Biological Resources Technical Memorandum for the Proposed Project Amendment – Otay Ranch Village 14 and Planning Areas 16/19

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MAY 2020 DECEMBER 2019



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Acronyms and Abbreviations

Acronym/Abbreviation	Description
ACOE	U.S. Army Corps of Engineers
BMO	Biological Mitigation Ordinance
BRCA	Biological Resource Core Area
CDFW	California Department of Fish and Wildlife
EIR	Environmental Impact Report
MSCP	Multiple Species Conservation Program
Otay Ranch GDP/SRP	Otay Ranch City of Chula Vista General Development Plan/County of San Diego Otay Subregional Plan Volume II
POM	Preserve Owner/Manager
RMP	Resource Management Plan
RWQCB	Regional Water Quality Control Board
USFWS	U.S. Fish and Wildlife Service
VPHCP	Vernal Pool Habitat Conservation Plan

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1 Introduction

This Memorandum evaluates proposed changes to the Otay Ranch Village 14 and Planning Areas 16/19 Project that was approved by the San Diego County Board of Supervisors on June 26, 2019 (Approved Project). The changes to the Approved Project would reconfigure the development footprint to consolidate development in Village 14; add 147 units, for a total of 1,266 residential units; and reduce impacts by approximately 230 acres, to 579 acres (the Proposed Project Amendment). Figure 1, Regional Location, shows the regional location of the Approved Project Area and the Proposed Amendment Project Area, in the County of San Diego (County).

An Environmental Impact Report (EIR) was prepared for the Approved Project and was certified by the Board on June 26, 2019. The Final EIR analyzed the potential impacts of the Approved Project. The Final EIR also analyzed potential impacts associated with the EIR Land Exchange Alternative, which was one of the alternatives to the Approved Project. The Final EIR is incorporated herein by reference; the results are summarized in Chapter 5, Summaries; and mitigation measures are described in Chapter 7.

The Final EIR analyzed the Approved Project's potential impacts to biological resources in Section 2.4. This Biological Resources Technical Memorandum (Technical Memorandum) was prepared for the Proposed Project Amendment. The purpose of this analysis is to evaluate whether, and to what extent, the potential impacts of the Proposed Project Amendment to biological resources differ from those of the Approved Project and the EIR Land Exchange Alternative. This Technical Memorandum includes the following chapters: (1) Introduction, (2) Background, (3) Proposed Project Amendment Description and Summary of Amendment/Revisions, (4) Proposed Project Amendment Analysis, (5) Summaries (Approved Project, EIR Land Exchange Alternative, and Proposed Project Amendment), (6) Development Footprint Comparisons, (7) Mitigation Measures, (8) Summary of Project Impacts and Mitigation, and (9) References.

Note that the while the EIR Land Exchange Alternative and the Proposed Project Amendment both contemplate exchanges of land with California Department of Fish and Wildlife (CDFW), they differ in important respects.

Dudek prepared the following technical reports for the certified Final EIR, which are incorporated herein by reference:

- Final EIR Section 2.4, Appendix 2.4-1, Biological Resources Technical Report for Otay Ranch Village 14 and Planning Areas 16/19, dated September 2018
- Final EIR Chapter 4, Appendix 4.1-4, Biological Resources Technical Report for Otay Ranch Village 14 and Planning Areas 16/19 Land Exchange Alternative, dated February 2018

Any and all Dudek, Helix, or H.T. Harvey memoranda or reports; County of San Diego response to comments; or applicant-prepared responses included in the Final EIR administrative record are incorporated herein by reference.

In addition, a Biological Equivalency Analysis has been prepared for the proposed land exchange between the owner/applicant and CDFW, which is contemplated as part of the Proposed Project Amendment. This proposed land exchange is associated with the Dispute Resolution Agreement between the owner/applicant and CDFW, the U.S. Fish and Wildlife Service (USFWS), and the County. The Biological Equivalency Analysis, provided as Appendix A, describes, in detail, the parcels that would be conserved, either by being designated as part of the Multiple Species Conservation Program (MSCP)/Otay Ranch Resource Management Plan (RMP) or by being subject to a conservation easement. The Biological Equivalency Analysis is incorporated herein by reference to identify the net conservation benefits associated with the implementation of the Dispute Resolution Agreement process.



In support of the proposed land exchange between the owner/applicant and CDFW, CDFW has prepared a Land Conversion Evaluation (LCE), which assessed the biological impacts and benefits of the land exchange contemplated under the Proposed Project Amendment. The LCE referred to several years of biological studies conducted on the state-owned parcels that were included in the Approved Project Final EIR's analysis of the Land Exchange Alternative. Upon review of the LCE, it has been concluded that the LCE did not include substantial new information that showed the Proposed Project Amendment would result in new or significantly greater impacts than analyzed in the Approved Project Final EIR.

Terminology

The following terminology is used in this Technical Memorandum.

Approved Project: The project described in Otay Ranch Village 14 and Planning Areas 16/19 Tentative Map No. 5616, Specific Plan No. 16-002, and the certified EIR No. 16-19-006, which the County of San Diego approved on June 26, 2019. The Approved Project permits 1,119 dwelling units on a Project Area of approximately 1,369.0 acres. The actual Development Footprint of the Approved Project is 809.0 acres.

Biological Study Area: The Biological Study Area discussed within this Biological Resources Technical Memorandum combines the extent of the "Project Area" defined for the Approved Project and the "Project Area" for the EIR Land Exchange Alternative. Therefore, the Biological Study Area discussed in this memorandum is larger than the Proposed Project Amendment Project Area (defined below). The total Biological Study Area, approximately 2,900 acres, covers the entire Proposed Project Amendment Project Area. The Biological Study Area includes land owned by the Project owner/applicant as well as land owned by the CDFW. The Biological Study Area also includes a 100-foot buffer from the Proposed Project Amendment Project Area as required by the County of San Diego. The full extent of biological resources mapped during the evaluation of the Approved Project and the EIR Land Exchange Alternative can be found within the technical reports prepared for the Approved Project and the alternative.

Conserved Open Space: Conserved Open Space refers to 24.5 acres of land within the Proposed Project Amendment Project Area, which, while designated in the Otay Ranch City of Chula Vista General Development Plan/County of San Diego Otay Subregional Plan Volume II (Otay Ranch GDP/SRP) for residential uses within Village 14 and Planning Areas 16/19, would not be developed as part of the Proposed Project Amendment. Instead, the Conserved Open Space would be preserved on site and be (1) added to the Otay Ranch RMP Preserve (through a future RMP Amendment), (2) managed under a separate RMP, or (3) used to mitigate impacts to the City of San Diego MSCP Cornerstone Lands. The Conserved Open Space areas are located adjacent to Otay Ranch RMP Preserve and would be conserved by recording a biological open space easement over the land.

Development Footprint: The areas where a given project will cause permanent or temporary ground disturbance. The Development Footprint includes all on-site development, off-site improvements, and impacts resulting from infrastructure and other allowable uses within the Otay Ranch RMP Preserve.

EIR Land Exchange Alternative: The project alternative identified as the "Land Exchange Alternative" in Chapter 4 of the certified Final EIR. This Land Exchange Alternative contemplated a land exchange with CDFW and would involve development of 1,530 units on a Project Area of approximately 2,387.6 acres, with a Development Footprint of 658.3 acres.

Off-Site Improvements: Off-site improvements total approximately 40.1 acres and include Proctor Valley Road, wet and dry utilities, drainage facilities, trails, an off-site sewer pump station in the southern reach of Proctor Valley Road, and off-site sewer facilities to connect to the Salt Creek Interceptor, as planned since 1994.



Otay Ranch Resource Management Plan Preserve: The Otay Ranch RMP Preserve includes areas defined as Preserve in the MSCP County of San Diego Subarea Plan Implementing Agreement (USFWS et al. 1998), which defines the County's required contribution to the MSCP Preserve. The Otay Ranch RMP provides for the conservation and management of the entire 11,375-acre Otay Ranch RMP Preserve. The Implementing Agreement states that the required mitigation for Otay Ranch includes "protection of the areas identified as preserved in the boundaries of the Otay Ranch project including approximately 11,375 acres" of the Otay Ranch RMP Preserve (USFWS et al. 1998). Therefore, the Otay Ranch RMP Preserve is a subset of the MSCP Preserve.

Project Area: The total land area for the Proposed Project Amendment as contemplated in the proposed land exchange between Project owner/applicant and CDFW.¹ The Project Area consists of approximately 1,283.6 acres currently owned by the Applicant, 219.4 acres currently owned by CDFW, and approximately 40.1 acres of off-site improvements, for a total of 1,543 acres.

Proposed Project Amendment: The Proposed Project Amendment reflects proposed changes to the Approved Project, which would add 147 units for a total of 1,266 residential units and would reduce the Development Footprint by approximately 230 acres, to a total of 579 acres, within a Project Area of 1,543 acres, as shown on Figure 2, Site Utilization Plan. The Proposed Project Amendment includes a Revised Tentative Map and Specific Plan Amendment. As contemplated in the Dispute Resolution Agreement, the Proposed Project Amendment assumes and will require a County-initiated amendment to the MSCP County Subarea Plan. Because the amendment to the MSCP County Subarea Plan will be initiated by the County, it is not part of the Proposed Project Amendment.

PV1 and PV3: PV1 and PV3 are areas of the Approved Project located in Village 14, as shown on Figure 3, Proposed Land Exchange.

Revised Tentative Map: The Revised Tentative Map reflects revisions to the June 26, 2019, Approved Tentative Map No. 5616 that are necessary to process and implement the land exchange with CDFW and the Proposed Project Amendment in the County.

Specific Plan Amendment: The Specific Plan Amendment reflects revisions to the June 26, 2019, Approved Specific Plan No. 16-002 that are necessary to process and implement the land exchange with CDFW and the Proposed Project Amendment in the County.

¹ As described in Chapter 4, the land exchange necessary to implement the Proposed Project Amendment must be approved by the California Wildlife Conservation Board.



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2 Background

The Proposed Project Amendment Project Area comprises approximately 1,543 acres of undeveloped land within the Proctor Valley area of the 23,000-acre Otay Ranch master planned community. The Proposed Project Amendment reflects proposed changes to the Approved Project, including a proposed land exchange with CDFW.

On June 27, 2019, the owner/applicant of the Approved Project entered into a Dispute Resolution Agreement with CDFW, USFWS, and the County. Pursuant to this agreement, the owner/applicant would seek a land exchange with CDFW through a process overseen by the California Wildlife Conservation Board. The proposed land exchange, if approved by the Wildlife Conservation Board, would require the owner/applicant to (1) transfer 147.3 acres in Village 14 and 192.4 acres in Planning Area 16 to CDFW and (2) record a conservation easement over 191.5 acres in Planning Area 16. In exchange, CDFW would transfer 219.4 acres in Village 14 to the owner/applicant (Figure 3). The Proposed Project Amendment would then be implemented on the lands within the applicant's ownership, including those received via the Wildlife Conservation Board land exchange. Because the Proposed Project Amendment assumes the above-described land exchange, it would result in a different development footprint than the Approved Project's development footprint. Therefore, a Specific Plan Amendment to the approved Village 14 and Planning Areas 16/19 Specific Plan and a Revised Tentative Map are required processes for the Proposed Project Amendment.

While the Proposed Project Amendment and EIR Land Exchange Alternative both contemplate exchanges of land with the CDFW, the Development Footprints and other aspects differ. It is important to note that the Development Footprint of the Proposed Project Amendment was assessed in the certified Final EIR as part of the Approved Project Development Footprint and as part of the EIR Land Exchange Alternative Development Footprint.



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Proposed Project Amendment Description and Summary of Amendment/Revisions

The Proposed Project Amendment proposes 1,266 residential units within a Project Area of 1,543 acres (Figure 4, Project Area). The Proposed Project Amendment Development Footprint would be approximately 578.6 acres, which would consistent of approximately 513.1 acres within Otay Ranch Village 14, 25.2 acres within Otay Ranch Planning Areas 16/19, and 40.1 acres of off-site improvements (i.e., Proctor Valley Road). Of the 1,266 residential units, 1,253 units would be located in Village 14 (consistent with the Otay Ranch GDP/SRP) and 13 units would be located in Planning Area 19 (consistent with the Otay Ranch GDP/SRP). The Proposed Project Amendment is depicted on Figure 2.

As described above, the Proposed Project Amendment would also include a land exchange between the owner/applicant and CDFW, which would require the owner/applicant to transfer 339.7 acres to CDFW and record a conservation easement over 191.5 acres; in exchange, CDFW would transfer 219.4 acres in Village 14 to the owner/applicant to create a consolidated Development Footprint. The proposed land exchange between the applicant and CDFW is depicted on Figure 4 and described in detail in Attachment A. As defined above, the Proposed Project Amendment requires a Specific Plan Amendment and Revised Tentative Map, which must be approved by the County. The Revised Tentative Map would replace that approved Tentative Map No. 5616, approved by the County on June 26, 2019. The Specific Plan Amendment would amend the Specific Plan No. 16-002 to reflect the Proposed Project Amendment, including the Revised Tentative Map and the land exchange with CDFW.

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4 Proposed Project Amendment Analysis

As part of the 2019 Final EIR preparation process, numerous biological surveys were conducted for both the Approved Project and the EIR Land Exchange Alternative (Dudek 2018a and 2018b). The combined area covered by these biological surveys is referred to herein as the Biological Study Area (approximately 2,900 acres). As shown on Figure 4, the Development Footprint of the Proposed Project Amendment is located partially within the Approved Project Development Footprint and partially within the EIR Land Exchange Alternative Development Footprint. Therefore, the Proposed Project Amendment's Development Footprint falls within the Biological Study Area, as defined above. For this reason, this Technical Memorandum's analysis of the Proposed Project Amendment relies on the various biological surveys that were conducted previously as part of the 2019 Final EIR preparation process.

In September and October 2019, Dudek and HELIX biologists visited the Proposed Project Amendment site to review the development footprints within the Biological Study Area for changes related to the jurisdictional delineation and associated vegetation mapping. The review did not reveal significant changes to those vegetation communities typically associated with jurisdictional aquatic resources. As part of this updated site review, however, Dudek and Helix biologists also inspected five features located within the City of San Diego Cornerstone lands, each of which had been previously identified as scour pools in the City of San Diego's Vernal Pool Habitat Conservation Plan source data (AECOM and Hogan 2012). During the inspection, the Dudek and HELIX biologists determined that the five scour ponds now contain the required elements of vernal pools and should be reclassified as such. Therefore, this Technical Memorandum, in addition to using all previously disclosed mapping to compare the potential impacts of the Proposed Project Amendment to the impacts disclosed in the Final EIR for the Approved Project and the EIR Land Exchange Alternative, addresses potential impacts to the five vernal pools identified during September and October 2019.

Biological surveys within the Biological Study Area were conducted in 2014, 2015, 2016, and 2017 and included the following: vegetation mapping; a jurisdictional delineation; focused rare plant surveys; habitat assessments and focused surveys for Quino checkerspot butterfly (*Euphydryas editha quino*), Hermes copper butterfly (*Lycaena hermes*), and vernal pool branchiopods; and focused surveys for burrowing owl (*Athene cunicularia*), coastal California gnatcatcher (*Polioptila californica californica*), and western spadefoot (*Spea hammondii*). A habitat assessment was conducted for arroyo toad (*Anaxyrus californicus*); however, no focused survey was deemed necessary. The survey areas for each of these focused surveys can be found within the Figure 3 series for the biological resources technical reports previously prepared for the Approved Project and the EIR Land Exchange Alternative (Dudek 2018a and 2018b).

Dudek biologists also reviewed the Biological Study Area in conjunction with planning documents to determine whether the Approved Project and the EIR Land Exchange Alternative's impacts on golden eagle (*Aquila chrysaetos*) would be consistent with those anticipated in the MSCP County Subarea Plan (County of San Diego 1997). As part of its golden eagle analysis, Dudek consulted raptor specialists at H.T. Harvey & Associates (see Appendix C of Dudek 2018a and Appendices C-1 and C-2 of Dudek 2018b for the full analysis).

Thirteen sensitive vegetation communities occur within the Biological Study Area: granitic chamise chaparral (including disturbed), granitic southern mixed chaparral, Diegan coastal sage scrub (including disturbed), Diegan coastal sage scrub–*Baccharis* dominated (including disturbed), coast live oak woodland, non-native grassland,



cismontane alkali marsh, mulefat scrub, coastal and valley freshwater marsh, southern coast live oak riparian forest, southern willow scrub, unvegetated channel, and open water. The Biological Study Area also supports aquatic resources under the jurisdiction of the U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and/or CDFW.

Focused rare plant surveys recorded 22 special-status plants within the Biological Study Area, including one federally and state-listed plant: Otay tarplant (*Deinandra conjugens*). Forty-nine additional rare plants have a moderate or high potential to occur in the Biological Study Area. Surveys within the Biological Study Area recorded 27 special-status wildlife species, including two federally and state-listed species (coastal California gnatcatcher and San Diego fairy shrimp [*Branchinecta sandiegonensis*]) and one fully protected species: golden eagle. An additional 24 special-status wildlife species have potential to occur in the Biological Study Area.

A full discussion of the biological resources observed within the Biological Study Area can be found in the biological resources technical reports previously prepared for the Approved Project and the EIR Land Exchange Alternative (Dudek 2018a and 2018b). Chapter 6 of this Technical Memorandum provides a comparison of the Development Footprints for the Proposed Project Amendment, the Approved Project, and the EIR Land Exchange Alternative.

5 Summaries

Each of the three projects discussed in this Technical Memorandum, the Proposed Project Amendment, the Approved Project, and the EIR Land Exchange Alternative, would implement a portion of the Otay Ranch GDP/SRP, which identifies and coordinates land use patterns, objectives, and goals for the Otay Ranch community. The Otay Ranch GDP/SRP organized development in a series of villages and planning areas with varying character and densities (City of Chula Vista and County of San Diego 1993a). The Otay Ranch GDP/SRP designates the parcels within these planning areas for residential development and Otay Ranch RMP Preserve.

This chapter provides a summary of each of the projects, their impacts on biological resources, and mitigation. Chapter 6 of this Technical Memorandum provides the detailed impact comparison of each of the three projects.

5.1 Approved Project

The Approved Project Area encompasses approximately 1,369 acres and proposes a Development Footprint of 809 acres. Specifically, the Approved Project Area includes approximately 723.7 acres within Otay Ranch Village 14, 559.9 acres within Planning Areas 16/19, and 85.4 acres of off-site development. Development of the Approved Project would occur on approximately 741.9 acres (not including 67.1 acres of temporary impacts), with the remainder of the Approved Project Area consisting of 82.7 acres of non-graded Limited Development Area, 72.4 acres of Conserved Open Space (including areas designated as development and Limited Development Area), and 426.7 acres of Otay Ranch RMP Preserve. Of those 426.7 acres of Otay Ranch RMP Preserve, the Approved Project would result in 11.8 acres of permanent impacts and 10.1 acres of temporary impacts for road improvements. Portions of the development would occur off site on approximately 85.4 acres of lands owned by the City of San Diego, City of Chula Vista, CDFW, and County of San Diego (road easement), as well as on private property.

Development of the Approved Project, including the off-site improvements areas, would result in potentially significant direct or indirect effects to special-status plant species, special-status wildlife species, wildlife movement, special-status vegetation communities, and jurisdictional resources. In addition, the Approved Project would result in potential significant direct impacts to foraging or breeding habitat, wildlife movement, and avian species protected under the Migratory Bird Treaty Act. Most of these impacts, however, have been or would be mitigated by virtue of the applicant's compliance with the MSCP Plan and requirements of the Otay Ranch RMP. Impacts not covered under the MSCP Plan would be addressed by other mitigation measures. Specific mitigation related to special-status plants and wildlife species and jurisdictional resources have also been incorporated into the Approved Project, as described in detail in the Final EIR for Otay Ranch Village 14 and Planning Areas 16/19 (County of San Diego 2019). These mitigation measures would reduce the Approved Project's impacts on biological resources to less than significant. In addition, the Approved Project's impacts on local policies, ordinances, and adopted plans would be less than significant.

