dumping would be facilitated by new development and police and property owner access within the Project site.

Indirect impacts related to drainage, toxics, lighting, noise, invasive species, barriers (for restricting public access, domestic animal predation, illegal trespass and dumping), and grading/land development are anticipated to be less than significant through compliance with MSHCP urban interface requirements

detailed in Section 6.1.4 Guidelines Pertaining to the Urban/Wildlands Interface. Furthermore, additional project-specific environmental review per ELSPA No. 11 Section 10.7.2 is required to verify these findings made in this programmatic D~~raft~~ EIR prior to future implementing development project implementation. Specific measures to minimize noise impacts may include one or more of the following: setbacks, berms, or walls to minimize the effects of noise on MSHCP Conservation Area resources pursuant to applicable rules, regulations, and guidelines. Specific measures to minimize night-lighting impacts may include one or more of the following: directing night lighting away from conservation areas; shielding of lights to ensure ambient lighting in the conservation areas is not increased; use of amber lights; the use of motion sensors and other controls, especially for security lighting, so that lights operate only when the area is occupied by people; surface treatment specifications that minimize glare and sky glow; and always-on security lighting be limited to one low-wattage, fully shielded, full cutoff light fixture at the main entrance to facilities.~~These impacts are anticipated to be less than significant.~~

Impact BIO-6 *Operation of the Project would likely lead to increased encroachment in undeveloped portions of the Project site as well as reduced habitat for these species, which would result in less than significant impacts to special status plants and wildlife.*

Potential Impacts to Critical Habitat

Riverside Fairy Shrimp Critical Habitat is located in the Project site within the 33-acre preserved open space (see Figure 5.3-6, Critical Habitat). Direct impacts to Riverside Fairy Shrimp Critical Habitat are identified within the Infrastructure Improvement Areas including 0.28 acre permanent impacts and 0.91 acre temporary impacts (total of 1.23 acres). ~~However, in~~ These impact calculations account for a worst-case evaluation of potential impacts because they include everything within the Infrastructure Improvement Area study area, which does not account for ultimate roadway widths, alignment or design. During future final design of the roadway improvements at this location, the City would avoid and minimize these impacts to the maximum extent practicable. If avoidance is not possible, mitigation measure MM BIO-6 requires focused surveys be conducted to determine presence/absence of Riverside fairy shrimp within the Infrastructure Improvement Areas. If fairy shrimp are present, the City shall determine whether avoidance can be achieved. If not, mitigation measure MM BIO-6 would require 90 percent of the occupied portions of the property that provide for long-term conservation value for the fairy shrimp to be conserved consistent with the MSHCP. ~~No indirect impacts due to the Infrastructure Improvements are expected with the implementation of MSHCP urban interface requirements.~~ Direct impacts to the Riverside Fairy Shrimp Critical habitat, to the extent it occurs, would be considered less than significant if in-kind replacement within the Back Basin occurs, avoidance of Critical Habitat is achieved, or the constituent elements for f~~F~~airy s~~S~~hrimp are documented to be absent prior to these impacts occurring. Furthermore, MSHCP compliance and additional environmental review is required to verify these findings made in this programmatic DEIR prior to future implementing development project implementation.

No indirect impacts due to the Infrastructure Improvements are anticipated with the implementation of MSHCP urban interface requirements detailed in Section 6.1.4 Guidelines Pertaining to the Urban/Wildlands Interface. Compliance with these standard guidelines would ensure indirect impacts

from drainage, toxics, lighting, noise, invasives, barriers, and grading/land development are less than significant. Specifically, compliance with drainage and toxics guidelines would ensure less than significant impacts occur to the watershed of any vernal pools that may be found during future implementing development project project-level surveys.

~~Riverside Fairy Shrimp Critical Habitat is located in the Project site within the 33-acre preserved open space (see Figure 5.3-6, Critical Habitat).~~

No additional direct impacts are anticipated to Riverside Fairy Shrimp Critical Habitat. No further direct or indirect impacts to Riverside Fairy Shrimp Critical Habitat are expected to result from the implementation of other future implementing development projects within the Project site.

Impact BIO-7 *Operation of the Project, particularly the improvement of Malaga Road, may result in permanent direct impacts to Critical Habitat designated for Riverside Fairy Shrimp in the Project site, which would constitute a potentially significant impact.*

Threshold BIO-B *Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service (including protections provided pursuant to Section 1600 et seq.).*

5.3.6.3 Construction Impacts

Given that sensitive natural communities identified in the Project site may be avoided by future implementing development projects during the site design process, the extent of these future projects' impacts to these sensitive natural communities is not currently known. Therefore, as a worst-case approach, impacts to sensitive natural communities identified within the Project site have been classified as permanent operational impacts and are described below in Section 5.3.6.4 and 5.3.6.5.

5.3.6.4 Operational Impacts

A total of 6.08 acres of permanent impacts to Southern Cottonwood Willow Riparian Forest is anticipated as a result of the proposed Project. Permanent operational impacts to riparian habitat, which is also considered a sensitive natural community, is discussed below in Section 5.3.6.5.

Impact BIO-8 *Operation of the Project would result in the removal of a maximum of 6.08 acres of Southern Cottonwood Willow Riparian Forest from portions of the Project site, which would result in a potentially significant impact to this sensitive natural community.*

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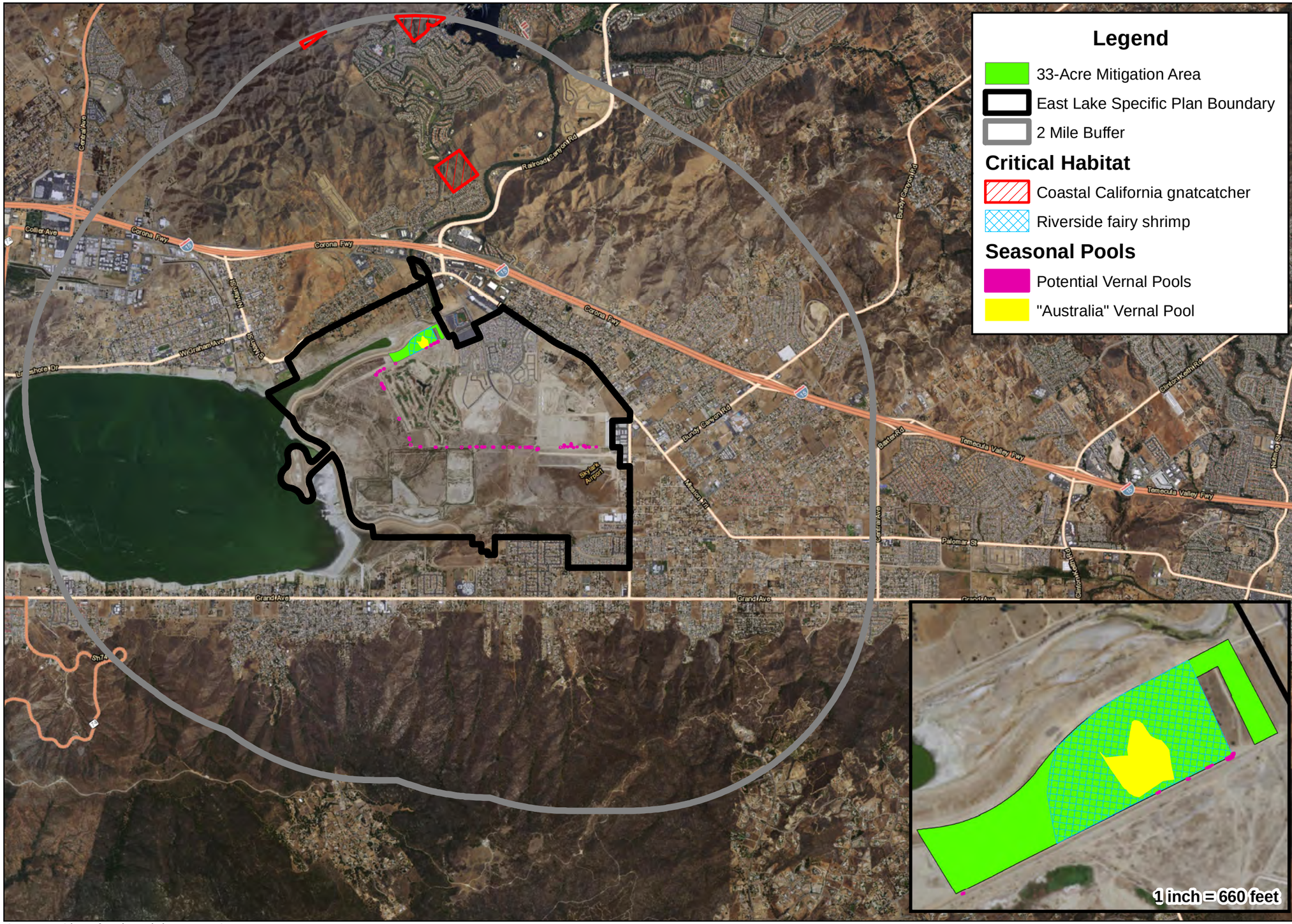

