



## HAMILTON BIOLOGICAL

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August 18, 2023

Ms. Carmen J. Borg  
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396 Hayes Street  
San Francisco, CA 94102

**SUBJECT: REVIEW OF BIOLOGICAL RESOURCE ISSUES  
RECIRCULATED DEIR, COTTONWOOD SAND MINE PROJECT  
COUNTY OF SAN DIEGO, CALIFORNIA**

Dear Ms. Borg,

At your request, this letter provides the comments of Hamilton Biological, Inc., regarding biological issues associated with the proposed Cottonwood Sand Mine Project. The proposed sand mine would remove approximately 6.4 million tons of sand and other materials from approximately 251 acres in the Sweetwater River floodplain currently occupied by the Cottonwood Golf Club. The County of San Diego (County) has prepared a Recirculated Draft EIR (RDEIR) addressing the proposed actions. Certification of the DEIR by the County would put in place a Major Use Permit (MUP) for the mining activities, and the proposed actions require a Reclamation Plan for the proposed under the California Surface Mining and Reclamation Act (SMARA).

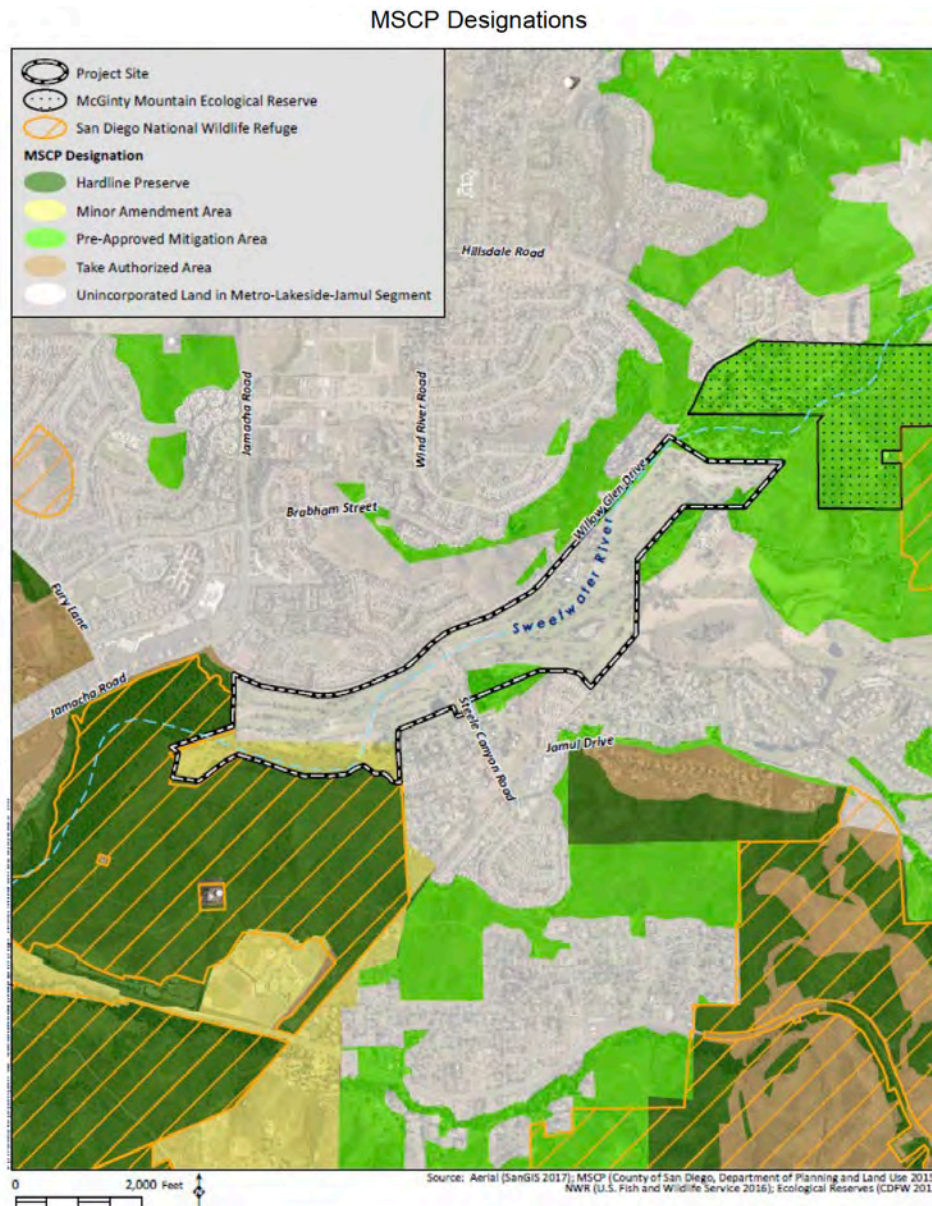
### COMMENTS ON ORIGINAL DEIR

Hamilton Biological commented on the original Draft EIR (DEIR) in a 42-page letter dated February 28, 2022. Review of the RDEIR shows that the County has ignored most of the earlier comments. Updated information in the RDEIR focuses mainly upon issues raised in a comment letter dated February 28, 2022, from the California Department of Fish and Wildlife (CDFW). Nevertheless, public participation remains a mandated and essential component of CEQA. In *Concerned Citizens of Costa Mesa, Inc. v. 32nd District Agricultural, Assoc.* (1986) 42 Cal. 3d 929, the court emphasized that the public holds a “privileged position” in the CEQA process “based on a belief that citizens can make important contributions to environmental protection and on notions of democratic decision making.”

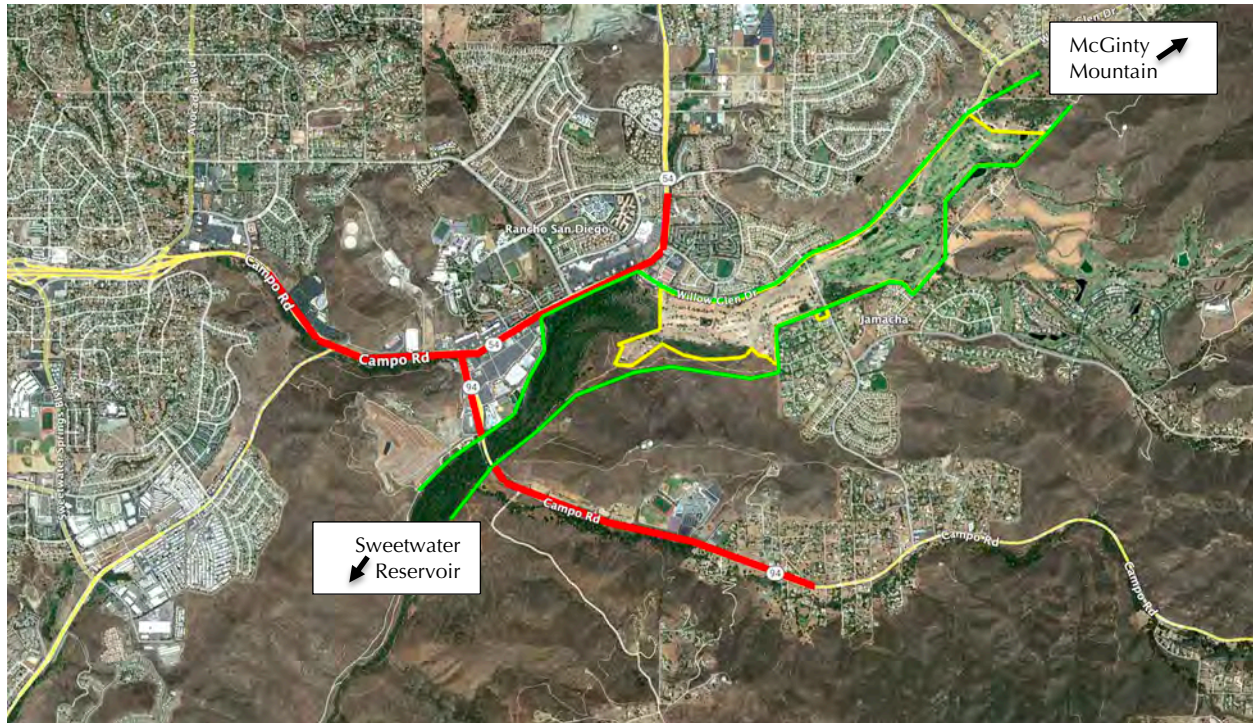
### MSCP CONSIDERATIONS

The project site lies within Pre-Approved Mitigation Area (PAMA) in the South County Subarea of the Multi-Species Conservation Plan (MSCP) and is identified as a Biological Resource Core Area (BRCA) and a designated habitat linkage between the McGinty Mountain/Sycuan Peak-Dehesa and Sweetwater Reservoir/San Miguel Mountain

BRCA. The northeastern two-thirds of the project site consists of the still-active Ivanhoe golf course and the remainder of the site consists of the disused Lakes Course. Given these designations, the site has an important strategic role in the function of the South County Subarea MSCP. An exhibit entitled “MSCP Designations,” provided on the last page of the County’s MSCP Findings of Conformance Statement and reproduced below, indicates the importance of this site in the regional open space system.



**Figure 1.** Reproduction of the “MSCP Designations” exhibit provided on the final (un-numbered) page of the County’s MSCP Findings of Conformance Statement. As shown, the project site represents the only viable habitat linkage between the San Diego National Wildlife Refuge in the southwest and the McGinty Mountain Ecological Reserve in the northeast.



**Figure 2.** Aerial imagery, without the screens used in Figure 1, showing even more clearly that urban development along Highway 94 and Highway 54 effectively blocks nearly all movement of terrestrial and aquatic wildlife between Sweetwater Reservoir/SDNWR and the McGinty Mountain Ecological Reserve. The project site, an MSCP-designated habitat linkage containing a river channel, provides by far the most viable opportunity for terrestrial and aquatic wildlife to move through this highly fragmented landscape.

## GRASSLANDS ERRONEOUSLY MISCLASSIFIED AS DISTURBED HABITAT

As required under the County's Biology Guidelines, the project biologists at Helix cite Holland (1986) and Oberbauer et al. (2008) as the authority for the vegetation classification categories used in the RDEIR. In certain sections of the Biological Resources Technical Report, however, Helix shifts to County (2010a) as the authority for vegetation classification. As discussed below, this should not be a problem since both systems are generally compatible, but in order to explain how the RDEIR erroneously mischaracterizes Non-native Grasslands as Disturbed Habitat, it's necessary to understand the differences and similarities between Oberbauer et al. (2008) and County (2010a).

The category of "Disturbed Habitat" was not included in the vegetation classification system originally developed by Holland (1986). It was added by Oberbauer (1996), in the original update to Holland's system. The latest revised update to the Holland system, and the system Helix cites for classifying most of the vegetation on the Cottonwood project site, is Oberbauer et al. (2008):

Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on *Preliminary Descriptions of the Terrestrial Natural Communities of California*, R. F. Holland, Ph.D., October 1986.

Nevertheless, when classifying areas as “Disturbed Habitat,” both the original Biological Resources Technical Report (Helix 2021:18) and the updated Biological Resources Technical Report (Helix 2023:24) cite a different authority:

San Diego County. 2010a. Report Format and Content Requirements, Biological Resources. Fourth Revision, September 15.

Page 35 of this County publication states:

While Holland [1986] gives information regarding habitat attributes, the following additional guidance shall be followed in determining the proper code for disturbed land, non-native grassland, agriculture, coastal sage-chaparral scrub, and native grassland classifications:

**Disturbed Land (Holland 11300)** – Disturbed land includes areas in which the vegetative cover comprises less than 10 percent of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance and compaction from previously legal human activity; or where the vegetative cover is greater than 10 percent, there is soil surface disturbance and compaction, and the presence of building foundations and debris (e.g., irrigation piping, fencing, old wells, abandoned farming or mining equipment) resulting from legal activities (as opposed to illegal dumping). Vegetation on disturbed land (if present) will have a high predominance of non-native and/or weedy species that are indicators of surface disturbance and soil compaction, such as Russian thistle (*Salsola tragus*), telegraph weed (*Heterotheca grandiflora*), horehound (*Marrubium vulgare*), and sow-thistle (*Sonchus oleraceus*). Although non-native grasses may be present on disturbed land, they do not dominate the vegetative cover. Examples of disturbed land include the following activities, if performed under legal means: recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites.

The minor differences between the two classification systems should not matter, but because the County and Helix have mixed the systems in the RDEIR, both systems must be reviewed.

Oberbauer et al. (2008) defines Disturbed Habitat (11300) as follows:

**Description:** Areas that have been physically disturbed (by previous legal human activity) and are no longer recognizable as a native or naturalized vegetation association, but continues to retain a soil substrate. Typically vegetation, if present, is nearly exclusively composed of non-native plant species such as ornamentals or ruderal exotic species that take advantage of disturbance, or shows signs of past or present animal usage that removes any capability of providing viable natural habitat for uses other than dispersal. Examples of disturbed habitat include areas that have been graded, repeatedly cleared for fuel management purposes and/or experienced repeated use that prevents natural revegetation (i.e. dirt parking lots, trails that have been present for several decades), recently graded firebreaks, graded construction pads, construction staging areas, off-road vehicle trails, and old homesites.

**Characteristic Species:** Invasive, non-native forb species, such as, thistles ([*Centaurea*], [*Carduus*], and [*Cynara*] spp.), [*Sonchus* spp.], [*Salsola tragus*], *Heterotheca grandiflora*, [*Marrubium vulgare*], [*Sisymbrium irio*], [*Raphanus* spp.], [*Carpobrotus edulis*], [*Chrysanthemum* spp.], and [*Foeniculum vulgare*]. A limited number of grass species: [Pampas grass (*Cortaderia* spp.)] and [fountain grass (*Pennisetum* spp.)]; most annual grass species are more typical of Non-Native Grassland (42200) and do not dominate vegetative cover in Disturbed Habitat.

Although both definitions of Disturbed Habitat (County 2010a and Oberbauer et al. 2008) share language and are generally compatible with each other, some differences can be seen. For example:

- The definition provided by the County (2010a) states that “vegetative cover comprises less than 10 percent of the surface area” and also requires “evidence of soil surface disturbance and compaction from previously legal human activity.”
- The definition provided by Oberbauer et al. (2008) does not include a specific statement about percent vegetative cover but states that disturbed areas “are no longer recognizable as a native or naturalized vegetation association” and provides a more complete list of invasive, non-native forb species that characterize Disturbed Habitat.

The abandoned golf course can be easily recognized as a naturalized grassland with scattered large cottonwoods. Under either system, non-native grasses make up only a minor component of the vegetation in Disturbed Habitat:

- The definition provided by the County (2010a) states, “Although non-native grasses may be present on disturbed land, they do not dominate the vegetative cover.”
- The definition provided by Oberbauer et al. (2008) states, “most annual grass species are more typical of Non-Native Grassland (42200) and do not dominate vegetative cover in Disturbed Habitat.”

This is important because, as shown in site photos included in this letter, the abandoned golf course is dominated by non-native grasses and therefore, under either system, does not fit the classification of Disturbed Habitat.

### ***The RDEIR Presents False and Misleading Information About Grasslands***

Both the original DEIR and the RDEIR claim that the entire abandoned golf course, apart from the ponds and the riparian channel—a total of 93.1 acres—fall under the category of Disturbed Habitat (11300). My letter commenting on the original DEIR repeatedly called out the falseness of this claim, on pages 16, 19, 23, 24, 25, 26, and 31. For example, page 16 of my letter stated:

To erroneously describe the park-like landscape shown in Photos 1-8 of this letter as “disturbed”—a mapping category that the DEIR defines as an area “in which the vegetative cover comprises less than 10 percent of the surface area”—demonstrates lack of accuracy and objectivity on the part of the project biologists and the County.

Rather than addressing the substance of my comments—that the abandoned golf course plainly does not match *any* definition of Disturbed Habitat—Helix has manipulated and altered the County’s (2010a) definition of “Disturbed Habitat” in two different ways. First, Helix removed the 10 percent vegetative cover criterion:

- **DEIR Biological Resources Technical Report (2021), Page 18:** “Disturbed habitat includes areas in which the vegetative cover comprises less than 10 percent of the surface area (disregarding natural rock outcrops) and where there is evidence of soil surface disturbance. Disturbed habitat supports a predominance of non-native and/or weedy species that are indicators of such surface disturbance (County 2010a).”
- **RDEIR Biological Resources Technical Report (2023), Page 24:** “Disturbed habitat includes areas where there is evidence of soil surface disturbance and compaction resulting from previous legal human activities. Vegetation, if present, has a predominance of non-native and/or weedy species that are indicators of such surface disturbance (County 2010a).”

This deceptive edit does not solve the problem, however, since both Oberbauer et al. (2008) and County (2010a) state that areas classified as Disturbed Habitat are *not* dominated by non-native grasses. In a final effort to square the circle, page 2.2-8 of the RDEIR’s Biological Resources section further distorts the definition of Disturbed Habitat (County 2010a) – by adding one word, highlighted here in bold: “Although **annual**, non-native grasses may be present on disturbed land, they do not dominate the vegetative cover.” This awkward change appears to have been made so that the County and Helix would be able to claim – citing the false criteria they just invented – that Disturbed Habitat **can** be dominated by **perennial** grasses, like Bermuda Grass.

As the site photos provided in this letter show, non-native grasses are dominant across the abandoned golf course. Therefore, applying either Oberbauer et al. (2008) or County (2010a), the abandoned golf course should be classified as “Non-Native Grassland,” with scattered native Fremont Cottonwoods forming a savannah. Although the cottonwoods present on the abandoned golf course may have been planted there, this large and biologically valuable tree species undoubtedly occurred naturally throughout the project site historically (as it does downstream in the San Diego National Wildlife Refuge) before the river’s floodplain was converted to golf course uses.