Mitigation for the Approved Project is generally governed by the terms of the Otay Ranch RMP and includes conveyance of Preserve land at a ratio of 1.188, for a total of 776.8 acres, 426.7 acres of which would be preserved on site (in the Approved Project Area). The additional acreage would be acquired through the purchase of Otay Ranch RMP land outside the Approved Project Area. Included in the conveyance acreage is mitigation for 9.1 acres (10.8 acres of conveyance) of impacts to sensitive vegetation within CDFW lands; this acreage is included in the 776.8 acres of conveyance calculation. Note, however, that certain portions of the Approved Project Area are subject to the Biological Mitigation Ordinance (BMO) and/or impact City of San Diego Cornerstone Lands. These portions of the Approved Project would require additional mitigation beyond that called for in the Otay Ranch RMP. Since the BMO

mitigation requirements are more stringent for certain types of habitat, the BMO requires an additional 24.6 acres of mitigation, in addition to the 776.8 acres of conveyance. Impacts to City of San Diego Cornerstone Lands would require an additional 11.3 acres of mitigation. Therefore, the total required mitigation for the Approved Project is 812.7 acres.

5.2 EIR Land Exchange Alternative

The EIR Land Exchange Alternative Project Area totals 2,387.7 acres, including both state and privately owned lands, of which approximately 1,002.6 acres are within Otay Ranch Village 14, 1,344.8 acres are within Planning Areas 16/19, and 40.2 acres consist of off-site improvements. The EIR Land Exchange Alternative's Development Footprint would encompass approximately 658 acres, composed of 601.7 acres on site and 56.6 acres off site. Off-site impacts are largely related to improvements of Proctor Valley Road. The EIR Land Exchange Alternative would preserve 965.2 acres, which would contribute to the existing state-owned Rancho Jamul Ecological Preserve, resulting in the creation of 1,757 acres of contiguous Preserve lands. The remaining acreage would remain within CDFW ownership.

Development of the EIR Land Exchange Alternative, including the off-site improvements areas, would result in potentially significant direct or indirect effects to special-status plant species, special-status wildlife species, wildlife movement, special-status vegetation communities, and jurisdictional resources. In addition, the EIR Land Exchange Alternative would result in potential significant direct impacts to foraging or breeding habitat, wildlife movement, and avian species protected under the Migratory Bird Treaty Act. Most of these impacts, however, have been or would be mitigated by virtue of the owner/applicant's compliance with the MSCP Plan and requirements of the Otay Ranch RMP. Impacts not covered under the MSCP Plan would be addressed by other mitigation measures. Specific mitigation related to special-status plants and wildlife species and jurisdictional resources have also been incorporated into the EIR Land Exchange Alternative, as described in detail in the Biological Resources Technical Report for Otay Ranch Village 14 and Planning Areas 16/19 Land Exchange Alternative (Dudek 2018b). These mitigation measures would reduce the EIR Land Exchange Alternative's impacts on biological resources to less than significant. In addition, EIR Land Exchange Alternative's impacts on local policies, ordinances, and adopted plans would be less than significant.

The mitigation for the EIR Land Exchange Alternative is governed by the terms of the Otay Ranch RMP and includes conveyance of Preserve land at a ratio of 1.188, for a total of 654.5 acres. The EIR Land Exchange Alternative would convey 403.9 acres within Village 14 and 276.3 acres within Planning Areas 16/19, for a total of 680.2 acres of conveyance. This would be 25.7 acres above the required conveyance acreage. An additional 278 acres of Preserve lands would be exchanged to the CDFW, which would contribute to the existing state-owned Rancho Jamul Ecological Preserve. A Land Exchange Agreement would be required to establish take authorized hardline development and Preserve boundaries for the entire EIR Land Exchange Alternative.

5.3 Proposed Project Amendment

The Proposed Project Amendment site includes approximately 796.2 acres within Otay Ranch Village 14, 367.5 acres within Planning Areas 16/19, and 40.1 acres of off-site development. Development of the Approved Project would occur on approximately 537.2 acres (not including 41.4 acres of temporary impacts), with the remainder of the Proposed Project Amendment consisting 24.5 acres of Conserved Open Space and 435.3 acres of Otay Ranch RMP Preserve. Within Off those 435.3 acres of Otay Ranch RMP Preserve, the Proposed Project Amendment's proposes a secondary

access² road to Village 14 and a water tank. These road improvements would permanently affect 13.17.1 acres and temporarily affect 13.35.4 acres of Preserve. However, in response to a request from the Wildlife Agencies, the project applicant has prepared an optional design for the secondary access road within the Preserve. This optional road design would remove most of the access road from the Preserve and would reduce impacts to the Preserve by 8.3 acres (5.0 acres of permanent and 3.3 acres of temporary impacts). In addition, portions of the Proposed Project Amendment would occur off site on approximately 40.1 acres of lands owned by the City of San Diego (34.6 acres), City of Chula Vista (5.3 acres), and County of San Diego (a 0.3-acre road easement).

Development of the Proposed Project Amendment, including the off-site improvements areas, would result in potentially significant direct or indirect effects to special-status plant species, special-status wildlife species, wildlife movement, special-status vegetation communities, and jurisdictional resources (see Chapter 6). In addition, the Proposed Project Amendment would result in potential significant direct impacts to foraging and/or breeding habitat, wildlife movement, and avian species protected under the Migratory Bird Treaty Act. Most of these impacts, however, have been or would be mitigated by virtue of the applicant's compliance with the MSCP Plan and requirements of the Otay Ranch RMP. Impacts not covered under the MSCP Plan would be addressed by other mitigation measures. Specific mitigation related to special-status plants and wildlife species and jurisdictional resources have also been incorporated into the Proposed Project Amendment, as described in detail in Chapter 6. These mitigation measures would reduce the Proposed Project Amendment's impacts on biological resources to less than significant. In addition, the Proposed Project Amendment's impacts on local policies, ordinances, and adopted plans would be less than significant.

Mitigation for the Proposed Project Amendment is generally governed by the terms of the Otay Ranch RMP and includes conveyance of Preserve land at a ratio of 1.188, for a total of 558.7556.6 acres, 377 acres of which would be preserved on site (in the Proposed Project Amendment Project Area). The remaining Conveyance Obligation would be met through the off-site Otay Ranch RMP Preserve in Planning Area 16 (58.3 acres), Conserved Open Space (24.5 acres), and a conservation easement over land designated as development in Planning Area 16 (191.5 acres), for a total of 274.3 acres. Note, however, that certain portions of the Proposed Project Amendment Project Area are subject to the BMO and/or impact City of San Diego Cornerstone Lands. These portions of the Proposed Project Amendment would require additional mitigation beyond that called for in the Otay Ranch RMP. Since the BMO mitigation requirements are more stringent for certain types of habitat, the BMO requires an additional 11.4 acres of mitigation in addition to the 558.7556.6 acres of conveyance. Impacts to City of San Diego Cornerstone Lands would require an additional 14.5 acres of mitigation (see Section 6.6, Local Policies, Ordinances, and Adopted Plans). Therefore, the total required mitigation for the Proposed Project Amendment is 584.6 acres.

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The access road (also described as Street "I"), is required for the Otay Water District water transmission line, access to the 980-Zone regional water reservoir facility, and also provides secondary fire access for Village 14. The water transmission line, water reservoir and associated access road are allowed facilities in the Otay Ranch RMP Preserve and the County MSCP Subarea Plan.

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6 Development Footprint Comparisons

The Final EIR evaluated both the Approved Project and the EIR Land Exchange Alternative at a project level of detail. This report examines whether the Final EIR, through its analysis of the Approved Project and the EIR Land Exchange Alternative, covered all anticipated impacts of the Proposed Project Amendment. This chapter provides a comparison of the Development Footprints for the Proposed Project Amendment, the Approved Project, and the EIR Land Exchange Alternative. Sections 6.1 through 6.5 specifically address riparian habitat and sensitive vegetation communities, special-status plants and wildlife, jurisdictional resources, wildlife movement, and ordinances and plans. Figure 5, Certified EIR Study Area, depicts the limits of the development contemplated under the Approved Project and the EIR Land Exchange Alternative and then compares these limits to those of the Proposed Project Amendment. Table 1 likewise compares the Proposed Project Amendment to the Approved Project and the EIR Land Exchange Alternative. Note that from a geographical perspective, each acre that composes the Proposed Project Amendment's Development Footprint is located either within the Approved Project Development Footprint or within the EIR Land Exchange Alternative Development Footprint. In other words, no portion of the Proposed Project Amendment Development Footprint is outside the combined Approved Project and EIR Land Exchange Alternative Development Footprints.

Table 1. Proposed Project Amendment Comparison

Description		Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative
Total Project Area		1,543 acres	1,369 acres	2,388 acres
Development Footprint		578.6 acres	809 acres	658 acres
Graded Acres (within Developm Footprint)	nent	522 acres	599 acres	583 acres
Off-site Improvements		40 acres	85 acres	40 acres
Conserved Open Space		24.5 acres	72.4 acres	N/A
Conveyance to Otay Ranch RM Preserve/Preservation	Р	626.7 acres	776.8 acres	687.2 acres
Biological Mitigation	PV1	Excluded	Included	Excluded
Ordinance Areas	PV2	Included	Included	Excluded
	PV3	Excluded (except for Basin and Proctor Valley Road)	Included	Included

Notes: EIR = Environmental Impact Report; N/A = not applicable; RMP = Resource Management Plan; PV = Proctor Valley. The 626.7 acres of preserved lands associated with the Proposed Project Amendment includes the 191.5 acres within Planning Area 16 that are designated development, but as a part of the Dispute Resolution Agreement, a conservation easement will be placed over the land and granted to CDFW to manage. This land will also include 58.3 acres of designed Otay Ranch RMP Preserve within Planning Area 16 under control of the owner/applicant off site and 377 acres of on-site Otay Ranch RMP Preserve within Village 14 and Planning Area 16. All of the required conveyance, estimated at 558.7556.6, will be satisfied on site within these 626.7 acres.

6.1 Riparian Habitat or Sensitive Vegetation Communities

6.1.1 Development Footprint Comparisons

Table 2 identifies the Proposed Project Amendment's direct impacts (permanent and temporary) on sensitive vegetation communities and then compares them to those of the Approved Project and the EIR Land Exchange Alternative (Impacts BI-13, BI-14, BI-15, BI-16, BI-17, and BI-18, as described in the Final EIR³). As the acreages in Table 2 show, the Proposed Project Amendment's temporary⁴ and permanent direct impacts to vegetation communities are substantially similar to those of the Approved Project and the EIR Land Exchange Alternative, as analyzed and disclosed in the Final EIR (County of San Diego 2019). In terms of overall permanent impacts to sensitive vegetation communities, the Proposed Project would disturb substantially less acreage (512.4 acres) than the Approved Project (718.4 acres) and the EIR Land Exchange Alternative (624.9 acres). The Proposed Project Amendment's temporary and permanent indirect impacts would be the same as those described in the Final EIR for the Approved Project (Impacts BI-24 and BI-25).

Table 2. Direct Impacts to Vegetation Communities and Land Cover Types – Development Footprint Comparison (Acres)

	Propose Project Amendr Impacts	nent	Approve Project Impacts		EIR Lan Exchan Alterna Impacts	ge tive
Habitat Types/Vegetation Communities	Perm.	Temp	Perm.	Temp.	Perm.	Temp.
Sensitive Upland Communities						
Granitic chamise chaparral (including disturbed)	352.4	3.5	230.9	18.8	426.2	2.3
Granitic southern mixed chaparral	1.7	1.5	12.4	1.9	1.7	1.5
Diegan coastal sage scrub	96.7	10.8	353.5	18.7	82.7	9.4
Diegan coastal sage scrub (disturbed)	14.3	9.7	51.0	9.6	43.3	6.0
Diegan coastal sage scrub-Baccharis dominated (including disturbed)	0.4	0.9	0.4	0.9	0.4	0.9
Non-native grassland	45.7	11.2	70.2	12.5	42.5	9.4
Subtotal of Sensitive Upland Communities	511.2	27.5	718.4	62.4	596.7	29.5
Riparian Habitat/Jurisdictional Aquatic Resources						
Cismontane alkali marsh (including disturbed)	0.8	0.1	1.0	<0.1	0.2	0.3
Mulefat scrub	0.1	0.3	0.1	0.3	0.1	0.3
Coastal and valley freshwater marsh	0.1	0.3	0.1	0.3	0.1	0.3
Southern coast live oak riparian forest	_	_	_	_	_	_
Southern willow scrub	0.1	<0.1	0.2	<0.1	<0.1	<0.1
Open water	_	_	0.2	-	_	_
Unvegetated channela	<0.1	0.1	<0.05	0.1	<0.1	0.1
Subtotal of Riparian Habitat/Jurisdictional Aquatic Resources	1.2	0.7	1.6	0.7	0.4	1.1

Note that Impact BI-19 as described in the Final EIR is not applicable to the Proposed Project Amendment.

⁴ Temporary impacts are largely associated with improvements to Proctor Valley Road but, for the Approved Project only, also include impacts along connector roads in Village 14 and Planning Area 16.



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Table 2. Direct Impacts to Vegetation Communities and Land Cover Types – Development Footprint Comparison (Acres)

	Propose Project Amendr Impacts	ment	Approve Project Impacts		EIR Lan Exchan Alternat Impacts	ge tive
Habitat Types/Vegetation Communities	Perm.	Temp	Perm.	Temp.	Perm.	Temp.
Non-Sensitive Communities and Land Covers						
Eucalyptus woodland	3.0	0.1	_	0.2	3.0	0.1
Urban/developed	7.3	1.1	5.9	1.2	7.8	1.4
Disturbed habitat	14.4	1.9	16.0	2.6	17.0	1.3
Subtotal of Non-Sensitive Communities and	24.7	3.2	21.9	4.0	27.8	2.8
Land Covers						
Total ^b	537.2º	41.4°	741.9	67.1	624.9	33.4

Notes:

- Unvegetated stream channel is also an overlay within various vegetation communities and is therefore not fully represented in this table. See Table 3.
- b May not sum precisely due to rounding.
- The optional design for the secondary access to the water tank and Village 14 would eliminate a total of 8.3 acres of impacts to the Preserve. These impacts include 5.0 acres of permanent impacts and 3.3 acres of temporary impacts within the Preserve.

6.1.2 Discussion

The Proposed Project Amendment would permanently affect 537.2 acres within the Biological Study Area. Of these 537.2 acres, 511.2 acres are impacts to sensitive upland vegetation and 1.2 acres are impacts to riparian habitat (Table 2; Figure 6 series, Impacts to Biological Resources). Although the Proposed Project Amendment would result in greater permanent impacts to chaparral as compared to the Approved Project, its impacts to other sensitive upland vegetation communities would be less. For example, the Proposed Project Amendment's total permanent impact to sensitive upland vegetation would be 207.2 acres less than that of the Approved Project, and 85.5 acres less than that of the EIR Land Exchange Alternative. In addition, the Proposed Project Amendment's permanent direct impacts to riparian habitat/jurisdictional resources would be 0.4 acres less than that of the Approved Project, but 0.8 acres more than that of the EIR Land Exchange Alternative.

Temporary impacts for the Proposed Project Amendment would be 25.7 acres less than the Approved Project and 8 acres more that the EIR Land Exchange Alternative. The difference in temporary impacts between the Proposed Project Amendment and Approved Project is that, upon further review of the site plan, it was determined that some of the temporary impacts associated with Proctor Valley Road could not be revegetated adequately and thus had to be recategorized as permanent impacts for purposes of the Proposed Project Amendment. The significance of these potential impacts was determined through application of the County's Significance Guidelines (Guideline 4.2), as described in Section 2.4.3.2, Guideline 4.2: Riparian Habitat or Sensitive Natural Community, of the Final EIR (County of San Diego 2019). The Proposed Project Amendment's impacts to sensitive vegetation communities, both permanent and temporary, would be **significant** absent mitigation. However, the Proposed Project Amendment would not result in any new significant impacts to riparian habitats or sensitive vegetation communities and would not substantially increase the severity of significant impacts previously identified in the certified Final EIR. Implementation of mitigation measures M-BI-1 (biological monitoring), M-BI-2 (temporary construction fencing), M-BI-3 (habitat conveyance and preservation), M-BI-4 (biological open space easement), M-BI-5 (permanent fencing and signage), and M-BI-21 (federal and state agency permits), as described in Chapter 7, would reduce these impacts to less than significant.

6.2 Special-Status Plant Species

6.2.1 Development Footprint Comparisons

A comparison of the loss of special-status plant species for the Proposed Project Amendment, Approved Project, and the EIR Land Exchange Alternative is presented in Table 3. Permanent direct impacts to special-status plant species were quantified by comparing the Development Footprints with the occurrence data for each special-status plant species (Impacts BI-4 and BI-5 from the Final EIR). Temporary direct impacts to special-status plants resulting from grading are quantified as permanent direct impacts. Table 3 includes each species' status and an assessment of permanent direct impacts based on the number of individual plants located within the Development Footprints. Impacts associated with the Proposed Project Amendment are shown on the Figure 6 series. In addition, there are impacts to critical habitat for Otay tarplant and spreading navarretia (*Navarretia fossalis*), as described in Table 3. Impacts to critical habitat for the Proposed Project Amendment are shown on Figure 7. Temporary and permanent indirect impacts (Impacts BI-9 and BI-12) would be similar to those discussed in the Final EIR (County of San Diego 2019).

6.2.2 Discussion

The Proposed Project Amendment would result in direct impacts to three County List A plant species: San Diego goldenstar (*Bloomeria clevelandii*; 727 individuals), Otay tarplant (*Deinandra conjugens*; 25 individuals/8 acres of critical habitat), and Robinson's pepper-grass (*Lepidium virginicum* var. *robinsonii*; 56 individuals). The Proposed Project Amendment would have impacts to critical habitat for spreading navarretia but would not impact any populations of this species, as it was not observed during focused surveys. Impacts to three County List B plant species would also occur: San Diego barrel cactus (*Ferocactus viridescens*; 12 individuals); San Diego marsh-elder (*Iva hayesiana*; 3,250 individuals), and Munz's sage (*Salvia munzii*; 10,918 individuals). A total of six County List D species would be impacted, as listed in Table 3.

As compared to the Approved Project, the Proposed Project Amendment would result in fewer impacts to all special-status plant species, with the exception of Otay tarplant. With respect to Otay tarplant, the Proposed Project Amendment and the Approved Project would both adversely affect 25 individual plants. The Proposed Project Amendment would avoid impacts to several County List A species that would be affected by the Approved Project: Orcutt's brodiaea (*Brodiaea orcuttii*), delicate clarkia (*Clarkia delicata*), and variegated dudleya (*Dudleya variegata*; also a Narrow Endemic species).

When compared to the EIR Land Exchange Alternative, the Proposed Project Amendment would result in fewer impacts to all special-status plant species with the exception of southwestern spiny rush (*Juncus acutus* ssp. *leopoldii*; County List D species) and San Diego marsh-elder. For these two species, the Proposed Project Amendment would result in greater impacts (Table 3). Note, however, that the Proposed Project Amendment would avoid impacts to variegated dudleya, whereas the EIR Land Exchange Alternative would adversely affect 35 individuals of this species.

The significance of these potential impacts was determined through application of the County's Significance Guidelines (Guideline 4.1), as described in Section 2.4.3.1, Guideline 4.1: Candidate, Sensitive, or Special-Status Species, of the Final EIR (County of San Diego 2019). Table 3 provides the significance calls for each plant species and associated mitigation measures required to reduce any impacts to less than significant. The Proposed Project Amendment would not result in any new significant impacts to special-status plant species and would not substantially increase the severity of previously identified significant impacts in the certified Final EIR.

Table 3. Direct Impacts to Special-Status Plant Species - Development Footprint Comparison

Species	Regulatory Status: Federal/ State/County/ CRPR	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
County List A					
Arctostaphylos otayensis Otay manzanita	None None Covered 1B.2	I	I	I	I
Bloomeria clevelandii San Diego goldenstar	None None Covered 1B.1	727	775	2,228	Although San Diego goldenstar is a Covered Species under the Otay Ranch RMP and MSCP Plan, the Proposed Project Amendment's impacts to this species are subject to RMP translocation requirements. Therefore, upon implementation of mitigation measures M-BI-3, M-BI-4, and M-BI-11, the impacts to this species would be less than significant.
Brodiaea orcuttii Orcutt's brodiaea	None None Covered 1B.1	I	833	I	I
Calochortus dunnii Dunn's mariposa- lily	None SR Covered, NE 1B.2	I	1	I	I
Clarkia delicata delicate clarkia	None None Not Covered 1B.2	I	4	I	I
Clinopodium chandleri San Miguel savory	None None Covered 1B.2	I	1	I	I
Deinandra conjugens Otay tarplant	FT SE Covered 1B.1	25 8.0 acres of critical habitat	25 17.3 acres of critical habitat	25 7.2 acres of critical habitat	The Proposed Project Amendment's direct off-site impacts to Otay tarplant individuals have already been mitigated. Thus, the impacts on this species would be less than significant.