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CITY OF LAKE ELSINORE

ELSP AMENDMENT No. 11

CRITICAL HABITAT

0 2,100 4,200 6,300 8,400
Feet
1 in = 4,200 ft

Map Date: December 2016
Source: USFWS

Source: City of Lake Elsinore ELSPA No. 11 EIR

Critical Habitat, Figure 5.3-6

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Threshold BIO-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.*

5.3.6.5 Construction and Operational Impacts

Potential Impacts to Jurisdictional Waters

WoUS under the jurisdiction of the Corps and RWQCB, WoS under the jurisdiction of CDFW and RWQCB, and Riparian/Riverine/Vernal Pools under the jurisdiction of the MSHCP were found within the Project site. Ultimate impacts for each Planning Area are not currently known as they are dependent on ultimate development and site design that occurs within the Project site; therefore, this document assumes impacts may occur to all of the jurisdictional waters within planning areas that are subject to development. Impacts are identified in the tables below and in Figure 5.3-7, Potential Impacts to WoUS, Figure 5.3-8, Potential Impacts to WoS, and Figure 5.3-9, Potential Impacts to Riparian & Riverine Areas and Vernal Pools.

Table 5.3-9. Potential Impacts to Waters of the United States within the Project site

Feature*	Permanent Impacts	Temporary Impacts
Below Elevation 1246’	343.39	7.62
Other WoUS	0.09	0.00
Potential Wetlands	27.90	0.00
Mitigation Areas	10.24	7.62
Above Elevation 1246’	--	--
Other WoUS	2.32	0.00
Potential Wetlands	25.98	0.16
Mitigation Areas	6.76	8.39
Totals	--	--
Below Elevation 1246’	343.39	7.62
Other WoUS**	2.41	0.00
Potential Wetlands**	53.88	0.16
Mitigation Areas	17.01	16.01

*includes the Infrastructure Improvement Areas

**includes overlap with the Below Elevation 1246’ feature.

Table 5.3-10. Potential Impacts to Waters of the State within the Project site

Feature*	Permanent Impacts	Temporary Impacts
Below Elevation 1265’	1347.78	30.55
Rivers, Streams, or Lakes	2.59	0.00
Riparian/Potential Wetland	51.22	0.16
Mitigation Areas	17.01	16.01
Above Elevation 1265’	--	--
Riverine	0.49	0.00
Riparian/Potential Wetland	2.66	0.00
Mitigation Areas	0.00	0.00
Totals	--	--
Below Elevation 1265’	1347.78	30.55
Riverine**	3.08	0.00
Riparian/Potential Wetland**	53.88	0.16
Mitigation Areas	17.01	16.01

*includes the Infrastructure Improvement Areas

**includes overlap with the Below Elevation 1265’ feature.

Table 5.3-11. Potential Impacts to Riparian/Riverine within the Project site

Feature*	Permanent Impacts	Temporary Impacts
Riverine**	3.08	0.00
Riparian**	53.88	0.16
Mitigation Areas	17.01	16.01
Tamarisk Scrub**	341.31	1.56

*includes overlap with the Below Elevation 1265’ feature.

**includes the Infrastructure Improvement Areas

Table 5.3-12. Potential Impacts to Vernal Pools/Seasonal Depressions within the Project site

Feature*	Permanent Impacts	Temporary Impacts
Potential Vernal Pools	0.25	0.07

*includes the Infrastructure Improvement Areas

WoUS under the jurisdiction of the Corps and RWQCB, WoS under the jurisdiction of CDFW and RWQCB, and Riparian/Riverine/Vernal Pools under the jurisdiction of the MSHCP were found within the Cereal Street, Malaga Street, Lucerne Street, and Berm improvement limits. Impacts are identified in the tables below.

Table 5.3-13. Potential Impacts to Waters of the United States within the Infrastructure Improvement Areas

Feature*	Permanent Impacts	Temporary Impacts
Below Elevation 1246’	10.24	7.62
Other WoUS	0.00	0.00
Wetland	0.00	0.00
Mitigation Areas	10.24	7.62
Above Elevation 1246’	--	--
Other WoUS	0.00	0.00
Wetland	0.23	0.16
Mitigation Areas	6.76	8.39
Totals	--	--
Below Elevation 1246’	10.24	7.62
Other WoUS*	0.00	0.00
Wetland*	0.23	0.16
Mitigation Areas	17.01	16.01

*includes overlap with the Below Elevation 1246’ feature.

Table 5.3-14. Potential Impacts to Waters of the State within the Infrastructure Improvement Areas

Feature*	Permanent Impacts	Temporary Impacts
Below Elevation 1265’	46.88	30.55
Rivers, Streams, or Lakes	0.00	0.00
Riparian/Potential Wetland	0.23	0.16
Mitigation Areas	17.01	16.01
Above Elevation 1265’	--	--
Riverine	0.00	0.00
Riparian/Potential Wetland	0.00	0.00
Mitigation Areas	0.00	0.00

Feature*	Permanent Impacts	Temporary Impacts
Totals	--	--
Below Elevation 1265'	46.88	30.55
Riverine*	0.00	0.00
Riparian/ Wetland*	0.23	0.16
Mitigation Areas	17.01	16.01

*includes overlap with the Below Elevation 1265' feature.

Table 5.3-15. Potential Impacts to Riparian/Riverine within the Infrastructure Improvement Areas