Disturbed Habitat is characterized as possessing no “capability of providing viable natural habitat for uses other than dispersal” (Oberbauer et al. 2008). Non-native Grassland is a natural community that provides habitat for a variety of wildlife, including raptors and several special-status species. Had the RDEIR properly designated the site’s grasslands, the EIR preparer would have had to acknowledge that the proposed sand mine would impact a large area of Tier III habitat within a Biological Resource Core Area (BRCA) that provides potentially suitable burrowing habitat for California Glossy Snakes, Western Spadefoots, and other severely declining species for which focused surveys have not been conducted. Under the MSCP, Non-native Grassland is a Tier IIIB community that requires 0.5 to 1.0 acre of mitigation for every 1.0 acre of impact. Moreover, under the proper classification, the County would be obligated to propose adequate mitigation per MSCP requirements, including adequate mitigation for grassland/alluvium species not covered under the MSCP.

### ***RDEIR's Classification of Disturbed Habitat is Inconsistent with CDFW's Approach in Other Areas with Similar Habitat***

As noted previously, new information in the RDEIR focuses primarily upon issues raised by CDFW in their comment letter of February 28, 2022. In those comments, CDFW failed to note that 93 acres of Tier III Non-native Grasslands were mischaracterized as Disturbed Habitat. In some cases, however, CDFW has shown awareness of CEQA lead agencies misclassifying grasslands. For example, see the excerpt provided on the next page, from the attached CDFW letter dated April 21, 2021, commenting on the "City of Chula Vista Encompass Health (PROJECT) Mitigated Negative Declaration (MND)." In reviewing the Chula Vista project, CDFW recommended that "the City carefully consider if some or all of the areas presently shown as Disturbed should more appropriately be designated as NNG [Non-native Grassland], and mitigated as such consistent with the SAP requirements."

Misclassification of plant communities to make a project appear more appealing is not uncommon in CEQA documents. The comments from CDFW to the City of Chula Vista show that, in some cases, CDFW recognizes that "Areas that are dominated by grass species and/or require periodic mowing should be considered as NNG and mitigated appropriately." My recent site photos, on pages 10-16 of this letter, show that CDFW should have raised this issue at the Cottonwood Sand Mine project site.

### ***The RDEIR's Misrepresentation of Grasslands as Disturbed Habitat is a Fatal Flaw***

In misclassifying 93 acres of Non-native Grasslands as Disturbed Habitat based upon fabricated criteria, the County and their consultant have made it practically impossible for the public and decisionmakers to understand the full impacts of the proposed actions. Not only would the County avoid having to provide the required MSCP off-site mitigation ratio for impacts to 93 acres of Tier III habitat, but the misclassification has provided an excuse for the County and its consultants to avoid conducting necessary surveys for the California Glossy Snake and Western Spadefoot, both non-covered species under the MSCP (because the MSCP reserve system has not been determined to adequately conserve their populations). The California Glossy Snake is not so much as mentioned in the RDEIR.

As discussed later in these comments (page 38), misclassification of the grasslands creates an internal contradiction within the RDEIR: The project biologists have identified a "high potential" for the Western Spadefoot to occur in the abandoned golf course while also classifying all of those uplands as Disturbed Habitat. Actual Disturbed Habitat would not provide suitable aestivation habitat for the spadefoot, but Non-native Grassland is the species' typical aestivation habitat. By giving the Western Spadefoot a "high potential" to occur on the site, the project biologists tacitly admit that the abandoned golf course is Non-native Grassland and not Disturbed Habitat.

**Excerpt from pages 2-3 of a CDFW letter dated April 21, 2021,  
commenting on the City of Chula Vista Encompass Health Project  
Mitigated Negative Declaration (MND)**

**I. Potential Impacts to Tier III Uplands**

**Potential Impacts to Non-native Grassland**

**COMMENT #1:**

**Section: Biology Letter Report for Encompass Health Chula Vista, City of Chula Vista, California (BLR), Flora, Page: 2**

**Issue:** The Project will impact land that has been classified as disturbed, but CDFW is concerned that this habitat exhibits characteristics of a Non-native Grassland (NNG), which is a Tier III upland habitat in the City's SAP. Aerial imagery suggests that the Project contains areas that are regularly mowed and maintained. The evidence suggests much of the ongoing disturbance is occurring outside of requisite buffer areas to nearby development; therefore, CDFW recommends the City carefully reconsider if some or all of the areas presently shown as Disturbed should be more appropriately designated as NNG, and mitigated as such consistent with the SAP requirements. To be consistent with the SAP, NNG impacts outside of the preserve need to be mitigated at a ratio of 0.5 to 1.0 acre per acre of impact, dependent on the location of mitigation.

**Specific impacts:** Most of the Project site (9.38 acres) has been classified as disturbed. The BLR indicates on page 2 that the site has been previously graded. Historic aerials of the site show that only the northern portion of the site was graded sometime between 1991 to 1993 (historicalaerials.com 2021), recent satellite imagery shows that majority of the site has been mowed periodically over the last several years (Google Earth Pro 2021). The BLR notes that two of the predominant species on site are non-native grass species, *Avena barbata* and *Bromus madritensis*, and also states that the site contains potential suitable habitat for burrowing owls, which are primarily a grasslands species. These factors indicate that the disturbed habitat could alternatively be characterized as disturbed non-native grassland.

**Why impact would occur:** The Project has the potential to impact disturbed non-native grassland but does not provide appropriate mitigation for these impacts due to the characterization of the land as disturbed.

**Evidence impact would be significant:** Potential impacts to non-native grassland would be considered significant without mitigation.

**Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure #CDFW-REC-1a:**

**To reduce impacts to less than significant:** The MND should reassess the Project site for potential impacts to non-native grassland. Areas that are dominated by grass species and/or require periodic mowing should be considered for designation as NNG and mitigated appropriately.



## WILLOW SCRUB MISCLASSIFIED AS DISTURBED WETLAND

Figure 10 in the RDEIR's Biological Resources Technical Report depicts most of the Sweetwater River channel as Disturbed Wetland:

Disturbed wetland is dominated by exotic wetland species that invade areas that have been previously disturbed or undergone periodic disturbances. These non-natives become established more readily following natural or human-induced habitat disturbance than the native wetland flora. Characteristic species of disturbed wetlands include giant reed, tamarisk, cocklebur (*Xanthium strumarium*), umbrella sedge (*Cyperus involucratus*), and wild celery (*Apium graveolens*).

Disturbed wetland on-site is located along the Sweetwater River and is dominated by Bermuda grass or bare ground. The river channel has been altered from current and past disturbances associated with previous mining activities and golf course development, including on-going maintenance and operations. It has been planted with turf grass and is regularly mowed as part of golf course maintenance activities. Approximately 10.25 acres of disturbed wetland are mapped within the project site.

This may have been accurate at some point in time, but large sections of the river channel have since regenerated naturally to Southern Willow Scrub, a sensitive natural community described on page 21 of the RDEIR's Biological Resources Technical Report:

Southern willow scrub consists of dense, broad-leaved, winter-deciduous stands of trees dominated by shrubby willows in association with mule fat (*Baccharis salicifolia*), and with scattered emergent cottonwood and western sycamores. This vegetation community occurs on loose, sandy or fine gravelly alluvium deposited near stream channels during flood flows. Frequent flooding maintains this early seral community, preventing succession to a riparian woodland or forest (Holland 1986). In the absence of periodic flooding, this early seral type would be succeeded by southern cottonwood or western sycamore riparian forest. Disturbed southern willow scrub contains a higher percentage of exotics and non-native species.

This habitat occurs along the downstream portion of Sweetwater River in the southwestern portion of the site. Dominant species include arroyo willow, black willow, and sandbar willow (*Salix exigua*). Disturbed southern willow scrub includes the same species along with intermixed giant reed and tamarisk trees. A total of 4.82 acres of disturbed southern willow scrub occurs on-site.

The following site photos (nos. 9, 10, 12, 13, 16, and 17) show several areas of healthy Southern Willow Scrub, all misclassified as Disturbed Wetland. Despite the logical presumption that heavy rains in 2022/2023 would have substantially altered and improved habitat conditions in the Sweetwater River channel, the County chose not to review the old vegetation mapping for accuracy. As a result, the RDEIR misrepresents the existing conditions in the river channel. Furthermore, the RDEIR fails to note that establishment of a ribbon of Southern Willow Scrub habitat through the middle of the site has improved the existing opportunities for wildlife movement through the site, as well as improving/expanding suitable habitat for such species as the Arroyo Toad, Western Spadefoot, and Least Bell's Vireo, none of which were surveyed for in 2023. For these reasons, the RDEIR's characterization of the site's riparian resources is inaccurate, inadequate, and unreliable.

## SITE PHOTOS

During my visit to the western part of the project site on July 27, 2023, I took photos at the locations shown in Figure 3, below. These photos show that the current condition of the abandoned golf course differs markedly from that described in the RDEIR.

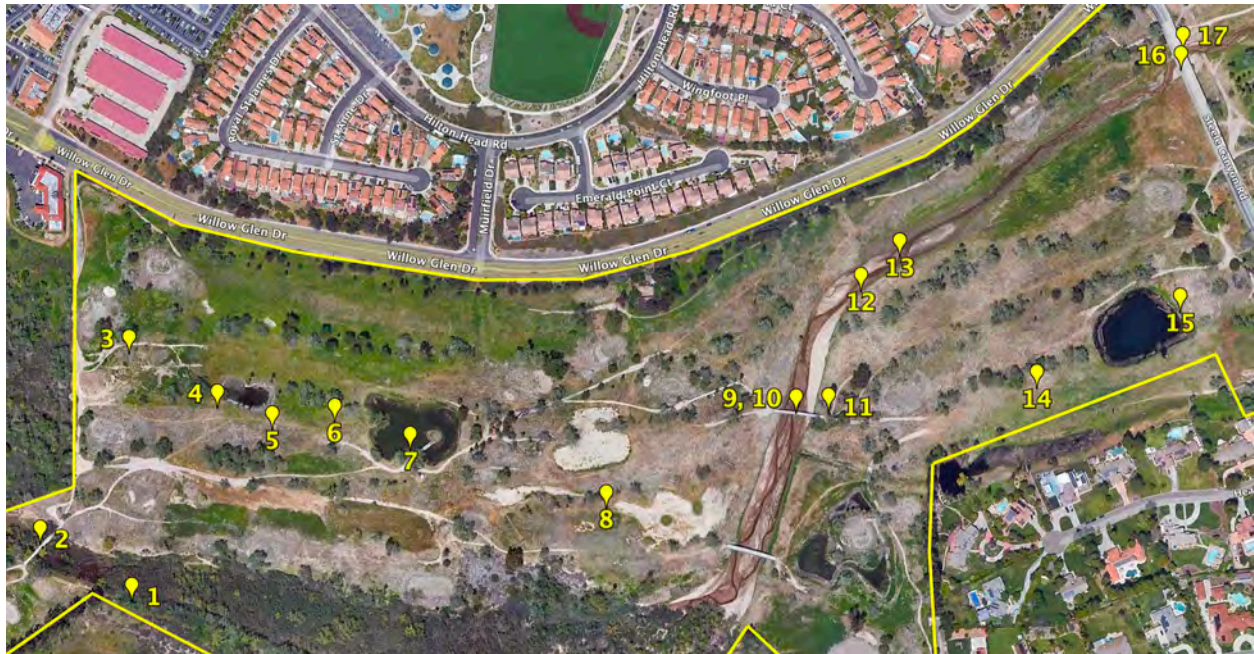


Figure 3. Showing locations where site photos were taken on July 27, 2023.



Photos 1 (above) and 2 (right). Showing well-established encampments in the southwestern part of the site.

Robert Hamilton, 7/27/23



**Photo 3.** View, facing northwest, of a healthy Fremont Cottonwood and California Sycamore in an area that the RDEIR misclassifies as Disturbed Habitat. The low, herbaceous vegetation around these trees is Non-native Grassland.

*Robert Hamilton, 7/27/23*

**Photo 4.** View, facing southwest, of healthy Fremont Cottonwoods in an area that the RDEIR misclassifies as Disturbed Habitat. The low, herbaceous vegetation around these trees is Non-native Grassland.

*Robert Hamilton, 7/27/23*



**Photo 5.** View, facing southwest, of healthy Fremont Cottonwoods in an area that the RDEIR misclassifies as Disturbed Habitat. The low, herbaceous vegetation around these trees is Non-native Grassland.

*Robert Hamilton, 7/27/23*



**Photo 6.** View, facing north, of healthy Fremont Cottonwoods in an area that the RDEIR misclassifies as Disturbed Habitat. The low, herbaceous vegetation around these trees is Non-native Grassland.

*Robert Hamilton, 7/27/23*

**Photo 7.** View, facing north, of one of the large ponds in the western part of the project site.

*Robert Hamilton, 7/27/23*



**Photo 8.** View, facing west, of healthy Fremont Cottonwoods in an area that the RDEIR misclassifies as Disturbed Habitat. The low, herbaceous vegetation around these trees is Non-native Grassland.

*Robert Hamilton, 7/27/23*



**Photo 9.** View, facing northeast, showing healthy Southern Willow Scrub in the channel of the Sweetwater River. The RDEIR misclassifies this habitat as Disturbed Wetland.

*Robert Hamilton, 7/27/23*

**Photo 10.** View, facing southwest, showing healthy Southern Willow Scrub in the channel of the Sweetwater River. The RDEIR misclassifies this habitat as Disturbed Wetland.

*Robert Hamilton, 7/27/23*





**Photo 11.** View, facing northeast, of healthy Fremont Cottonwoods in an area that the RDEIR misclassifies as Disturbed Habitat. The low, herbaceous vegetation around these trees is Non-native Grassland.

*Robert Hamilton, 7/27/23*

**Photo 12.** View, facing northeast, showing healthy Southern Willow Scrub in the channel of the Sweetwater River. The RDEIR misclassifies this habitat as Disturbed Wetland.

*Robert Hamilton, 7/27/23*



**Photo 13.** View, facing northeast, showing healthy Southern Willow Scrub in the channel of the Sweetwater River. The RDEIR misclassifies this habitat as Disturbed Wetland.

*Robert Hamilton, 7/27/23*





**Photo 14.** View, facing west, of healthy Fremont Cottonwoods in an area that the RDEIR misclassifies as Disturbed Habitat. The low, herbaceous vegetation around these trees is Non-native Grassland.

*Robert Hamilton, 7/27/23*

**Photo 15.** View, facing west, of one of the large ponds in the western part of the project site.

*Robert Hamilton, 7/27/23*



**Photo 16.** View, facing southwest from the Steele Canyon Road bridge, showing healthy Southern Willow Scrub in the channel of the Sweet-water River. The RDEIR misclassifies this habitat as Disturbed Wetland.

*Robert Hamilton, 7/27/23*



**Photo 17.** View, facing northeast from the Steele Canyon Road bridge, showing healthy Southern Willow Scrub in the channel of the Sweetwater River. The RDEIR misclassifies this habitat as Disturbed Wetland.

*Robert Hamilton, 7/27/23*

Photos 3–17 demonstrate that the RDEIR misrepresents the resources present across large swaths of the project site. In addition to the deceptive misclassification of Non-native Grassland as Disturbed Habitat, the inaccurate representation of Southern Willow Scrub vegetation as Disturbed Wetland reflects the County’s decision to not complete updated plant community mapping in 2023. Because the RDEIR grossly misrepresents the existing resources across roughly 100 acres of the project site, the impact analysis grossly misrepresents the potential adverse effects of the project on sensitive biological resources. For these reasons, the RDEIR is inadequate as a CEQA document.

## **REVIEW OF THE MSCP CONFORMANCE STATEMENT**

To achieve its conservation goals, the MSCP has strict requirements for projects that propose impacts to BRCA’s and designated habitat linkages. In 2021, the County produced a Conformance Statement (Multiple Species Conservation Program Conformance Statement for Cottonwood Sand Mining PDS2018-MUP-18-023, December 3, 2021) that found the proposed sand-mining and reclamation actions to be consistent with all of the MSCP’s requirements. My comments on the original DEIR, dated February 28, 2022, identified numerous inadequacies in the County’s findings of conformance, all of which remain relevant because they were either completely ignored or inadequately addressed in the recirculated CEQA document. The pages of the Conformance Statement are not numbered, so references are to the page numbers specified in the PDF file downloaded from the County’s web page.

### **Pages 1-2: Incomplete and inaccurate description of existing resources**

Citing the original Biological Resources Technical Report for the DEIR (Helix Environmental Planning, November 2021), the Conformance Statement lists 17 special-status wildlife species observed on or near the project site and nine additional species determined to have high potential to occur. The updated Biological Resources Technical Report provided in the RDEIR (Helix Environmental Planning, March 2023) superficially



addresses some of the issues I raised, but remains inaccurate, inadequate, and misleading in many respects.

The updated report—like the original report—misclassifies 93.1 acres of Non-native Grassland (a Tier IIIB habitat under the MSCP) as Disturbed Habitat, and also fails to address two California Species of Special Concern closely associated with loose, alluvial soils, that have a high potential to occur on the project site: California Glossy Snake (*Arizona elegans occidentalis*) and Southern California Legless Lizard (*Anniella stebbinsi*). It was the general failure of biologists to recognize that alluvium-dependent reptiles and amphibians can thrive in disturbed alluvial soils that led Jonathan Richmond and colleagues at the U.S. Geological Survey (USGS) to study this phenomenon and to publish their findings:

Richmond, J. Q., C. J. Rochester, N. W. Smith, J. A. Nordland, and R. N. Fisher. 2017. Rare alluvial sands of El Monte Valley, California (San Diego County), support high herpetofaunal species richness and diversity, despite severe habitat disturbance. *Southwestern Naturalist* 61(4):294–306.