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Table 3. Direct Impacts to Special-Status Plant Species - Development Footprint Comparison

Species	Regulatory Status: Federal/ State/County/ CRPR	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
Dudleya variegata variegated dudleya	None None Covered, NE 1B.2	I	35	35	I
Lepechinia ganderi Gander's pitcher sage	None None Covered, NE 1B.3	I	I	I	
Lepidium virginicum var. robinsonii Robinson's pepper- grass	None None Not Covered 4.3	വ	168	174	Robinson's pepper-grass has a low CRPR 4.3 ranking in terms of threats and plant rarity. Thus, the Proposed Project Amendment's impacts to this species would be less than significant . However, M-BI-3 and M-BI-4 would provide for the preservation of existing populations and suitable habitat for the species.
Navarretia fossalis spreading navarretia	FT None Covered 1.B	8.2 acres of critical habitat	16.6 acres of critical habitat	8.6 acres of critical habitat	
County List B					
Ferocactus viridescens San Diego barrel cactus	None None Covered 2B.1	12	48	48	All of the Proposed Project Amendment's impacts to San Diego barrel cactus occur within the cities of Chula Vista and San Diego. San Diego barrel cactus is a Covered Species those cities' MSCP Subarea Plans. Therefore, impacts to this species associated with the Proposed Project Amendment would be less than significant .
Iva hayesiana San Diego marsh- elder	None None Not Covered 2B.2	3,250	3,937	1,566	The Proposed Project Amendment's impacts to San Diego marsh-elder would be mitigated to less than significant through the habitat conveyance required under M-BI-3 and M-BI-4, implementation of a Resource Salvage and Restoration Plan (M-BI-11) consistent with the RMP and BMO, and restoration of temporary impacts (M-BI-12).

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Table 3. Direct Impacts to Special-Status Plant Species - Development Footprint Comparison

Species	Regulatory Status: Federal/ State/County/ CRPR	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
Salvia munzii Munz's sage	None None Not Covered 2B.2	10,918	11,812	11,303	The Proposed Project Amendment's impacts to Munz's sage would be less than significant due to conservation of the species within the Proposed Project Amendment Project Area and elsewhere within Otay Ranch. M-BI-3 and M-BI-4 would provide for the preservation of existing populations and suitable habitat for the species.
County List D					
Artemisia palmeri San Diego sagewort	None Not Covered 4.2	2	4	1	The Proposed Project Amendment's impacts on San Diego sagewort would be less than significant because this is a List D species and the Proposed Project Amendment would not jeopardize the local, long-term viability of the species. In addition, San Diego sagewort is a CRPR 4.2 species, indicating it has a limited distribution and is moderately threatened in California. Given its low sensitivity ranking and that it is known from 23 quads in Southern California (CNPS 2019), impacts to fewer than 10 individuals is not expected to impact the local long-term survival of this species. Nevertheless, by following the guidelines of the Otay Ranch RMP, and conveying the agreed-upon acreage to the Otay Ranch RMP Preserve through M-BI-3 and additional habitat through M-BI-4 , the Proposed Project Amendment would contribute to the Ranch-wide preservation goals.
Dichondra occidentalis western dichondra	None Not Covered 4.2	0.06 acres ^b	0.23 acres ^b	0.23 acres ^b	The Proposed Project Amendment's impacts on western dichondra would be less than significant because this is a List D species and the Proposed Project Amendment would not jeopardize the local, long-term viability of the species. Nevertheless, by following the guidelines of the Otay Ranch RMP and conveying the agreed-upon acreage to the Otay Ranch RMP Preserve through M-BI-3 and additional habitat through M-BI-4, the Proposed Project Amendment would contribute to the Ranch-wide preservation goals. In addition, western dichondra is a CRPR 4.2 species, indicating it has a limited distribution and is moderately threatened in California. Given its low sensitivity ranking and that it is known from 33 quads in Southern California (CNPS 2019), impacts to 0.06 acres are not expected to impact the local long-term survival of this species.

Table 3. Direct Impacts to Special-Status Plant Species - Development Footprint Comparison

Species	Regulatory Status: Federal/ State/County/ CRPR	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
Harpagonella palmeri Palmer's grapplinghook	None None Not Covered 4.2	I	40	40	I
Holocarpha virgata ssp. elongata graceful tarplant	None None Not Covered 4.2	I	20	ഗ	
Juncus acutus ssp. leopoldii southwestern spiny rush	None Not Covered 4.2	54	S8 20	31	The Proposed Project Amendment's impacts on Southwestern spiny rush would be less than significant because this is a List D species and the Proposed Project Amendment would not jeopardize the local, long-term viability of the species. Nevertheless, by following the guidelines of the Otay Ranch RMP and conveying the agreed-upon acreage to the Otay Ranch RMP Preserve through M-BL-3 and additional habitat through M-BL-4, the Proposed Project Amendment would contribute to the Ranch-wide preservation goals. In addition, southwestern spiny rush is a CRPR 4.2 species, indicating it has a limited distribution and is moderately threatened in California. Given its low sensitivity ranking and that it is known from 27 quads in Southern California (CNPS 2019), impacts to 54 individuals are not expected to impact the local long-term survival of this species, especially considering the preservation of individuals in the Otay Ranch RMP Preserve and Conserved Open Space, as well as additional suitable habitat for this species in the Otay Ranch RMP Preserve system on and off site.
Pentachaeta aurea ssp. aurea golden-rayed pentachaeta	None None Not Covered 4.2	121	6,350	2,341	The Proposed Project Amendment's impacts on golden-rayed pentachaeta would be less than significant because this is a List D species and the Proposed Project Amendment would not jeopardize the local, long-term viability of the species. Nevertheless, by following the guidelines of the Otay Ranch RMP and conveying the agreed-upon acreage to the Otay Ranch RMP Preserve through M-BI-3 and additional habitat through M-BI-4 , the Proposed Project Amendment would

Table 3. Direct Impacts to Special-Status Plant Species - Development Footprint Comparison

Species	Regulatory Status: Federal/ State/County/ CRPR	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
					contribute to the Ranch-wide preservation goals. In addition, golden-rayed pentachaeta is a CRPR 4.2 species, indicating it has a limited distribution and is moderately threatened in California. Given its low sensitivity ranking and that it is known throughout Southern California, including records within 12 different quads in San Diego County from as far north as Camp Pendleton to as far southeast as the Pine Valley area (CNPS 2019; SDNHM 2019), impacts to approximately 121 individuals are not expected to impact the local long-term survival of this species.
Selaginella cinerascens ashy spike-moss	None Not Covered 4.1	1.34 acres ^b	3.69 acres ^b	acres ^b	The Proposed Project Amendment's impacts on ashy spike-moss would be less than significant because this is a List D species and the Proposed Project Amendment would not jeopardize the local, long-term viability of the species. Nevertheless, by following the guidelines of the Otay Ranch RMP and conveying the agreed-upon acreage to the Otay Ranch RMP Preserve through M-BL-3 and additional habitat through M-BL-4, the Proposed Project would contribute to the Ranch-wide preservation goals. In addition, ashy spike-moss is a CRPR 4.1 species, indicating it has a limited distribution and is seriously threatened in California. Given its low sensitivity ranking and that it is known from 17 quads in Southern California (CNPS 2019), impacts to 1.37 occupied acres are not expected to impact the local long-term survival of this species, especially considering the preservation of occupied locations, as well as additional suitable habitat for this species in the Otay Ranch RMP Preserve system on site.
Stipa [=Achnatherum] diegoensis San Diego County needle grass	None None Not Covered 4.2	I	93	I	

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Table 3. Direct Impacts to Special-Status Plant Species - Development Footprint Comparison

Species	Regulatory Status: Federal/ State/County/ CRPR	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
<i>Viguiera laciniata</i> San Diego County viguiera	None Not Covered 4.2	699	6,857	2,430	The Proposed Project Amendment's impacts on San Diego County viguiera would be less than significant because this is a List D species and the Proposed Project Amendment would not jeopardize the local, long-term viability of the species. Nevertheless, by following the guidelines of the Otay Ranch RMP and conveying the agreed-upon acreage to the Otay Ranch RMP Preserve through M-Bl-3 and additional habitat through M-Bl-4, the Proposed Project Amendment would contribute to the Ranchwide preservation goals. Preservation of individuals within the Otay Ranch RMP Preserve would contribute to the Ranch-wide goals for this species.

Notes: CRPR = California Rare Plant Rank; MSCP = Multiple Species Conservation Program.

Impacts to special-status plants include impacts within the permanent and temporary footprints.

Impacts to western dichondra and ashy spike-moss are in acres occupied rather than number of individuals impacted due to the difficulty in counting distinct individuals for these species, given their growth habits.

Status Legend

Federal

FT: Federally listed as threatened

SE: State listed as endangered

SR: State listed as rare

County

Covered: MSCP Covered Species

Not Covered: Species not Covered under the MSCP

NE: Narrow Endemic

CRPR

1B: Plants rare, threatened, or endangered in California and elsewhere

2B: Plants rare, threatened, or endangered in California, but more common elsewhere

4: Plants of Limited Distribution - A Watch List

Threat Rank

0.1 – Seriously threatened in California (over 80% of occurrences threatened/high degree and immediacy of threat)

0.2 - Moderately threatened in California (20%-80% occurrences threatened/moderate degree and immediacy of threat)0.3 - Not very threatened in California (less than 20% of occurrences threatened/low degree and immediacy of threat or no current threats known)



6.3 Special-Status Wildlife Species

6.3.1 Surveys for Special-Status Wildlife Species

As explained in the Final EIR, the project biologists performed focused surveys for a number of highly sensitive species and the resources on which they rely (County of San Diego 2019). These surveys included: (i) a habitat assessment, larval host plant survey, and protocol surveys for Quino checkerspot butterfly; (ii) focused protocol surveys for coastal California gnatcatcher; (iii) a habitat assessment and four-pass protocol survey for burrowing owl; (iv) a habitat assessment for arroyo toad; (v) a habitat assessment and protocol surveys for Hermes copper butterfly; (vi) nest survey and habitat assessment for golden eagle; (vii) a habitat assessment and protocol wet season and dry season surveys for listed large branchiopods (i.e., fairy shrimp); and (viii) focused surveys for western spadefoot (County of San Diego 2019).

6.3.<u>2</u>4 Development Footprint Comparisons

The Final EIR's Biological Resources Technical Reports provide detailed assessments of the Approved Project's impacts on habitat for special-status wildlife species either known to occur or with a high potential to occur within the Biological Study Area (Section 5.3. in both reports; Impacts BI-1, BI-2, BI-3, BI-6, BI-7, BI-8, BI-10, and BI-11 in the Final EIR). These same reports provide similar information for the EIR Land Exchange Alternative. As stated previously, (1) the Proposed Project Amendment's Development Footprint does not extend beyond the geographic boundaries of the respective Development Footprints of the Approved Project and the Land Exchange Alternative and (2) the Proposed Project Amendment's Development Footprint results in less impact to native habitat than either the Approved Project or the EIR Land Exchange Alternative. Given these facts, it is reasonable to conclude that the impact evaluations provided in the Final EIR's Biological Resources Technical Reports capture the full extent of impacts for the Proposed Project Amendment, and that impacts to suitable habitat for these species would be less than those of the Approved Project and the EIR Land Exchange Alternative. Impacts associated with the Proposed Project Amendment are shown on the Figure 6 series.

Based on the surveys discussed in Section 6.3.1 and other available data, the Final EIR determined that the Approved Project would have significant impacts on the following: Quino checkerspot butterfly habitat (Impact BI-1); habitat for various special-status wildlife species, including coastal California gnatcatcher and burrowing owl (Impact BI-2); Hermes copper butterfly habitat (Impact BI-3); golden eagle foraging habitat (Impact BI-6); habitat for special-status wildlife species, including amphibians, reptiles, and small mammals (Impacts BI-7, BI-11, BI-12); and birds protected under the Migratory Bird Treaty Act (Impact BI-8) (County of San Diego 2019). The Final EIR recommended various mitigation measures, which, if adopted and implemented, would reduce these impacts to less than significant levels (County of San Diego 2019).

The Final EIR also determined that the EIR Land Exchange Alternative would have similar significant impacts on special-status wildlife species, and that the recommended mitigation measures, if implemented, would reduce such impacts to a less than significant level.



Four special-status species were analyzed extensively in the certified Final EIR (which includes the Biological Technical Reports for the Approved Project and the Land Exchange Alternative) due to their sensitivity: (1) Quino checkerspot butterfly (*Euphydryas editha quino*; Impact BI-1), (2) Hermes copper butterfly (*Lycaena hermes*; Impact BI-3), (3) golden eagle (*Aquila chrysaetos*; Impact BI-6), and (4) burrowing owl (*Athene cunicularia*; Impact BI-2). This Technical Memorandum discusses these four species, along with western spadefoot (*Spea hammondii*), in greater detail (see Table 4 and Section 6.3.3). In addition, this Technical Memorandum assessed the Proposed Project Amendment's potential impacts on Crotch bumble bee (*Bombus crotchii*), which became a candidate for listing under the California Endangered Species Act in June 2019, following certification of the Final EIR. In addition, a full comparison of the Proposed Project Amendment, Approved Project, and EIR Land Exchange Alternative as they relate to Quino checkerspot butterfly habitat assessments and protocol surveys is provided in Appendix A. A detailed analysis of the Proposed Project Amendment's impacts to Quino checkerspot butterfly host plants is presented on the Figure 8 series, 2016 Quino Host Plant Mapping and Recent Sightings.

Like the Approved Project and the EIR Land Exchange Alternative, the Proposed Project Amendment has been designed to avoid impacts on features occupied by San Diego fairy shrimp (*Branchinecta sandiegonensis*). Therefore, San Diego fairy shrimp is not included in Table 4, which summarizes direct impacts to special status wildlife species. However, because such features supporting San Diego fairy shrimp may in the future develop in locations where they do not currently exist, the Final EIR included a mitigation measure that requires the project applicant to consult with USFWS to determine whether take authorization is required for impacts to San Diego fairy shrimp suitable habitat (see M-BI-7 in Chapter 7). This same mitigation measure would apply to the Proposed Project Amendment.

During recent inspection of the Biological Study Area (September and October 2019), project biologists detected five vernal pools within the City of San Diego Cornerstone lands that were previously designated as scour pools, not vernal pools. Project biologists had surveyed this area in the past as part of the biological review for the Approved Project EIR, but the features in question did not at that time exhibit the requisite characteristics of vernal pools (i.e., they did not support vernal pool indicator species). Specifically, in April and June 2014, Dudek biologists assessed the entire project area and mapped potential features (i.e., vernal pools, ephemeral basins, and road ruts) that could support vernal pool branchiopods. As part of this effort, Dudek biologists reviewed the specific on site microhabitats (e.g., flat topography, soil types, and slopes) along with the potential vernal pool locations provided in the Proctor Valley Vernal Pool Restoration Plan (AECOM and Hogan 2012) and A Report on the Flora of Otay Ranch Vernal Pools, 1990–1991 (Dudek & Associates 1992). The biologists inspected all features for occurrences of vernal pool plant species. After the 2014/2015 wet season survey and the USFWS release of new survey guidelines for listed large branchiopods (adopted May 31, 2015), dry season sampling was authorized by USFWS and was conducted according to the 2015 guidelines (USFWS 2015).

Due to updates to the USFWS survey guidelines for fairy shrimp and the predicted El Niño conditions for the 2015/2016 wet season, another wet season survey was conducted within the review area, focusing on potential features that the proposed project might disturb. Again, each potential feature was reviewed for the presence of vernal pool indicator plants and none of the features within the review area supported such plants, including the five scour pools referenced above. Another dry season survey was conducted in 2016.

Through the habitat assessment and 2 years of surveys, Dudek biologists mapped 52 features within the biological study area that met the ponding requirements set forth in the USFWS survey guidelines. The focused surveys resulted in the detection of federally endangered San Diego fairy shrimp within four features in the biological study area: A22, A23, A27, and D4.



In the Biological Technical Report for the Approved Project EIR, Dudek determined which basins within the biological study area qualified as vernal pools. To make this determination, Dudek relied on the criteria set forth in the Report on the Flora of the Otay Ranch Vernal Pools, 1990–1991 (Dudek & Associates 1992). Pursuant to those criteria, a vernal pool requires at least one indicator plant species "whose distribution in coastal California is completely or substantially restricted to vernal pool basins" (Dudek & Associates 1992, p. 5). Based on the 2 years of focused surveys conducted for the proposed project (described above), none of the surveyed features (road ruts and ephemeral basins) in the biological study area contained vernal pool plant indicator species, and thus none met the applicable criteria discussed above. Accordingly, they were not classified as vernal pools.

During the October 24, 2019, site visit, HELIX, Dudek, and U.S. Army Corps of Engineers staff observed potential vernal pool plant indicators in basins located within the portion of the review area owned by the City of San Diego (i.e., City of San Diego Cornerstone Lands). Although the Proctor Valley Vernal Pool Restoration Plan identified these features as floodplain scour pools (AECOM and Hogan 2012), none of these basins held water long enough to be included within the protocol surveys described above, nor did they contain vernal pool plant species at the time the 2014 surveys were conducted. Dudek revisited these areas on October 30, 2019, to determine the type and extent of vernal pool indicator plants within each feature. During this review, Dudek observed within those basins vernal pool plant species, wetland plant species, and leftover carapaces of Ostracods, a freshwater crustacean species. The basins appear to have been created through a scouring process associated with the main Proctor Valley drainage, and as previously stated, the Proctor Valley Vernal Pool Restoration Plan identified these features as floodplain scour pools (AECOM and Hogan 2012).

All five of these pools are isolated and scoured within the alluvial terraces adjacent to the main flood channel, and their individual watersheds reflect this landscape flow pattern, with most of the pool watersheds concentrated on the upstream side of each mapped pool. For these pools to persist, the input from their watersheds will need to be maintained so that the current hydrological support for these pools is not lost or reduced. Also, the pools will need to be able to outflow at their existing high water level; otherwise, there is potential that the pools will pond too deeply and/or for too long.

The current and approved design for Proctor Valley Road includes a bridge with a proposed span of approximately 282 lineal feet. In order to avoid permanent direct impact to the five pools described above (and their watersheds), the proposed bridge for Proctor Valley Road will increase its span from 282 lineal feet to approximately 702 lineal feet. This increase in span length will allow the bridge to avoid the drainage, including the vernal pools and their watershed (Figure 9, Vernal Pools within City of San Diego Cornerstone Lands). In addition, the bridge pylons would be placed outside of the vernal pools and associated watershed. With this bridge design, the landscape in which these pools occur will be maintained, and the watershed input to the pools, as well as their outflow elevations, will not be altered. The bridge will not be directly over any of the pools and direct impacts to the pools will be avoided during project construction. Based on these facts, the proposed bridge at Proctor Valley Road, and the Proposed Project Amendment as a whole, would avoid impacts to vernal pools and the species that rely on them, which is consistent with the conclusions drawn in the Approved Project EIR. For this reason, the Proposed Project Amendment is likewise consistent with the City of San Diego's Vernal Pool Habitat Conservation Plan (VPHCP). Note, however, that the project applicant must obtain from the City a site development permit and the City, as part of that permitting process, might require additional measures to ensure continued compliance with the VPHCP. Should the City require such additional measures, the project applicant will implement them, along with any other measures the City might impose as conditions of the site development permit. The temporary impacts associated with bridge construction will be restored to pre-project conditions as required by the City's Land Development Code, leaving both the pools and watersheds in place.



The Proposed Project Amendment's temporary and permanent indirect impacts to special status wildlife species (BI 10 and BI 11), as well as temporary direct impacts (BI 7), would be similar to those discussed in the Final EIR (County of San Diego 2019).