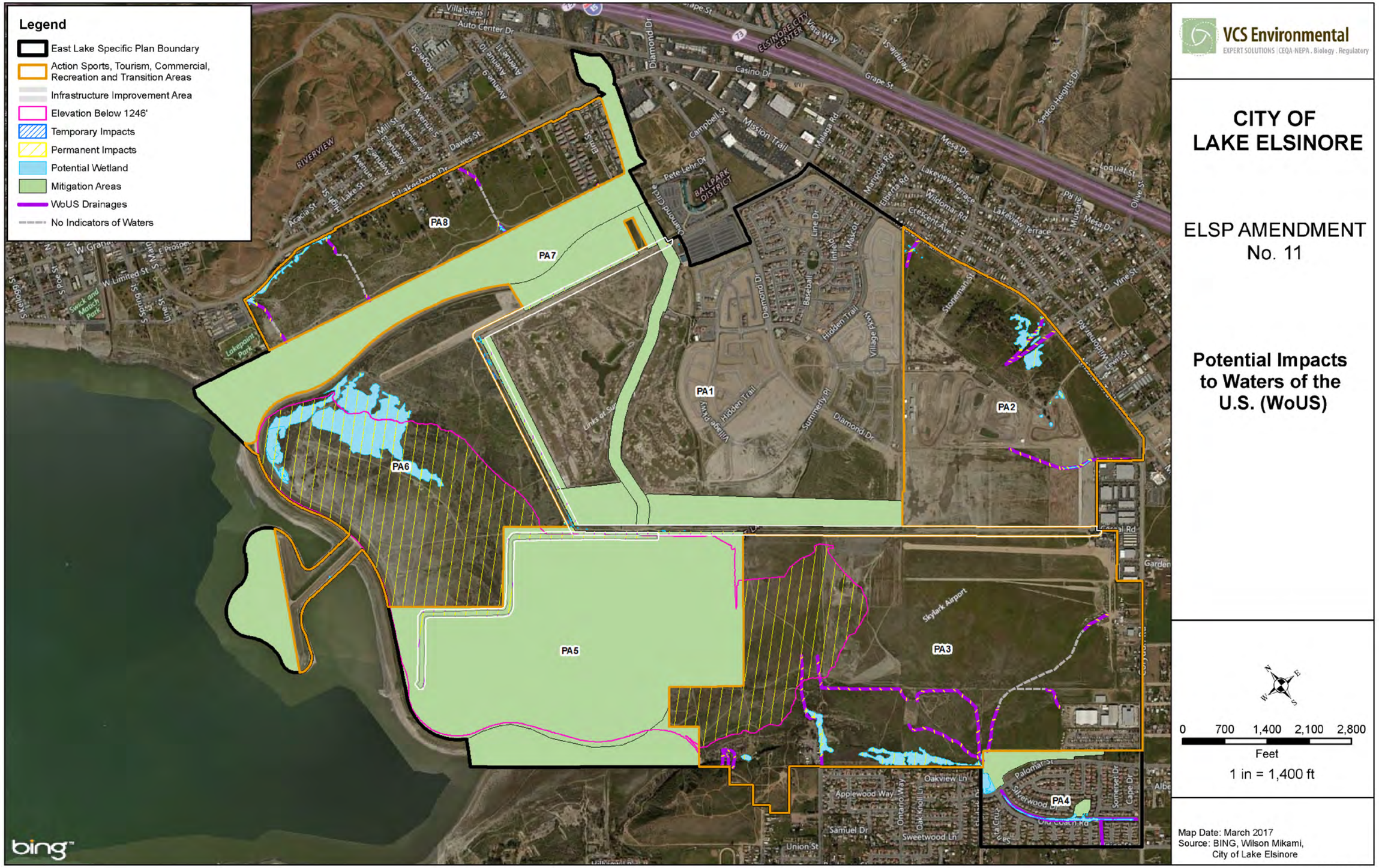
Feature*	Permanent Impacts	Temporary Impacts
Riverine*	0.00	0.00
Riparian*	0.23	0.16
Mitigation Areas	17.01	16.01
Tamarisk Scrub*	3.11	1.56

*includes overlap with the Below Elevation 1265' feature.

Table 5.3-16. Potential Impacts to Vernal Pools/Seasonal Depressions within the Infrastructure Improvement Areas

Feature*	Permanent Impacts	Temporary Impacts
Potential Vernal Pools	0.17	0.07

Impact BIO-9 *Operation of the Project would result in temporary and permanent impacts to Waters of the US, Waters of the State, and Riparian-Riverine resources from portions of the Project site, which would result in a potentially significant impact.*



Source: City of Lake Elsinore ELSPA No. 11 EIR

Potential Impacts to Waters of the U.S., Figure 5.3-7

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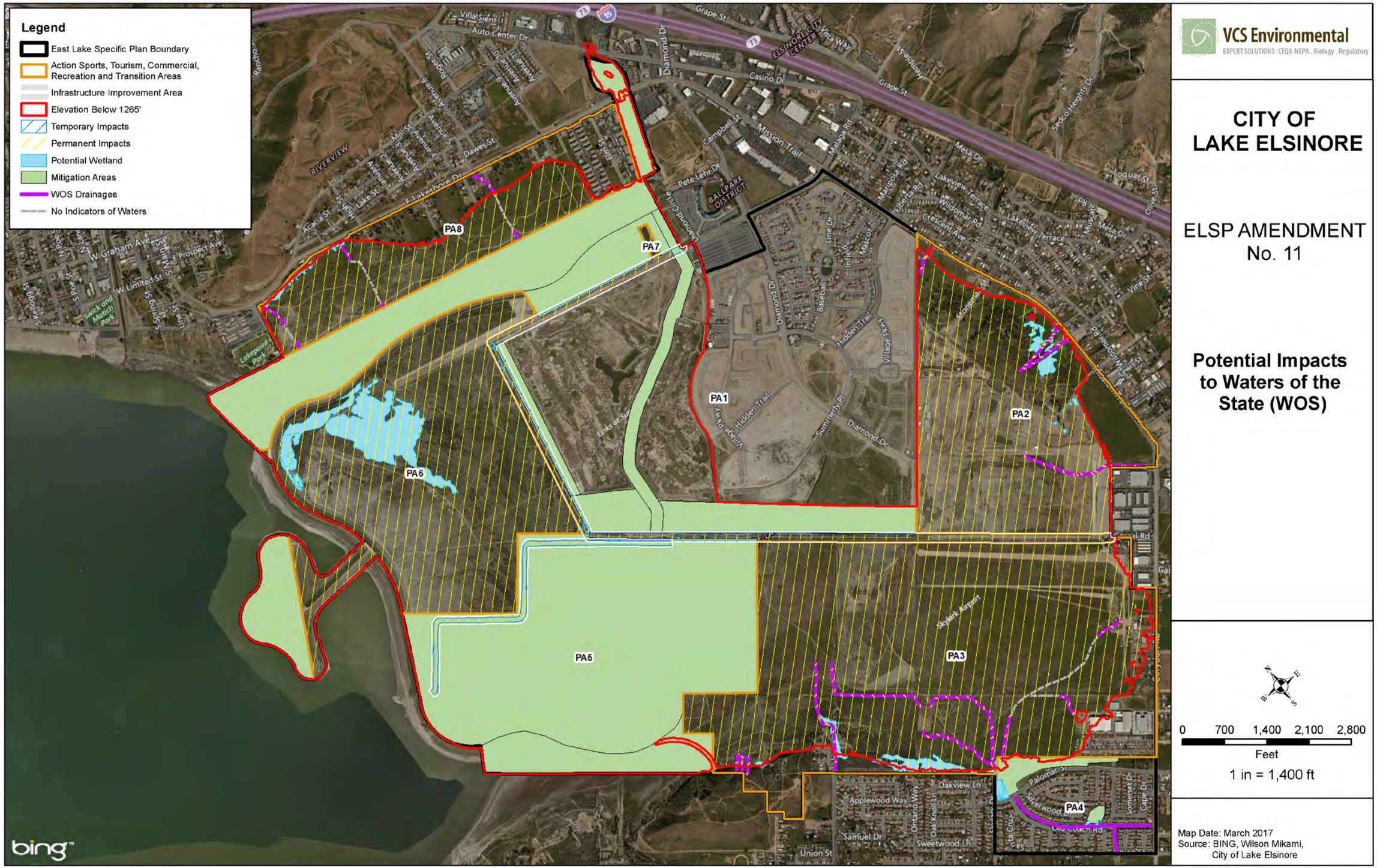