As described by Richmond et al. (2017:294-295, citations omitted), the adverse ecological effects of widespread sand and gravel operations across western San Diego County and the wider region have elevated the ecological importance of the relatively few areas of alluvial soil that remain:

Large portions of the southwestern United States, particularly coastal areas of western San Diego County, California, near the USA-Mexico international border, have undergone rapid development that has either eliminated or encroached upon what little is left of alluvial sand and gravel habitats. These habitats are generally found in river and stream valleys, at the base of topographic features where there is a pronounced change in slope, and in intermountain valleys. Deposits typically consist of variable grain sizes that are compactable, but retain good internal drainage. This feature makes them a preferred substrate for numerous reptiles and amphibians occurring within the region, particularly those with burying or burrowing tendencies such as the southern California legless lizard (*Anniella stebbinsi*), the California glossy snake (*Arizona elegans occidentalis*), Blainville's horned lizard (*Phrynosoma blainvillii*), the Gilbert skink (*Plestiodon gilberti*), and the western spadefoot (*Spea hammondi*).

Golf course operations may have rendered most of the site unsuitable for Blainville's Horned Lizard, but this is not true for other alluvium-dependent species, and for the California Glossy Snake in particular. During my site visit on July 27, 2023, I observed an Orange-throated Whiptail in the abandoned golf course. As described by Richmond et al. (2017:304):

We observed *A. e. occidentalis* [California Glossy Snake] in four of the five sampling sections, including some of the most disturbed parts of the valley. Many of the 23 observations were in old agricultural plots that have been plowed or graded within the two past decades, and two were in otherwise "disturbed" or "developed" habitat. This is consistent with the observations of Klauber (1946) on *A. e. occidentalis* more than 70 years ago, where individuals were often found in association with uncultivated grasslands or cultivated fields. This suggests that as long as there is a suitable matrix of sandy habitat and appropriate prey resources, *A. e. occidentalis* will occupy intervening or surrounding areas of lower habitat quality.

The California Glossy Snake is nocturnal, and the Southern California Legless Lizard lives underground, and so general wildlife surveys are inadequate to detect these species. Because the project site's loose, alluvial soil represents ideal habitat for these species, they must be assumed to be present in the absence of focused surveys demonstrating otherwise. Impacts to loose, alluvial soils required by the California Glossy Snake and Southern California Legless Lizard would be significant. The impacts would not be mitigated to less than significant by the proposed revegetation plan, even if the revegetation were to be successful, because the site's alluvial soils would have been removed.

The RDEIR mentions that a visual assessment for the Southwestern Pond Turtle (*Actinemys pallida*) was conducted in 2022, but provides no results of those surveys.

The MSCP Conformance Statement, like the EIR itself, cannot be based upon misclassified vegetation communities, inadequate survey information, and unfounded assumptions about the project's potential adverse effects.

### **Page 2: Mitigation does not address all potentially significant impacts**

The Conformance Statement states:

Mitigation measures are proposed to mitigate potentially significant impacts to special status species, sensitive vegetation communities/habitats, and compliance with local policies/ordinances. Implementation of these mitigation measures would mitigate potential impacts to below a level of significance.

The existing linkage/corridor is 850 to 1,700 feet wide, and the proposed project would narrow the corridor to "an average width of approximately 600 feet" with a bottleneck 350-400 feet wide at the western end of the project site. For reasons discussed in this letter, the substantial narrowing of the habitat linkage represents a potentially significant impact to wildlife movement, and to the functioning of the MSCP preserve system, that cannot be mitigated to below the level of significance.

Additionally, the proposed mitigation:

- Does not address the project's potentially significant impacts to the Glossy Snake or Southern California Legless Lizard, special-status species not mentioned in the RDEIR and for which surveys were not conducted.
- Does not effectively address potentially significant impacts to the Western Spadefoot, another species for which focused surveys were not conducted, because the impact/mitigation analysis focuses only on breeding pools and ignores aestivation habitat that is no less important to the species.
- Mentions surveys for the Southwestern Pond Turtle in 2022, but provides no results of those surveys.

- Assumes that proposed revegetation/reclamation will fully mitigate all significant impacts to wildlife movement and MSCP preserve design, even though the proposed actions will not address the reduction in width of the regional habitat linkage, and successful replanting of the site is not assured.

Finally, as discussed on page 38 of this letter, the report on the 2019 Arroyo Toad survey by Helix provides inadequate information to evaluate the adequacy of the survey, and no reassessment was made in 2023 after large areas of willow-riparian scrub naturally regenerated throughout the Sweetwater River channel. For these reasons, project implementation could result in significant impacts to this species that would not be mitigated to below a level of significance.

Until the site's 93.1 acres of Non-native Grasslands are correctly classified, and surveys are conducted that accurately establish the baseline ecological conditions on the project site in 2023, the County will not be able to substantiate the RDEIR's finding that all potentially significant impacts have been mitigated to below a level of significance.

#### **Page 4: Project is not "sited in areas to minimize impact to habitat"**

The project site is designated as a regional habitat linkage, and a BRCA, because it is an expansive area of Non-native Grassland and golf course punctuated with cottonwood trees that occupies an ecologically important position in the MSCP preserve system. By improperly redefining "habitat" to refer only to "riparian and other sensitive natural communities," and by misclassifying 93 acres of grasslands as disturbed areas, the County falsely portrays the project site as consisting of something other than "habitat."

To help understand the impropriety and inconsistency of the County's approach, consider the example of the California Glossy Snake. As discussed previously, this snake is an alluvium-dependent species that is rare and declining across the region due mainly to past and ongoing mining of the loose, sandy soils that comprise the most important feature of its required **habitat**. Because the RDEIR fails to mention the California Glossy Snake, however, the Conformance Statement fails to make the connection that removing the loose sand from more than three-quarters of the project site represents a massive impact to the required **habitat** of this special-status species. The project has not been sited to minimize impacts to this important **habitat**, and because the RDEIR is incomplete and inadequate, decision-makers have no way of knowing this.

The project site provides **habitat** for many other species, such as for foraging raptors, but by improperly redefining "habitat" to exclude the great majority of the project site—a regional habitat linkage and BRCA—the County falsely asserts that "project development has been sited in areas to minimize impact to habitat."

**Page 7: MSCP requires that the proposed project “preserve the biological integrity of linkages between BRCAs.”**

In a document dated May 19, 2019, commenting on the application for a Major Use Permit for the proposed project, the County Planning & Development Services stated the following on page 77:

The project **contains nearly the entire habitat linkage** between the McGinty Mountain/Sequan Peak-Dehesa Biological Resource Core Area (BRCA) and the Sweetwater Reservoir/San Miguel Mountain BRCA. **Analysis of potential project impacts to wildlife movement through this linkage will be required and BMO findings will need to be made prior to project approval.** [emphasis added in bold]

Despite the project site occupying a critically important location in the assembled MSCP preserve system, and the County’s self-stated requirement to analyze potential impacts to wildlife movement, the original DEIR provided no observation-based information on the movement of wildlife through the site. Even with no information to evaluate, the original DEIR found the project to have no significant impacts to wildlife movement, and the Conformance Statement found the project to be consistent with the MSCP. The letter from CDFW commenting on the original DEIR failed to mention this lack of observational data, but I raised the issue several times in my comments.

To address the complete lack of data on wildlife movement through the project site, in 2022 the County retained Helix to undertake a bare-bones wildlife movement analysis. A valid study of wildlife movement would explain the rationale for the study design, present all of the results in an organized manner, analyze the results, and discuss the potential implications and the limitations of the information gathered. Burton et al. (2015:676) described numerous important considerations for camera trap studies:

While the adoption of new survey technologies such as camera trapping can open avenues for novel insights, it could convey a false sense of progress if data collection outpaces rigorous sampling designs and statistical analyses (cf. Hebblewhite and Haydon 2010). Although CTs [Camera Traps] show great promise for facilitating standardized surveys, increasing knowledge on data-deficient species and capturing public attention, concerns about sub-standard applications and weak inferences have been raised (O’Connell, Nichols and Karanth 2011; Meek, Ballard & Fleming 2015). As with any wildlife survey methodology, CT surveys must address common sources of sampling error, particularly the problem of imperfect detection – where individuals or species present within a sampling area are not always detected (Anderson 2001; Williams, Nichols and Conroy 2002).

The wildlife movement study completed for the RDEIR addressed none of the important issues identified by Burton et al. (2015). The methods of Helix’s study are briefly outlined in a single paragraph on page 14 of the Biological Resources Technical Report. In summary:

- Three motion-detecting cameras were deployed at four locations each for a period of two to three weeks per deployment.

- Two deployments failed completely, leaving data from only ten deployments.

The results of Helix's study occupy a single paragraph on page 38 of the Biological Resources Technical Report. In summary, the cameras detected a variety of wildlife, including Coyotes, Bobcats on three different occasions, and a Long-tailed Weasel. The RDEIR does not provide so much as a table indicating which species were detected at which locations on which dates. The wildlife observations were not analyzed or placed in any context, and they had no effect upon the County's previous analysis of potential wildlife movement impacts.

The ineffective and inadequate wildlife movement study presented in the RDEIR raises more questions than answers. For example:

- Why did Helix not develop an explicit study-design rationale to determine the number of cameras that should be deployed, and during what time periods, to develop data that could be statistically analyzed as part of a legitimate analysis of the likely and potential impacts of the proposed actions?
- Instead of deploying three cameras between May 19 and July 22, why didn't the project biologists deploy additional cameras for a longer period, or during different times of year, when different terrestrial wildlife species may have been moving through the area, and to provide greater opportunity to capture data on species that may move through the area only occasionally?
- When two of the twelve the camera deployments failed and could not be used, why was this considered irrelevant to the study?

Given the lack of a study-design rationale, the minimal effort expended, the failure of 17% of the camera deployments, and the lack of detailed results or any kind of analysis, there was little chance of Helix's wildlife movement study affecting the predetermined impact analysis presented in the original DEIR. The RDEIR's revised discussion of wildlife movement removed the original DEIR's most obviously flawed and biased statements while leaving in place the initial findings and conclusions.

The DEIR's brief discussion of wildlife movement issues concludes on page 2.2-19 with the following passage:

Larger blocks of open space areas associated with the SDNWR occur further south between Steele Canyon Golf Club and Jamul that provide better access to resources and connectivity between preserved lands, open spaces areas, and pockets of undeveloped lands located to the east and west of the site. However, the presence of two major roadways, Campo Road and Jamul Drive, connecting these two communities could impede wildlife movement.

These confusing statements have nothing to do with wildlife movement through the project site.

The following points are relevant:

- The habitat linkage through the project site was identified in the MSCP Subarea Plan because, despite being occupied by two golf courses (one now abandoned), this is the only viable pathway for terrestrial and aquatic wildlife to move between the McGinty Mountain/Sycuan Peak-Dehesa BRCA and the Sweetwater Reservoir/San Miguel Mountain BRCA.
- Closure of the Lakes Course in 2017 increased the functioning of the wildlife linkage compared with when it was originally designated in the MSCP Subarea Plan, because the southwestern third of the project site is no longer manicured and human presence has been completely removed. As shown in photos 9, 10, 12, 13, 16, and 17 in this letter, willow-riparian vegetation has grown back in the main channel following the wet winter of 2022/2023, improving movement opportunities for wildlife. This RDEIR does not account for this important change in the existing conditions.
- The Ivanhoe Course, although still in use, represents a viable habitat linkage for use by terrestrial wildlife, most of which move at night, when human presence, lighting, and noise are minimal.
- Although the project biologists assert that this regional habitat linkage is of little value for wildlife, they collected only minimal wildlife movement data in support of this conclusion. Their study was not designed to provide adequate information upon which to base a legitimate impact analysis.

In the absence of adequate data from a properly designed study that studies the project site in its current condition, the assumption must be that a variety of terrestrial and aquatic wildlife species can and do utilize the project site for movement between the two BRCA's. Given the proposal to greatly narrow the existing linkage, the proposal to remove 6.4 million tons of material from 209.6 acres of the project site clearly would not "preserve the biological integrity" of this designated habitat linkage.

**Page 7: MSCP requires that the project "Achieve the conservation goals for covered species and habitats."**

The Conformance Statement claims that the "proposed project achieves the conservation goals" for covered species through implementation of various mitigation measures. Hydrologist Greg Kamman analyzed the DEIR and RDEIR and concluded that changes to project grades may alter the configuration of the low-flow channel that feeds into an existing stand of dense riparian habitat that was found to be occupied by Least Bell's Vireos during the most recent protocol surveys in 2019. Proposed removal of the high ground on the north side of the low-flow channel and creation of a wider equal-elevation floodplain upstream of the entrance to the riparian habitat has potential to redirect high flows into the floodplain north of the berm, which otherwise would have fed into

the riparian habitat area. The re-grading could also result in the existing low flow channel migrating northward and establishing a new alignment north of the berm. If this occurs, all the water deliveries conveyed by the low-flow channel would no longer feed into the existing riparian habitat area, with potential adverse impacts to this habitat due to reduced hydroperiod. This represents a potentially significant adverse effect to the mature riparian woodland vegetation and to the Least Bell's Vireo. This would represent a failure to achieve the MSCP's conservation goals for covered species and habitats, and would also violate Condition (f) of the BMO's exemption for sand and gravel operations ("Mature riparian woodland may not be destroyed or reduced in size due to sand, gravel and mineral extraction").

### **Pages 8-12: Project violates nine MSCP design criteria for linkages and corridors**

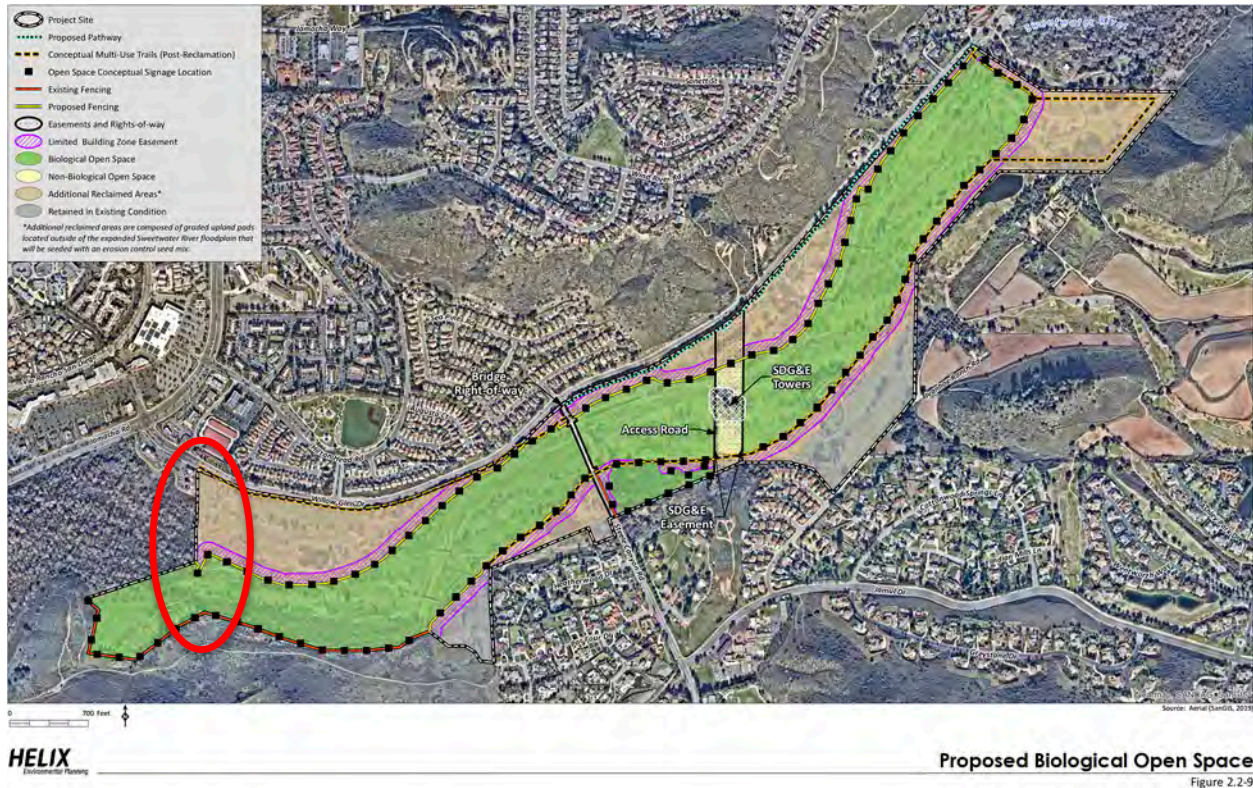
For project sites located within a regional linkage and/or that support one or more potential local corridors, the County must affirm that the proposed actions would not violate any of **11 numbered MSCP criteria** developed to protect the most important ecological values of regional linkages and movement corridors. **Nine of these design criteria are applicable to the project, and the proposed actions would violate all of them.**

#### **1. Habitat Linkages as defined by the BMO, rather than just Corridors, will be maintained.**

The Conformance Statement states:

As part of the reclamation process, the proposed project would substantially improve the condition of the existing linkage through widening of the Sweetwater River floodplain and planting of riparian habitat. A riparian corridor would be re-established throughout the site, which would encourage and facilitate wildlife movement within the region. Therefore, the project would ultimately conserve and enhance the functions and values of the habitat linkage in accordance with the MSCP and BMO.