Table 4. Permanent Impacts to Special-Status Wildlife Species Present within the Biological Study Area, or with a High Potential to Occur

		Development I	Development Footprint Impacts	Ų	
	Regulatory		oochiiic iiiibaa	3	
Species Common Name (Scientific Name)	Status: Federal/ State/MSCP/ County Group	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
western spadefoot (Spea hammondii)	None SSC Not Covered Group 2	12 occupied features	12 occupied features	8 occupied features	Western spadefoot is not a Covered Species under the MSCP. However, this species is covered in the Otay Ranch RMP. Policy 2.8 of the Otay Ranch RMP, Phase 1, states the following: "Preserve on-site populations of plant and wildlife species recognized as Category 2 Candidates for listing by USFWS." Western spadefoot was listed as a Category 2 species in the Otay Ranch RMP, Phase 2. Per the Phase 2 Resource Management Plan Update (RECON 2018), Policy 2.8 is complete, as the Preserve boundaries were established in Section 5.1 of the Phase 1 RMP and were designed to achieve this standard. The Otay Ranch RMP conveyance obligation is the required fair-share mitigation based on the Otay Ranch RMP and the MSCP Plan. Thus, by conveying the required acreage of land to the Otay Ranch RMP Preserve (M-BI-3), direct impacts to this species would be reduced to less than significant for the Proposed Project Amendment.
					Specifically, the applicant will be contributing to spadefoot habitat within the Otay Ranch RMP Preserve by preserving four occupied features that support this species, as well as suitable estivation habitat. This level of conservation would mitigate impacts by providing suitable habitat in a configuration that preserves genetic exchange and species viability. Each of the conserved occupied pools is surrounded by protected open space that allows for the unimpeded movement of adults into surrounding areas of available aestivation habitat.
golden eagle (Aquila chrysaetos) (nesting and wintering)	BCC FP, WL Covered Group 1	538.7 acres of foraging habitat	780.8 acres of foraging habitat	596.6 acres of foraging habitat	Per the MSCP Implementing Agreement, conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan would mitigate for direct impacts to covered sensitive species and reduce impacts to less than significant.
					The development footprint for the Proposed Project Amendment would not result in lethal take of golden eagle individuals or disturbance of any active golden eagle nest. In addition, the Proposed Project Amendment would not place human activity within 4,000 feet of an active golden eagle nest, per the conditions of the MSCP. Nor

Table 4. Permanent Impacts to Special-Status Wildlife Species Present within the Biological Study Area, or with a High Potential to Occur

		Development F	Development Footprint Impacts	ts	
	Regulatory	7000		7	
Species Common Name (Scientific Name)	Status: Federal/ State/MSCP/ County Group	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
					would the Proposed Project Amendment place human activity within 3,000 feet of historical nests per the Otay Ranch Raptor Management Study (Ogden 1992).
					Compliance with these plans would mitigate for direct and indirect impacts to golden eagle, reducing impacts to less than significant. Therefore, the Proposed Project Amendment would not result in any significant impacts that have not already been mitigated through compliance with the MSCP, the MSCP County Subarea Plan, and the Otay Ranch RMP.
burrowing owl (Athene cunicularia) (burrow sites and some wintering sites)	BCC SSC Covered Group 1	34.1 acres of potential habitat	84.7 acres of potential habitat	140.1 acres of potential habitat	Conservation provided through the Otay Ranch RMP and MSCP County Subarea Plan conformance/equivalency would provide mitigation for direct impacts to covered species to reduce impacts to less than significant (M-BI-3). In addition, preconstruction surveys for the Proposed Project Amendment would be conducted to ensure that direct impacts to this species are avoided (M-BI-13).
Quino checkerspot butterfly (Euphydryas editha quino)	FE None Not Covered Group 1	527.1 acres of potential habitat1	789.4 acres of potential habitat¹	605.5 acres of potential habitat ¹	The Proposed Project Amendment would affect potential Quino checkerspot butterfly habitat. This impact would be significant absent mitigation. Mitigation for direct impacts to potential Quino checkerspot butterfly habitat include habitat conveyance
		500.2 acres of critical habitat ¹	488.4 acres of critical habitat ¹	595.0 acres of critical habitat ¹	and preservation (M-BI-3, MBI-4, and M-BI-9), Quino checkerspot butterfly take authorization (M-BI-8), and Quino checkerspot butterfly management/ enhancement plan (M-BI-10). Implementation of these mitigation measures would reduce direct impacts to suitable Quino checkerspot butterfly habitat to less than significant for the Proposed Project Amendment.
					In May 2019, just prior to the certification of the Final EIR, USFWS released survey data for the 2019 Quino checkerspot butterfly flight season, including survey data in the Otay Ranch area of San Diego County. This data was reviewed by HELIX, who determined that since the 2019 survey data closely matched the 2017 survey data and other previous sightings, the 2019 occurrence data did

Table 4. Permanent Impacts to Special-Status Wildlife Species Present within the Biological Study Area, or with a High Potential to Occur

		Development I	Development Footprint Impacts	ts	
Species Common Name (Scientific Name)	regulatory Status: Federal/ State/MSCP/ County Group	Proposed Project Amendment	Approved Project	EIR Land Exchange Alternative	Significance Determination for the Proposed Project Amendment
					not alter the analysis, conclusions, or mitigation measures set forth in the Final EIR, in which impacts were determined to be less than significant with mitigation. A detailed discussion of these sightings is provided in Appendix B.
Hermes copper (Lycaena hermes)	FC None Not Covered Group 1	10.2 acres of suitable habitat	18 acres of suitable habitat	15 acres of suitable habitat	The Proposed Project Amendment would affect suitable Hermes copper butterfly habitat. This impact would be significant absent mitigation . Mitigation for direct impacts to potential Hermes copper butterfly habitat includes habitat conveyance and preservation (M-BI-3 and M-BI-4). Implementation of these mitigation measures would reduce direct impacts to suitable Hermes copper butterfly habitat to less than significant .
Crotch bumble bee (Bombus crotchii)	None Candidate Not Covered None	570.2 acres of potential habitat	801.9 acres of potential habitat	649.1 acres of potential habitat	The Proposed Project Amendment would affect potential Crotch bumble bee. This impact would be significant absent mitigation. Mitigation for direct impacts to potential Crotch bumble bee habitat includes habitat conveyance and preservation (M-BI-3 and M-BI-4). Implementation of these mitigation measures would reduce direct impacts to potential Crotch bumble bee habitat to less than significant.

Notes: EIR = Environmental Impact Report; MSCP = Multiple Species Conservation Program; RMP = Resource Management Plan; USFWS = U.S. Fish and Wildlife Service.

1 Impacts to potential habitat for Quino checkerspot butterfly excludes 5.3 acres of development within the City of Chula Vista. The amount of critical habitat reported does not include areas of habitat deemed unsuitable for Quino checkerspot butterfly (i.e., no physical or biological features for the species), and thus not included as a part of protocol surveys.

BCC: USFWS—Birds of Conservation Concern

FC: Candidate for federal listing as threatened or endangered

FE: Federally listed as endangered

State

FP: CDFW Fully Protected species

SSC: California Species of Special Concern

WL: CDFW Watch List species

Covered MSCP

Not Covered County

Group 1 County of San Diego Sensitive Animal List Group 2 County of San Diego Sensitive Animal List

6.3.32 Discussion

The Proposed Project Amendment's temporary and permanent indirect impacts to special-status wildlife species (BI-10 and BI-11), as well as temporary direct impacts (BI-7), would be similar to those discussed in the Final EIR (County of San Diego 2019). A discussion of the changes to permanent direct impacts on the species listed in Table 4, as they relate to the Proposed Project Amendment, is provided in this section.

Fairy Shrimp

Like the Approved Project and the EIR Land Exchange Alternative, the Proposed Project Amendment has been designed to avoid impacts on features occupied by San Diego fairy shrimp. Therefore, San Diego fairy shrimp is not included in Table 4, which summarizes direct impacts to special-status wildlife species. However, because such features supporting San Diego fairy shrimp may in the future develop in locations where they do not currently exist, the Final EIR included a mitigation measure that requires the project applicant to consult with USFWS to determine whether take authorization is required for impacts to San Diego fairy shrimp suitable habitat (see M-BI-7 in Chapter 7). This same mitigation measure would apply to the Proposed Project Amendment.

During recent inspection of the Biological Study Area (September and October 2019), project biologists detected five vernal pools within the City of San Diego Cornerstone lands that were previously designated as scour pools, not vernal pools. Project biologists had surveyed this area in the past as part of the biological review for the Approved Project EIR, but the features in question did not at that time exhibit the requisite characteristics of vernal pools (i.e., they did not support vernal pool indicator species). Specifically, in April and June 2014, Dudek biologists assessed the entire project area and mapped potential features (i.e., vernal pools, ephemeral basins, and road ruts) that could support vernal pool branchiopods. As part of this effort, Dudek biologists reviewed the specific on-site microhabitats (e.g., flat topography, soil types, and slopes) along with the potential vernal pool locations provided in the Proctor Valley Vernal Pool Restoration Plan (AECOM and Hogan 2012) and A Report on the Flora of Otay Ranch Vernal Pools, 1990–1991 (Dudek & Associates 1992). The biologists inspected all features for occurrences of vernal pool plant species. After the 2014/2015 wet season survey and the USFWS release of new survey guidelines for listed large branchiopods (adopted May 31, 2015), dry-season sampling was authorized by USFWS and was conducted according to the 2015 guidelines (USFWS 2015).

Due to updates to the USFWS survey guidelines for fairy shrimp and the predicted El Niño conditions for the 2015/2016 wet season, another wet-season survey was conducted within the review area, focusing on potential features that the proposed project might disturb. Again, each potential feature was reviewed for the presence of vernal pool indicator plants and none of the features within the review area supported such plants, including the five scour pools referenced above. Another dry season survey was conducted in 2016.

Through the habitat assessment and 2 years of surveys, Dudek biologists mapped 52 features within the biological study area that met the ponding requirements set forth in the USFWS survey guidelines. The focused surveys resulted in the detection of federally endangered San Diego fairy shrimp within four features in the biological study area: A22, A23, A27, and D4.

In the Biological Technical Report for the Approved Project EIR, Dudek determined which basins within the biological study area qualified as vernal pools. To make this determination, Dudek relied on the criteria set forth in the Report on the Flora of the Otay Ranch Vernal Pools, 1990–1991 (Dudek & Associates 1992). Pursuant to those criteria, a vernal pool requires at least one indicator plant species "whose distribution in coastal California is completely or substantially restricted to vernal pool basins" (Dudek & Associates 1992, p. 5). Based on the 2 years of focused

surveys conducted for the proposed project (described above), none of the surveyed features (road ruts and ephemeral basins) in the biological study area contained vernal pool plant indicator species, and thus none met the applicable criteria discussed above. Accordingly, they were not classified as vernal pools.

During the October 24, 2019, site visit, HELIX, Dudek, and U.S. Army Corps of Engineers staff observed potential vernal pool plant indicators in basins located within the portion of the review area owned by the City of San Diego (i.e., City of San Diego Cornerstone Lands). Although the Proctor Valley Vernal Pool Restoration Plan identified these features as floodplain scour pools (AECOM and Hogan 2012), none of these basins held water long enough to be included within the protocol surveys described above, nor did they contain vernal pool plant species at the time the 2014 surveys were conducted. Dudek revisited these areas on October 30, 2019, to determine the type and extent of vernal pool indicator plants within each feature. During this review, Dudek observed within those basins vernal pool plant species, wetland plant species, and leftover carapaces of Ostracods, a freshwater crustacean species. The basins appear to have been created through a scouring process associated with the main Proctor Valley drainage, and as previously stated, the Proctor Valley Vernal Pool Restoration Plan identified these features as floodplain scour pools (AECOM and Hogan 2012).

All five of these pools are isolated and scoured within the alluvial terraces adjacent to the main flood channel, and their individual watersheds reflect this landscape flow pattern, with most of the pool watersheds concentrated on the upstream side of each mapped pool. For these pools to persist, the input from their watersheds will need to be maintained so that the current hydrological support for these pools is not lost or reduced. Also, the pools will need to be able to outflow at their existing high water level; otherwise, there is potential that the pools will pond too deeply and/or for too long.

The current and approved design for Proctor Valley Road includes a bridge with a proposed span of approximately 282 lineal feet. In order to avoid permanent direct impact to the five pools described above (and their watersheds), the proposed bridge for Proctor Valley Road will increase its span from 282 lineal feet to approximately 702 lineal feet. This increase in span length will allow the bridge to avoid the drainage, including the vernal pools and their watershed (Figure 9, Vernal Pools within City of San Diego Cornerstone Lands). In addition, the bridge pylons would be placed outside of the vernal pools and associated watershed. With this bridge design, the landscape in which these pools occur will be maintained, and the watershed input to the pools, as well as their outflow elevations, will not be altered. The bridge will not be directly over any of the pools and direct impacts to the pools will be avoided during project construction. Based on these facts, the proposed bridge at Proctor Valley Road, and the Proposed Project Amendment as a whole, would avoid impacts to vernal pools and the species that rely on them, which is consistent with the conclusions drawn in the Approved Project EIR. For this reason, the Proposed Project Amendment is likewise consistent with the City of San Diego's Vernal Pool Habitat Conservation Plan (VPHCP). Note, however, that the project applicant must obtain from the City a site development permit and the City, as part of that permitting process, might require additional measures to ensure continued compliance with the VPHCP. Should the City require such additional measures, the project applicant will implement them, along with any other measures the City might impose as conditions of the site development permit. The temporary impacts associated with bridge construction will be restored to pre-project conditions as required by the City's Land Development Code, leaving both the pools and watersheds in place.

Western Spadefoot

The Proposed Project Amendment would disturb 12 features occupied by western spadefoot, 10 of which would be affected by the Approved Project as well. The other 2 features would be affected under the EIR Land Exchange Alternative, which would disturb 8 features in total. Thus, all of the Proposed Project Amendment's impacts to



features occupied by western spadefoot were identified and analyzed in the certified Final EIR as impacts from either the Approved Project or the EIR Land Exchange Alternative. The impacts to western spadefoot would be **potentially significant** for the Proposed Project Amendment. However, by conveying the required acreage of land to the Otay Ranch RMP Preserve (M-BI-3), direct impacts to this species would be reduced to less than significant for the Proposed Project Amendment.

Golden Eagle

The Proposed Project Amendment would impact a total 538.7 acres of golden eagle foraging habitat; however, it would not result in human activity within 4,000 feet of an active nest or 3,000 feet of a historical nest. As shown in Table 4, this impact to foraging habitat is approximately 242.1 acres less than that of the Approved Project and 57.9 acres less than that of the EIR Land Exchange Alternative. The Proposed Project Amendment's individual impacts on golden eagle, including golden eagle nests and foraging habitat, would be **less than significant**, as golden eagle is a Covered Species under the MSCP and the Proposed Project Amendment is consistent with the MSCP Plan, MSCP County Subarea Plan, and Otay Ranch RMP. Note, however, that the Proposed Project Amendment would preserve foraging/nesting habitat for golden eagle through **M-BI-3** (habitat conveyance and preservation) and **M-BI-4** (biological open space easement). Additionally, **M-BI-5** (permanent fencing and signage) would mitigate for potential long-term impacts by deterring unauthorized human activity within the Otay Ranch RMP Preserve.

Burrowing Owl

For burrowing owl, the Proposed Project Amendment would impact 34.1 acres of potential habitat. In comparison, as shown in Table 4, this is approximately 50 acres less than the amount of burrowing owl habitat affected by the Approved Project and 106 acres less than the EIR Land Exchange Alternative. Although there is suitable habitat for burrowing owls within each of the Project Areas, this species is not expected to occur. Therefore, direct impacts to potential habitat for burrowing owl would be **less than significant** for the Proposed Project Amendment.

Quino Checkerspot Butterfly

For Quino checkerspot butterfly, the Proposed Project Amendment would disturb 527.1 acres of potential habitat, and 500.2 acres of critical habitat, and 4.21 acres of host plants. Comprehensive host plant mapping was completed in 2016 and locations were mapped as "Low" (1-100 plants), "Moderate" (100-1,000 plants), and "High" (1,000-10,000 plants). Using the mid-point of the estimated host plant populations, the Proposed Project Amendment would impact approximately 59 percent of the Quino checkerspot butterfly larval host plants on the project site. The Proposed Project Amendment would impact 29 "High" host plant locations and would Preserve 40 "High" host plant locations. A detailed analysis of the Proposed Project Amendment's impacts to Quino checkerspot butterfly host plants is presented on the Figure 8 series, 2016 Ouino Host Plant Mapping and Recent Sightings. A full comparison of the Proposed Project Amendment, Approved Project, and EIR Land Exchange Alternative as they relate to Quino checkerspot butterfly habitat assessments and protocol surveys is provided in Appendix B. This is a reduction of 262.3 acres of impacts to potential habitat from the Approved Project and a reduction of 78.4 acres of impacts as compared the EIR Land Exchange Alternative. Impacts to critical habitat are 94.8 acres less for the Proposed Project Amendment as compared to the EIR Land Exchange Alternative. As compared to the Approved Project, impacts to critical habitat are increased by 11.8 acres with the Proposed Project Amendment. Although the acreage of permanent impacts is reduced, the Proposed Project Amendment's impacts to potential habitat for Quino checkerspot butterfly would still be considered significant absent mitigation. Mitigation for direct impacts to potential Quino checkerspot butterfly habitat includes habitat conveyance and preservation (M-BI-3, M-BI-4, and M-BI-9), Quino checkerspot butterfly take authorization (M-BI-8), and Quino checkerspot butterfly management/enhancement plan (M-BI-10). These mitigation measures are fully described in



Chapter 7 of this Technical Memorandum. Implementation of these mitigation measures would reduce direct impacts to suitable Quino checkerspot butterfly habitat to **less than significant** for the Proposed Project Amendment. A Quino Checkerspot Butterfly Conservation Strategy, which includes a Framework Management Plan, has been developed by HELIX Environmental prepared in coordination with the applicant, the Wildlife Agencies and the County and is provided as Appendix C. In addition, M-BI-10 has been revised to reflect that the required Quino checkerspot butterfly management/enhancement plan shall incorporate and be informed by the Quino Checkerspot Conservation Strategy" and "Framework Management Plan, including the performance standards/criteria set forth within it (see Section 7).

Hermes Copper Butterfly

The Proposed Project Amendment would affect suitable Hermes copper butterfly habitat, but to a lesser extent than the Approved Project (10.2 acres as compared to 18 acres) and the EIR Land Exchange Project (10.2 acres as compared to 15 acres). Nevertheless, these impacts would be **significant absent mitigation**. Mitigation for direct impacts to potential Hermes copper butterfly habitat includes habitat conveyance and preservation and/or a biological open space easement (M-BI-3 and M-BI-4). Implementation of these mitigation measures would reduce direct impacts to suitable Hermes copper butterfly habitat to less than significant.

Crotch Bumble Bee

The Final EIR did not discuss Crotch bumble bee because, at the time the Final EIR was being prepared, Crotch bumble bee was not a listed species (or a candidate for listing); nor was it among those invertebrates that the County's CEQA Guidelines for Biology required the EIR to study. In June 2019, however, the California Fish and Game Commission voted to make Crotch bumble bee a "candidate" for listing under the California Endangered Species Act (CESA) (CDFW 2019)

5. Although the Fish and Game Commission has not yet made a final decision to list the Crotch bumble bee, the species' status as a Candidate requires that it be included among the species analyzed in this Technical Memorandum and the Addendum for which it provides support.

Based on Dudek's understanding of regional conditions and species distribution, there is potential for Crotch bumble bee to occur within the Biological Study Area. There is currently no standardized survey methodology for surveying for this species. In the absence of surveys to verify the presence/absence from the biological study area, a habitat assessment can be used to determine the extent of potential habitat loss for this species. Crotch bumble is a generalist and can occur in open grassland and scrub habitats, primarily those with a variety of flowering plant species. Crotch bumble bee has been documented to be most commonly associated with the following plant families: Fabaceae, Apocynaceae, Asteraceae, Lamiaceae, and Boraginaceae. Given that this species does not have a defined habitat preference, the entire Biological Study Area, with the exception of developed areas, could be considered habitat for this species (Table 4).

The Proposed Project Amendment would affect potential habitat for Crotch bumble bee, but to a lesser extent than the Approved Project (570.2 acres as compared to 801.9 acres) and the EIR Land Exchange Alterntaive (570.2 acres as compared to 649.1 acres). Nevertheless, these impacts would be **significant absent mitigation** (BI-2). Mitigation for direct impacts to potential habitat for Crotch bumble bee includes habitat conveyance and preservation and/or a biological open space easement (M-BI-3 and M-BI-4). Implementation of these mitigation measures would reduce direct impacts to suitable Crotch bumble bee habitat to less than significant.