Source: City of Lake Elsinore ELSPA No. 11 EIR

Potential Impacts to Waters of the State., Figure 5.3-8

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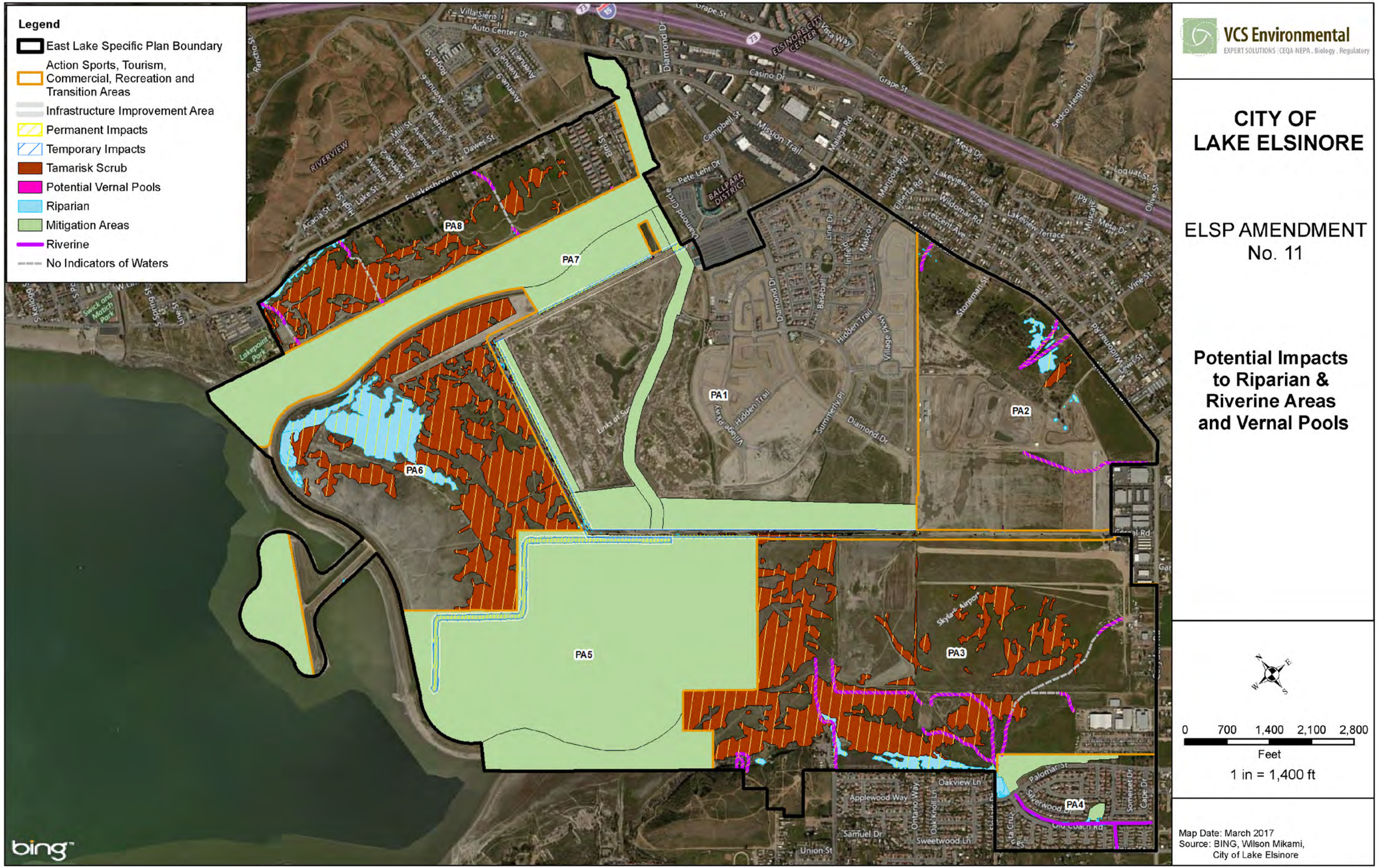

Source: City of Lake Elsinore ELSPA No. 11 EIR

Potential Impacts to Riparian & Riverine Areas and Vernal Pools, Figure 5.3-9

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Threshold BIO-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.*

5.3.6.6 Construction Impacts

Nesting Birds

The Project site contains breeding, nesting and roosting habitat for bird species, in both vegetation and structures. Given the potential for nesting birds throughout the Project site and proposed clearing, grubbing, and other activities proposed, which would disturb nesting activities, potentially significant impacts to nesting birds in the Project site as a result of future implementing development projects would occur. Implementation of **MM BIO-7** for preconstruction nesting bird surveys would ensure potential short-term impacts to nesting birds are less than significant.

Impact BIO-4 *Construction of future implementing development projects including clearing, grubbing, and demolition activities ~~would~~ may result in ~~less than significant~~ impacts to western snowy plover and other nesting birds in the Project site.*

Potential Impacts to Wildlife Movement

During construction of future implementing development projects, temporary impacts to local wildlife movement may result (i.e. dispersal and home range activities); however, these impacts are considered less than significant given the large proportion of open space conservation proposed in the Project site which would allow for alternative wildlife movement corridors for these species. Construction of future implementing development projects including clearing, grubbing, and demolition activities would result ***in less than significant impacts to wildlife movement***.

5.3.6.7 Operational Impacts

Potential Impacts to Wildlife Movement

The Project site may serve a function in local wildlife movement (i.e. dispersal and home range activities), however as discussed with USFWS and CDFW, the Back Basin is not considered a local or regional wildlife corridor for mammals. The Back Basin is considered an important location in bird migration and as such implementation of the ~~Back Basin~~ 770 ~~Agreement~~ Plan is expected to provide habitat especially for bird use. It is also expected that local wildlife movement would be preserved within the Project site as a result of the existing mitigation and preservation areas which make up the acreage requirements of the ~~Back Basin~~ 770 ~~-~~Plan ~~Agreement~~. Considering the existing and future preservation of open space, ***potential impacts to local wildlife movement would be less than significant***.

Threshold BIO-E *Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.*

5.3.6.8 Construction Impacts

Construction of the proposed Project would not result in any conflicts with local policies or ordinances protecting biological resources. ***Therefore, no impact.***

5.3.6.9 Operational Impacts

No operational impacts conflicting with local policies or ordinances protecting biological resources would result from the proposed Project. ***Therefore, no impact.***

Threshold BIO-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.*

5.3.6.10 Construction Impacts

Construction of future implementing development projects within the Project site would comply with standard construction BMPs found in Appendix C of the MSHCP. In addition, MSHCP approvals would be required of future projects in the Project site. Therefore, although direct and indirect impacts to MSHCP riparian riverine resources as well as covered species would occur during construction of future implementing development projects, ***these impacts would be less than significant***.

5.3.6.11 Operational Impacts

MSHCP 770

As mapped in Figure 5.3-2, up to 33.02 acres of temporary and permanent impacts to existing mitigation areas in the ELSP may occur as a result of infrastructure improvements. Impact analysis was conservative, assuming the maximum right-of-way width and using a conceptual alignment, both of which may be modified to further avoid and minimize impacts to these mitigation areas during the design of these infrastructure improvements. No other permanent operational impacts to the MSHCP would result from construction of the proposed Project. Currently, the following properties are considered part of the MSHCP 770 Plan:

- The 130-acre Lake Elsinore Inlet Channel
- The 356-acre wetlands
- The 10-, 25-, and 71- acre sites on the Summerly project
- The 33 acres around the "Australia"~~n~~ Vernal Pool
- The 11.66 acres at TR 30846 (Serenity Park)

Additional land is proposed to be preserved, ~~including:~~which may include all or portions of the following:

- An ~~35~~11.5-acre portion of the "T-Peninsula";
- The City's ownership of 48-acres south of the 356-acre wetlands;

- An additional 59 acres around the 356-acre wetlands~~ or 45 acres of the riparian forest in PA 6~~;
- 45 acres of the riparian forest in PA 6;
- Portions of additional City-owned land in the Back Basin;
- Additional managed open space set aside by implementing development projects as biological mitigation.

The exact final acreage of the above-listed properties has yet to be determined pending preparation and recordation of conservation easements. However, upon following recordation of all conservation easements, the total acreages conserved would total or exceed 770 acres and would fulfill the MSHCP criteria for the Back Basin. These lands would be preserved as development occurs and would be credited as mitigation for development projects in the Back Basin.

In addition, the City of Lake Elsinore, CDFW, and USFWS are currently coordinating to replace compensatory mitigation previously required by the agencies for impacts related to a prior City boat launch project, unrelated to the ELSPA No. 11 Project. The City, CDFW, and USFWS are exploring options including, but not limited to, replacing the approximately 17 acres of mitigation with either an endowment for non-endowed portions of mitigation areas within the ELSP site, or relocating the 17 acres of mitigation within the T-Peninsula located in Planning Area 6 and establishing an endowment for long-term management.