**The 100-year floodplain is 850 to 1,700 feet wide through the site.** Throughout the RDEIR – *except in the Biological Resources section* – the term “floodplain” refers to the 100-year floodplain. In the Project Description, for example, page I-33 states, “The entire site also is subject to Special Area Designator F (Flood Plain), which prohibits placement of permanent structures for human habitation in a floodway.” Appendix O, the Drainage Study-Hydraulic Analysis, refers exclusively to the 100-year floodplain. There is no valid reason for the Biological Resources section to use a different definition of “floodplain” than is used in the rest of the RDEIR. **Implementation of the proposed actions would clearly reduce the width of the 100-year floodplain throughout the project site.** See Figure 2.2-9 in the RDEIR, reproduced on the next page as Figure 4



**Figure 4.** Reproduction of Figure 2.2-9 in the RDEIR, showing how project implementation would **reduce** the width of the existing habitat linkage through the project site. At the western end of the site, where the river channel empties into the SDNWR (red circle), the **1,050-foot-wide Linkage** would be diminished to a **400-foot-wide Corridor** in direct violation of Design Criterion 1.

As defined in Section 86.508(d) of the Biological Mitigation Ordinance (BMO):

“Corridor” is a specific route that is used for movement and migration of species. A corridor may be different from a “Linkage” because it represents **a smaller or more narrow avenue for movement**. [emphasis added in bold]

Project implementation would narrow the existing **Linkage** down to the width of a **Corridor**, in direct violation of Design Criterion 1.

**2. Existing movement corridors within linkages will be identified and maintained.**

**3. Corridors with good vegetative and/or topographic cover will be protected.**

To address these two criteria, the Conformance Statement states:

The site is currently an active golf course that lacks sufficient vegetative cover to conceal and encourage wildlife movement through the linkage. As part of the reclamation process, the proposed project would substantially improve the condition of the existing linkage through widening of the Sweetwater River floodplain and planting of riparian habitat. A riparian corridor would be re-established throughout the site, which would encourage and facilitate wildlife movement through the site.



And:

The site is currently an active golf course that lacks sufficient vegetative and topographic cover to conceal and encourage wildlife movement through the linkage. As part of the proposed reclamation, the project would increase topographic complexity of the site by establishing a widened Sweetwater River floodplain with bordering constructed slopes and elevated graded pads to the north and south. This would create topographic features more favorable to wildlife species movement along the linkage path. The project would also increase vegetative cover within the widened riparian corridor providing adequate coverage for wildlife species that would utilize the linkage.

The wildlife movement study conducted by the project biologists is inadequate to identify “existing movement corridors within linkages,” as required by Design Criterion 2. As discussed on pages 20–21 of this letter, the wildlife movement study conducted in 2022 was, by design, virtually incapable of changing the RDEIR’s predetermined finding that project implementation would improve opportunities for wildlife moving through the site.

The assertion that “The site is currently an active golf course” is factually incorrect and misleading. The western third of the site is an abandoned golf course with minimal human presence and a landscape that has been rewilding itself since 2017.

The statement that the site “lacks sufficient vegetative cover to conceal and encourage wildlife movement through the linkage” is not substantiated, especially since the extent of Southern Willow Scrub habitat in the Sweetwater River channel has greatly increased in 2023 (see photos 9, 10, 12, 13, 16, and 17 in this letter). The river channel passes through a floodplain 850 to 1,700 feet wide vegetated with a mix of grasses, trees, and shrubby thickets.

Based upon its width, mix of vegetation, lack of conspicuous human presence at night, and only limited/localized night-lighting, the project site appears to be conducive the nocturnal movement of wildlife between BRCAs that exist to the southwest and northeast of the site. The RDEIR fails to substantiate its claims that implementing the project will improve the site’s functionality as a BRCA and habitat linkage.

The proposed actions to “increase topographic complexity of the site by establishing a widened Sweetwater River floodplain with bordering constructed slopes and elevated graded pads to the north and south” would **constrict** the floodplain instead of expanding it, in violation of Design Criterion 1, and would decrease visual continuity in violation of Design Criterion 7.

**4. Regional linkages that accommodate travel for a wide range of wildlife species, especially those linkages that support resident populations of wildlife, will be selected.**

The Conformance Statement states:

The project site is located within an identified habitat linkage between the McGinty Mountain/Sycuan Peak-Dehesa BRCA and Sweetwater Reservoir/San Miguel Mountain BRCA, in

the South County MSCP. The site is currently an active golf course that lacks sufficient vegetative cover to conceal and encourage wildlife movement through the linkage. As part of the reclamation process, the proposed project would substantially improve the condition of the existing linkage through widening of the Sweetwater River floodplain and planting of riparian habitat. A riparian corridor would be re-established throughout the site, which would encourage and facilitate wildlife movement for a wide range of species through the site.

This response repeats false and misleading statements already addressed in these comments. The project site already does “accommodate travel for a wide range of wildlife species” and already does “support resident populations of wildlife.” For reasons discussed in this letter, and in the comments of hydrologist Greg Kamman, the RDEIR’s promises to improve the site by mining the sand, constricting the width of the linkage, and attempting to reclaim part of the site are speculative and unproven.

**5. The width of a linkage will be based on the biological information for the target species, the quality of the habitat within and adjacent to the corridor, topography, and adjacent land uses. Where there is limited topographic relief, the corridor must be well vegetated and adequately buffered from adjacent development.**

The Conformance Statement states:

As part of the project’s reclamation process, the Sweetwater River floodplain, which is currently disturbed, would be expanded throughout the entire length of the project site (approximately 10,040 linear feet). The channel and associated flood prone area, currently measuring between 35 and 120 feet wide, would be substantially expanded to an average width of approximately 250 to 300 feet. This additional width would be more consistent with both historical conditions on the site and current conditions downstream of the site. The expanded floodplain would be revegetated with riparian habitat resulting in a post-project condition that would restore wildlife linkage and corridor functions and is biologically superior to the existing condition. The established widened riparian corridor would re-establish connectivity between upstream and downstream areas by providing increased vegetative cover and access to higher quality resources which would promote and facilitate wildlife use and movement in the region and local area that is currently constrained by the existing golf course development. The project would ultimately contribute approximately 142.8 acres of preserved, rehabilitated, restored, and revegetated habitat to the linkage which will be placed within a biological open space easement.

The 100-year floodplain, which coincides with the MSCP-designated habitat linkage, measures between 850 and 1,700 feet wide. Rather than **expanding** the floodplain “to an average width of approximately 250 to 300 feet,” project implementation would **narrow** the floodplain by hundreds of feet.

The criterion states, “The width of a linkage will be based on the biological information for the target species,” but the project biologists have not identified “target species” or identified “biological information” upon which they have based their claim that the “minimum width” of the linkage can be greatly reduced.

To maintain a fully functioning MSCP preserve system, the linkage between the McGinty Mountain/Sycuan Peak-Dehesa BRCA and the Sweetwater Reservoir/San Miguel Mountain BRCA should be able to accommodate the movement of Mountain Lions

(Cougars). Researcher Paul Beier conducted extensive radiotelemetry studies of the movement of Mountain Lions through fragmented landscapes of southern California (Beier 1995). Following are some relevant points from Dr. Beier's research on dispersal of young male Cougars through corridors:

- "Cougars will disperse via habitat corridors in a landscape fragmented by urbanization, and some dispersers will use corridors containing un-natural features such as golf courses and major freeways."
- "Cougars frequently used dirt roads and trails. Where dense woody vegetation impedes cougar travel, a trail or dirt road running the length of the corridor can facilitate use by cougars and discourage travel into adjacent urban areas. Mock et al. (1992) found that all functional wildlife corridors in urban San Diego County, California, had a path, drainage, railroad, or other linear feature, and speculated that these features helped guide animals through the corridor."
- "Some native woody vegetation should be present to provide visual cover. I observed cougars move >400 m across unlit open terrain when the surrounding areas were in native woody vegetation, but they did not cross this span of open terrain with urban areas nearby on either side."
- "If disturbance level, cover, and the other factors discussed above are suitable, I suggest that a corridor designed for use by cougars should be >100 m wide if the total distance to be spanned is <800 m, **and >400 m wide for distances of 1-7 km.** To the extent that other factors are suboptimal, and as the corridor length increases, corridor width should be increased." [emphasis added in bold]

Dr. Beier's study points to a need for a linkage/corridor roughly 400 meters (1,312 feet) wide in this location, which is comparable to the existing linkage/corridor width of approximately 259 to 518 meters (850 to 1,700 feet). His research suggests that the proposed reduction of the width of the linkage/corridor – to an average width of approximately 600 feet (183 meters) and as narrow as 350 to 400 feet (107 to 122 meters) at the western end of the project, where it interfaces with the SDNWR – would substantially reduce or possibly even eliminate the potential for Mountain Lions to move between Sweetwater Reservoir and McGinty Mountain.

Because the project biologists did not provide the required "biological information for the target species," and because the proposed actions would reduce the width of the existing habitat linkage to far below that recommended for Mountain Lions in the peer-reviewed literature, the project would not conform to Design Criterion 5.

**6. If a corridor is relatively long, it must be wide enough for animals to hide in during the day. Generally, wide linkages are better than narrow ones. If narrow corridors are unavoidable, they should be relatively short. If the minimum width of a corridor is 400 feet, it should be no longer than 500 feet. A width of greater than 1,000 feet is recommended for large mammals and birds. Corridors for bobcats, deer, and other large animals should reach rim-to-rim along drainages, especially if the topography is steep.**

The Conformance Statement states:

The project would not narrow the existing wildlife linkage width. The proposed post-reclamation condition of the site would consist of an expanded Sweetwater River floodplain that would be restored and revegetated with wetland/riparian habitat. Graded slopes would be created on either side of the channel and planted with coastal sage scrub. This would increase the width of the existing linkage and restore available vegetative cover that would encourage and adequately conceal wildlife movement within the area. The preserved, rehabilitated, restored, and revegetated riparian habitat along Sweetwater River would be conserved within a biological open space easement that directly abuts existing riparian habitat to the west located within the San Diego National Wildlife Refuge (SDNWR). The biological open space would follow the path of the river across the entire site, extending approximately 10,040 feet from end to end, with an average width of approximately 600 feet. The project does not propose any additional development following reclamation of the site, though select areas outside of the biological opens space would be available for land uses allowed by the existing land use designation and zoning classifications.

This response states, "The project would not narrow the existing wildlife linkage width," but clearly it would. See Figure 4 on page 24 of this letter. Only by redefining "floodplain" to mean something other than its common meaning, and the meaning used throughout the rest of the RDEIR, is the County able to claim that the project would result in "an expanded Sweetwater River floodplain."

Design Criterion 6 posits, "Generally, wide linkages are better than narrow ones." Project implementation would narrow the existing habitat linkage by hundreds of feet.

Design Criterion 6 posits, "If narrow corridors are unavoidable, they should be relatively short." The linkage/corridor is approximately 1.8 miles (3 km) long, and a narrow corridor is not "unavoidable."

Design Criterion 6 posits, "A width of greater than 1,000 feet is recommended for large mammals and birds." The existing linkage is 850 to 1,700 feet wide. The proposed project would substantially narrow the linkage, to an average width of 450 to 720 feet, with a bottleneck 350-400 feet wide at the western end of the project site. Furthermore, the areas proposed to be graded and not preserved as natural open space must be expected to be subject to future development, which would further degrade the site's function as a regional habitat linkage.

For these reasons, the proposed project clearly violates Design Criterion 6.

**7. Visual continuity (i.e., long lines-of-site) will be provided within movement corridors. This makes it more likely that animals will keep moving through it. Developments along the rim of a canyon used as a corridor should be set back from the canyon rim and screened to minimize their visual impact.**

The Conformance Statement states:

The project would not impair visual continuity within corridors or linkages within the local area. The site is currently an active golf course that lacks sufficient vegetative cover to conceal and encourage wildlife movement through the linkage. The proposed project would predominantly result in impacts to disturbed and developed areas associated with the golf course development; only 1.63 acres of the 209.63 acres of the onsite impacts would occur to native or sensitive habitats. These impacts would occur in 20- to 30-acre subphases across the site, rather than the entire project footprint impacted concurrently, during mining and reclamation activities leaving other portions of the site either undisturbed or in the five-year restoration and revegetation monitoring period and accessible for foraging. Reclamation of the site would include widening of the Sweetwater River floodplain and planting the area with native wetland/riparian habitat, first occurring adjacent to existing riparian habitat along the Sweetwater River channel in the western portion of the site. As mining activities progress eastward and reclamation is completed, active revegetation areas would provide a buffer between later extraction areas and existing riparian habitat off-site improving visual continuity within the linkage.

Contrary to these statements:

- Proposed grading would substantially increase the site's topographic complexity, thus reducing visual continuity.
- If the proposed riparian plantings were to become successfully established, this would further reduce visual continuity.
- The 209.6 acres of habitat that the DEIR and Conformance Statement write off as "disturbed and developed areas" consist of grassy areas interspersed with shrubby thickets, extensive stands of Southern Willow Scrub in the river channel, and hundreds of large cottonwood trees. The project biologists have not collected adequate wildlife movement data to substantiate their claim that the project site is not fulfilling its role as a designated habitat linkage between nearby BRCA's.
- Project implementation would narrow the floodplain, not widen it.
- The statement that "active revegetation areas would provide a buffer between later extraction areas and existing riparian habitat off-site improving visual continuity within the linkage" makes no sense. If riparian habitat were to be successfully revegetated, as promised, the resulting growth of willows and other dense riparian vegetation would inhibit visual continuity within the linkage.

Because the proposed actions would **reduce** visual continuity (long lines-of-site), the County has no basis for finding the project in conformance with Design Criterion 7.

**8. Corridors with low levels of human disturbance, especially at night, will be selected. This includes maintaining low noise levels and limiting artificial lighting.**

The Conformance Statement states:

The project occurs along the path of a constrained linkage that is already subjected to noise and nighttime lighting impacts associated with operation of the Cottonwood Golf Club. The reach of river traversing the site currently has low function as a wildlife corridor as it is narrow, lacks suitable vegetative cover, and is adjacent to developed golf course operations. Large portions of the project site are fenced, further impeding wildlife access across the site.

The RDEIR provides no evidence that the project site is either especially noisy or heavily lit at night, or that fencing actually impedes the movement of wildlife through the site. The general lack of night lighting and potential sources of nocturnal noise both appear to increase the site's value as a designated habitat linkage/movement corridor in the existing condition. The proposed sand mining operation would have massive noise impacts during the day for at least ten years, and lighting of the site would also increase, at least for the duration of mining operations.

The large graded pads that would be built as part of the project, for which the end use is undetermined, may ultimately be lit at night. The RDEIR must provide a comparison between the existing and potential future lighting conditions on the site, both during mining operations and after reclamation.

The areas proposed to be graded and not preserved as natural open space should be expected to be subject to future development, with additional night-lighting, further degrading the site's function as a regional habitat linkage.

Because the proposed actions would increase both lighting and noise in the habitat linkage – definitely in the short term and possibly in the long term – the County has no basis for finding the project in conformance with Design Criterion 8.

**9. Barriers, such as roads, will be minimized.**

The Conformance Statement states:

The project would not include the construction or placement of barriers in any wildlife movement paths. Currently, Steele Canyon Road crosses the site north to south bisecting the entirety of the east-west linkage; therefore, species that are currently accessing the project site and crossing below the road will continue to be able to do so following project implementation. No additional road crossings are proposed as part of the project.

Project implementation involves installing 20-foot-high bands of grouted riprap as grade-control structures across 1.74 acres of the floodplain. Two of these bands would span nearly the entire width of the post-project floodplain, one at the eastern edge of the project site and the other just west of the Steel Canyon Road bridge, and the third would be constructed across the mouth of Mexican Canyon. These bands of new hardscape pose a barrier to movement of some types of wildlife through the habitat

linkage/movement corridor, which currently has no such barriers. The RDEIR must analyze all potential effects of installing these massive riprap structures on the movement of various forms of wildlife through the project site.

Because the RDEIR fails to recognize these hardscaped grade-control structures as potential barriers to wildlife movement, provides no analysis of their potential effects on the functionality of the existing linkage/corridor, and provides no mitigation for any potential adverse effects to wildlife movement, the County has no basis for finding the project in conformance with Design Criterion 9.

**CONCLUSION: A project in a designated habitat linkage that violates all applicable MSCP design criteria would not only fail to conform to the MSCP but could also render the MSCP inoperable moving forward.**

The County's BMO contains design criteria and mitigation standards that, when applied to projects requiring discretionary permits, protect habitats and species and ensure that a project does not preclude the viability of the MSCP preserve system. The BMO identifies 11 design criteria for linkages and corridors, providing multiple lines of defense against any action that would erode the ecological integrity of the MSCP preserve system. Of the 11 design criteria, nine are applicable to the proposed project, and the proposed project violates all nine design criteria.

A project located within an MSCP-designated habitat linkage that violates design criteria for linkages and corridors cannot be found to conform to the MSCP Subarea Plan, the BMO, or the Implementation Agreement between the County, the California Department of Fish and Wildlife (CDFW), and the US Fish and Wildlife Service (USFWS). In this case, because the biological investigations undertaken for the RDEIR are inadequate and unresponsive to specific MSCP planning requirements, the County and the project biologists cannot point to data from a carefully designed and implemented study of wildlife movement, or any other relevant data or analyses, upon which to credibly claim conformance with any of the applicable BMO design criteria.

Preserving the function of habitat linkages and movement corridors is a fundamental tenet of MSCP preserve design in a fragmented landscape. County approval of a project within an MSCP-designated linkage/corridor that violates several design criteria would signal that all of that these carefully crafted requirements can be waved away without so much as a well-designed study of wildlife movement. Such an approval would completely undercut the MSCP as a predictable, credible, and hence coherent approach to regional planning.