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The Fish and Game Commission voted to elevate Crotch bumble bee to a "candidate" on June 12, 2019, but did not issue the Findings of Fact supporting the decision until June 28, 2019, two days after the County certified the Approved Project Final EIR. (See, https://cdfgnews.wordpress.com/2019/07/31/cdfw-seeks-information-related-to-listing-of-bumble-bees/.)

Conclusion

The significance of these potential impacts was determined through application of the County's Significance Guidelines (Guideline 4.1), as described in Section 2.4.3.1, Guideline 4.1: Candidate, Sensitive, or Special-Status Species, of the Final EIR (County of San Diego 2019). The Proposed Project Amendment would not result in any new significant impacts to special-status wildlife species and would not substantially increase the severity of previously identified significant impacts in the certified Final EIR.

6.4 Jurisdictional Wetlands and Waterways

6.4.1 Development Footprint Comparisons

Each of the three development scenarios would affect jurisdictional aquatic resources regulated by CDFW, ACOE, and/or RWQCB (Table 5) (Impact V-21). Impacts associated with the Proposed Project Amendment are shown on the Figure 6 series in this Technical Memorandum. Temporary and permanent indirect impacts (Impacts BI-22 and BI-23) and temporary direct impacts (Impact BI-20) resulting from the Proposed Project Amendment would be similar to the indirect impacts and temporary direct impacts for the Approved Project and EIR Land Exchange Alternative, which were identified in the certified Final EIR (County of San Diego 2019).

Table 5. Impacts to ACOE/RWQCB/CDFW Jurisdictional Aquatic Resources – Development Footprint Comparison (Acres)

	Proposed I	•	Approved F	Project	EIR Land Exchange Alternative Impacts)
Habitat Types/Vegetation Communities	Perm.	Temp.	Perm.	Тетр.	Perm.	Temp.
ACOE/RWQCB Wetlands and CDFW Riparian	Habitat					
Cismontane alkali marsh (including disturbed)	0.84	0.07	1.04	0.06	0.15	0.32
Coastal freshwater marsh	0.13	0.30	0.12	0.31	0.11	0.32
Mulefat scrub	0.14	0.25	0.09	0.29	0.07	0.35
Southern coast live oak riparian forest	_	_	_	_	_	_
Southern willow scrub	0.10	0.03	0.21	0.06	0.01	0.04
Subtotal	1.21	0.65	1.45	0.73	0.34	1.03
ACOE/RWQCB Non-Wetland Waters and CDF	V Streambe	d				
Unvegetated channel	1.16	0.16	1.27	0.35	1.40	0.18
Open water	_	_	0.16	_	_	_
Subtotal	1.16	0.16	1.43	0.35	1.40	0.18
Total	2.37	0.81	2.87	1.08	1.73	1.21

Notes: ACOE = U.S. Army Corps of Engineers; CDFW = California Department of Fish and Wildlife; EIR = Environmental Impact Report; RWQCB = Regional Water Quality Control Board.



6.4.2 Discussion

Development of the Proposed Project Amendment would result in permanent impacts to a total of 2.37 acres of jurisdictional aquatic resources within the Biological Study Area, as shown in Table 5. Of this 2.37 acres, 1.21 acres are impacts to wetlands/riparian habitat and 1.16 acres are non-wetland waters/streambed. Compared to the Approved Project, the Proposed Project Amendment would reduce permanent impacts to wetlands/riparian habitat by 0.24 acres and non-wetland waters/streambed by 0.27 acres. When compared to the EIR Land Exchange Alternative, the Proposed Project Amendment would impact 0.87 acres more of wetlands/riparian habitat but would result in a reduction of impacts to non-wetland waters/streambed by 0.24 acres. All of the Proposed Project Amendment's permanent impacts to jurisdictional aquatic resources were identified and analyzed in the certified Final EIR as impacts from either the Approved Project or the EIR Land Exchange Alternative. The Proposed Project Amendment's permanent impacts to jurisdictional resources would be potentially significant. Permanent direct impacts would be mitigated to less than significant with implementation of M-BI-21 (federal and state agency permits), described in Chapter 7 of this Technical Memorandum.

In addition, the Proposed Project Amendment would result in temporary impacts to 0.81 acres of jurisdictional aquatic resources within the Biological Study Area, as shown in Table 5. Of this 0.81 acres, 0.65 acres are impacts to wetlands/riparian habitat and 0.16 acres are non-wetland waters/streambed. Compared to the Approved Project, the Proposed Project Amendment would reduce temporary impacts to wetlands/riparian habitat by 0.08 acres and non-wetland waters/streambed by 0.19 acres. When compared to the EIR Land Exchange Alternative, the Proposed Project Amendment would impact 0.38 acres less of wetlands/riparian habitat and 0.02 acres less of non-wetland waters/streambed. All of the Proposed Project Amendment's temporary impacts to jurisdictional aquatic resources were identified and analyzed in the certified Final EIR as impacts from either the Approved Project or the EIR Land Exchange Alternative. The Proposed Project Amendment's temporary impacts to jurisdictional resources would be potentially significant. Temporary direct impacts would be mitigated to less than significant through implementation of M-BI-1 (biological monitoring), M-BI-2 (temporary construction fencing), M-BI-12 (restoration of temporary impacts), and M-BI-21 (federal and state agency permits), as described in Chapter 7.

The significance of these potential impacts was determined through application of the County's Significance Guidelines (Guidelines 4.2 and 4.3), as described in Sections 2.4.3.2 and 2.4.3.3 of the Final EIR (County of San Diego 2019). The Proposed Project Amendment would not result in any new significant impacts to jurisdictional aquatic resources and would not substantially increase the severity of previously identified significant impacts in the certified Final EIR.

6.5 Wildlife Movement and Nursery Sites

6.5.1 Development Footprint Comparisons

The Proposed Project Amendment consolidates development within the center of Village 14. Through the proposed land exchange discussed in Chapter 3, development would not occur in Planning Area 16, PV1, and most of PV3 (discussed in the BMO Findings, Appendix C-D to this Technical Memorandum). By foregoing development in these areas, the Proposed Project Alternative would allow the regional corridor (R1) and local corridors (L3 and L4) to expand beyond the corridors in the Approved Project (Figure 10, Wildlife Corridor and Habitat Linkages). In addition, with the Proposed Project Amendment, these corridors will significantly exceed the MSCP's 1,000-foot criterion for wildlife corridor design. With development limited primarily to portions of Village 14 and the small area of Planning

Area 19, the surrounding blocks of MSCP Preserve will be more consolidated than what was contemplated in the MSCP County Subarea Plan.

Also under the Proposed Project Amendment, all of PV3 except for an approximately 2-acre area needed for a detention basin would be transferred to CDFW as part of the land exchange. This would preserve a large block of habitat, which CDFW has indicated is pivotal to the protection of wildlife movement corridors. Specifically, CDFW has stated that preservation of PV3 widens the connectivity between occupied Quino checkerspot butterfly habitat to the south (in Otay Ranch Village 13) and to the north in the San Miguel Mountain area. Preservation of PV3 would ensure that Quino checkerspot butterfly could move unimpeded along a lower-elevation route to upper Otay Reservoir, as well through the broader connection to the more rugged ridgeline north of Lower Otay Reservoir. Likewise, inclusion of PV1 in the MSCP Preserve further enhances this unrestricted movement, while eliminating road crossings within L4 by removing an MSCP-Plan-approved road across corridor L4 between PV1 and the approved development footprint in the central portion of Village 14.

As a matter of preserve design, the Proposed Project Amendment, including the land it would convey to the Otay Ranch RMP Preserve, will result in a larger, more unified preserve/open space system with fewer edge effects from the surrounding development areas, providing fewer opportunities for human intrusion (e.g., lighting, trash, noise, and others) into the habitat. The approximately 18.9 miles of preserve/development edge associated with the Approved Project is reduced to approximately 5.8 miles with the Proposed Project Amendment. This is a reduction of approximately 13.1 miles, or nearly 70%, of edge effects. The result is an enhanced MSCP Preserve design.

As a result of the change in bridge design as described in Section 6.3.1, the wildlife crossing at the Proctor Valley drainage, identified as Wildlife Crossing 4 in the Final EIR, would be expanded from 282 lineal feet to 702 lineal feet (Figure 11, Wildlife Crossings). Bridge height would vary from 6 feet on either end near the abutments to 12 feet near the center. The new bridge design will allow for unimpeded wildlife movement throughout the area and expands the openness ratio ((height x width)/length) to 9.5 meters at its highest point. The crossing would meet the MSCP Plan's design criteria guideline of a less than 2:1 length-to-width ratio, and more importantly would exceed the minimum openness ratio of 0.6 meters (see Section 2.4.3.4 of the Final EIR for a through discussion of wildlife movement requirements).

The certified Final EIR did not identify significant direct impacts to wildlife movement or nursery sites as a result of the Approved Project or the EIR Land Exchange Alternative. The direct impacts of the Proposed Project Amendment also would be less than significant.

Like the Approved Project, the Proposed Project Amendment would have **less than significant** temporary and permanent indirect impacts (Impacts BI-27 and BI-28 from the Final EIR) and temporary direct impacts (Impact BI-26 from the Final EIR) on wildlife corridors.

With respect to Biological Resource Core Areas (BRCAs), the Proposed Project Amendment's impacts on BRCAs would be virtually the same as those of the Approved Project. The Project Area, while included in two MSCP-defined BRCAs, does not contain a biological linkage, as depicted on Figure 2-2 of the MSCP. The Proposed Project Amendment, similar to the Approved Project, does not result in the "significant degradation" of a BRCA, a core linkage, or a constrained linkage. Therefore, it does not meet the Subarea Plan definition of an inconsistency because (1) it does not impact 25% of a BRCA and (2) it does not reduce the width of a core linkage or of a constrained linkage below a width of 1,000 feet. An analysis of the Proposed Project Amendment's impacts to BRCAs is provided in Appendix D-E to this Technical Memorandum, Biological Resource Core Area Analysis.



6.5.2 Discussion

The significance of potential impacts to wildlife movement and nursery sites was determined through application of the County's Significance Guidelines (Guideline 4.4), as described in Section 2.4.3.1, Guideline 4.4: Wildlife Movement and Nursery Sites, of the Final EIR (County of San Diego 2019). The Proposed Project Amendment would result in **less than significant** impacts to wildlife corridors. As discussed in Section 6.5.1, the Proposed Project Amendment would expand upon wildlife corridors compared to the Approved Project. The Proposed Project Amendment would result in **potentially significant** temporary direct and indirect impacts, similar to impacts identified in the Final EIR (Impacts BI-26, BI-27, and BI-28). A full discussion of those impacts can be found in section 2.4 of the Final EIR. Therefore, the Proposed Project Amendment would not result in any new significant impacts to wildlife movement and nursery sites and would not substantially increase the severity of previously identified significant impacts in the certified Final EIR.

6.6 Local Policies, Ordinances, and Adopted Plans

As discussed in Section 2.4.3.5 of the Final EIR, the Approved Project conforms with the goals and requirements outlined in the MSCP Plan, MSCP County Subarea Plan, Otay Ranch RMP, City of San Diego's MSCP Subarea Plan, and City of Chula Vista MSCP Subarea Plan (County of San Diego 2019). Similarly, implementation of the Proposed Project Amendment would not conflict with these currently established local policies, ordinances, or plans. Biological resources protected under these documents are expected to remain safeguarded, given the compliance of the Proposed Project Amendment with the stipulations indicated in these regulations. A summary of the Proposed Project Amendment's compliance with the above-listed plans is provided in this section.

MSCP Plan and MSCP County Subarea Plan

To confirm the Proposed Project Amendment's consistency with the MSCP Plan, MSCP County Subarea Plan, and Implementing Agreement, the Proposed Project Amendment's Development Footprint and Preserve was reviewed based on these plans. Based on this review, it was determined that the designated areas of Preserve within the Proposed Project Amendment's Project Area are exactly the same as those identified in the MSCP Plan and the MSCP County Subarea Plan and Implementing Agreement. The applicant has not requested—and does not need—an MSCP Preserve boundary adjustment for the Proposed Project Amendment. The Proposed Project Amendment would not encroach into the MSCP Preserve; instead, the Proposed Project Amendment is consistent with the Preserve boundary that was created by the MSCP Plan and the MSCP County Subarea Plan. Given that the Proposed Project Amendment is consistent with the MSCP plans and the "hardline" preserve assumptions identified in the plans, the Proposed Project Amendment can be implemented in a manner consistent with the habitat loss findings set forth in Table 3-5 of the MSCP.

MSCP County Subarea Plan - Roads

Under the MSCP County Subarea Plan, a project that results in take of Covered Species from construction of new or modification of existing Circulation Element road corridors is required to complete a consistency analysis, as outlined in Section 1.9.3.2 of the MSCP County Subarea Plan. A consistency analysis was prepared for the portions of Proctor Valley Road that are currently owned by CDFW (Dudek 2018a, Table 10-2). An MSCP County Subarea Plan consistency analysis for Proctor Valley Road, a County Mobility Element Road, is included in the certified Final EIR. The alignment of Proctor Valley Road was determined to be consistent with the MSCP County Subarea Plan. The alignment of Proctor Valley Road in the Proposed Project Amendment has not changed; therefore, the consistency determination has been completed and is included in the certified Final EIR.

Otay Ranch Resource Management Plan

The Otay Ranch RMP includes conveyance procedures for dedicating parcels of land to the Otay Ranch RMP Preserve. The Otay Ranch RMP establishes an obligation for each new development to convey its fair share of the Preserve. Fair-share contribution requirements are established in the Otay Ranch RMP as a proportion of Ranchwide development to Ranch-wide Preserve land. The Otay Ranch RMP established a fair-share contribution to the creation of the Preserve as a ratio of 1.188 acres of Preserve conveyance required for every 1 acre of development (City of Chula Vista and County of San Diego 1993b). Accordingly, the conveyance ratio for all development is 1.188 acres for each 1 acre of the Proposed Project Amendment Development Footprint, excluding areas that include "common uses," such as schools, parks, and arterial roadways. Per the Otay Ranch RMP, these "common use" areas are excluded from the required mitigation/conveyance.

The Proposed Project Amendment's required conveyance to the Otay Ranch RMP Preserve is 558.7556.6 acres, as explained below. Common uses not subject to conveyance for the Proposed Project Amendment would include 10.2 acres of public parks, the 9.9-acre elementary school⁶, 19.9 acres of major circulation, the 2.3-acre public safety site, and a water tank (1.4 acres). Areas of Conserved Open Space (24.5 acres) are also excluded from the conveyance total. The Proposed Project Amendment's total impacts, less these common areas and Conserved Open Space, would be 470.3468.5 acres. Therefore, developable land within the Project Area is subject to a conveyance obligation of 558.7556.6 acres (470.3468.5 acres × 1.188 = 558.7556.6 acres).

The Proposed Project Amendment's obligation would be partially satisfied through on-site conveyance of the Otay Ranch RMP Preserve, which totals 377 acres. The remaining conveyance obligation would be met through off-site Otay Ranch RMP Preserve in Planning Area 16 (58.3 acres), Conserved Open Space (24.5 acres), and a conservation easement over land designated as development in Planning Area 16 (191.5 acres), for a total of 274.3 acres.

This combination of transfers to the Preserve Owner/Manager (POM) results in a total Preserve conveyance of 626.7 acres, which is substantially more than what the RMP requires (558.7556.6 acres). Therefore, upon conveyance to the Otay Ranch RMP Preserve, the Proposed Project Amendment would be consistent with the Otay Ranch RMP in accordance with the Otay Ranch RMP conveyance requirement.

City of San Diego MSCP Subarea Plan - Cornerstone Lands

Under the Proposed Project Amendment, the portion of Proctor Valley Road within City of San Diego Cornerstone Lands would follow the same alignment identified for the Approved Project. As such, the siting criteria evaluation for that portion of Proctor Valley Road (see Table 10-3 of Dudek 2018a) would remain the same. However, the improvements to this portion of the road have been re-evaluated for the Proposed Project Amendment and, while the alignment and overall footprint of Proctor Valley Road is the same, approximately 3.3 acres which were considered temporary impacts in the Final EIR for the Approved Project have been re-classified as permanent impacts, since the affected area cannot be adequately revegetated. Consequently, the permanent impacts to resources have increased by 3.3 acres, while temporary impacts have correspondingly been reduced by the same amount. The permanent impacts to vegetation communities resulting from the Approved Project and the Proposed Project Amendment are listed in Table 6. Once complete, the redesigned bridge within City lands, as discussed in Section 6.3.1, would actually result in less biological impacts than the design proposed under the Approved Project. The bridge would expand from 282 lineal feet to 702 lineal feet and would reduce the need for additional fill and slopes associated with the previous design.

⁶ If the school site is not developed as a school it will revert to the underlying residential zoning designation and the area would be included in the required conveyance.



While the quantity of mitigation acreage has increased (see Table 6), the overall mitigation requirements for impacts within City of San Diego Cornerstone lands as described in the Final EIR remain the same and impacts would be mitigated to a less than significant level.

Table 6. Mitigation Requirements for Permanent Impacts to City of San Diego (Cornerstone Lands)

	Permanent Impa	acts (acres)		Required Mitiga	ation (acres)a				
Vegetation Community	Proposed Project Amendment	Approved Project	Mitigation Ratio	Proposed Project Amendment	Approved Project				
Upland									
Diegan coastal sage scrub (including disturbed)	8.0	6.6	1:1	8.0	6.6				
Diegan coastal sage scrub - Baccharis-dominated (including disturbed)	0.4	0.4	1:1	0.4	0.4				
Non-native grassland	4.1	2.6	1:1	4.1	2.6				
Southern mixed chaparral	1.7	1.4	1:1	1.7	1.4				
Wetlands									
Mulefat scrub	0.1	0.1	2:1	0.2	0.2				
Unvegetated channel	<0.1	<0.1	2:1	0.1	0.1				
No Mitigation Required									
Urban/developed	0.5	0.3	None	0	0				
Disturbed habitat	0.7	0.6	None	0	0				
	To	otal impacts requ	iring mitigation	14.4	11.1				
		Total requ	ired mitigation	14.5	11.3				

Note:

City of San Diego Site Development Permit Application and VPHCP

As mentioned in Section 6.3.1, the project applicant is processing a site development permit application through the City. Through the site development permit process, which the applicant initiated in December 2017, the project applicant will comply with the City's Land Development Code, VPHCP, and Subarea Plan, including any conditions that may be required by the site development permit. Specific to compliance with the City's VPHCP, as described in the Final EIR, in order to avoid any direct impacts to vernal pools, the project applicant will relocate the northern portion of Proctor Valley Road that is within City jurisdiction from the center of a vernal pool restoration site and realign the road to the east. As described in Section 6.3.1, upon the recent discovery of vernal pools within the road alignment located within the City's jurisdiction, the project applicant has redesigned the road to create a longer bridge that extends over the Proctor Valley drainage as well as all five vernal pools and their watersheds. The Proposed Project Amendment would thus avoid all direct impacts to vernal pools and is therefore in compliance with the VPHCP.

City of Chula Vista MSCP Subarea Plan

Under the Proposed Project Amendment, the portion of Proctor Valley Road within the City of Chula Vista would follow the same alignment as the Approved Project. There are no changes to the impacts reported in the Biological



The mitigation ratio and required mitigation is based on the assumption that the mitigation lands would be located inside the Multiple Habitat Planning Area. Mitigation occurring outside the Multiple Habitat Planning Area would be required at a higher ratio.

Resources Technical Report for the Approved Project. The certified Final EIR included an analysis of the Approved Project's consistency with the City of Chula Vista MSCP Subarea Plan (City of Chula Vista 2003) and found it to be consistent. Therefore, the Proposed Project Amendment would be consistent.

County of San Diego Biological Mitigation Ordinance

Because the Approved Project contemplated development within PV1, PV2, and PV3, a BMO consistency analysis was prepared for impacts anticipated to occur on those three parcels. The Proposed Project Amendment excludes development on all of PV1 and reduces development within PV3 by 96%, but does contemplate development on PV2. A BMO Findings has been prepared for the Proposed Project Amendment to address impacts in PV2 and PV3 (Appendix <u>CD</u>). Table 1 of the BMO consistency findings report quantifies the sensitive vegetation impacts anticipated with proposed development of PV2 and PV3, and also describes the required mitigation for those impacts (Appendix <u>CD</u>). The BMO consistency analysis prepared for the Proposed Project Amendment demonstrates compliance with the BMO requirements.