5.3.7 General Plan Consistency Impacts

The following table analyzes the consistency of the Project with the goals and policies of the City's General Plan as they apply to Biological Resources.

Table 5.3-17. General Plan Biological Resources Consistency Analysis

Goal/Policy #	Goal/Policy Text	Consistency Analysis
Goal RP 1	Identify and conserve important biological habitats where feasible while balancing the economic growth and private property right interests of the City, its residents, and landowners.	**CONSISTENT.** Potential impacts to biological impacts are evaluated in this section of the Project EIR as well as the Project's biological Technical Report. Additionally, the City has designated approximately 770 acres in the Project site for preservation/conservation per ~~a~~the 770 Plan developed ~~n agreement~~ in consultation with the Regional Conservation Authority, the State Department of Fish and Wildlife and the federal Army Corps of Engineers.
RP 1.1	The City shall continue to participate in the Western Riverside County Multiple Species Habitat Conservation Plan, the LEAPS program, and the Implementing Agreement;	**CONSISTENT.** Development in the Project site is subject to MSHCP fees, which would be paid pursuant to City requirements.

Goal/Policy #	Goal/Policy Text	Consistency Analysis
	with a strategy that focuses on quality assemblage of conservation acreage. The City shall work toward the lower end of the conservation acreage range as promised by the County during the adoption of the MSHCP by the City.	
RP 1.2	Evaluate the installation of barrier fencing or other buffers between MSHCP Conservation Areas and proposed public and private land uses that may be incompatible with the Conservation Areas in order to minimize illegal/unauthorized public access, domestic animal predation, or dumping in the Conservation Areas while not impeding wildlife movement.	**CONSISTENT.** Potential impacts to biological impacts are evaluated in this section of the Project EIR as well as the Project's biological Technical Report. The biological Technical Report, prepared by VCS Environmental identifies Project design features and best management practices, including the use of fencing to minimize potential effects. In addition, land use buffers (transition areas) adjacent to open space areas are already designed into the Project.
RP 1.4	Encourage revegetation with native plants compatible with natural surrounding habitat where soils have been disturbed during construction, and discourage plants identified in the MSHCP as unsuitable for conservation areas.	**CONSISTENT.** The Project provides landscaping guidelines that encourage the use of native, non-invasive plants.
RP 1.6	The City shall establish a plan for a trail network intended for active or passive use within public open space areas and traversing around and through MSHCP Conservation areas where compatible with guidelines set forth in the MSHCP and City Council MSHCP policies.	**CONSISTENT.** The ELSP incorporates a portion of the Murrieta Creek Trail and trails along the top of the Lake Elsinore Levee, which are components of the Lake Elsinore Regional Trail, that will connect directly to the internal onsite pedestrian circulation system. The trail, sidewalk, and other pedestrian circulation systems in the ELSP provide connectivity to MSHCP Conservation areas along Lake Elsinore.
RP 1.7	The City shall require all new trails, trailheads, conservation signage, interpretive centers, and maintenance facilities established within MSHCP Conservation	**CONSISTENT.** Development in the Project site that may include a trail, interpretive center or maintenance facilities within the

Goal/Policy #	Goal/Policy Text	Consistency Analysis
	areas to follow the Guidelines for the Siting and Design of Trails and Facilities, as set forth in Section 7.4.2 of the MSHCP.	MSHCP area shall be conditioned to follow MSHCP Guidelines.
Goal RP 2	Protect sensitive plant and wildlife species residing or occurring within the City.	**CONSISTENT.** Impacts to sensitive plant and wildlife species are evaluated in the Project's EIR and biological reports. Focused surveys of sensitive plant and wildlife species that may occur onsite would be completed and mitigation measures would be identified to achieve this goal's purpose to the extent feasible.
RP 2.1	Biological resources analyses of proposed projects shall include discussion of potential impacts to any plant or wildlife species that is officially listed as threatened or endangered by the United States Fish and Wildlife Service and/or the California Department of Fish and Game but not covered by the MSHCP.	**CONSISTENT.** Impacts to sensitive plant and wildlife species that are officially listed as threatened or endangered by the U.S. Fish and Wildlife Service and/or the California Department of Fish and Wildlife are evaluated in the Project's EIR and biological reports.
RP 2.2	Development or modification shall be discouraged in areas containing riparian habitat of high functions and values or corridors with 80% or more of natural native habitat that link larger patches of natural native habitat containing 80% or more native plant species. Further, development in areas described for conservation, including areas planned for riparian/riverine restoration included in the MSHCP, shall also be discouraged	**CONSISTENT.** In compliance with the MSHCP, a Determination of Biologically Equivalent or Superior Preservation (DBESP) would be prepared to address proper mitigation to ensure the replacement of any lost functions and values for any on-site riparian areas lost due to future implementing development projects. The mitigation may include enhancement of existing riparian areas and/or creation of new riparian areas.

Based on the analysis provided in the table above, the Project is consistent with the General Plan and no inconsistency has been identified.

5.3.8 Cumulative Impacts

Cumulative impacts related to biological resources are addressed in the General Plan EIR which is incorporated by reference into this EIR. While the General Plan would not result in any specific project, the GP Land Use Plan could facilitate future developments. Future development activities could result in

potential conflicts with plan and policies that are designed to mitigate and avoid potential environmental effects. However, implementation of existing State, Federal, regional, and local regulatory requirements (including the GP goals, policies and implementation programs, together with implementation of applicable mitigation measures within the GP), would ensure that implementation of the GP, and future implementing development projects derived from the GP, would not make a cumulatively considerable contribution to ~~accumulate~~ biological resource impacts within either the Elsinore Area Plan jurisdictional area or the areas covered by the Lake Elsinore and San Jacinto Watersheds. Therefore, impacts upon biological resources are not considered to be cumulatively significant.

With implementation of the goals and policies of the GP, applicable local ordinances, regional plans, and the rules and regulations enforced by the resource agencies cited in Section 3.8 (Biological Resources) to the GP's PEIR, together with the mitigation measures identified in this section, potential cumulative impacts on biological resources within the City and SOI would be reduced to a less than significant level and no additional mitigation measures are required.

5.3.9 Impacts and Mitigation Measures

The following section includes BMPs, avoidance, and protection measures that would be incorporated into future development within the Project site and Infrastructure Improvement Areas to reduce Project impacts to biological resources. These measures are standard practices that have been shown to reduce impacts to plant communities, special status plant and wildlife species, and jurisdictional waters.

Mitigation would match impacts. If the applicant/developer wishes to mitigate at a higher level, for example, riparian vegetation for Saltgrass Ruderal, a lower mitigation ratio may be acceptable, in consultation with CDFW. Mitigation can be planted within existing or future preservation areas, as appropriate and in consultation with CDFW and the City. New preservation areas should be contiguous with existing 770 features and/or major riparian areas. All future mitigation shall include endowments for invasive species removal within Project open space.

5.3.9.1 General Vegetation and Wildlife Avoidance and Protection Measures

Impact BIO-1 *Construction activities related to future implementing development projects within the Project site including grading, vegetation removal, and/or demolition activities would result in potentially significant impacts to surrounding plant and wildlife species including candidate, sensitive, and special status species.*

Impact BIO-2 *Construction of future implementing development projects within the Project site would result in potentially significant impacts to vegetation communities of concern pursuant to the MSHCP.*

MM BIO-1 For future implementing development projects within the Project site, the applicant will implement the following avoidance and protection measures to protect vegetation and wildlife.