### **Pages 12-15: Project violates Subarea Plan Findings**

The RDEIR provides inadequate basis for the County to conclude that the project conforms to all applicable findings of the County Subarea Plan. As detailed below, the proposed actions would violate Findings 9 and 11.

**9. No project shall be approved which will jeopardize the possible or probable assembly of a preserve system within the Subarea Plan.**

The Conformance Statement states:

The proposed project will not jeopardize the preserve system assembly within the Subarea Plan. The proposed project will contribute to preserve assembly by adding 142.8 acres to the preserve that will be managed through an RMP.

The assembly, and ultimately the functioning, of the MSCP preserve system depends upon the County, USFWS, and CDFW working together to ensure that any action proposed within a designated habitat linkage be consistent with the MSCP's specified design criteria for linkages and corridors. County certification of the EIR for this proposed mining project, which violates multiple linkage/corridor design criteria, would clearly jeopardize the assembly of a functioning preserve system. The jeopardy would arise not only from degradation of this one designated linkage/corridor, **but from establishing precedent that any or all of the MSCP design criteria can be completely ignored when proposing impacts within designated regional habitat linkages.** The County, therefore, has no basis for finding that approval of this non-conforming project would *not* jeopardize the possible or probable assembly of a preserve system within the Subarea Plan.

**11. Every effort has been made to avoid impacts to BRCAs, to sensitive resources, and to specific sensitive species as defined in the BMO.**

The Conformance Statement states:

The proposed project has made every effort to avoid impacts to BRCAs, sensitive resources, and sensitive species as defined in the BMO. Since the proposed project site is located within a BRCA and supports many sensitive resources, the impact footprint was concentrated within disturbed habitat and developed lands, associated with the existing golf course, minimizing impacts to sensitive resources. The proposed project does not contain covered plant species. However, the proposed project provides for the conservation of habitat for covered wildlife species including Belding's orange-throated whiptail, coastal California gnatcatcher, Cooper's hawk, least Bell's vireo, peregrine falcon, and western bluebird. Following mining activities, the site would be reclaimed and revegetated, as described in the Reclamation Plan, Revegetation Plan, and Wetland Mitigation Plan. The revegetated area, including 142.8 acres, would be preserved within an open space easement. The proposed open space will be protected by a recorded conservation easement, fencing, and signage, and will be managed and monitored in perpetuity by an approved conservancy following an approved RMP, funded by a non-wasting endowment. The proposed project is consistent with the goals of the MSCP.

The Conformance Statement provides no evidence or legitimate line of reasoning in support of its finding that the project makes "every effort to avoid impacts to BRCAs, sensitive resources, and sensitive species as defined in the BMO." Rather, the project proposes to aggressively mine for aggregate across more than three-quarters of the site (211.9 acres of 276.6 acres), with impacts to another 4.8 acres off-site.



The project site was designated as a regional linkage/corridor, and hence a BRCA, not because it supports an abundance of sensitive natural communities, but because (a) it occupies an extremely important position between two larger BRCA's, and (b) despite having been developed for golf course use, the site has many important characteristics of a valuable linkage/corridor, including:

- The existing width of 850 to 1,700 feet is comparable to the minimum habitat width recommended for use by Mountain Lions (Beier 1995).
- The linkage consists of extensive grassy areas interspersed with shrubby thickets, extensive stands of Southern Willow Scrub in the river channel, and hundreds of large cottonwood trees.
- Lighting, noise, and human presence are all minimal at night, when most terrestrial wildlife movement takes place.

As described in this letter, the proposed actions would substantially narrow the habitat linkage. CEQA requires a complete description of the project setting and a legitimate analysis of all potentially significant adverse effects of the project. By contrast, the RDEIR (a) misclassifies 93.1 acres of Tier III Non-native Grasslands as Disturbed Habitat; (b) misclassifies several acres of Southern Willow Scrub as Disturbed Wetland; (c) provides inadequate information about the current functioning of the existing habitat linkage; and (d) provides no information regarding the abundance or distribution of several special-status species with high potential to occur within the site's alluvial soils. The project biologists, having collected only fragmentary baseline information, are unable to acknowledge and analyze all of the project's potential impacts. Instead, the RDEIR glosses over major aspects of the impact analysis while repeatedly assuring readers that the habitat linkage will be greatly improved at the end of the long mining and reclamation process. CEQA does not, however, allow the lead agency to provide an incomplete baseline that feeds into an inadequate impact analysis.

For reasons identified in Greg Kamman's detailed hydrological analysis (comments on DEIR dated February 24, 2022; comments on RDEIR dated August 11, 2023), the ultimate success of the promised revegetation of the narrowed linkage is far from assured.

The Conformance Statement asserts, "the impact footprint was concentrated within disturbed habitat and developed lands, associated with the existing golf course, minimizing impacts to sensitive resources," but the putative Disturbed Habitat is accurately classified as Non-native Grassland, a Tier III MSCP sensitive community. Several acres of Disturbed Wetland are accurately classified as Southern Willow Scrub, a Tier I MSCP sensitive community; see pages 10-16 of this letter. The project site represents the only viable conduit for terrestrial and aquatic species moving between the McGinty Mountain/Sequan Peak-Dehesa BRCA and the Sweetwater Reservoir/San Miguel Mountain BRCA, and yet the County did not require the Applicant to conduct an adequate study of the existing pattern of wildlife movement through the site—i.e., a study designed to

yield results robust enough to be analyzed in a way that would credibly substantiate the CEQA impact analysis. Therefore, the County has inadequate information upon which to base its determination that most of the site can be aggressively mined, and the width of the habitat linkage substantially narrowed, while maintaining function of the linkage/corridor.

As discussed in this letter, the project biologists failed to report that the site's extensive areas of loose, alluvial soil provide high quality habitat for special-status species that are not covered under the MSCP and that have been greatly impacted by sand mining operations across the region. The California Glossy Snake, Southern California Legless Lizard, and Western Spadefoot all have high potential to occur on the site, and would experience significant adverse effects from the proposed actions, but no surveys were conducted to determine their presence or absence, abundance, or distribution across the site. Of these species, only the Western Spadefoot is so much as mentioned in the DEIR. Given their high potential for occurrence, and the lack of necessary survey information, the County must acknowledge potentially significant impacts to each of these special-status species. The County must take all feasible measures to reduce impacts to these species to below the level of significance.

Because the RDEIR fails to provide adequate, objective, and credible information demonstrating that the proposed sand mining project would minimize impacts to BRCAs, sensitive resources, and special-status species, the County has no basis for finding that the proposed actions conform to the Subarea Plan Findings.

## **REVIEW OF THE RDEIR'S CEQA IMPACT ANALYSIS**

As reviewed on pages 3–16 of this letter, the RDEIR fundamentally misrepresents the site's plant communities; provides inadequate information on the status and distribution of special-status species on the site; and does not incorporate the results of an adequate study of wildlife movement designed to meaningfully inform the RDEIR's CEQA impact analysis.

As reviewed on pages 16–34 of this letter, the RDEIR claims that the project conforms to the requirements of the MSCP but fails to substantiate these claims with adequate survey data, accurate representation of the site's resources, and incorporation of relevant scientific information from the peer-reviewed literature.

The RDEIR's incomplete and inaccurate accounting of the existing conditions leads to a fatally flawed impact analysis.

### ***Significant Impacts to Non-native Grassland***

As discussed on pages 3–9 of this letter, the RDEIR misclassifies 93.1 acres of Non-native Grassland, a Tier III MCSP natural community, as Disturbed Habitat. Thus, project implementation would entail significant impacts to 93.1 acres of Non-native Grassland.

### ***Significant Impacts to Southern Willow Scrub***

As discussed on page 3–10 of this letter, the RDEIR misclassifies several acres of Southern Willow Scrub as Disturbed Wetland. Both are Tier I MSCP natural communities. Project implementation would entail significant impacts to several acres of Southern Willow Scrub habitat that are not acknowledged in the RDEIR.

### ***Potential Significant Impacts to Special-status Species for Which Adequate Surveys Were Not Conducted***

As discussed on pages 3–4 of this letter, the project biologists failed to report that the site’s extensive areas of loose, alluvial soil provide high quality habitat for special-status species that are not covered under the MSCP and that have been greatly impacted by sand mining operations across the region. The California Glossy Snake and Southern California Legless Lizard have high potential to occur on the site, and would experience significant adverse effects from the proposed actions, but no surveys were conducted to determine their presence or absence, abundance or distribution across the site. Given their high potential for occurrence, and the lack of necessary survey information, the RDEIR must acknowledge potentially significant impacts to each of these special-status species. The County must take all feasible measures, including compensatory mitigation, to reduce impacts to these species to below the level of significance.

### ***Western Spadefoot Impact Analysis is Inadequate and Self-contradictory***

The Western Spadefoot, a California Species of Special Concern, is not a “covered” species under the MSCP. Because this toad is not uniformly distributed among the MSCP covered habitats (grassland, coastal sage scrub, etc.) but instead is sporadically distributed in association with certain seasonal pools adjacent to suitable upland aestivation habitats, the MSCP does not provide mitigation via the habitat tier mitigation ratios. An adequate site-specific CEQA analysis is required independent of the MSCP.

### **Western Spadefoot status and distribution on the site**

CEQA impact analysis requires adequate information about the species’ abundance and distribution on the project site. In this case, because no focused study was undertaken, the project biologists have no information on the species’ occurrence on the project site. Nevertheless, the project biologists identify a “high potential” for Western Spadefoots to occur on the site. For the species to occur on the site, it is necessary that both aquatic and upland habitats be occupied, since spadefoots are aquatic only during the breeding season.

### **Western Spadefoot life history and ecological requirements**

An adequate CEQA impact analysis must consider all of the species’ relevant natural history and habitat requirements. Page 2.2-33 of the DEIR identifies impacts to “0.50 acre of disturbed wetland, 0.32 acre of southern cottonwood-willow riparian forest, and

3.5 acres of constructed ponds with potential to support the species.” **This analysis accounts for only a fraction of the species’ natural history requirements.**

A recently published telemetry study of Western Spadefoots in southern California provides important current information on the species’ life history and ecological requirements (Halstead et al. 2021), following on earlier telemetry studies in the same region (Baumberger 2013, Baumberger et al. 2019).

**Western Spadefoots spend large parts of the year aestivating underground, often far away from their breeding ponds.** As observed by Halstead et al. (2021:1385):

The distance that western spadefoots move from breeding pools is a key metric for western spadefoot conservation. Distance from the breeding pool indicates how much terrestrial habitat around a breeding pool might be used by western spadefoots, and provides a direct link to the effective reserve sizes needed to preserve western spadefoot populations.

...

The need for core terrestrial habitats around amphibian breeding sites is documented (Semlitsch 1998, Semlitsch and Jensen 2001, Semlitsch and Bodie 2003, Harper et al. 2008, Searcy et al. 2013), as are the negative consequences of roads separating adult habitat from breeding pools (Becker et al. 2007, Brehme et al. 2018). Ensuring that enough terrestrial habitat exists to provide the life cycle needs for western spadefoots is best measured by the predictive distribution of distance from breeding pools. The 95th percentile of the posterior predictive distribution for western spadefoot asymptotic distance from the breeding pool was **486 m** at Crystal Cove. This predicted value encompassed the maximum distance from the breeding pool of all but 1 of the spadefoots at the site. [emphasis added in bold]

Baumberger et al. (2019:6) found:

The maximum distance the spadefoots were found from the pools **ranged from 16 to 262 m (Table 1, S1 Table), with a mean maximum distance of 69 m ± 61.48.** The spadefoots used a mean of 13 burrows (SD ± 8.5), and the mean distance between burrow locations was 18 m (SD ± 24.2). They used 4–31 unique burrow sites (mean 11 ± 7.8) during the study. Nine of the 15 spadefoots (60%) reused one or more burrows at least once after moving to a different burrow. Outside of their aestivation period, the spadefoots shifted their burrow location an average of every 8 ± 7 days, and 147 of 194 (~76%) movements between burrows were ≤ 25 m. [emphasis added in bold]

In order to mitigate potential adverse effects associated with development upon Western Spadefoots, and to accommodate the movement of the toads between breeding ponds and upland aestivation sites, the USGS (Rochester et al. 2017) recommended that the City of Santee protect an **undeveloped buffer measuring 300 to 400 meters** around Western Spadefoot breeding ponds. This range is consistent with conservation recommendations for the Western Spadefoot contained in the *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon* (US Fish and Wildlife Service 2005:II-231):

Based on calculations from upland habitat use data analyzed by Semlitsch and Brodie (2003), a minimum conservation area to preserve the ecological processes required for the conservation of amphibians may fall within a distance of approximately 368 meters (1,207 feet) from suitable breeding wetlands.

In light of the Western Spadefoot's extensive requirements for upland aestivation sites away from their aquatic breeding habitats, the project's impacts to this species necessarily extend far beyond the "0.50 acre of disturbed wetland, 0.32 acre of southern cottonwood-willow riparian forest, and 3.5 acres of constructed ponds with potential to support the species." Furthermore, Western Spadefoots regularly breed in ephemeral ponds, such as those that form on dirt roads. Because the project biologists made no effort to map the extent of ephemeral ponds on the site, the RDEIR provides no reliable information on the actual extent of aquatic breeding habitat on the site.

Because the RDEIR's analysis of potential impacts to the Western Spadefoot (1) is not based on a study to determine the species' status and distribution on the site, and (2) does not reflect the species' known life history and ecological requirements, the analysis is inadequate under CEQA.

Page 2.2-33 of the DEIR states, "Temporal loss of potential habitat during mining and reclamation activities would not affect the local long-term survival of this species." Since the DEIR's analysis of the nature and extent of potential impacts fails to account for all of the potential impacts, the RDEIR provides no factual basis for this conclusion.

Page 2.2-33 of the RDEIR concludes, "Following reclamation, the project would provide additional, higher quality habitat for the species through revegetation and restoration of the expanded Sweetwater River floodplain." This superficial analysis fails to account for the Western Spadefoot's requirement for alluvial upland aestivation habitat away from its aquatic breeding sites. Because the purpose of the project is to remove the alluvium that makes the uplands suitable as aestivation habitat, the RDEIR has no basis for claiming that the project would "provide additional, higher quality habitat for the species."

For all of these reasons, the DEIR's analysis of potential impacts to the Western Spadefoot is inadequate. The project's significant impacts to the species are not limited to only a small area of aquatic breeding habitat, but must also account for the much larger areas of alluvial uplands required for aestivation. In the absence of focused survey data showing the actual extent of ephemeral breeding ponds, and occupied alluvial uplands, the project biologists should base their impact analysis on the known life history of the species, as reported in the scientific literature. That is to say, all of the site's Non-native Grasslands should be assumed to be occupied by aestivating Western Spadefoots.

To address the project's potentially significant impacts to the Western Spadefoot, the RDEIR identifies Mitigation Measure M-BIO-10:

If western spadefoot toads, tadpoles, or egg masses are identified within the proposed impact area(s), the following measures shall be implemented: (1) A suitable relocation site(s) outside the proposed impact area(s) shall be identified by a qualified biologist. The relocation site(s) shall be located a minimum of 50 feet outside of the proposed impact area(s), or 100 feet if available, and shall be approved by CDFW; (2) All western spadefoot adults, tadpoles, and egg masses encountered in the proposed impact area(s) shall be collected and released in the identified relocation site(s); (3) The relocation site(s) shall be monitored annually for five years during and immediately following peak breeding season (late winter to March), such that

surveys can be conducted for adults as well as for egg masses and tadpoles. The results of annual monitoring shall be provided to CDFW in an annual report.

This mitigation measure was not included in the original DEIR, but was recommended on page 8 of CDFW's letter dated February 28, 2022, commenting on the original DEIR. Moving toads, tadpoles, and egg masses from breeding pools to an off-site area does not account for the dozens of acres of required aestivation habitat that would be removed for project implementation. For this reason, implementation of Mitigation Measure M-BIO-10 would not reduce the project's potential impacts to the Western Spadefoot to a less-than-significant level.

The RDEIR's treatment of Western Spadefoot illustrates the document's fundamental incoherence and unreliability. Western Spadefoots are typically associated with grasslands, and do not aestivate in Disturbed Habitat, so the species would not have a "high potential" to occur on the site if the abandoned golf course actually fit the description of Disturbed Habitat. This is but one more line of evidence that the abandoned golf course is vegetated with Non-native Grassland and not Disturbed Habitat.

### ***RDEIR's Arroyo Toad Findings Based on Inadequate Information***

The project site was identified as critical habitat for the Arroyo Toad because it contains the primary constituent elements of suitable habitat for this endangered species. Page 2.2-52 of the RDEIR identifies no significant impacts to the Arroyo Toad based upon lack of observations during protocol surveys conducted in 2019. The 2019 survey provided inadequate information to evaluate the adequacy of that survey (e.g., no description of relevant site conditions; no photos of site conditions; no indication of survey routes; no list of amphibians detected). Also endangered species surveys are normally considered valid for one year, so a four-year-old study is outdated. Furthermore, updated surveys clearly should have been completed in 2023, after large areas of Southern Willow Scrub habitat regenerated throughout the Sweetwater River channel, greatly increasing the area of suitable Arroyo Toad habitat. In all of these ways, the RDEIR misrepresents the project's potentially significant impacts to the Arroyo Toad.