Conclusion

The Final EIR determined that the Approved Project and the EIR Land Exchange Alternative would not conflict with the MSCP Plan, MSCP County Subarea Plan, Otay Ranch RMP, City of San Diego MSCP Subarea Plan, or City of Chula Vista MSCP Subarea Plan (see Section 2.4.3.5 of the Final EIR and Section 10 of the biological resources technical reports prepared for the Approved Project and the EIR Land Exchange Alternative). The additional analysis provided herein confirms that the Proposed Project Amendment likewise would not conflict with the goals and requirements outlined in these plans. Consequently, the Proposed Project Amendment would not result in any significant impact in terms of consistency with applicable conservation plans.



7 Mitigation Measures

The mitigation measures required for the Proposed Project Amendment are very similar to those required for the Approved Project and the EIR Land Exchange Alternative. The discussion below includes *all* of the mitigation measures for impacts to biological resources from the Final EIR, including one additional mitigation measure that was only applicable to the EIR Land Exchange Alternative, which is now also applicable to the Proposed Project Amendment. Any revisions to those measures as required for the Proposed Project Amendment, such as changes in the conveyance acreage and location, are shown in strikeout/underline. All of the mitigation measures in this section would be required for the Proposed Project Amendment.

Mitigation Measure BI-1 (M-BI-1)

M-Bl-1 application to the Proposed Project Amendment: Mitigation measure M-Bl-1 applies to the Proposed Project Amendment. No revisions to M-Bl-1 are needed. The full mitigation measure from the Final EIR is provided below.

M-BI-1

Biological Monitoring. To prevent disturbance to areas outside the limits of grading, all grading shall be monitored by a biologist. Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits for any areas adjacent to the Otay Ranch Resource Management Plan (RMP) Preserve and the off-site areas, the Proposed Project applicant or its designee shall provide written confirmation that a biological monitor approved by the County of San Diego has been retained and shall be present during clearing, grubbing, and/or grading activities within sensitive resources.

Biological monitoring shall include the following:

- a. Attend the preconstruction meeting with the contractor and other key construction personnel prior to clearing, grubbing, or grading to reduce conflict between the timing and location of construction activities with other mitigation requirements (e.g., seasonal surveys for nesting birds).
- b. Conduct meetings with the contractor and other key construction personnel describing the importance of restricting work to designated areas prior to clearing, grubbing, or grading. Perform weekly inspection of fencing and erosion control measures (daily during rain events) near proposed preservation areas.
- c. Discuss procedures/training for minimizing harm to or harassment of wildlife encountered during construction with the contractor and other key construction personnel prior to clearing, grubbing, or grading.
- d. Supervise and monitor vegetation clearing, grubbing, and grading to ensure against direct and indirect impacts to biological resources that are intended to be protected and preserved.
- e. Flush species (i.e., avian or other mobile species) from occupied habitat areas immediately prior to brush-clearing and earth-moving activities.
- f. Verify that the construction site is implementing the stormwater pollution prevention plan (SWPPP) best management practices. The SWPPP is described in further detail in M-BI-14.



- g. Periodically monitor the construction site in accordance with the Proposed Project's fugitive dust control plan. Periodically monitor the construction site to see that dust is minimized according to the fugitive dust control plan and that manufactured slopes are revegetated as soon as possible.
- h. Periodically monitor the construction site to verify that artificial security light fixtures are directed away from open space and are shielded.
- i. Oversee the construction site so that cover and/or escape routes for wildlife from excavated areas are provided on a daily basis. All steep trenches, holes, and excavations during construction shall be covered at night with backfill, plywood, metal plates, or other means, and the edges covered with soils and plastic sheeting such that small wildlife cannot access them. Soil piles shall be covered at night to prevent wildlife from burrowing in. The edges of the sheeting shall be weighed down by sandbags. These areas may also be fenced to prevent wildlife from gaining access. Exposed trenches, holes, and excavations shall be inspected twice daily (i.e., each morning and prior to sealing the exposed area) by a qualified biologist to monitor for wildlife entrapment. Excavations shall provide an earthen ramp to allow for a wildlife escape route.

Mitigation Measure BI-2 (M-BI-2)

M-BI-2 application to the Proposed Project Amendment: Mitigation measure M-BI-2 applies to the Proposed Project Amendment. No revisions to M-BI-2 are needed. The full mitigation measure from the Final EIR is provided below.

M-BI-2 Temporary Construction Fencing. Prior to issuance of land development permits, including clearing, grubbing, grading, and/or construction permits, the Proposed Project applicant or its designee shall install prominently colored fencing and signage wherever the limits of grading are adjacent to sensitive vegetation communities or other biological resources, as identified by the qualified monitoring biologist. Fencing shall remain in place during all construction activities. All temporary fencing shall be shown on grading plans for areas adjacent to the Preserve and for all off-site facilities constructed within the Preserve. Prior to release of grading and/or improvement bonds, a qualified biologist shall provide evidence to the satisfaction of the Director of Planning & Development Services (or his/her designee) and the Director of Parks and Recreation that work

Mitigation Measure BI-3 (M-BI-3)

M-BI-3 application to the Proposed Project Amendment: Mitigation measure M-BI-3 applies to the Proposed Project Amendment; however, the acreage calculations and references to PV1, PV2, and PV3 within M-BI-3 require revisions as follows:

M-BI-3

Habitat Conveyance and Preservation. Prior to the approval of the first Final Map for the Proposed Project, the Proposed Project applicant or its designee shall coordinate with the County of San Diego (County) to establish and/or annex the Project Area into a County-administered Community Facilities District to fund the ongoing management and maintenance of the Otay Ranch Resource Management Plan (RMP) Preserve. Prior to the recordation of the first Final Map within each development phase, the Proposed Project applicant shall convey land within the Otay Ranch RMP

was conducted as authorized under the approved land development permit and associated plans.

Preserve to the Otay Ranch Preserve Owner/Manager or its designee at 1.188 acres for each "developable acre" impacted, as defined by the Otay Ranch RMP. Based on the analysis in the Draft Addendum to the Final EIR, it is anticipated that the Proposed Project Amendment would be required to convey a total of 776.8 556.6 acres, 426.7 377 acres of which is anticipated to be conveyed on site within Village 14 and Planning Areas 16/19. The actual conveyance will be based on the 1.188 mitigation ratio as determined at Final Map. The remaining acres of required conveyance would be met through off-site acquisitions conveyances to the Otav Ranch RMP Preserve in Planning Area 16 (58.3 acres) within the Otay Ranch RMP, which would then be conveyed to the Otay Ranch RMP Preserve and a conservation easement over land designated for development in Planning Area 16 (191.5 acres). The total habitat preservation (626.7 acres) would exceed the acreage required by the mitigation ratio, as defined in the Otay Ranch RMP. In addition, the BMO analysis-Findings determined mitigation requirements for areas subject to the BMO (PV1, PV2 and a 6.1-acre portion of PV3) are more stringent for certain types of habitat than the Otay Ranch RMP Preserve Conveyance Obligation. Accordingly, the BMO analysis-Findings identified an additional 24.6-11.4 acres of mitigation, beyond the 203.5-52.4 acres required by the Otay Ranch RMP Preserve Conveyance Obligation, for impacts in PV1, PV2 and a portion of PV3, for a total of 228.1 63.8 acres. The mitigation provided for impacts to PV1, PV2, and a portion of PV3 would be like-kind or up-tiered habitat.

Mitigation Measure BI-4 (M-BI-4)

M-BI-4 application to the Proposed Project Amendment: Mitigation measure M-BI-4 applies to the Proposed Project Amendment. No revisions to M-BI-4 are needed.

M-BI-4

Biological Open Space Easement. Areas of Conserved Open Space shall be preserved on site and shall either be added to the Otay Ranch Resource Management Plan (RMP) Preserve (see M-BI-3), given to the City of San Diego to mitigate for impacts to Cornerstone Lands, or managed under a County of San Diego (County) approved RMP through the County biological open space easement to satisfy the additional mitigation requirements as a result of the BMO analysis-Findings. This easement shall be for the protection of biological resources, and all of the following shall be prohibited on any portion of the land subject to said easement: grading; excavating; placing soil, sand, rock, gravel, or other material; clearing vegetation; constructing, erecting, or placing any building or structure; vehicular activities; dumping trash; or using the area for any purpose other than as open space. Granting this biological open space shall authorize the County and its agents to periodically access the land to perform management and monitoring activities for species and habitat conservation. The only exceptions to this prohibition are the following:

1. Selective clearing of vegetation by hand to the extent required by written order of the fire authorities for the express purpose of reducing an identified fire hazard. Although clearing for fire management is not anticipated with the creation of this easement, such clearing may be deemed necessary in the future for the safety of lives and property. All fire clearing shall be pursuant to the applicable fire code of the fire authority having jurisdiction, and the Memorandum of Understanding dated February 26, 1997, between the wildlife agencies and the fire districts and any subsequent amendments thereto.

- 2. Activities conducted pursuant to a revegetation or habitat management plan approved by the Director of Department of Planning & Development Services.
- 3. Vegetation removal or application of chemicals for vector control purposes where expressly required by written order of the County of San Diego Department of Environmental Health.
- 4. Construction, use, and maintenance of multi-use, non-motorized trails.

The applicant shall show the on-site biological open space easement on the Final Map and biological open space easement exhibit with the appropriate granting language on the title sheet concurrent with Final Map Review, then submit them for preparation and recordation with the Department of General Services, and pay all applicable fees associated with preparation of the documents.

If areas of Conserved Open Space are managed through the County to provide for the long-term management of the proposed Conserved Open Space, an RMP shall be prepared and implemented prior to the approval of the Final Map. The RMP shall be submitted to the County and agencies for approval as required.

The final RMP cannot be approved until the following has been completed to the satisfaction of the Director of Department of Planning & Development Services, and, in cases where the Director of the Department of Parks and Recreation has agreed to be the owner/manager, to the satisfaction of the Director of the Department of Parks and Recreation:

- The RMP shall be prepared and approved pursuant to the most current version of the County of San Diego Biological Report Format and Content Requirements.
- The biological open space easements shall be dedicated to ensure that the land is protected in perpetuity.
- A resource manager shall be selected and evidence provided by the applicant as to the acceptance of this responsibility by the proposed resource manager.
- The RMP funding costs, including a PAR (Property Assessment Record) or other equally adequate forecast, shall be identified. The funding mechanism (endowment or other equally adequate mechanism) to fund annual costs for the RMP and the holder of the security shall be identified and approved by the County.
- A contract between the applicant and County shall be executed for the implementation of the RMP.
- Annual reports shall include an accounting of all required tasks and details of tasks addressed during the reporting period, and an accounting of all expenditures and demonstration that the funding source remains adequate.

Mitigation Measure BI-5 (M-BI-5)

M-BI-5 application to the Proposed Project Amendment: Mitigation measure M-BI-5 applies to the Proposed Project Amendment. No revisions to M-BI-5 are needed.

M-BI-5

Permanent Fencing and Signage. To protect the Otay Ranch Resource Management Plan Preserve and areas of Conserved Open Space from entry upon occupancy of any housing units, an open space fence or wall shall be installed along all open space edges where open space is adjacent to residential uses, along internal streets, and as indicated in the Proctor Valley Village 14 and



Planning Areas 16/19 Preserve Edge Plan and Proposed Fencing, Preserve Signage, and Fuel Modification Zones. The barrier shall be a minimum construction of vertical metal fencing, but may be other suitable construction material, as approved by Department of Planning & Development Services and the Director of Parks and Recreation. To protect the Preserve from entry, informational signs shall be installed, where appropriate, along all open space edges where open space is adjacent to residential uses, along internal streets, and as indicated in the Proctor Valley Village 14 and Planning Areas 16/19 Preserve Edge Plan. The signs must be corrosion resistant, a minimum of 6 inches by 9 inches, on posts not less than 3 feet in height from the ground surface, and state, "Sensitive Environmental Resources Protected by Easement. Entry without express written permission from the County of San Diego is prohibited."

Mitigation Measure BI-6 (M-BI-6)

M-BI-6 application to the Proposed Project Amendment: Mitigation measure M-BI-6 applies to the Proposed Project Amendment. No revisions to M-BI-6 are needed.

M-BI-6

Nesting Bird Survey. To avoid any direct impacts to raptors and/or any migratory birds protected under the Migratory Bird Treaty Act, removal of habitat that supports active nests on the proposed area of disturbance shall occur outside of the nesting season for these species (January 15 through August 15, annually). If, however, removal of habitat on the proposed area of disturbance must occur during the nesting season, the Proposed Project applicant or its designee shall retain a biologist approved by the County of San Diego (County) to conduct a preconstruction survey to determine the presence or absence of nesting birds on the proposed area of disturbance. The preconstruction survey must be conducted within 72 hours prior to the start of construction, and the results must be submitted to the Director of Planning & Development Services for review and approval prior to initiating any construction activities. If nesting birds are detected, a letter report or mitigation plan, as deemed appropriate by the County, shall be prepared and include proposed measures to be implemented to ensure that disturbance of nesting activities are avoided. The report or mitigation plan shall be submitted to the County for review and approval and implemented to the satisfaction of the Director of Planning & Development Services (or her/his designee). The County's mitigation monitor shall verify and approve that all measures identified in the report or mitigation plan are in place prior to and/or during construction.

Mitigation Measure BI-7 (M-BI-7)

M-BI-7 application to the Proposed Project Amendment: Mitigation measure M-BI-7 applies to the Proposed Project Amendment. No revisions to M-BI-7 are needed.

M-BI-7

San Diego Fairy Shrimp Take Authorization. The Project Applicant shall consult with the USFWS to determine if take authorization is required for impacts to San Diego fairy shrimp suitable habitat. If such take authorization is required, the Proposed Project Applicant or its designee shall demonstrate, to the satisfaction of the Director of Planning & Development Services (or his/her designee) and prior to the issuance of the first grading permit that impacts suitable San Diego fairy shrimp habitat, that it has secured from any necessary take authorization from the USFWS. Take authorization may be obtained through the Section 7 Consultation or Section 10 incidental take permit requirements. If required as a permit condition, preconstruction surveys for San Diego fairy shrimp will be a condition of this Project if required by the USFWS pursuant to the FESA. If required

by the USFWS, the surveys shall be performed prior to the commencement of any clearing, grubbing, or grading activities. The preconstruction surveys will follow protocols set by the USFWS unless the USFWS authorizes a deviation from those protocols, as permitted under Section IX, subdivision a, of the "Survey Guidelines for the Listed Large Branchiopods," issued by USFWS on May 21, 2015. Note this measure will not apply to off-site areas under the jurisdiction of the City of San Diego or the City of Chula Vista. Take for San Diego fairy shrimp is provided by the City of San Diego's Vernal Pool Habitat Conservation Plan and the City of Chula Vista's Subarea Plan.

Mitigation Measure BI-8 (M-BI-8)

M-BI-8 application to the Proposed Project Amendment: Mitigation measure M-BI-8 applies to the Proposed Project Amendment. No revisions to M-BI-8 are needed.

M-BI-8

Quino Checkerspot Butterfly Take Authorization. The Project Applicant shall consult with the USFWS to determine if take authorization is required for impacts to Quino checkerspot. If such take authorization is required, the Proposed Project Applicant or its designee shall demonstrate, to the satisfaction of the Director of Planning & Development Services (or his/her designee) and prior to the issuance of the first grading permit that impacts suitable Quino checkerspot butterfly habitat, that it has secured from any necessary take authorization. Take authorization may be obtained through the Section 7 Consultation or Section 10 incidental take permit requirements. The Applicant will comply with any and all conditions, including preconstruction surveys, that the USFWS may require for take of Quino checkerspot butterfly pursuant to the FESA. If required as a permit condition, preconstruction survey will be conducted in accordance with USFWS protocols unless the USFWS authorizes a deviation from those protocols.

Take may also be obtained through the County of San Diego Multiple Species Conservation Program Subarea Plan Quino Checkerspot Butterfly Addition, if/when approved. If the Quino checkerspot butterfly is included as an addition to the South County MSCP, and the Applicant seeks take under the Quino Addition, the Applicant will comply with any and all conditions for Quino checkerspot butterfly.

Mitigation Measure BI-9 (M-BI-9)

M-BI-9 application to the Proposed Project Amendment: Mitigation measure M-BI-9 applies to the Proposed Project Amendment; however, the acreage calculations within M-BI-9 require revisions as follows:

M-BI-9

Quino Checkerspot Butterfly Habitat Preservation. The Proposed Project shall convey 350.7 345.3 acres of potential habitat for Quino checkerspot butterfly on site. In addition, per M-Bl-4, a biological open space easement shall be placed over 72.4-24.5 acres of potential habitat within Conserved Open Space. Additional preservation of suitable habitat is provided by off-site Otay Ranch RMP Preserve in Planning Area 16 (58.3 acres) and a conservation easement over land designated for development in Planning Area 16 (191.5 acres). Therefore, 477.2-619.6 acres of potential habitat for Quino checkerspot butterfly shall be conveyed to the Otay Ranch Resource Management Plan Preserve or not be impacted by the Proposed Project. An additional 350.1 acres of conveyance is required for the Proposed Project's impacts and shall be selected to include suitable Quino checkerspot butterfly habitat. For the off-site mitigation parcel(s) to be acceptable as mitigation for sensitive plant and wildlife species, including Quino checkerspot butterfly, vegetation within the off-site parcel must be mapped and the site must have suitable habitat to support Quino checkerspot butterfly per the survey guidelines definition of habitat. Thus, the Proposed Project

shall provide mitigation acreage at a ratio in excess of 1:1 (preservation of 1 acre for every 1 acre of impact) and shall adequately mitigate impacts to potential Quino checkerspot butterfly habitat. This mitigation measure also satisfies the mitigation requirements for those portions of the Project Area subject to the Biological Mitigation Ordinance. These areas shall be managed under a Quino Checkerspot Butterfly Management/Enhancement Plan, as discussed further in M-BI-10.

Mitigation Measure BI-10 (M-BI-10)

M-BI-10 application to the Proposed Project Amendment: Mitigation measure M-BI-10 applies to the Proposed Project Amendment. M-BI-10 has been revised as follows to exclude the need for focused surveys within the Otay Ranch RMP Preserve and Conserved Open Space because off-site conveyance obligation has been removed and therefore these surveys are no longer necessary and to reference the Quino Checkerspot Conservation Strategy and Framework Management Plan which has been developed in coordination with the Wildlife Agencies.

M-BI-10

Quino Checkerspot Butterfly Management/Enhancement Plan. Prior to the issuance of the first grading permit that impacts habitat identified as suitable for Quino checkerspot butterfly, the Proposed Project shall prepare a long-term Quino Checkerspot Butterfly Management/Enhancement Plan ("QCB Management Plan"). The QCB Management Plan shall be based on, and incorporate the performance criteria/standards set forth in, the February 2020 "Quino Checkerspot Conservation" Strategy" and "Framework Management Plan", which HELIX Environmental prepared in cooperation with the applicant, the County, the United States Fish and Wildlife Service, and the California Department of Fish and Wildlife. At a minimum that plan shall include focused surveys within suitable habitat in the Otay Ranch Resource Management Plan Preserve and Conserved Open Space to determine if the species and suitable host plants are present, and determine areas of potential habitat restoration. The QCB Management Planplan shall be submitted to and receive approval from the Director of the Department of Planning & Development Services (or her/his designee) and the Director of Parks and Recreation. Note, however, that should the applicant rely on a future County Multiple Species Conservation Program Subarea Plan Quino Checkerspot Butterfly Addition for take authorization, the QCB Management PlanThe Quino Checkerspot Butterfly Management/ Enhancement Plan shall may either be superseded by or rendered unnecessary upon completion and adoption of sucha future County Multiple Species Conservation Program Subarea Plan Quino Checkerspot Butterfly Addition. Adaptive management techniques shall be included in the plan, with contingency methods for changed circumstances. These measures shall ensure that the loss of habitat for the species related to the proposed development are adequately offset by measures that will enhance the potential for Quino checkerspot butterfly to occupy the Preserve, and shall provide data that will help the species recover throughout its range.

Mitigation Measure BI-11 (M-BI-11)

M-BI-11 application to the Proposed Project Amendment: This mitigation measure is applicable to the Proposed Project Amendment; however, the impacts and acreages within M-BI-11 require revisions as shown in strikeout/underline. In addition, this project specific mitigation measure has been revised to capture how the Proposed Project Amendment would comply with the mitigation measures for biological resources in the 1993 Otay Ranch GDP/SRP Program EIR. Section 2.1 of the Final EIR for the Approved Project provides a comprehensive Mitigation Monitoring Program Compliance table outlining how the Approved Project complies with each of the mitigation measures from the Program EIR. The "Mitigation Requirement Source" heading of the table embedded within the measure clearly states the source for compliance (Otay Ranch RMP/Program EIR, City requirement, and/or BMO Findings).