- Prior to project implementation, a biologist will conduct a Worker Environmental Awareness Program (WEAP) which will describe the biological constraints of the particular project. Key personnel who will work within the project site will attend the WEAP prior to the commencement of construction activity. The WEAP will be administered to key personnel regarding the sensitive biological resources, restrictions, protection measures, and individual responsibilities associated with the construction.
- Work area limits will be defined and respected. All construction/laydown areas will have their boundaries clearly flagged or marked before project implementation and all disturbances will be confined to the flagged areas. All project personnel will be instructed that their activities must be confined to locations within the flagged areas. Disturbance beyond the actual construction zone is prohibited without site-specific surveys.
- Cleared or trimmed vegetation and woody debris will be disposed of in a legal manner at an approved disposal site.
- If any wildlife is encountered during the course of project activities, said wildlife will be allowed to freely leave the area unharmed.
- Wildlife will not be disturbed, captured, harassed, or handled. Animal nests, burrows and dens will not be disturbed without prior survey from a qualified biologist.
- Active nests (nests with chicks or eggs) cannot be removed or disturbed. Inactive nests may be removed or disturbed by a qualified biologist.
- To avoid impacts to wildlife, the applicant will comply with all litter and pollution laws and will institute a litter control program during the course of the construction activities. All contractors, subcontractors, and employees shall also obey these laws. Trash removal will reduce the attractiveness of the area to opportunistic predators such as coyotes, opossums, and common ravens.
- Employees, contractors, and site visitors will be prohibited from collecting plants and wildlife unless under the direction of a qualified biologist for purposes of project implementation, relocation, or mitigation.

MM BIO-2 In addition to the general measures mentioned above, each project is required to comply with the following standard construction BMPs found in Appendix C of the MSHCP.

- Water pollution and erosion control plans shall be developed and implemented in accordance with RWQCB requirements.
- The footprint of disturbance shall be minimized to the maximum extent feasible. Access to sites shall be via preexisting access routes to the greatest extent possible.
- The upstream and downstream limits of projects disturbance plus lateral limits of disturbance on either side of the stream shall be clearly defined and marked in the field and reviewed by the biologist prior to initiation of work.
- Projects should be designed to avoid the placement of equipment and personnel within the stream channel or on sand and gravel bars, banks, and adjacent upland habitats used by target species of concern.
- Equipment storage, fueling, and staging areas shall be located on upland sites with minimal risks of direct drainage into riparian areas or other sensitive habitats. These designated areas shall be located in such a manner as to prevent any runoff from

entering sensitive habitat. Necessary precautions shall be taken to prevent the release of cement or other toxic substances into surface waters. Project-related spills of hazardous materials shall be reported to appropriate entities including but not limited to applicable jurisdictional city, FWS, and CDFW, RWQCB and shall be cleaned up immediately and contaminated soils removed to approved disposal areas.

- The removal of native vegetation shall be avoided and minimized to the maximum extent practicable. Temporary impacts shall be returned to preexisting contours and revegetated with appropriate native species.
- Exotic species that prey upon or displace target species of concern should be permanently removed from the site to the extent feasible.

MM BIO-3 Mitigation for impacts to vegetation communities caused by development within the Project site will be achieved through compliance with MSHCP requirements as applicable. Each future implementing development project will go through the MSHCP approval process. Mitigation for impacts to sensitive vegetation communities associated with jurisdictional waters, riparian, riverine, or vernal pool resources may be satisfied through compensatory and/or preservation requirements described below under MM BIO-4 and MM BIO-8.

MM BIO-3a Prior to issuance of any grading permit, the project applicant of a future implementing development project shall complete systematic wildlife and sensitive plant surveys to document species occurrence. For sensitive species detected onsite, but not covered by the MSHCP, project specific mitigation measures will be included in future specific plan approvals to offset impacts. These measures shall include the preservation of appropriate natural open space areas in perpetuity via a conservation easement and provision of a non-wasting endowment to fund the long-term management by a CDFW-approved local conservation entity. Preservation of open space shall occur at a minimum 1:1 ratio.

5.3.9.2 Plant Species

Impact BIO-3 *Construction of future implementing development projects would result in potentially significant impacts to special status plant species during construction.*

Impact BIO-8 *Operation of the Project would result in the removal of a maximum of 6.08 acres of Southern Cottonwood Willow Riparian Forest from portions of the Project site, which would result in a potentially significant impact to this sensitive natural community.*

MM BIO-4 Future implementing development projects within the ELSP will adhere to the MSHCP special status plant species requirements, which include the Narrow Endemic and Criteria Area Plant surveys (NEPSSA and CAPSSA respectively). All surveys will be performed during the time of year specified in the MSHCP. Per the MSHCP, either Equivalency Findings or a Determination of Biologically Equivalent or Superior Preservation (DBESP) will be prepared for each project on which a NEPSSA or CAPSSA species is found during

surveys. If 90% of the area with long term conservation value to the NEPSSA or CAPSSA plant species on the project site can be avoided then an Equivalency Finding will be made. If impacts to more than 10% of the area with conservation value to the plant species is not avoided, then a DBESP will be prepared and provided to the Wildlife Agencies for review and approval.

MM BIO-4a Whenever more than 10% of the area with long term conservation value within a future implementing development project's footprint is affected by that future implementing development project's activities and the DBESP has been prepared and approved, if the mitigation strategy includes translocation and or seed collection with propagation to an on-site or off-site preserved property, the receiving property must be acceptable to the City and Wildlife Agencies. The property shall provide habitat characteristics suitable to support the plant species, including but not limited to: appropriate soils, elevation, hydrology and vegetation community. The property shall be conserved via recordation of a conservation easement or deed restriction in favor of a CDFW-due diligence approved local conservation entity to protect sensitive plant species on the property in perpetuity. Alternatively, the land may be transferred in fee title to a CDFW approved local conservation entity. A management fund shall be established by the Applicant and will consist of an interest-bearing account with the amount of capital necessary to generate sufficient interest and/or income to fund all monitoring, management, and protection of the conservation area(s), including but not limited to, reasonable administrative overhead, biological monitoring, invasive species and trash removal, fencing and signage replacement and repair, law enforcement measures, long-term management reporting (as described below), and other actions designed to maintain and improve the habitat of the conserved land(s), in perpetuity. A Property Analysis Record, or substantially equivalent analysis, shall be conducted by the Applicant and approved by the City to determine the management needs and costs described above, which then will be used to calculate the capital needed for the management of the fund. This management fund shall be held and managed by a CDFW-approved local conservation entity. To protect the mitigation area(s), the Applicant shall place appropriate fencing and/or natural barriers and signage around the perimeter of each site. Except for uses appropriate to a habitat conservation area, the public shall not have access to the mitigation area(s), and no activities shall be permitted within the site, except maintenance of habitat, including the removal of nonnative plant species, trash, and debris, and the installation of native plant materials. Mitigation areas can include limited trails to allow passive use of the land, subject to CDFW and City approval. Prior to any ground disturbance, the Applicant shall prepare a Planting Plan (Plan) for sensitive plant species. The Plan shall require a replacement ratio of 1:1 by area, and ensure a minimum 90 percent survivorship at the end of a five-year monitoring period, which shall be verified by the monitoring biologist (minimum qualifications of the monitoring biologist are specified below). At a minimum, the five-year plan shall include the following information:

a. A description of the existing conditions of the receiver site(s), characterizing the suitability of the site(s) for the plant, and documenting the acreage of the site.
b. A description of how the site will be preserved in perpetuity, e.g., conservation easement, deed restriction, etc., and the name of the CDFW-approved due diligence entity that will hold the easement/deed restriction, etc.
c. Qualifications of the monitoring biologist: At a minimum, the monitoring biologist will possess a minimum of two-year's experience conducting habitat restoration projects in coastal sage scrub, chaparral and/or other native habitat in Riverside County, California.
d. Receiver site preparation for transplanting.
e. Goals for success.
f. Schedule.
g. Propagation techniques.
h. Transplant and seedling installation methods.
i. Plant spacing.
j. Performance criteria for success, including provision for control of non-native and invasive species.
k. Monitoring and reporting procedures for each of the five years of the monitoring period.
l. Adaptive management strategies, including a contingency plan should the site fail to meet the specified success criteria.
m. Maintenance requirements that will be reviewed and approved by the City. The Plan shall also ensure a mixture of both male and female plants (where appropriate).