### ***Unsupported Analysis of Potential Impacts to Raptor Foraging Habitat***

Page 2.2-53 of the RDEIR states:

The Project site consists of an active and abandoned golf course, which has historically been subjected to frequent human visitation and ongoing disturbances related to golf course operations, such as regular mowing, irrigation, and pest management. In its current state, the Project site provides relatively low- to moderate- quality foraging opportunities for common raptors that are resident and migratory to the region. Although the Project site provides some function and value for raptor foraging, it has been a golf course for decades and has likely not functioned as a local or regional foraging resource of importance for raptors considering that species observed within the Project site are known to be tolerant to urbanization and other disturbances. Other more expansive areas occur in the local area and region that provide foraging habitat, such as the SDNWR to the south and west, and McGinty Mountain Ecological Reserve to the east.

As shown in the photos on pages 6–10 of this letter, the project site consists of large areas of Non-native Grassland and turf, along with riparian woodlands and many large cottonwood trees. The area appears to be valuable to foraging raptors. This is especially true for the southwestern third of the project site, which has been closed to most human activity since course since 2017. Project biologists recorded seven raptors on the site: Turkey Vulture, Cooper’s Hawk, Red-tailed Hawk, Red-shouldered Hawk, Barn Owl, American Kestrel, and Peregrine Falcon. Nevertheless, without conducting a raptor foraging study or any kind of detailed analysis, the project biologists conclude “the Project site has likely not functioned as a local or regional foraging resource of importance for raptors and would provide low quality foraging habitat in its current state.” In the absence of a study or credible analysis supporting the DEIR’s finding of no significant impact, the EIR should acknowledge potentially significant impacts to raptor foraging habitat. The EIR should identify potentially significant impacts to raptor foraging habitat and provide appropriate compensatory mitigation.

### ***Flawed Analysis of Regional Wildlife Corridors and Linkages***

The DEIR’s impact analysis, on page 2.2-67, justifies its finding of no significant impact by claiming, “The Project would conform to the goals and requirements of the County Subarea MSCP and BMO, including effects on habitat linkages and wildlife corridors.” Pages 16–34 of this letter detail the many ways that the proposed action would violate the goals and requirements of the Subarea MSCP and BMO, and which undermine the RDEIR’s finding that project actions would not result in significant impacts to regional wildlife corridors and linkages.

### ***Inadequate discussion of indirect effects***

The RDEIR’s analysis of this topic is on page 2.2-68. The first paragraph states:

The Project occurs along the path of a constrained linkage that is already subjected to noise and nighttime lighting impacts associated with operation of the Cottonwood Golf Club. The reach of river traversing the Project site currently has low function as a wildlife corridor as it is narrow, lacks suitable vegetative cover, and is adjacent to developed golf course operations.

The RDEIR provides no information on the existing levels of noise and night-lighting in different parts of the project site. During my field visit on February 10, 2022, I saw very few lights around the project site, and no reason to expect that the site would experience much noise at night, when most terrestrial wildlife movement takes place. Furthermore, since an adequate study of wildlife movement was not conducted, the assertion that “the Project site currently has low function as a wildlife corridor” is inadequately supported and speculative.

The second paragraph states:

Construction-related noise generated from mining and reclamation activities could temporarily impact wildlife. Mining operations and reclamation activities would require the daily use of heavy equipment that would elevate existing noise levels on site. Wildlife may be

temporarily displaced from or avoid the Project site during construction activities but would be expected to return to the area was activities have ceased.

The RDEIR should specify the noise levels expected from project operations and evaluate them against the published literature on noise impacts to different wildlife species known to occur in the local area.

The second paragraph also states:

Larger wildlife species, such as mule deer or bobcat, would already be discouraged from utilizing the Project site based on results of biological surveys and wildlife camera surveys, current golf course activity and current golf course activity and lack of vegetative cover along the Sweetwater River.

As discussed in these comments, the project biologists conducted only a brief and superficial study of wildlife movement through the site. The study design that was not adequate to draw broad conclusions about the movement of species like Mountain Lion, which may move through a linkage only occasionally. Furthermore, the RDEIR fails to acknowledge that project implementation would decrease the suitability of the resulting habitat linkage for Mountain Lions (*cf.* Beier 1995).

### ***Erroneous and Misleading Analysis of Habitat Linkage Width, Barriers***

Page 2.2-68 erroneously states “The Project would not further constrain existing corridors or linkages in the local area.” Page 2.2-69 erroneously states, “The Project would not narrow the existing wildlife linkage width.” As reviewed in this letter, the project would reduce the existing MSCP-designated habitat linkage from its current width of 850 to 1,700 feet to a width of approximately 450 to 720 feet.

Page 2.2-69 erroneously states, “only 2.34 acres (1.1 percent) of the 211.94 acres of the on-site impacts would occur to native or sensitive habitats.” The project would impact much more than 2.34 acres of native or sensitive habitats, as the project biologists have misclassified 93.1 acres of Tier III Non-native Grasslands as Disturbed Habitat and misclassified several acres of Tier I Southern Willow Scrub as Disturbed Wetlands.

Page 2.2-69 erroneously states, “The project would not include the construction or placement of barriers in any wildlife movement paths.” The topic of placing barriers to the movement of wildlife through the site is discussed on page 30 of this letter, which notes that project implementation involves installing 20-foot-tall bands of grouted riprap as grade-control structures across 1.74 acres of the floodplain. Two of these bands would span nearly the entire width of the post-project floodplain, one at the eastern edge of the project site and the other just west of the Steel Canyon Road bridge, and the third would be constructed across the mouth of Mexican Canyon. These bands of new hardscape pose a barrier to movement of some types of wildlife through the habitat linkage/movement corridor, which currently has no such barriers. The DEIR must analyze all potential effects of installing these riprap structures on the movement of various forms of wildlife through the project site.



The RDEIR's finding that "impacts associated with corridor width would be less than significant," is based upon erroneous assertions that must be corrected; then a new impact analysis must be prepared.

### ***Erroneous and Misleading Analysis of Visual Continuity***

Page 2.2-70 erroneously states:

Although 0.58 acre of riparian habitat would be impacted as part of Project implementation, these impacts are on the outer edges of existing habitat and would not adversely affect visual continuity within the wildlife linkage.

The project would impact much more than 0.58 acre of riparian habitat, since the RDEIR misclassifies several acres of Tier I Southern Willow Scrub as Disturbed Wetlands.

### ***County RPO Wetlands***

Page 2.2-71 erroneously states:

The Project would directly impact a total of 2.34 acres of riparian habitat or other sensitive natural communities, including 1.14 acres of County RPO wetlands.

The project would impact much more than 2.34 acres of riparian habitat or sensitive habitats, as the project biologists have misclassified 93.1 acres of Tier III Non-native Grasslands as Disturbed Habitat and misclassified several acres of Tier I Southern Willow Scrub as Disturbed Wetlands.

### ***Project does not minimize impacts to BRCA***

Page 2.2-73 of the Biological Resources section of the RDEIR states:

The Project minimizes impacts to BRCA in accordance with the MSCP and BMO. Impacts to BRCA would be less than significant.

As reviewed in this letter, the RDEIR provides no evidence or legitimate line of reasoning to support this finding that the project "minimizes impacts to BRCA in accordance with the MSCP and BMO."

### ***Impacts to BMO-identified Linkages***

Page 2.2-73 of the Biological Resources section of the RDEIR states:

The Project site is located within an identified habitat linkage in the South County MSCP. As part of the reclamation process, the Proposed Project would substantially improve the condition of the existing linkage through widening of the Sweetwater River floodplain and planting of riparian habitat. A riparian corridor would be re-established throughout the Project site which would encourage and facilitate wildlife movement within the region. Therefore, the Project would ultimately conserve and enhance the functions and values of the habitat linkage in accordance with the MSCP and BMO. Impacts to BMO-identified corridors would be less than significant.

BMO Design Criteria 1 states, "Habitat Linkages as defined by the BMO, rather than just Corridors, will be maintained."

Section 86.508(d) of the Biological Mitigation Ordinance (BMO) defines "Linkage" and "Corridor" as follows:

"Corridor" is a specific route that is used for movement and migration of species. A corridor may be different from a "Linkage" because it represents a smaller or more narrow avenue for movement.

The MSCP-designated habitat linkage through the project site occupies the 100-year floodplain, and measures between 850 and 1,700 feet wide. The proposed project would dramatically narrow the habitat linkage "to an average width of approximately 600 feet," and as narrow as 350-400 feet at the western end of the project, where it interfaces with the SDNWR.

Since Design Criterion 1 specifies that "Linkages . . . rather than just Corridors, will be maintained," and the proposed actions would dramatically narrow the existing Linkage, down to the width of a Corridor, the project clearly violates BMO Design Criterion 1. Therefore, a significant impact to the MSCP-designated habitat linkage must be identified.

### ***Flawed and Inadequate Cumulative Impact Analysis***

With regard to the project's contribution to cumulative impacts to wildlife movement, page 2.2-77 of the DEIR states:

As the Proposed Project would ultimately be in conformance with the South County MSCP Subarea Plan and any other projects proposed in the vicinity would also have to follow the South County MSCP Subarea Plan, cumulative impacts would be considered fully mitigated.

This letter identifies numerous ways in which the RDEIR misrepresents the biological resources present, or potentially present, on the project site. It also identifies numerous flaws and misrepresentations in the MSCP Findings of Conformance Statement. Thus, the project's cumulative impacts would not be fully mitigated.

Adverse ecological effects of sand and gravel operations across western San Diego County have elevated the ecological importance of the relatively few areas of alluvial soil that remain. As stated by Richmond and colleagues (2017:294-295):

Large portions of the southwestern United States, particularly coastal areas of western San Diego County, California, near the USA-Mexico international border, have undergone rapid development that has either eliminated or encroached upon what little is left of alluvial sand and gravel habitats. These habitats are generally found in river and stream valleys, at the base of topographic features where there is a pronounced change in slope, and in intermountain valleys. Deposits typically consist of variable grain sizes that are compactable, but retain good internal drainage. This feature makes them a preferred substrate for numerous reptiles and amphibians occurring within the region, particularly those with burying or burrowing tendencies such as the southern California legless lizard (*Anniella stebbinsi*), the California glossy

snake (*Arizona elegans occidentalis*), Blainville's horned lizard (*Phrynosoma blainvillii*), the Gilbert skink (*Plestiodon gilberti*), and the western spadefoot (*Spea hammondi*).

The project's contribution to this cumulative adverse effect is a significant impact that the DEIR does not acknowledge, discuss, or analyze. The project must be reconsidered to acknowledge and avoid cumulatively considerable impacts to alluvium-dependent special-status species, especially the California Glossy Snake and Western Spadefoot.

### ***Inadequate Alternatives Analysis***

The DEIR evaluates two potential alternatives, both of which call for intensive, large-scale mining of the project site. Both alternatives would violate the BMO Design Criteria for habitat linkages/movement corridors, and would not take into consideration the results of a wildlife movement study, since no such study has been completed for the proposed project. As such, there is no reason to expect that either project alternative could be completed without the type of significant adverse effects identified in this letter for the proposed project.

The DEIR must evaluate at least one project alternative that would, in fact, comply with all BMO Design Criteria for linkages and corridors, as determined through a legitimate study of the existing patterns of wildlife movement through the project site. Such a study would involve using "camera traps" or other commonly used and widely accepted techniques for documenting patterns of movement of different wildlife species at night, when most such movement takes place.

A type of project compatible with the site's MSCP designation as a regional habitat linkage would be to convert the project site to a mitigation bank. In 2021, I spoke with Brian Monaghan at Wildlands, Inc., a mitigation banking company based in Rocklin, California. In 2017, before the previous landowner went into bankruptcy, Mr. Monaghan visited the site several times to conduct a detailed investigation into the site's potential for conversion to a wetland mitigation bank. In his opinion, the site has great potential for this use. Furthermore, Mr. Monaghan reports that San Diego County has a shortage of wetland mitigation credits available. Thus, it would be in the County's interest, as well as the public's interest, to evaluate a mitigation banking alternative in the EIR. Such an alternative would be consistent with the site's MSCP designation as a habitat linkage/movement corridor and would allow the landowner to profit on their investment.

### **COMMENTS ON THE CONCEPTUAL REVEGETATION/RECLAMATION PLAN**

In a separate letter, hydrologist Greg Kamman has identified a number of flaws in the RDEIR's hydrological analysis that call into question the likelihood of success of the proposed plans to revegetate the mined areas. Each of the points raised in Mr. Kamman's analysis must be fully addressed in order to substantiate the DEIR's claims about revegetation/reclamation of the site post-mining.

Restoration/revegetation efforts would continue for five years or until the County determines that performance standards have been satisfied for two consecutive years, at which time the project proponent may apply for release of an unspecified financial assurance, to be required by the County. Also at that time, the project proponent may request that SMARA declare the site successfully reclaimed. Page 1-15 of the RDEIR states that any areas not successfully restored within four years following the initial seeding “would be reevaluated to determine the measures necessary to improve revegetation success.” With regard to financial assurances, page 22 of Appendix O, the Conceptual Wetland Mitigation Plan, states:

A revegetation agreement shall be signed and notarized by the property owner following approval of this restoration plan and be accompanied by the required security as agreed upon by the County.

It is my understanding, from speaking to people who have been in consultation with the County and the Applicant during preparation of the RDEIR, that the amount of the “financial assurance” or “security” is a sum not to exceed \$30,000 (if this is incorrect, please specify the actual amount of the performance bond that would be required). Given that tens of millions of dollars in aggregate would be removed from the site, the public can have no expectation that a “financial assurance” on the order of \$30,000 – or even ten times that amount – would represent a sufficient financial incentive to ensure full, long-term success of the revegetation/reclamation.

## CONCLUSION

I appreciate the opportunity to evaluate the CEQA documentation for this important project. Please call me at 562-477-2181 if you have questions or wish to further discuss any matters; you may send e-mail to [robb@hamiltonbiological.com](mailto:robb@hamiltonbiological.com).

Sincerely,



Robert A. Hamilton, President  
Hamilton Biological, Inc.

<http://hamiltonbiological.com>

Attachments: Literature Cited  
CDFW Letter to City of Chula Vista dated April 21, 2021  
Curriculum Vitae

cc: Jonathan Snyder, US Fish and Wildlife Service  
David Zoutendyk, US Fish and Wildlife Service  
Susan Wynn, US Fish and Wildlife Service  
Dan Leavitt, US Fish and Wildlife Service  
David Mayer, California Dept. of Fish and Wildlife  
Heather Schmalbach, California Dept. of Fish and Wildlife

## LITERATURE CITED

- Anderson, D. R. 2001. The need to get the basics right in wildlife field studies. *Wildlife Society Bulletin* 29:1294–1297.
- Baumberger, K. L., M. V. Eitzel, M. E. Kirby, and M. H. Horn. 2019. Movement and habitat selection of the Western Spadefoot (*Spea hammondi*) in southern California. *PLOS ONE* 14(10): e0222532. <https://doi.org/10.1371/journal.pone.0222532>
- Becker, C. G., C. R. Fonseca, C. F. B. Haddad, R. F. Batista, and P. I. Prado. 2007. Habitat split and the global decline of amphibians. *Science* 318:1775–1777.
- Beier, P. 1995. Dispersal of juvenile Cougars in fragmented habitat. *Journal of Wildlife Management* 59:228–237.
- Brehme, C. S., S. A. Hathaway, and R. N. Fisher. 2018. An objective road risk assessment method for multiple species: ranking 166 reptiles and amphibians in California. *Landscape Ecology* 33:911–935.
- Burton, A. C., E. Neilson, D. Moreira, A. Ladle, R. Steenweg, J. T. Fisher, E. Bayne, and S. Boutin. 2015. Wildlife camera trapping: a review and recommendations for linking surveys to ecological processes. *Journal of Applied Ecology* 52:675–685.
- Halstead, B. J., K. L. Baumberger, A. R. Backlin, P. M. Kleeman, M. N., Wong, E. A. Gallegos, J. P. Rose, J.P. and R. N. Fisher. 2021. Conservation implications of spatio-temporal variation in the terrestrial ecology of Western Spadefoots. *Journal of Wildlife Management* 85:1377–1393.
- Harper, E. B., T. A. G. Rittenhouse, and R. D. Semlitsch. 2008. Demographic consequences of terrestrial habitat loss for pool-breeding amphibians: predicting extinction risks associated with inadequate size of buffer zones. *Conservation Biology* 22:1205–1215.
- Hebblewhite, M., and D. T. Haydon. 2010. Distinguishing technology from biology: a critical review of the use of GPS telemetry data in ecology. *Philosophical Transactions of the Royal Society B: Biological Sciences* 365:2303–2312.
- Holland, R.F. 1986. Preliminary Descriptions of the Terrestrial Natural Communities of California. State of California, The Resources Agency.
- Oberbauer, T., 1996, Terrestrial Vegetation Communities in San Diego County Based on Holland's Descriptions. Report prepared for San Diego Association of Governments, San Diego, CA.