M-BI-11

Biological Resource Salvage and Restoration Plan(s). Mitigation requirements for the Proposed Project's impacts on special-status plants are based on the biological analysis for the Proposed Project Amendment within Sections 5.2 and 6.2.2.1 (Impact SP-2) of this report, and the Biological Mitigation Ordinance analysis provided in Appendix A. Prior to the issuance of land development permits, including clearing or grubbing and grading permits, for areas with salvageable sensitive biological resources, including San Diego goldenstar, variegated dudleya, San Diego barrel cactus, and San Diego marsh-elder , and Robinson's pepper grass (including plant materials and soils/seed bank), the Proposed Project applicant or its designee shall prepare a Biological Resource Salvage and Restoration Plan. The Resource Salvage and Restoration Plan shall be prepared by a biologist approved by the City of Chula Vista and County of San Diego, to the satisfaction of the Development Services Directors (or her/his designee) and in conjunction with the POM. Mitigation ratios for impacts to plant populations subject to the BMO are more robust than those required under the RMP. The mitigation for impacts to species and vegetation communities subject to the RMP, BMO, and the City of Chula Vista and County of San Diego subarea plans shall be as follows:

Species Common Name (Scientific Name)	Impacts	Mitigation Ratio	Mitigation Provided
San Diego Goldenstar (Bloomeria clevelandii)	17 individuals	3:1	51 individuals
Variegated dudleya (Dudleya variegata)	35 individuals	3:1	105 individuals
San Diego barrel cactus (Ferocactus viridescens)	36 individuals	2:1	70 individuals (2 individuals are preserved onsite)
San Diego marsh elder (Iva hayesiana)	1,057 individuals	1:1	1,057 individuals
Robinson's pepper grass (Lepidium virginicum var. robinsonii)	112 individuals	2:1	218 individuals (6 individuals are preserved onsite)

Species Common Name (Scientific Name) or Vegetation Community	<u>Impacts</u>	Mitigation Requirement Source	Mitigation Ratio	Mitigation Provided/RMP Requirements
San Diego goldenstar (Bloomeria clevelandii)	727 individuals	RMP salvage and translocation requirement	<u>1:1</u>	727 individuals
San Diego marsh-elder (Iva hayesiana)	228 individuals 33 individuals	BMO Findings Off-site impacts in City of Chula Vista and City of San Diego	1:1 1:1	228 individuals 33 individuals
San Diego marsh-elder within drainages	<u>0.48 acres</u>	RMP restoration and translocation requirement	<u>2:1</u>	<u>0.96 acres</u>
Munz's sage-dominated coastal sage scrub	<u>O acres</u>	RMP restoration requirement	<u>2:1</u>	N/A
San Diego County viguiera- dominated coastal sage scrub	<u>0 acres</u>	RMP restoration requirement	<u>2:1</u>	N/A



The Resource Salvage and Restoration Plan will also include compliance with the mitigation standards set forth in the RMP, including those related to restoration and translocation for San Diego goldenstar (translocation 758-727 of impacted individuals), and San Diego marsh-elder in drainages (0.65 0.48 acres of impacts at a 2:1 ratio), and San Diego County needle grass (translocation of 93 impacted individuals). The mitigation requirements for variegated dudleya and San Diego barrel cactus are satisfied with the BMO mitigation requirements.

The Resource Salvage and Restoration Plan shall, at a minimum, evaluate options for plant salvage and relocation, including individual plant salvage, native plant mulching, selective soil salvaging, application of plant materials on manufactured slopes, and application/relocation of resources within the Otay Ranch Resource Management Plan Preserve. The Resource Salvage and Restoration Plan shall include incorporation of relocation and restoration efforts for San Diego goldenstar, San Diego County needle grass, variegated dudleya and San Diego barrel cactus, and include San Diego marsh-elder, and Robinson's pepper grass within restoration areas associated with M-BI-12 or other suitable sites within the Otay Ranch RMP Preserve. Relocation efforts may include seed collection and/or transplantation to a suitable receptor site, and shall be based on the most reliable methods of successful relocation. The program shall also include a recommendation for method of salvage and relocation/application based on feasibility of implementation and likelihood of success. The program shall include, at a minimum, an implementation plan, maintenance and monitoring program, estimated completion time, success criteria, and any relevant contingency measures to ensure that no-net-loss is achieved. The program shall also be subject to the oversight of the Development Services Director (or her/his designee). In addition to relocation of existing populations for San Diego goldenstar, variegated dudleya and San Diego barrel cactus, the Biological Resource Salvage and Restoration Plan shall may also include additional plantings of these species as necessary to achieve a 3:1 and 2:1 1:1 mitigation ratio, respectively (see the table above). If populations of San Diego marsh-elder, and Robinson's pepper grass are found within the off site mitigation, preservation of these populations may be used for mitigation instead of restoration activities. As required per RMP Policy 3.2, the Project Applicant will coordinate with the POM to meet the restoration requirements for Munz's sage and San Diego viguiera dominated coastal sage scrub. This may require a separate plan than Biological Resource Salvage and Restoration Plan.

Mitigation Measure BI-12 (M-BI-12)

M-Bl-12 application to the Proposed Project Amendment: Mitigation measure M-Bl-12 applies to the Proposed Project Amendment; however, the impacts and acreages within M-Bl-12 require revisions as follows:

M-BI-12

Restoration of Temporary Impacts. The Proposed Project would result in temporary impacts to sensitive upland and jurisdictional aquatic resources along the off-site portions of Proctor Valley Road, as well as temporary impacts associated within on-site road development. Road development within Village 14 would include 14.1 acres of temporary impacts to sensitive resources, and of which 6.69.3 acres are within the Otay Ranch Resource Management Plan (RMP) Preserve. Within Planning Areas 16/19, there would be 3.4 4.3 acres of temporary impacts, of which 3.4 acres are within the Otay Ranch RMP Preserve. Off-site temporary impacts to sensitive resources would total 49.4 38.6 acres: 2.4 acres of temporary impacts to City of Chula Vista land and, 21.1 17.8 acres of temporary impacts to City of San Diego Cornerstone Lands, and 25.9 acres of temporary impacts to California Department of Fish and Wildlife (CDFW) owned lands. In addition, there would be minor impacts to County of San Diego lands totaling 0.1 acres. Restoration areas may incorporate salvaged materials, such as seed collection and translocation of plant materials, as determined to be appropriate. The

Proposed Project biologist shall review the plant materials prior to grading and determine if salvage is warranted. Prior to grading the Proposed Project, a Conceptual Upland and Wetlands Restoration Plan for impacts within County of San Diego shall be submitted to and receive approval from the Director of the Department of Planning & Development Services (or her/his designee) and the Director of Parks and Recreation. Prior to grading, a separate Conceptual Upland and Wetlands Restoration Plan shall also be prepared and submitted to each city's Development Services Director (or her/his designee) and CDFW-for their approval.

The Conceptual Upland and Wetlands Restoration Plans shall include the following to ensure the establishment of the restoration objectives: a 24- by 36-inch map showing the restoration areas, site preparation information, type of planting materials (e.g., species ratios, source, size of container), planting program, 80% relative native cover success criteria, 5-year monitoring plan, and detailed cost estimate. The cost estimate shall include planting, plant materials, irrigation, maintenance, monitoring, and report preparation. The report shall be prepared by a City of Chula Vista-, City of San Diego-, and County of San Diego-approved biologist and a California-licensed landscape architect. The habitat restored pursuant to the plan must be placed within an open space easement dedicated to the appropriate managing entity prior to or immediately following approval of the plan.

Mitigation Measure BI-13 (M-BI-13)

M-BI-13 application to the Proposed Project Amendment: Mitigation measure M-BI-13 applies to the Proposed Project Amendment. No revisions to M-BI-13 are needed.

M-BI-13 Burrowing Owl Preconstruction Survey. Prior to issuance of any land development permits, including clearing, grubbing, and grading permits, the Proposed Project applicant or its designee shall retain a County of San Diego (County)-approved biologist to conduct focused preconstruction surveys for burrowing owl. The surveys shall be performed no earlier than 30 days prior to the commencement of any clearing, grubbing, or grading activities. If occupied burrows are detected, the County-approved biologist shall prepare a passive relocation mitigation plan subject to review and approval by the Wildlife Agencies (i.e., California Department of Fish and Wildlife and U.S. Fish and Wildlife Service) and the County, including any subsequent burrowing owl relocation plans to avoid impacts from construction-related activities.

Mitigation Measure BI-14 (M-BI-14)

M-BI-14 application to the Proposed Project Amendment: Mitigation measure M-BI-14 applies to the Proposed Project Amendment. No revisions to M-BI-14 are needed.

- M-BI-14 SWPPP. Prior to issuance of grading permits in portions of the Development Footprint that are adjacent to the Preserve, the Proposed Project applicant or its designee shall develop a stormwater pollution prevention plan (SWPPP). The SWPPP shall be developed, approved, and implemented during construction to control stormwater runoff such that erosion, sedimentation, pollution, and other adverse effects are minimized. The following performance measures contained in the Proctor Valley Preserve Edge Plan shall be implemented to avoid the release of toxic substances associated with construction runoff:
 - Sediment shall be retained within the Development Footprint by a system of sediment basins, traps, or other appropriate measures.



- Permanent energy dissipaters shall be included for drainage outlets.
- The best management practices contained in the SWPPP shall include silt fences, fiber rolls, gravel bags, and soil stabilization measures such as erosion control mats and hydroseeding.

The Project Area drainage basins shall be designed to provide effective water quality control measures, as outlined in the SWPPP. Design and operational features of the drainage basins shall include design features to provide maximum infiltration; maximum detention time for settling of fine particles; maximum distance between basin inlets and outlets to reduce velocities; and maintenance schedules for periodic removal of sedimentation, excessive vegetation, and debris.

Mitigation Measure BI-15 (M-BI-15)

M-BI-15 application to the Proposed Project Amendment: Mitigation measure M-BI-15 applies to the Proposed Project Amendment without change. No revisions to M-BI-15 are needed.

M-BI-15 Erosion and Runoff Control. During construction, material stockpiles shall be placed such that they cause minimal interference with on-site drainage patterns. This shall protect sensitive vegetation from being inundated with sediment-laden runoff.

Dewatering shall be conducted in accordance with standard regulations of the Regional Water Quality Control Board (RWQCB). A National Pollutant Discharge Elimination System permit, issued by RWQCB to discharge water from dewatering activities, shall be required prior to start of construction. This shall minimize erosion, siltation, and pollution within sensitive communities.

Design of drainage facilities shall incorporate long-term control of pollutants and stormwater flow to minimize pollution and hydrologic changes. An Urban Runoff Plan and operational best management practices shall be approved by the San Diego County Department of Planning & Development Services prior to construction.

Mitigation Measure BI-16 (M-BI-16)

M-Bl-16 application to the Proposed Project Amendment: Mitigation measure M-Bl-16 applies to the Proposed Project Amendment. No revisions to M-Bl-16 are needed.

M-BI-16 Prevention of Invasive Plant Species. A County of San Diego (County)—approved plant list, as described in the Preserve Edge Plan, shall be used for areas immediately adjacent to the Preserve. All slopes immediately adjacent to the Preserve shall be planted with native species that reflect the adjacent native habitat. A hydroseed mix that incorporates native species, is appropriate to the area, and is without invasive species shall be used for slope stabilization in transitional areas. Per the Preserve Edge Plan, only County-approved vegetation shall be planted in streetscapes or within the 100-foot "edge" between development and the Otay Ranch Resource Management Plan Preserve.

The Planning and Development Services Landscape Architect shall require that all final landscape plans comply with the following: no invasive plant species as included on the most recent version of the California Invasive Plant Council's California Invasive Plant Inventory for the Proposed Project region shall be included, and the plant palette shall be composed of native species that do not require high irrigation rates. The Proposed Project biologist shall periodically check landscape products for compliance with these requirements.



Mitigation Measure BI-17 (M-BI-17)

M-BI-17 application to the Proposed Project Amendment: Mitigation measure M-BI-17 applies to the Proposed Project Amendment. No revisions to M-BI-17 are needed.

M-BI-17

Prevention of Chemical Pollutants. Weed control treatments shall include all legally permitted chemical, manual, and mechanical methods applied with the authorization of the County of San Diego (County) agriculture commissioner. The application of herbicides shall be in compliance with all state and federal laws and regulations under the prescription of a Pest Control Adviser and implemented by a licensed applicator. Where manual and/or mechanical methods are used, disposal of the plant debris shall follow the regulations set by the County agriculture commissioner. The timing of the weed control treatment shall be determined for each plant species in consultation with the Pest Control Adviser, the County agriculture commissioner, and the California Invasive Plant Council, with the goal of controlling populations before they start producing seeds. A manual weeding program shall be implemented on the manufactured slope adjacent to the Preserve to control weeds that are likely to be encouraged by irrigation within the 100-foot Preserve edge/fuel modification zone. Weed control efforts shall occur quarterly or as needed to prevent weeds on the manufactured slopes from moving into the adjacent Preserve. Either the homeowner's association or County's landscape monitoring firm shall be responsible to check the irrigated slopes during plant establishment to verify that excessive runoff does not occur and that any weed infestations are controlled.

During Proposed Project operation, all recreational areas that use chemicals or animal by-products, such as manure, that are potentially toxic or impactive to sensitive habitats or plants shall incorporate best management practices on site to reduce impacts caused by the application and/or drainage of such materials into the Otay Ranch Resource Management Plan Preserve. In addition, use of rodenticides will not be allowed within the 100-foot Preserve edge.

Mitigation Measure BI-18 (M-BI-18)

M-BI-18 application to the Proposed Project Amendment: Mitigation measure M-BI-18 applies to the Proposed Project Amendment. No revisions to M-BI-18 are needed.

M-BI-18

Noise. Uses in or adjacent to the Otay Ranch Resource Management Plan (RMP) Preserve with impacts that are not reduced through implementation of the Preserve Edge Plan shall be designed to minimize potential noise impacts to surrounding wildlife species by constructing berms or walls adjacent to commercial areas and any other uses, such as community parks, that may introduce noises that could impact or interfere with wildlife use of the Otay Ranch RMP Preserve.

Construction-related activities that are excessively noisy (e.g., clearing, grading, grubbing, or blasting) adjacent to breeding/nesting areas shall incorporate noise-reduction measures (described below) or be curtailed during the breeding/nesting season of sensitive bird species.

There shall be no construction-related activities allowed during the breeding season of migratory birds or raptors (January 15 through August 31) or coastal California gnatcatcher (February 15 through August 31). The Director of Planning & Development Services may waive this condition, through written concurrence from the U.S. Fish and Wildlife Service and California Department of Fish and Wildlife (i.e., Wildlife Agencies), provided that no nesting or breeding birds are present within 300 feet of the construction activities (500 feet for raptors) based on a preconstruction survey.

If construction-related activities that are excessively noisy (e.g., clearing, grading, grubbing, or blasting) occur during the period of February 15 through August 31, a County of San Diego (County)approved biologist shall conduct preconstruction surveys in suitable nesting habitat adjacent to the construction area to determine the location of any active nests in the area. If the habitat is suitable for raptors, the survey area shall extend to 500 feet from the impact area, and if the habitat is suitable only for nesting by non-listed and non-raptor avifauna, the survey area shall extend 50 to 300 feet from the impact area, depending on the habitat type. The survey shall begin not more than 3 days prior to the beginning of construction activities. If nesting birds are detected by the biologist, the following buffers shall be established: (1) no work within 50 feet of a non-listed and non-raptor avifauna nest; (2) no work within 300 feet of a federally or state-listed species, such as coastal California gnatcatcher; and (3) no work within 500 feet of a raptor nest. The buffer shall be flagged in the field and mapped on the construction plans. To the extent possible, the nonconstruction buffer zones shall be avoided until the nesting cycle is complete. However, it may be reasonable for the County to reduce these buffer widths depending on site conditions (e.g., the width and type of screening vegetation) or the existing ambient level of activity (e.g., existing level of human activity within the buffer distance). If construction-related activities must take place within these buffer widths, the Proposed Project applicant or its designee shall contact the County to determine how to best minimize impacts to nesting birds.

Specific to coastal California gnatcatcher and nesting raptors, construction-related noise levels in coastal California gnatcatcher-occupied habitat within 500 feet of construction activity shall not exceed 60 A-weighted decibels equivalent continuous sound level (dBA L_{eq}) or preconstruction ambient noise levels, whichever is greater. Proposed Project construction within 500 feet of occupied habitat shall occur outside of the breeding season, if possible. If necessary, construction activities during the breeding season shall be managed to limit noise levels in occupied habitat within 500 feet of the site, or noise attenuation measures, such as temporary sound walls, shall be implemented to reduce noise levels below 60 dBA L_{eq} or below existing ambient noise levels, whichever is greater.

Mitigation Measure BI-19 (M-BI-19)

M-BI-19 application to the Proposed Project Amendment: Mitigation measure M-BI-19 applies to the Proposed Project Amendment. Minor revisions to the mitigation measure are required, as follows:

M-BI-19 Fire Protection. To minimize the potential exposure of the Project Area to fire hazards, all features of the Fire Protection Plan for Otay Ranch Village 14 and Planning Areas 16/19 and the Fire Protection Plan Technical Memorandum for the Otay Ranch Village 14 and Planning Areas 16/19 Proposed Project Amendment shall be implemented in conjunction with development of the Proposed Project Amendment.

Mitigation Measure BI-20 (M-BI-20)

M-BI-20 application to the Proposed Project Amendment: Mitigation measure M-BI-20 applies to the Proposed Project Amendment. No revisions to M-BI-20 are needed.

M-BI-20 Lighting. Lighting of all developed areas adjacent to the Otay Ranch Resource Management Plan Preserve shall be directed away from the Preserve, wherever feasible and consistent with public safety. Where necessary, development shall provide adequate shielding with non-invasive plant materials (preferably native), berming, and/or other methods to protect the Preserve and sensitive species from night lighting. Consideration shall be given to the use of low-pressure sodium lighting.

Mitigation Measure BI-21 (M-BI-21)

M-BI-21 application to the Proposed Project Amendment: Mitigation measure M-BI-21 applies to the Proposed Project Amendment. No revisions to M-BI-21 are required.

M-BI-21

Federal and State Agency Permits. Prior to impacts occurring to U.S. Army Corps of Engineers (ACOE), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW) (collectively, the Resource Agencies) jurisdictional aquatic resources, the Proposed Project applicant or its designee shall obtain the following permits: ACOE 404 permit, RWQCB 401 Water Quality Certification, and CDFW Fish and Game Code 1600 Streambed Alteration Agreement. The overall ratio of wetland/riparian habitat mitigation shall be 3:1. Impacts shall be mitigated at a 1:1 impact-to-creation ratio by either the creation, or purchase of credits for the creation, of jurisdictional habitat of similar functions and values. An addition 2:1 enhancement-to-impact ratio shall be required to meet the overall 3:1 impact-to-mitigation ratio for impacts to wetlands/riparian habitat. Impacts to unvegetated and ephemeral stream channels shall occur at a 1:1 impact-to-creation ratio. A suitable mitigation site shall be selected and approved by the Resource Agencies during the permitting process.

If mitigation is proposed to occur within the Project Area or within the additional off-site areas needed for conveyance, then a Wetlands Mitigation and Monitoring Plan shall be prepared. Prior to issuance of land development permits, including clearing, grubbing, and grading permits for activities that would impact jurisdictional aquatic resources, the Proposed Project applicant shall prepare a Wetlands Mitigation and Monitoring Plan to the satisfaction of the Director of Planning & Development Services (or his/her designee), the Director of Parks and Recreation, ACOE, RWQCB, and CDFW. The Conceptual Wetlands Mitigation and Monitoring Plan shall, at a minimum, prescribe site preparation, planting, irrigation, and a 5-year maintenance and monitoring program with qualitative and quantitative evaluation of the revegetation effort and specific criteria to determine successful revegetation.

Mitigation Measure BI-22 (M-BI-22)

M-BI-22 application to the Proposed Project Amendment: Due to differing habitat impacts, mitigation measure M-BI-22 was not included in the Approved Project but was included as a mitigation measure for the EIR Land Exchange Alternative (M-BI-12 in the Biological Resources Technical Report for Otay Ranch Village 14 and Planning Areas 16/19 Land Exchange Alternative; Dudek 2018b). Mitigation measure M-BI-22 applies to the Proposed Project Amendment. No revisions to M-BI-22 are required.