~~Mitigation for impacts to special status plant species caused by development within the Project site will be achieved through compliance with MSHCP requirements. Each development will go through the MSHCP approval process (including required Narrow Endemic and Criteria Area Plant surveys). If impacts will occur to Narrow Endemic or Criteria Area plant species identified during the focused surveys, mitigation is proposed to occur in compliance with MSHCP requirements, specifically 90% preservation (translocation may be performed) of the impacted species population either onsite or offsite within a preservation area of the Back Basin. The 90% preservation will be appropriate for the species (i.e. seed collection, soil translocation, etc.).~~

5.3.9.3 ***~~Surveys for Narrow Endemic and Criteria Area Plant species will occur during the appropriate season within the Infrastructure Improvement Areas. If impacts will occur to Narrow Endemic or Criteria Area plant species identified during the focused surveys, mitigation is proposed to occur in compliance with MSHCP requirements, specifically 90% preservation (translocation may be performed) of the impacted species population either onsite or offsite within a preservation area of the Back Basin. The 90% preservation will be appropriate for the species (i.e. seed collection, soil translocation, etc.) Translocation may occur in preserved open spaces are~~Wildlife Species***

Impact BIO-4 *Construction of future implementing development projects including clearing, grubbing, and demolition activities ~~would~~ may result in ~~less than significant~~ impacts to western snowy plover and other nesting birds in the Project site.*

Impact BIO-5 *Construction of future implementing development projects including clearing, grubbing, and demolition activities would result in less than significant impacts to MSHCP-covered species as well as American white pelican, coast patch-nosed snake, and two-striped garter snake that might occur in portions of the Project site.*

Impact BIO-6 *Operation of the Project would likely lead to increased encroachment in undeveloped portions of the Project site as well as reduced habitat for these species, which would result in less than significant impacts to special status plants and wildlife.*

Impact BIO-7 *Operation of the Project, particularly the improvement of Malaga Road, may result in permanent direct impacts to Critical Habitat designated for Riverside Fairy Shrimp in the Project site, which would constitute a potentially significant impact.*

MM BIO-5 Most of the special status wildlife species with potential to occur within the Project site are covered under the MSHCP. Therefore, mitigation for potential impacts to special status wildlife species caused by development within the Project site will be achieved through compliance with MSHCP requirements. Each future implementing development project will go through the MSHCP approval process (including burrowing owl surveys and/or other focused species surveys as appropriate for each site/development, per MSHCP requirements).

MM BIO-6 Unless impacts can be avoided, focused surveys conducted pursuant to Appendix E of the MSHCP, Summary of Species Survey Requirements~~should~~ shall be conducted to determine presence/absence of Riverside fairy shrimp within the Infrastructure Improvement Areas. If fairy shrimp are present, the City shall determine whether avoidance can be achieved. If not, 90 percent of the occupied portions of the property that provide for long-term conservation value for the fairy shrimp shall be conserved~~mitigation will be provided at a 2:1 ratio in the form of in kind habitat replacement within the Back Basin,~~ and consistent with the MSHCP.

MM BIO-7 The following measures shall be performed by each respective applicant for future implementing development projects prior to clearing and grubbing within the Project site to avoid impacts to burrowing owl and other nesting birds:

- Prior to the commencement of future implementing development project-related activities (including all ground-disturbing activities) during the nesting season of January 1 through September 1~~The removal of potential nesting bird habitat will be conducted outside of the nesting season (February 1 to August 31) to the extent feasible. If grading or site disturbance is to occur between February 1 and August 31~~, a nesting bird survey shall be conducted by a qualified biologist not~~within no~~ more than 72 hours ~~of~~ prior to ground disturbance activities~~scheduled vegetation removal~~, to determine ~~the presence of~~ if active bird nests or nesting birds are present. If active nests are identified, the avian biologist will establish appropriate buffers around the nest ~~vegetation~~ (typically 500 feet for raptors and sensitive species, 200 feet for non-raptors/non-sensitive species). All work within these buffers will be halted until the nesting effort is finished (i.e. the juveniles are surviving independent from the nest). The on-site biologist will review and verify compliance with these nesting boundaries and will verify the nesting effort has finished. Work can resume within the buffer area when no other active nests are found. Alternatively, the qualified avian biologist may determine alternate appropriate buffer distances by referencing current species-specific standards, and taking into account the conservation status of the species, species-specific biology, and the nature of the planned disturbance (e.g., driving past a nest versus extensive grading). ~~a qualified biologist may determine that construction can be permitted within the buffer areas and would develop a monitoring plan to prevent any impacts while the nest continues to be active (eggs, chicks, etc.).~~ In either case, the qualified avian biologist shall develop a monitoring plan to ensure that the project complies with all rules and regulations pertaining to nesting birds. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the City for mitigation monitoring compliance record keeping. If vegetation clearing is not completed within 72 hours of a negative survey during nesting season, the nesting survey must be repeated to confirm the absence of nesting birds.

- Pre-construction presence/absence surveys for burrowing owl within the Project site where suitable habitat is present shall be conducted by a qualified biologist within 30 days prior to the commencement of ground disturbing activities pursuant to California Department of Fish and Wildlife and MSHCP protocols (Section 6.3.2 of the MSHCP, *Additional Survey Needs and Procedures*). ~~If active burrowing owl burrows are detected during the breeding season, all work within an appropriate buffer (typically a minimum 300 feet) of any active burrow will be halted until that nesting effort is finished. The on-site biologist will review and verify compliance with these boundaries and will verify the nesting effort has finished. Work can resume in the~~

~~buffer when no other active burrowing owl burrows nests are found within the buffer area.~~

If BUOW are found onsite, the Lead Agency shall notify the Wildlife Agencies and the Western Riverside County Regional Conservation Authority (RCA) to develop a conservation strategy including a Burrowing Owl Relocation Plan. If active burrowing owl burrows are detected during the breeding season, the qualified biologist will establish an appropriate buffer (typically a minimum 300 feet) and all work will be halted within the buffer until the biologist observes that nesting efforts have finished. Work can resume in the buffer when no other active burrowing owl burrows nests are found within the buffer area.

- If active burrowing owl burrows are detected outside the breeding season or during the breeding season and its determined nesting activities have not begun, then passive and/or active relocation may be approved with a Burrowing Owl Relocation Plan following consultation with the City of Lake Elsinore, the Wildlife Agencies and the RCA. Passive relocation, the installation of one-way doors, is not recommended unless suitable burrows are available within 100 meters of the closed burrows and the relocation area is protected through a long-term conservation mechanism (e.g., conservation easement). The installation of one-way doors may be installed as part of a passive relocation program. Burrowing owl burrows shall be excavated with hand tools by a qualified biologist when determined to be unoccupied, and back filled to ensure that animals do not re-enter the holes/dens. Upon completion of the survey and any follow-up construction avoidance management, a report shall be prepared and submitted to the City, the Wildlife Agencies and the RCA for mitigation monitoring compliance record keeping.

MM BIO-8 To reduce the impact of domestic cats on special status species in the conservation areas, cat-proof barriers shall be erected between future implementing residential development projects and any conservation area that exists at the time of development. The barrier should consist of a minimum 8- foot tall fencing made of secure materials that cats cannot scale placed along the entire boundary adjacent to the conservation areas to prohibit movement of people and pets from residential and recreational areas into the conservation area. No section of the barrier should include clear panels or sections such as glass or plastic as these are a hazard to birds, which may fly into them and perish.

5.3.9.4 Jurisdictional Waters

Impact BIO-9 *Operation of the Project would result in temporary and permanent impacts to Waters of the US, Waters of the State, and Riparian-Riverine resources from portions of the Project site, which would result in a potentially significant impact.*

MM BIO-9~~8~~ Mitigation for each Project will be completed prior to or concurrently with Project implementations and will be consistent with the ~~770-acre~~ 770 Plan ~~mitigation agreement~~ currently developed ~~in place~~ for the Back Basin.