- Oberbauer, T., M. Kelly, and J. Buegge. 2008. Draft Vegetation Communities of San Diego County. Based on *Preliminary Descriptions of the Terrestrial Natural Communities of California*, R. F. Holland, Ph.D., October 1986.
- O'Connell, A. F., J. D. Nichols, and K. U. Karanth (eds.) 2011. *Camera Traps in Animal Ecology: Methods and Analyses*. Springer, New York, NY.
- Meek, P. D., G. A. Ballard, and P. J. S. Fleming. 2015. The pitfalls of wildlife camera trapping as a survey tool in Australia. *Australian Mammalogy* 37:13–22.
- Richmond, J. Q., C. J. Rochester, N. W. Smith, J. A. Nordland, and R. N. Fisher. 2017. Rare alluvial sands of El Monte Valley, California (San Diego County), support high herpetofaunal species richness and diversity, despite severe habitat disturbance. *Southwestern Naturalist* 61(4):294–306.
- Rochester, C. J., K. L. Baumberger, and R. N. Fisher. 2017. Draft Final Western Spadefoot (*Spea hammondi*): Independent scientific advisor report for the City of Santee Multiple Species Conservation Plan (MSCP) Subarea Plan.
- San Diego County. 2010a. Report Format and Content Requirements, Biological Resources. Fourth Revision, September 15.
- Searcy, C. A., E. Gabbai-Saldate, and H. B. Shaffer. 2013. Microhabitat use and migration distance of an endangered grassland amphibian. *Biological Conservation* 158:80–87.
- Semlitsch, R. D. 1998. Biological delineation of terrestrial buffer zones for pond-breeding salamanders. *Conservation Biology* 12:1113–1119.
- Semlitsch, R. D. 2008. Differentiating migration and dispersal processes for pond-breeding amphibians. *Journal of Wildlife Management* 72:260–267.
- Semlitsch, R. D., and J. B. Jensen. 2001. Core habitat, not buffer zone. *National Wetlands Newsletter* 23:5–6, 11.
- Semlitsch, R. D., and J. R. Bodie. 2003. Biological criteria for buffer zones around wetlands and riparian habitats for amphibians and reptiles. *Conservation Biology* 17:1219–1228.
- US Fish and Wildlife Service. 2005. Recovery plan for vernal pool ecosystems of California and southern Oregon. Portland, OR.
- Williams, B. K., J. D. Nichols, and M. J. Conroy. 2002. *Analysis and Management of Animal Populations*. Academic Press, San Diego, CA.



State of California – Natural Resources Agency  
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South Coast Region  
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San Diego, CA 92123  
(858) 467-4201  
[www.wildlife.ca.gov](http://www.wildlife.ca.gov)

**GAVIN NEWSOM, Governor**  
**CHARLTON H. BONHAM, Director**



**Governor's Office of Planning & Research**

April 12, 2021

**Apr 12 2021**

Mr. Jeff Steichen  
City of Chula Vista  
276 Fourth Avenue  
Chula Vista, CA 91910  
[JSteichen@chulavistaca.gov](mailto:JSteichen@chulavistaca.gov)

**STATE CLEARINGHOUSE**

**Subject: City of Chula Vista Encompass Health (PROJECT) Mitigated Negative Declaration (MND), SCH #2021030287**

Dear Mr. Steichen:

The California Department of Fish and Wildlife (CDFW) received a Notice of Intent to Adopt an MND from the City of Chula Vista (City) for the Project pursuant to the California Environmental Quality Act (CEQA) and CEQA Guidelines.<sup>1</sup>

Thank you for the opportunity to provide comments and recommendations regarding those activities involved in the Project that may affect California fish and wildlife. Likewise, we appreciate the opportunity to provide comments regarding those aspects of the Project that CDFW, by law, may be required to carry out or approve through the exercise of its own regulatory authority under the Fish and Game Code.

**CDFW ROLE**

CDFW is California's **Trustee Agency** for fish and wildlife resources and holds those resources in trust by statute for all the people of the State. (Fish & G. Code, §§ 711.7, subd. (a) & 1802; Pub. Resources Code, § 21070; CEQA Guidelines § 15386, subd. (a).) CDFW, in its trustee capacity, has jurisdiction over the conservation, protection, and management of fish, wildlife, native plants, and habitat necessary for biologically sustainable populations of those species. (*Id.*, § 1802.) Similarly, for purposes of CEQA, CDFW is charged by law to provide, as available, biological expertise during public agency environmental review efforts, focusing specifically on projects and related activities that have the potential to adversely affect fish and wildlife resources.

CDFW administers the Natural Community Conservation Planning (NCCP) program (Fish and Game Code 2800, *et seq.*). In November 2003, CDFW issued their permit for the City's Multiple Species Conservation Program (MSCP) Subarea Plan (SAP). The City's SAP is the mechanism by which the City has obligated to assemble a preserve consistent with the goals of the MSCP Subregional Plan.

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<sup>1</sup> CEQA is codified in the California Public Resources Code in section 21000 *et seq.* The "CEQA Guidelines" are found in Title 14 of the California Code of Regulations, commencing with section 15000.

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## PROJECT DESCRIPTION SUMMARY

**Proponent:** Encompass Health California

**Objective:** The Project will construct an 80-bed inpatient rehabilitation facility with supporting amenities on the 9.79-acre site in two phases: phase 1 consists of up to 50 beds and phase 2 provides an additional 30 beds. Site access will be provided through Shinohara Lane. The Project also contains minor off-site improvements, including utility connections.

**Location:** The Encompass Health Project is located at 517 Shinohara Lane, east of Interstate 805 (I-805), west of Brandywine Avenue, and north of Main Street, within the City.

**Biological Setting:** The Project lies north of the Otay River and the Project site contains coastal sage scrub (CSS, 0.14 acre), *Eucalyptus* woodland (0.02 acre), disturbed habitat (9.38 acres), and developed land including a concrete-lined v-ditch (0.49 acre). The Project will permanently impact 9.38 acres of disturbed habitat and 0.06 acre of CSS, and the City will mitigate for impacts to CSS through the Habitat Loss and Incidental Take (HLIT) process at a ratio of 1:1 or 1.5:1. The mitigation ratio will depend upon the mitigation location. While the MND identifies a number of options for mitigation including both on-site and off-site preservation and restoration, the location of mitigation was not specified.

Sensitive species with potential presence to occur on site include burrowing owl (*Athene cunicularia*) and Otay tarplant (*Deinandra conjugens*). Both are Covered Species under the Chula Vista SAP and the Otay tarplant is further considered a Narrow Endemic species under the Chula Vista MSCP.

**Timeframe:** A timeframe was not provided for the Project.

## COMMENTS AND RECOMMENDATIONS

CDFW offers the comments and recommendations below to assist the City in adequately identifying and/or mitigating the Project's significant, or potentially significant, direct and indirect impacts on fish and wildlife (biological) resources. Editorial comments or other suggestions may also be included to improve the document. CDFW recommends the measures or revisions below be included in a science-based monitoring program that contains adaptive management strategies as part of the Project's CEQA mitigation, monitoring and reporting program (Public Resources Code, § 21081.6 and CEQA Guidelines, § 15097).

### I. Potential Impacts to Tier III Uplands

#### Potential Impacts to Non-native Grassland

##### COMMENT #1:

**Section: Biology Letter Report for Encompass Health Chula Vista, City of Chula Vista, California (BLR), Flora, Page: 2**

**Issue:** The Project will impact land that has been classified as disturbed, but CDFW is concerned that this habitat exhibits characteristics of a Non-native Grassland (NNG), which is a Tier III upland habitat in the City's SAP. Aerial imagery suggests that the Project contains areas that are regularly mowed and maintained. The evidence suggests much of the ongoing disturbance is occurring



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outside of requisite buffer areas to nearby development; therefore, CDFW recommends the City carefully reconsider if some or all of the areas presently shown as Disturbed should be more appropriately designated as NNG, and mitigated as such consistent with the SAP requirements. To be consistent with the SAP, NNG impacts outside of the preserve need to be mitigated at a ratio of 0.5 to 1.0 acre per acre of impact, dependent on the location of mitigation.

**Specific impacts:** Most of the Project site (9.38 acres) has been classified as disturbed. The BLR indicates on page 2 that the site has been previously graded. Historic aerials of the site show that only the northern portion of the site was graded sometime between 1991 to 1993 (historicalaerials.com 2021), recent satellite imagery shows that majority of the site has been mowed periodically over the last several years (Google Earth Pro 2021). The BLR notes that two of the predominant species on site are non-native grass species, *Avena barbata* and *Bromus madritensis*, and also states that the site contains potential suitable habitat for burrowing owls, which are primarily a grasslands species. These factors indicate that the disturbed habitat could alternatively be characterized as disturbed non-native grassland.

**Why impact would occur:** The Project has the potential to impact disturbed non-native grassland but does not provide appropriate mitigation for these impacts due to the characterization of the land as disturbed.

**Evidence impact would be significant:** Potential impacts to non-native grassland would be considered significant without mitigation.

### **Recommended Potentially Feasible Mitigation Measure(s)**

#### **Mitigation Measure #CDFW-REC-1a:**

**To reduce impacts to less than significant:** The MND should reassess the Project site for potential impacts to non-native grassland. Areas that are dominated by grass species and/or require periodic mowing should be considered for designation as NNG and mitigated appropriately.

#### **Mitigation Measure #CDFW-BIO-1b:**

**To reduce impacts to less than significant:** Any impacts to non-native grassland outside of the preserve shall be included in the HLIT permit and shall be mitigated at a ratio of 0.5 to 1.0 acre per one acre of impact, dependent on the location of mitigation.

## **II. Potential Impacts to Covered and Narrow Endemic Species**

### **COMMENT #2:**

#### **Otay Tarplant**

### **Section: BLR Special Status Plants and Attachment C: Special-Status Plant Species Potentially Occurring within the Project Study Area, Page: 6**

**Issue:** The BLR concludes that there is low suitability for Otay tarplant presence due to a lack of suitable clay soils required for the species; however, alternative information available indicates that a part of the site may be suitable for Otay tarplant. Additionally, the BLR did not provide the dates of rare plant or vegetation surveys. Periodic mowing of the site may further complicate the

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evaluation of presence of rare plants. For these reasons, potential impacts to Otay tarplant could occur.

**Specific impacts:** The information provided does not note the dates of vegetation or rare plant surveys, so it is uncertain if surveys were conducted during the appropriate blooming season for Otay tarplant, which is May through June (Calflora 2021). Periodic mowing of the site may have also complicated survey efforts. Therefore, it is not certain that Otay tarplant is absent from the site.

**Why impact would occur:** The BLR notes that Otay tarplant requires suitable clay soils and that these soils are not present on site, but it does not provide the soil types that are present. The southeastern portion of the site is characterized as Salinas clay loam, 2 to 9 percent slopes, which indicates that clay is the predominant soil type (United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) Web Soil Survey 2021). Additionally, there are occurrences of Otay tarplant approximately 670 feet from the site (California Natural Diversity Database (CNDDDB 2021). The NCCP Local Assistance Grant (LAG) study, *Enhancing the Resilience of Edaphic Endemic Plants*, characterizes the area near the Project as moderate to high suitability for Otay tarplant (Conservation Biology Institute (CBI) et al 2018).

**Evidence impact would be significant:** Potential impacts to Otay tarplant would be significant without avoidance and mitigation since it is both a covered species and narrow endemic species under the SAP.

### **Recommended Potentially Feasible Mitigation Measure(s)**

#### **Mitigation Measure # CDFW-BIO-2a:**

**To reduce impacts to less than significant:** Prior to construction, focused rare plant surveys shall be conducted within suitable habitat for Otay tarplant during the appropriate blooming season (May 1 through June 30). Mowing shall cease on site for the growing season prior to rare plant surveys, with the exception of mowing allowed adjacent to existing, adjacent development for fire fuel reduction purposes at the direction of the local fire authority.

#### **Mitigation Measure # CDFW-BIO-2b:**

**To reduce impacts to less than significant:** Any Otay tarplant identified on site during rare plant surveys shall be mitigated according to the SAP and in consultation with CDFW and the United States Fish and Wildlife Service (USFWS), collectively known as the Wildlife Agencies.

### **III. Mitigation**

#### **COMMENT #3:**

#### **Burrowing Owl**

#### **Section: BRL Survey Methods and Fauna, Pages: 1 and 3**

**Issue:** The MND and BRL note that burrowing owls were not detected on site, although suitable habitat is present. The survey methods used, and the mitigation measure provided to detect and minimize impacts to burrowing owls, are not consistent with the most effective methods of

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detecting the species as described in CDFW's Staff Report on Burrowing Owl Mitigation (CDFW Staff Report), Appendix D: Breeding and Non-breeding Season Surveys and Reports (2012).

**Specific impacts:** The BRL notes that survey results indicate signs of occupation by burrowing owls, but then concludes from the habitat assessment that the suitable burrow habitat is marginal. One focused survey was conducted in January, which is outside the typical nesting season for burrowing owls. These methods are not consistent with the guidance in the CDFW Staff Report and breeding owls may have not been detected during survey efforts.

**Why impact would occur:** The CDFW Staff Report (2012) recommends 4 surveys to detect the presence of burrowing owls: 1) at least one site visit between 15 February and 15 April and 2) a minimum of three survey visits at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June. As noted above, the January survey conducted for the Project and the proposed mitigation measure are not consistent with the current guidance for the species.

### **Recommended Potentially Feasible Mitigation Measure(s)**

#### **Mitigation Measure #CDFW-BIO-3a:**

**To reduce impacts to less than significant:** Pre-construction surveys for burrowing owls shall be conducted consistent with the CDFW Staff Report recommendations: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June.

#### **Mitigation Measure #CDFW-REC-3b:**

Early coordination with the Wildlife Agencies is recommended if burrowing owls are identified during any survey.

#### **COMMENT #4:**

#### **Mitigation Options**

#### **Section: MND, Mitigation Necessary to Avoid Significant Impacts, Page: 22**

**Issue:** Both the MND and the BRL note several mitigation options available for the Project. CDFW recommends that off-site mitigation options be employed due to the isolated nature of the on-site habitat that will remain after Project completion.

### **Recommended Potentially Feasible Mitigation Measure(s)**

**Mitigation Measure #CDFW-REC-4:** CDFW recommends the mitigation bank option for compensatory mitigation of impacts to sensitive habitat. As suggested in the MND, use of the San Diego County Water Authority's San Miguel Conservation Bank is appropriate; other banks may be determined to be appropriate by the City through the HLIT process.

### **Editorial Comments and Suggestions**

CEQA requires that information developed in environmental impact reports and negative declarations be incorporated into a database which may be used to make subsequent or supplemental environmental determinations. (Pub. Resources Code, § 21003, subd. (e).)

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Accordingly, please report any special status species and natural communities detected during Project surveys to the California Natural Diversity Database (CNDDDB). The CNDDDB field survey form can be found at the following link:  
[http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB\\_FieldSurveyForm.pdf](http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/CNDDDB_FieldSurveyForm.pdf). The completed form can be mailed electronically to CNDDDB at the following email address: [CNDDDB@wildlife.ca.gov](mailto:CNDDDB@wildlife.ca.gov). The types of information reported to CNDDDB can be found at the following link:  
[http://www.dfg.ca.gov/biogeodata/cnddb/plants\\_and\\_animals.asp](http://www.dfg.ca.gov/biogeodata/cnddb/plants_and_animals.asp).

## FILING FEES

The Project, as proposed, would have an impact on fish and/or wildlife, and assessment of filing fees is necessary. Fees are payable upon filing of the Notice of Determination by the Lead Agency and help defray the cost of environmental review by CDFW. Payment of the fee is required in order for the underlying Project approval to be operative, vested, and final. (Cal. Code Regs, tit. 14, § 753.5; Fish & G. Code, § 711.4; Pub. Resources Code, § 21089.)

## CONCLUSION

CDFW appreciates the opportunity to comment on the MND to assist the City in identifying and mitigating Project impacts on biological resources.

Questions regarding this letter or further coordination should be directed to Elyse Levy, Senior Environmental Scientist, at [Elyse.Levy@wildlife.ca.gov](mailto:Elyse.Levy@wildlife.ca.gov).

Sincerely,

DocuSigned by:

  
D700B4520375406...

David A. Mayer  
Environmental Program Manager I  
South Coast Region

## Attachments:

Attachment A: Recommended Mitigation Measures

ec: CDFW

Jennifer Turner, San Diego – [Jennifer.Turner@wildlife.ca.gov](mailto:Jennifer.Turner@wildlife.ca.gov)  
Jennifer Ludovissy, San Diego – [Jennifer.Ludovissy@wildlife.ca.gov](mailto:Jennifer.Ludovissy@wildlife.ca.gov)  
Susan Howell, San Diego – [Susan.Howell@wildlife.ca.gov](mailto:Susan.Howell@wildlife.ca.gov)  
CEQA Program Coordinator, Sacramento – [CEQACommentLetters@wildlife.ca.gov](mailto:CEQACommentLetters@wildlife.ca.gov)

Jonathan Snyder, USFWS – [Jonathan\\_d\\_Snyder@fws.gov](mailto:Jonathan_d_Snyder@fws.gov)  
State Clearinghouse, Sacramento – [State.Clearinghouse@opr.ca.gov](mailto:State.Clearinghouse@opr.ca.gov)

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## REFERENCES

Calflora: Information on California plants for education, research and conservation, with data contributed by public and private institutions and individuals, including the Consortium of California Herbaria. [web application]. 2021. Berkeley, California: The Calflora Database [a non-profit organization]. Available: <https://www.calflora.org/> [Accessed: April 6, 2021].

California Department of Fish and Game. 2012. Staff Report on Burrowing Owl Mitigation. California Natural Resources Agency. Appendix D.

California Fish and Game Code §2080, §2800, §3503

California Natural Diversity Database (01/04/21). [ds45]. Calif. Dept. of Fish and Wildlife. Biogeographic Information and Observation System (BIOS). Retrieved April 6, 2021 from <https://apps.wildlife.ca.gov/bios/>

California Office of Planning and Research. 2019 or current version. CEQA: California Environmental Quality Act. Statutes and Guidelines, CEQA Guidelines Appendix G.

Conservation Biology Institute (CBI), U.S. Geological Survey (USGS), and San Diego Management and Monitoring Program (SDMMP). 2018. Enhancing the Resilience of Edaphic Endemic Plants. Prepared for the California Department of Fish and Wildlife Natural Community Conservation Planning Local Assistance Grant P1582108-01.