M-BI-22

Preconstruction Bat Surveys. No earlier than 30 days prior to the commencement of construction activities for each construction area, a preconstruction survey shall be conducted by a biologist to determine whether active roosts of special-status bats (including maternity roosts, non-maternity roosts, and winter hibernacula) are present in the eucalyptus trees in Village 14 Development Footprint. If roosts are detected during preconstruction surveys, the following avoidance measures will be implemented unless relocation and/or take is authorized under CESA, as required by applicable law.

Maternity Roosts. If an active maternity roost is identified in these areas, the maternity roost will not be directly disturbed, and some construction activities, such as mass-grading or other activities involving heavy equipment, within 300 feet of the maternity roost may be postponed or halted until the maternity roost is vacated and juveniles have fledged, as determined by the project biologist. The rearing season for native bat species in California is approximately April 1 through August 31.

Hibernacula or Non-Maternity Roosts. If non-breeding bat roosts (hibernacula or non-maternity roosts) are found within the disturbance zone, the individuals shall be safely evicted, under the direction of the project biologist, by opening the roosting area to allow airflow through the cavity or other means determined appropriate by the project biologist (e.g., installation of one-way doors). If flushing species from tree roosts is required, this shall be done when temperatures are sufficiently warm for bats to exit the roost, because bats do not typically leave their roost daily during winter months. In situations requiring one-way doors, a minimum of 1 week shall pass after doors are installed and temperatures should be sufficiently warm (for winter hibernacula) for bats to exit the roost. This action should allow all bats to leave during the course of 1 week. If a roost needs to be removed and the project biologists determines that the use of one-way doors is not necessary, the roost shall first be disturbed following the direction of the project biologist at dusk to allow bats to escape during the darker hours. Once the bats escape, the roost site shall be removed or the construction disturbance shall occur the next day (i.e., there shall be no less or more than 1 night between initial disturbance and the roost removal).

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8 Summary of Project Impacts and Mitigation

Chapters 6 and 7 summarized the biological impacts and associated mitigation for each significant impact that may occur as a result of the Proposed Project Amendment. Table 7 summarizes the Proposed Project Amendment's impacts to special-status species, vegetation communities, and jurisdictional areas and identifies the recommended mitigation measures for those impacts.

Table 7. Summary of Proposed Project Amendment Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Wetlands and Waterways

Final EIR Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	County Guideline Number and Lettera
modification	ns, on a candidate, sensi or by California Departn	itive, or special- nent of Fish and	l adverse effect, either directly status species listed in local of I Game or U.S. Fish and Wildli	or regional plans, fe Service.	policies, or
Preventive Measure	Potential Habitat for San Diego Fairy Shrimp	None	M-BI-7 (San Diego fairy shrimp take authorization)	Less than significant	4.1.A
Bl-1	Quino Checkerspot Butterfly Suitable Habitat	Permanent Direct	M-BI-3 (habitat conveyance and preservation) M-BI-4 (biological open space easement) M-BI-5 (permanent fencing and signage) M-BI-8 (Quino checkerspot butterfly take authorization) M-BI-9 (Quino checkerspot butterfly habitat preservation) M-BI-10 (Quino checkerspot butterfly management/enhancement plan)	Less than significant	4.1.A
BI-2	Habitat for Special- Status Wildlife Species	Permanent Direct	M-Bl-1 (biological monitoring) M-Bl-3 (habitat conveyance and preservation) M-Bl-4 (biological open space easement) M-Bl-5 (permanent fencing and signage) M-Bl-6 (nesting bird survey) M-Bl-13 (burrowing owl preconstruction) M-Bl-22 (preconstruction bat survey)	Less than significant	4.1.A 4.1.B

Table 7. Summary of Proposed Project Amendment Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Wetlands and Waterways

Final EIR Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	County Guideline Number and Letter ^a
BI-3	Hermes Copper Butterfly Suitable Habitat	Permanent Direct	M-BI-3 (habitat conveyance and preservation) M-BI-4 (biological open space easement) M-BI-5 (permanent fencing and signage)	Less than significant	4.1.A
BI-4	Special-Status Plant Species (County List A and B Species)	Temporary Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing)	Less than significant	4.1.B
BI-5	Special-Status Plant Species (County List A and B Species)	Permanent Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-3 (habitat conveyance and preservation) M-BI-4 (biological open space easement) M-BI-11 (biological resource salvage plan)	Less than significant	4.1.B
BI-6	Golden Eagle	Permanent Direct	M-BI-3 (habitat conveyance and preservation) M-BI-4 (biological open space easement) M-BI-5 (permanent fencing and signage)	Less than significant	4.1.E
BI-7	Habitat for Special- Status Wildlife Species	Temporary Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-6 (nesting bird survey) M-BI-12 (restoration of temporary impacts) M-BI-18 (noise)	Less than significant	4.1.A 4.1.B
BI-8	Direct Loss of Birds under the MBTA	Permanent Direct	M-BI-1 (biological monitoring) M-BI-6 (nesting bird survey)	Less than significant	4.1.A 4.1.B
BI-9	Special-Status Plant Species	Temporary Indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control) M-BI-17 (prevention of chemical pollutants)	Less than significant	4.1.H



Table 7. Summary of Proposed Project Amendment Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Wetlands and Waterways

Final EIR Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	County Guideline Number and Letter ^a
BI-10	Special-Status Wildlife Species	Temporary Indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control) M-BI-16 (prevention of invasive plant species) M-BI-17 (prevention of chemical pollutants) M-BI-18 (noise)	Less than significant	4.1.H 4.1.L
BI-11	Special-Status Wildlife Species	Permanent Indirect	M-BI-5 (permanent fencing and signage) M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control) M-BI-16 (prevention of invasive plant species) M-BI-18 (noise) M-BI-19 (fire protection) M-BI-20 (lighting)	Less than significant	4.1.H
			M-BI-5 (permanent fencing and signage M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control) M-BI-16 (prevention of invasive plant species) M-BI-17 (prevention of chemical pollutants) M-BI-19 (fire protection)		
Fish and Ga	ame or U.S. Fish and Wild	llife Service.	ans, policies, regulations, or by		
BI-13	Sensitive Vegetation Communities – Project Area	Temporary Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-12 (restoration of temporary impacts) M-BI-21 (federal and state agency permits	Less than significant	4.2.A

Table 7. Summary of Proposed Project Amendment Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Wetlands and Waterways

Final EIR Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	County Guideline Number and Letter ^a
BI-14	Sensitive Vegetation Communities – Village 14 and Planning Areas 16/19	Permanent Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-3 (habitat conveyance and preservation) M-BI-4 (biological open space easement) M-BI-5 (permanent fencing and signage M-BI-21 (federal and state agency permits)	Less than significant	4.2.A
BI-15	City of San Diego MSCP Cornerstone Lands	Temporary and Permanent Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-4 (biological open space easement) M-BI-12 (restoration of temporary impacts) M-BI-21 (federal and state agency permits	Less than significant	4.2.A
BI-16	Lands within City of Chula Vista	Temporary and Permanent Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-12 (restoration of temporary impacts) M-BI-21 (federal and state agency permits)	Less than significant	4.2.A
BI-17	Off-Site Private Lands	Temporary and Permanent Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-12 (restoration of temporary impacts)	Less than significant	4.2.A
BI-18	County of San Diego Road Easement	Temporary and Permanent Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-12 (restoration of temporary impacts)	Less than significant	4.2.A



Table 7. Summary of Proposed Project Amendment Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Wetlands and Waterways

Final EIR Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	County Guideline Number and Letter ^a
BI-20	Jurisdictional Aquatic Resources – Project Area	Temporary Direct	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-12 (restoration of temporary impacts) M-BI-21 (federal and state agency permits	Less than significant	4.2.B
BI-21	Jurisdictional Aquatic Resources – Project Area	Permanent Direct	M-BI-21 (federal and state agency permits	Less than significant	4.2.B
BI-22	Jurisdictional Aquatic Resources – Project Area	Temporary Indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control) M-BI-17 (prevention of chemical pollutants)	Less than significant	4.2.B
BI-23	Jurisdictional Aquatic Resources – Project Area	Permanent Indirect	M-BI-5 (permanent fencing and signage M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control) M-BI-16 (prevention of invasive plant species) M-BI-17 (prevention of chemical pollutants)	Less than significant	4.2.B
BI-24	Sensitive Vegetation Communities – Project Area	Temporary Indirect	M-BI-1 (biological monitoring) M-BI-2 (temporary construction fencing) M-BI-4 (biological open space easement) M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control) M-BI-17 (prevention of chemical pollutants) M-BI-21 (federal and state agency permits	Less than significant	4.2.D
BI-25	Sensitive Vegetation Communities – Project Area	Permanent Indirect	M-BI-5 (permanent fencing and signage M-BI-14 (SWPPP) M-BI-15 (erosion and runoff control)	Less than significant	4.2.D

Table 7. Summary of Proposed Project Amendment Impacts and Mitigation for Special-Status Species, Vegetation Communities, and Jurisdictional Wetlands and Waterways

Final EIR Impact Number	Impacted Resource	Impact Type	Proposed Mitigation	Level of Significance After Mitigation	County Guideline Number and Letter ^a
			M-BI-16 (prevention of invasive plant species) M-BI-17 (prevention of chemical pollutants) M-BI-19 (fire protection)		

Guideline 4.3: The project would 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.

Refer to Impacts BI-20 through BI-23.

Guideline 4.4: The project would interfere substantially with the movement of a 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.

BI-26	Habitat Connectivity	Temporary	M-BI-1 (biological	Less than	4.4.A
	and Wildlife Corridors	Direct	monitoring)	significant	
			M-BI-2 (temporary		
			construction fencing)		
			M-BI-12 (restoration of		
			temporary impacts)		
BI-27	Habitat Connectivity	Temporary	M-BI-1 (biological	Less than	4.4.D
	and Wildlife Corridors	Indirect	monitoring)	significant	
			M-BI-2 (temporary		
			construction fencing)		
			M-BI-18 (noise)		
			M-BI-20 (lighting)		
BI-28	Habitat Connectivity	Permanent	M-BI-3 (habitat conveyance	Less than	4.4.D
	and Wildlife Corridors	Indirect	and preservation)	significant	
			M-BI-4 (biological open		
			space easement)		
			M-BI-5 (permanent fencing		
			and signage)		
			M-BI-18 (noise)		
			M-BI-20 (lighting)		

a Source: County of San Diego 2010.



9 References

- AECOM and Hogan, D. 2012. Proctor Valley Vernal Pool Restoration Plan. September 2012.
- City of Chula Vista. 2003. *City of Chula Vista MSCP Subarea Plan.* February 2003. Accessed June 2015. http://www.chulavistaca.gov/home/showdocument?id=7106.
- City of Chula Vista and County of San Diego. 1993a. Otay Ranch City of Chula Vista General Development Plan/County of San Diego Otay Subregional Plan, Volume 2. Applicant: Otay Vista Associates. Prepared for Otay Ranch Joint Planning Project. Approved by: City of Chula Vista and County of San Diego. October 28, 1993. Last amended May 26, 2015.
- City of Chula Vista and County of San Diego. 1993b. *Otay Ranch Resource Management Plan*. http://www.sandiegocounty.gov/content/dam/sdc/dplu/docs/OtayRMP.pdf.
- CDFW (California Department of Fish and Wildlife). 2019. Notification of Status Review for Four Bumble Bee Species.
- CNPS (California Native Plant Society). 2019. Inventory of Rare and Endangered Plants of California (online edition, v8-03 0.39). Website http://www.rareplants.cnps.org [accessed 30 October 2019].
- County of San Diego. 1997. *Multiple Species Conservation Plan: County of San Diego Subarea Plan*. Adopted October 22, 1997. Prepared by the County of San Diego in conjunction with the U.S. Fish and Wildlife Service, California Department of Fish and Game.
- County of San Diego. 2019. Final Environmental Impact Report: Otay Ranch Village 14 and Planning Areas 16/19 Project. State Clearinghouse # SCH 2016121042. GPA 16-008, SP 16-002, REZ 16-006, TM 5616, ER-16-19-006 and STP 16-027. May 2019.
- Dudek. 2018a. Biological Resources Technical Report for Otay Ranch Village 14 and Planning Areas 16/19. September 2018.
- Dudek. 2018b. Biological Resources Technical Report for Otay Ranch Village 14 and Planning Areas 16/19 Land Exchange Alternative. February 2018.
- Ogden. 1992. Otay Ranch Raptor Management Study. Prepared for the Otay Ranch Project Team. July 1992.
- RECON. 2018. Phase 2 Resource Management Plan Update.
- SDNHM (San Diego Natural History Museum). 2019. Data retrieved from Herbarium and Plant Atlas databases. San Diego County Plant Atlas Project. Online ed. Accessed October 2019. http://www.sdplantatlas.org/publicsearch.aspx.
- USFWS (U.S. Fish and Wildlife Service), CDFG (California Department of Fish and Game), and County of San Diego. 1998. MSCP County Subarea Plan Implementing Agreement by and between United States Fish and Wildlife Service, California Department of Fish and Game, and County of San Diego. March 17, 1998.
- USFWS. 2015. "Survey Guidelines for the Listed Large Branchiopods." May 31, 2015. https://www.fws.gov/sacramento/es/survey-protocols-guidelines/Documents/VernalPoolBranchiopodSurveyGuidelines_20150531.pdf.



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Attachment A

Biological Equivalency Analysis

MEMORANDUM

To: David Hubbard, Gatzke, Dillon & Balance LLP

Liz Jackson, Jackson Pendo Development Company

Rob Cameron, Jackson Pendo Development Company

From: Patricia Schuyler, Dudek

Subject: Review of the Proposed Land Exchange and CDFW's Land Conversion Evaluation Format

Date: October 16, 2019

Attachment: Attachment A – Biological Equivalency Analysis

The California Department of Fish and Wildlife (CDFW) has prepared a Land Conversion Evaluation (LCE) Format that directs preparation of LCE reports. There are five criteria outlined within "Section 2, Justification for Conversion" of the LCE Format that are considered the most important elements of the LCE. These five criteria should be reviewed and incorporated into any LCE discussion to determine whether a potential land conversion would be appropriate. Dudek reviewed the LCE Format and the five criteria, and prepared a Biological Equivalency Analysis (Attachment A) for the proposed land exchange between the State of California/CDFW and GDCI Proctor Valley L.P. (GDCI), as defined in the Dispute Resolution Agreement effective June 26, 2019, between GDCI, the County of San Diego, the U.S. Fish and Wildlife Service, and CDFW. This memo provides a summary of the five criteria described within the LCE Format, and provides the locations within the Biological Equivalency Analysis (Attachment A) where the criteria are addressed.

1 Property Name

The properties subject to review are as follows: (1) property currently owned by GDCI in Village 14 and Planning Area 16 that will be exchanged to CDFW (R-15, R-16, PV-1, and PV-3); (2) property currently owned by CDFW in Village 14 that will be exchanged to GDCI (Parcels A, B, C, and E, and the right-of-way for Proctor Valley Road [PVR] North); and (3) R-14 within Planning Area 16, which is owned by GDCI and for which GDCI will grant a conservation easement to CDFW (see Figure 1 of Attachment A).

2 Justification for Conversion

Each criterion listed in the LCE Format is described below as it relates to the proposed land exchange. The Biological Equivalency Analysis for the proposed land exchange, Attachment A to this memo, describes the existing biological resources within the proposed land exchange parcels currently under review, including vegetation communities, sensitive plant and wildlife species, and wildlife movement. The Biological Equivalency Analysis also evaluates the biological equivalency of the proposed land exchange, and in turn, the justification for conversion.



2.a Listed Species or Species of Special Concern

Section 2.a. of the LCE Format provides the following guidance:

Listed species or species of special concern: Habitat deemed important for the continued and future survival of listed species or species of special concern should not be converted unless the species has been extirpated from the site and there are no realistic expectations that it will recolonize or can be successfully reintroduced to the site in the future. Moreover, sensitive natural communities or high priority vegetation types (those listed by the Department's Vegetation Classification and Mapping Program - VegCAMP) should not be converted unless the site has suffered from irreversible impacts which eliminate the feasibility of its restoration. Reasonable documentation should be provided that extirpation, irreversible impacts, or improbability of recolonization exist. This will not preclude the conversion of the above types of properties as long as the Department retains conservation easements or deed restrictions, or is otherwise assured that the property's biological values will be protected in perpetuity. If parcels, or portions of parcels, adjacent to important or sensitive habitats are converted, adequate buffer zones will be retained by the Department to protect these habitats.

Both the CDFW and GDCI parcels proposed as part of the land exchange provide habitat for listed species and species of special concern as discussed in Sections 2.3.1 and 2.3.2 of Attachment A. Section 3.1 of Attachment A provides a full description of the vegetation communities and land cover types that will be placed into the Multiple Species Conservation Program (MSCP) Preserve. Sections 3.2.1 and 3.2.2 of Attachment A describe how the proposed land exchange would result in a significant increase in plant populations within the MSCP Preserve, and additional habitat for coastal California gnatcatcher (*Polioptila californica californica*) and Quino checkerspot butterfly (*Euphydryas editha quino*).

2.b Mitigation Lands

Section 2.b. of the LCE Format provides the following guidance:

Mitigation lands: Lands received as mitigation pursuant to CESA or CEQA, or any other applicable statute, are subject to the terms of any corresponding Memoranda of Understanding (MOU) which may not allow for conversion. Should conversion be permissible, and if such lands meet the first criteria for conversion (2.a. above), they should be replaced by lands of comparable habitat value for the species subject to the MOU. The same applies to those properties for which the department retains a mitigation-related conservation easement or deed restriction.

None of the parcels within the CDFW portion of the proposed land exchange were purchased for mitigation; they were acquired to expand the San Diego National Wildlife Refuge to support the survival of sensitive plant and wildlife species. Therefore, these lands are eligible for conversion. The Biological Equivalency Analysis provides a full analysis regarding the comparable habitat value of the land exchange. Specifically, Table 4 of Attachment A provides the vegetation communities and habitat types within the land exchange parcels, and the net gain of habitat to the MSCP Preserve should the land exchange be approved. As shown in Table 4, 311.6 net additional acres will be conserved within the MSCP Preserve as a result of the proposed land exchange. Therefore, the proposed DRA Exchange would provide replacement of lands of comparable habitat value at an almost 2.5:1 ratio.

2.c General Wildlife/Habitat Lands

Section 2.c. of the LCE Format provides the following guidance:

General wildlife/habitat lands: The parcel no longer retains the specific wildlife or habitat values for which it was acquired, or any other high priority habitat, or is unlikely to retain them over the long term due to changes in surrounding land use. In addition, the parcel cannot realistically be restored or managed to support the habitat values for which it was originally acquired. For example, habitat that has become increasingly isolated from other protected lands and is surrounded by increasing development pressures would be a candidate for conversion or exchange for habitat with higher values.

A full biological comparison of the DRA Exchange parcels and the benefits to the overall MSCP Preserve is described in Section 3 of Attachment A.

2.d Public Access lands

Section 2.d. of the LCE Format provides the following guidance:

Public access lands: The parcel no longer retains the public recreational access values, or other values deemed important for department purposes, for which it was acquired. For example, DFW may own property which, when purchased, provided public access to federal lands for wildlife-related recreation; if those public lands have been privatized or closed to public use, the property may no longer retain its value as public access.

The CDFW-owned parcels, and the parcels proposed to be given to CDFW, contain unauthorized trails and internal dirt roads that provide for unauthorized public recreational opportunities. Because the public access is unauthorized, this guidance does not apply.

2.e Administrative or Management Problems

Section 2.e. of the LCE Format provides the following guidance:

Administrative or management problems: Conversion of the parcel would eliminate a significant administrative or management problem. Some examples: the water necessary to manage a wetland parcel might be inadequate; illegal public activities on a parcel may not be manageable by existing personnel; conversion of lands might be necessary to consolidate landholdings. Criteria 1 and 2 must also be met.

As discussed throughout Section 3 of Attachment A, the proposed land exchange will eliminate the current fragmented configuration of CDFW and GDCl ownership. In summary, the proposed land exchange would result in a more logical, practical, and efficient land use and Preserve pattern that will be easier to manage. The consolidated development will result in less edge effects, providing for less human intrusion and the management issues that come with that development/Preserve interface (e.g., lighting, trash, noise, and others).