Impacts to Corps jurisdiction below elevation 1246' and CDFW jurisdiction below elevation 1265' ~~are recommended to be~~ shall be compensated for by the preservation of waters below elevation 1246' and/or 1265' in the confines of the Back Basin or Lake Elsinore at a ratio to be negotiated with USACE and CDFW respectively during the regulatory permitting process for subsequent implementing development projects at a minimum 0.25:1 ratio, except for developed, ruderal, and/or tamarisk scrub areas which may require a lesser ratio pending review and approval of the Corps and CDFW during the regulatory permitting process~~minimum 0.25:1 ratio~~. Impacts to non-wetland WoUS and streambed WoS ~~are recommended to~~shall be compensated for at a minimum ratio of 1:1 preservation in the Back Basin, Lake Elsinore or other agency-approved mitigation bank or in-lieu fee program within the MSHCP. Impacts to wetland and riparian waters ~~are recommended to~~shall be compensated for at a minimum ratio of 2:1 preservation in the Back Basin, Lake Elsinore or other agency-approved mitigation bank or in-lieu fee program within the MSHCP. Mitigation for non-elevation related impacts to jurisdictional features may be combined with the elevation mitigation areas, due to the significant overlap in these areas in the acreage calculations in the previous sections.

The following tables identify the anticipated minimum mitigation necessary for impacts within the Project site Each subsequent implementing development project will be evaluated individually by each applicable regulatory agency to determine appropriate mitigation for the project's impacts to jurisdictional resources, based on a case-by-case analysis of the function and value of impacted resources as compared to the function and value of mitigation proposed by the developer.~~:~~

Table 5.3-18. Compensatory Mitigation for "Other Waters" Impacts within the Project site

Feature*	Impacts	Ratio Multiplier (minimum)	Mitigation Acreage
Non-wetland WOUS	2.41	1	2.41
Potential Wetland WOUS	53.88	2	107.76
Riparian WoS	53.88	2	107.76
Rivers, Streams, or Lakes WoS	3.08	1	3.08
Mitigation Areas	17.01	1	17.01

*includes the Infrastructure Improvement Areas

Table 5.3-19. Compensatory Mitigation for "Other Waters" Impacts within the Infrastructure Improvement Areas

Feature	Impacts	Ratio Multiplier (minimum)	Mitigation Acreage
Non-wetland WOUS	0.00	1	0.00
Potential Wetland WOUS	0.23	2	0.46
Riparian WoS	0.23	2	0.46
Rivers, Streams, or Lakes WoS	0.00	1	0.00
Mitigation Areas	17.01	1	17.01

~~*see Table 24 below for additional detail regarding habitat types within the 1265' elevation~~

~~**Table 5.3-20. Compensatory Mitigation for Habitat Impacts within the Project site and Below Elevations 1265' for CDFW and 1246' for USACE**~~

~~Vegetation Communities~~	~~Impacts~~	~~Ratio Multiplier (minimum)~~	~~Mitigation Acreage~~
~~Borrow Site~~	~~11.64~~	~~0.5~~	~~5.82~~
~~Mitigation Areas~~	~~33.02~~	~~1~~	~~33.02~~
~~Mixed Scrub~~	~~40.43~~	~~1~~	~~40.43~~
~~Mulefat Scrub~~	~~0.63~~	~~1~~	~~0.63~~
~~Ornamental Woodland~~	~~27.00~~	~~0.25~~	~~6.75~~
~~Riversidean Sage Scrub~~	~~12.90~~	~~2~~	~~25.80~~
~~Riversidean Sage Scrub – disturbed~~	~~2.39~~	~~1~~	~~2.39~~
~~Ruderal~~	~~775.53~~	~~0.25~~	~~193.88~~
~~Saltgrass Ruderal~~	~~13.13~~	~~0.25~~	~~3.28~~
~~Southern Cottonwood – Willow Riparian Forest~~	~~6.08~~	~~2~~	~~12.16~~
~~Tamarisk Scrub~~	~~341.48~~	~~0*~~	~~0~~
~~Willow Scrub~~	~~6.81~~	~~1~~	~~6.81~~

~~*See under Riparian/Riverine Areas and Vernal Pools~~

~~The Infrastructure Improvements will result in the following direct impacts to vegetation communities.~~

~~**Table 5.3-21. Compensatory Mitigation for Habitat Impacts within the Infrastructure Improvement Areas and Below Elevations 1265' for CDFW and 1246' for USACE**~~

~~Vegetation Communities~~	~~Impacts~~	~~Ratio Multiplier (minimum)~~	~~Mitigation Acreage~~
~~Borrow Site~~	~~0.57~~	~~0.5~~	~~0.29~~
~~Mitigation Areas~~	~~17.01~~	~~1~~	~~17.01~~
~~Mulefat Scrub~~	~~0.21~~	~~1~~	~~0.21~~
~~Ruderal~~	~~6.51~~	~~0.25~~	~~1.63~~
~~Tamarisk Scrub~~	~~3.11~~	~~0*~~	~~0~~
~~Willow Scrub~~	~~0.03~~	~~1~~	~~0.03~~

MM BIO-9a Prior to issuance of any grading permit, the project applicant of each future implementing development project shall provide to the City of Lake Elsinore either of the following: Written correspondence from the California Department of Fish and Wildlife stating that notification under Section 1602 of the California Fish and Game Code is not required for the project; or a copy of a Department-executed Lake or Streambed Alteration Agreement, authorizing impacts to California Fish and Game Code, section 1602 resources associated with the project. ~~*See under Riparian/Riverine Areas and Vernal Pools~~

5.3.9.5 Riparian/Riverine Areas and Vernal Pools

Impact BIO-9 *Operation of the Project would result in temporary and permanent impacts to Waters of the US, Waters of the State, and Riparian-Riverine resources from portions of the Project site, which would result in a potentially significant impact.*

MM BIO-10~~9~~ Mitigation for each future implementing development project will be completed prior to or concurrently with each project's implementation (may require grading to occur to establish mitigation area) and will be consistent with the ~~770-acre mitigation agreement~~770 Plan currently ~~in place~~developed for the Back Basin as well as other requirements as described in Section 2.5.4.2 of ELSPA No. 11.

Removal of tamarisk scrub will be considered a benefit to the Back Basin and no mitigation will be required by the City~~necessary~~ provided the Tamarisk is eradicated in perpetuity. This means that development of a site that is graded, paved, etc. such that Tamarisk cannot survive, does not need mitigation. If a portion of Tamarisk scrub remains on a project site, the project proponent will be required by the City to establish an endowment to remove/eradicate the Tamarisk in perpetuity. Impacts to riverine and riparian resources will be mitigated in the Back Basin, Lake Elsinore or other agency-approved mitigation bank or in-lieu fee program within the MSHCP. Impacts to riparian resources will be compensated for at a minimum ratio of 2:1 preservation in the Back Basin, Lake

Elsinore or other agency-approved mitigation bank or in-lieu fee program within the MSHCP.

The following tables identify the anticipated minimum mitigation necessary for impacts within the Project site:

Table 5.3-20~~2~~. Compensatory Mitigation for Impacts within the Project site

Feature*	Impacts	Ratio Multiplier (minimum)	Mitigation Acreage
Mitigation Areas	17.01	1	17.01
Potential Vernal Pools	0.25	2	0.50
Riparian Resources	53.88	2	107.76
Riverine Resources	3.08	2	6.16
Tamarisk Scrub**	341.31	-	-

*includes the Infrastructure Improvement Areas

**endowment required to maintain site tamarisk-free

Table 5.3-21~~3~~. Compensatory Mitigation for Waters Impacts within the Infrastructure Improvement Areas

Feature	Impacts	Ratio Multiplier (minimum)	Mitigation Acreage
Mitigation Areas	17.01	1	17.01
Riparian Resources	0.23	2	0.46
Riverine Resources	0.00	2	0.00
Tamarisk Scrub*	3.11	-	-
Potential Vernal Pools	0.25	2	0.50

*endowment required to maintain site tamarisk-free

5.3.10 Level of Significance after Mitigation

With implementation of mitigation measures **MM BIO-1** through **MM BIO-10~~9~~**, potential impacts to biological resources resulting from construction and operation of the proposed Project would be reduced to less than significant levels.

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