Google Earth Pro. 2021, Project area map. 32° 35'51.51.12 N, 117° 01'53.57. eye alt. 1,352 ft. Maxar Technologies 2021. earth.google.com/web/. [Accessed: April 6, 2021].

historicaerials.com 2021 <https://www.historicaerials.com/viewer> [Accessed: April 6, 2021].

United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS). 2018. Web Soil Survey. <https://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>

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### Attachment A: Recommendations and Mitigation Measures

<b>Biological Resources</b>			
	<b>Mitigation Measures</b>	<b>Timing</b>	<b>Responsible Party</b>
CDFW-BIO-1b	Impacts to non-native grassland shall be included in the HLIT permit and shall be mitigated at a ratio of 0.5 to 1.0 acre per one acre of impact outside of the preserve, dependent on the location of mitigation.	Prior to and During Construction	City/Project Proponent
CDFW-BIO-2a	Prior to construction, focused rare plant surveys shall be conducted within suitable NNG or CSS habitat for Otay tarplant during the appropriate blooming season (May 1 through June 30). Mowing shall cease on site for the growing season prior to rare plant surveys.	Prior to and During Construction	City/Project Proponent
CDFW-BIO-2b	Any Otay tarplant identified on site during rare plant surveys shall be mitigated according to the SAP and in consultation with CDFW and the United States Fish and Wildlife Service (USFWS).	Prior to and During Construction	Project Proponent
CDFW-BIO-3a	Pre-construction surveys for burrowing owls shall be conducted consistent with the CDFW Staff Report recommendations: 1) at least one site visit between 15 February and 15 April, and 2) a minimum of three survey visits at least three weeks apart, between 15 April and 15 July, with at least one visit after 15 June.	Prior to and During Construction	Project Proponent
	<b>Recommendations</b>	<b>Timing</b>	<b>Responsible Party</b>
CDFW-REC-1a	The MND should reassess the Project site for potential impacts to non-native grassland. Areas that are dominated by grass species and/or require periodic mowing should be included in this habitat category.	Prior to and During Construction	Project Proponent
CDFW-REC-3b	Early coordination with the Wildlife Agencies is recommended if burrowing owls are identified during any survey.	Prior to, during construction, and after	Project Proponent
CDFW-REC-4a	CDFW recommends the mitigation bank option for compensatory mitigation of impacts to sensitive habitat. As suggested in the MND, use of the San Diego County Water Authority's San Miguel Conservation Bank is appropriate; other banks may be determined to be	Prior to, during construction, and after	Project Proponent

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	appropriate by the City through the HLIT process.		
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# Robert A. Hamilton

*President, Hamilton Biological, Inc.*

## Expertise

Endangered Species Surveys  
General Biological Surveys  
CEQA Analysis  
Population Monitoring  
Vegetation Mapping  
Construction Monitoring  
Noise Monitoring  
Open Space Planning  
Natural Lands Management

## Education

1988. Bachelor of Science degree in Biological Sciences, University of California, Irvine

## Professional Experience

1994 to Present. Independent Biological Consultant, Hamilton Biological, Inc.

1988 to 1994. Biologist, LSA Associates, Inc.

## Permits

Federal Permit to survey for the Coastal California Gnatcatcher and Southwestern Willow Flycatcher

MOUs with the California Dept. of Fish and Game to survey for Coastal California Gnatcatcher, Southwestern Willow Flycatcher, and Coastal Cactus Wren.

California Scientific Collecting Permit

Robert A. Hamilton has been providing biological consulting services in southern California since 1988. He spent the formative years of his career at the firm of LSA Associates in Irvine, where he was a staff biologist and project manager. He has worked as an independent and on-call consultant since 1994, incorporating his business as Hamilton Biological, Inc., in 2009. The consultancy specializes in the practical application of environmental policies and regulations to land management and land use decisions in southern California.

A recognized authority on the status, distribution, and identification of birds in California, Mr. Hamilton is the lead author of two standard references describing aspects of the state's avifauna: *The Birds of Orange County: Status & Distribution* and *Rare Birds of California*. Mr. Hamilton has also conducted extensive studies in Baja California, and for seven years edited the Baja California Peninsula regional reports for the journal *North American Birds*. He served ten years on the editorial board of *Western Birds* and regularly publishes in peer-reviewed journals. He is a founding member of the Coastal Cactus Wren Working Group and in 2011 updated the Cactus Wren species account for *The Birds of North America Online*. Mr. Hamilton's expertise includes vegetation mapping. From 2007 to 2010 he worked as an on-call biological analyst for the County of Los Angeles Department of Regional Planning. From 2010 to present he has conducted construction monitoring and focused surveys for special-status bird species on the Tehachapi Renewable Transmission Project (TRTP). He is a former member of the Los Angeles County Significant Ecological Areas Technical Advisory Committee (SEATAC).

Mr. Hamilton conducts general and focused biological surveys of small and large properties as necessary to obtain various local, state, and federal permits, agreements, and clearances. He also conducts landscape-level surveys needed by land managers to monitor songbird populations. Mr. Hamilton holds the federal and state permits and MOUs listed to the left, and he is recognized by federal and state resource agencies as being highly qualified to survey for the Least Bell's Vireo. He also provides nest-monitoring services in compliance with the federal Migratory Bird Treaty Act and California Fish & Game Code Sections 3503, 3503.5 and 3513.



## Board Memberships, Advisory Positions, Etc.

Friends of Colorado Lagoon, Board Member (2014–present)

Coastal Cactus Wren Working Group (2008–present)

Los Angeles County Significant Ecological Areas Technical Advisory Committee (SEATAC) (2010–2014)

American Birding Association: Baja Calif. Peninsula Regional Editor, North American Birds (2000–2006)

Western Field Ornithologists: Associate Editor of Western Birds (1999–2008)

California Bird Records Committee (1998–2001)

Nature Reserve of Orange County: Technical Advisory Committee (1996–2001)

California Native Plant Society, Orange County Chapter: Conservation Chair (1992–2003)

## Professional Affiliations

American Ornithologists' Union

Cooper Ornithological Society

Institute for Bird Populations

California Native Plant Society

Southern California Academy of Sciences

Western Foundation of Vertebrate Zoology

Mr. Hamilton is an expert photographer, and typically provides photo-documentation and/or video documentation as part of his services.

Drawing upon a robust, multi-disciplinary understanding of the natural history and ecology of his home region, Mr. Hamilton works with private and public land owners, as well as governmental agencies and interested third parties, to apply the local, state, and federal land use policies and regulations applicable to each particular situation. Mr. Hamilton has amassed extensive experience in the preparation and independent review of CEQA documents, from relatively simple Negative Declarations to complex supplemental and recirculated Environmental Impact Reports. In addition to his knowledge of CEQA and its Guidelines, Mr. Hamilton understands how each Lead Agency brings its own interpretive variations to the CEQA review process.

## Representative Project Experience

From 2008 to present, Mr. Hamilton has served as the main biological consultant for the Banning Ranch Conservancy, a local citizens' group that successfully defeated efforts to implement a large proposed residential and commercial project on the 400-acre Banning Ranch property in Newport Beach. Mr. Hamilton reviewed, analyzed, and responded to numerous biological reports prepared by the project proponent, and testified at multiple public hearings of the California Coastal Commission. In September 2016, the Commission denied the application for a Coastal Development Permit for the project, citing, in part, Mr. Hamilton's analysis of biological issues. In March 2017, the California Supreme Court issued a unanimous opinion (*Banning Ranch Conservancy v. City of Newport Beach*) holding that the EIR prepared by the City of Newport Beach improperly failed to identify areas of the site that might qualify as "environmentally sensitive habitat areas" under the California Coastal Act. In nullifying the certification of the EIR, the Court found that the City "ignored its obligation to integrate CEQA review with the requirements of the Coastal Act."

**Insurance**

\$3,000,000 professional liability policy (Hanover Insurance Group)

\$2,000,000 general liability policy (The Hartford)

\$1,000,000 auto liability policy (State Farm)

**Other Relevant Experience**

Field Ornithologist, San Diego Natural History Museum Scientific Collecting Expedition to Central and Southern Baja California, October/November 1997 and November 2003.

Field Ornithologist, Island Conservation and Ecology Group Expedition to the Tres Mariás Islands, Nayarit, Mexico, 23 January to 8 February 2002.

Field Ornithologist, Algalita Marine Research Foundation neustonic plastic research voyages in the Pacific Ocean, 15 August to 4 September 1999 and 14 to 28 July 2000.

Field Assistant, Bird Banding Study, Río Ñambí Reserve, Colombia, January to March 1997.

**References**

Provided upon request.

From 2012 to 2014, Mr. Hamilton collaborated with Dan Cooper on *A Conservation Analysis for the Santa Monica Mountains “Coastal Zone” in Los Angeles County*, and worked with Mr. Cooper and the County of Los Angeles to secure a certified Local Coastal Program (LCP) for 52,000 acres of unincorporated County lands in the Santa Monica Mountains coastal zone. The work involved synthesizing large volumes of existing baseline information on the biological resources of the study area, evaluating existing land use policies, and developing new policies and guidelines for future development within this large, ecologically sensitive area. A coalition of environmental organizations headed by the Surfrider Foundation selected this project as the “Best 2014 California Coastal Commission Vote”

([http://www.surfrider.org/images/uploads/2014CCC\\_Vote\\_Chart\\_FINAL.pdf](http://www.surfrider.org/images/uploads/2014CCC_Vote_Chart_FINAL.pdf)).

In 2010, under contract to CAA Planning, Mr. Hamilton served as principal author of the *Conservation & Management Plan for Marina del Rey, Los Angeles County, California*. This comprehensive planning document has two overarching goals: (1) to promote the long-term conservation of all native species that exist in, or that may be expected to return to, Marina del Rey, and (2) to diminish the potential for conflicts between wildlife populations and both existing and planned human uses of Marina del Rey (to the benefit of humans and wildlife alike). After peer-review, the Plan was accepted by the Coastal Commission as an appropriate response to the varied challenges posed by colonial waterbirds and other biologically sensitive resources colonizing urban areas once thought to have little resource conservation value.

## Contact Information

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## Third Party Review of CEQA Documents

Under contract to cities, conservation groups, homeowners' associations, etc., Mr. Hamilton has reviewed EIRs and other project documentation for the following projects:

- Piraeus Point (residential, City of Encinitas)
- Cottonwood Sand Mine (golf course to aggregate mine, County of San Diego)
- Alpine County Regional Park (park establishment, County of San Diego)
- Trails at Carmel Mtn. Ranch (golf course to residential, City of San Diego)
- Otay Village 13 (residential, County of San Diego)
- Otay Village 14, Planning Areas 16/19 (residential, County of San Diego)
- Western Snowy Plover Mgmt. Plan (resource management, City of Newport Beach)
- Sanderling Waldorf School (commercial, City of Encinitas)
- Diamond Bar General Plan (open space planning, City of Diamond Bar)
- UC San Diego Long-range Development Plan (institutional, UC Regents)
- El Monte Sand Mining Project (resource extraction, County of San Diego)
- Faria/Southwest Hills Annexation Project (residential, City of Pittsburg)
- Los Cerritos Oil Consolidation/Wetland Restoration Project (resource extraction/habitat restoration, City of Long Beach)
- Safari Highlands Ranch (residential, City of Escondido)
- Newland Sierra (residential, County of San Diego)
- Harmony Grove Village South (residential, County of San Diego)
- Vegetation Treatment Program (statewide fire management plan, California Department of Forestry and Fire Protection)
- Watermark Del Mar Specific Plan (residential, City of Del Mar)
- Newport Banning Ranch (residential/commercial, City of Newport Beach)
- Davidon/Scott Ranch (residential, City of Petaluma)
- Mission Trails Regional Park Master Plan (open space planning, City of San Diego)
- Esperanza Hills (residential, County of Orange)
- Warner Ranch (residential, County of San Diego)
- Dog Beach, Santa Ana River Mouth (open space planning, County of Orange)
- Gordon Mull subdivision (residential, City of Glendora)
- The Ranch at Laguna Beach (resort, City of Laguna Beach)
- Sunset Ridge Park (city park, City of Newport Beach)
- The Ranch Plan (residential/commercial, County of Orange)
- Southern Orange County Transportation Infrastructure Improvement Project (Foothill South Toll Road, County of Orange)
- Gregory Canyon Landfill Rest. Plan (proposed mitigation, County of San Diego)
- Montebello Hills Specific Plan EIR (residential, City of Montebello; 2009 and 2014 circulations)
- Cabrillo Mobile Home Park (illegal wetland filling, City of Huntington Beach)
- Newport Hyatt Regency (timeshare conversion project, City of Newport Beach)
- Lower San Diego Creek "Emergency Repair Project" (flood control, County of Orange)
- Tonner Hills (residential, City of Brea)
- The Bridges at Santa Fe Units 6 and 7 (residential, County of San Diego)
- Villages of La Costa Master Plan (residential/commercial, City of Carlsbad)
- Whispering Hills (residential, City of San Juan Capistrano)
- Santiago Hills II (residential/commercial, City of Orange)
- Rancho Potrero Leadership Academy (youth detention facility, County of Orange)
- Saddle Creek/Saddle Crest (residential, County of Orange)
- Frank G. Bonelli Regional County Park Master Plan (County of Los Angeles)

## Selected Presentations

Hamilton, R. A. Six Legs Good/Invertebral Limit. 2012-2020. 60-to-90-minute multimedia presentation on the identification and photography of dragonflies, damselflies, butterflies, and other invertebrates, given at Audubon Society chapter meetings, Irvine Ranch Conservancy, etc.

Hamilton, R. A. Birds of Colorado Lagoon. 2018-2019. 60-minute multimedia presentation on the history and avifauna of Colorado Lagoon in southeastern Long Beach, given at Audubon Society chapter meetings.

Hamilton, R. A., and Cooper, D. S. 2016. Nesting Bird Policies: We Can Do Better. Twenty-minute multimedia presentation at The Wildlife Society Western Section Annual Meeting, February 23, 2016.

Hamilton, R. A. 2012. Identification of Focal Wildlife Species for Restoration, Coyote Creek Watershed Master Plan. Twenty-minute multimedia presentation given at the Southern California Academy of Sciences annual meeting at Occidental College, Eagle Rock, 4 May. Abstract published in the Bulletin of the Southern California Academy of Sciences No. 111(1):39.

Hamilton, R. A., and Cooper, D. S. 2009-2010. Conservation & Management Plan for Marina del Rey. Twenty-minute multimedia presentation given to different governmental agencies and interest groups.

Hamilton, R. A. 2008. Cactus Wren Conservation Issues, Nature Reserve of Orange County. One-hour multimedia presentation for Sea & Sage Audubon Society, Irvine, California, 25 November.

Hamilton, R. A., Miller, W. B., Mitrovich, M. J. 2008. Cactus Wren Study, Nature Reserve of Orange County. Twenty-minute multimedia presentation given at the Nature Reserve of Orange County's Cactus Wren Symposium, Irvine, California, 30 April 2008.

Hamilton, R. A. and K. Messer. 2006. 1999-2004 Results of Annual California Gnatcatcher and Cactus Wren Monitoring in the Nature Reserve of Orange County. Twenty-minute multimedia presentation given at the Partners In Flight meeting: Conservation and Management of Coastal Scrub and Chaparral Birds and Habitats, Starr Ranch Audubon Sanctuary, 21 August 2004; and at the Nature Reserve of Orange County 10<sup>th</sup> Anniversary Symposium, Irvine, California, 21 November.

## Publications

Hamilton, R. A. 2022. Book review: Bird Versus Bulldozer. *Western Birds* 53:335–339.

Hamilton, R. A. 2022. Book review: All About Birds, California. *Western Birds* 53:177–179.

Hamilton, R. A. 2022. Book review: Sacramento County Breeding Birds. *Western Birds* 53:83–85.

Gómez de Silva, H., Villafaña, M. G. P., Nieto, J. C., Cruzado, J., Cortés, J. C., Hamilton, R. A., Vásquez, S. V., and Nieto, M. A. C. 2017. Review of the avifauna of The Tres Marías Islands, Mexico, including new and noteworthy records. *Western Birds* 47:2–25.

- Hamilton, R. A. 2014. Book review: The Sibley Guide to Birds, Second Edition. *Western Birds* 45:154–157.
- Cooper, D. S., R. A. Hamilton, and S. D. Lucas. 2012. A population census of the Cactus Wren in coastal Los Angeles County. *Western Birds* 43:151–163.
- Hamilton, R. A., J. C. Burger, and S. H. Anon. 2012. Use of artificial nesting structures by Cactus Wrens in Orange County, California. *Western Birds* 43:37–46.
- Hamilton, R. A., Proudfoot, G. A., Sherry, D. A., and Johnson, S. 2011. Cactus Wren (*Campylorhynchus brunneicapillus*), in The Birds of North America Online (A. Poole, ed.). Cornell Lab of Ornithology, Ithaca, NY.
- Hamilton, R. A. 2008. Cactus Wrens in central & coastal Orange County: How will a worst-case scenario play out under the NCCP? *Western Tanager* 75:2–7.
- Erickson, R. A., R. A. Hamilton, R. Carmona, G. Ruiz-Campos, and Z. A. Henderson. 2008. Value of perennial archiving of data received through the North American Birds regional reporting system: Examples from the Baja California Peninsula. *North American Birds* 62:2–9.
- Erickson, R. A., R. A. Hamilton, and S. G. Mlodinow. 2008. Status review of Belding's Yellowthroat *Geothlypis beldingi*, and implications for its conservation. *Bird Conservation International* 18:219–228.
- Hamilton, R. A. 2008. Fulvous Whistling-Duck (*Dendrocygna bicolor*). Pp. 68-73 in California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California (Shuford, W. D. and T. Gardali, eds.). Studies of Western Birds 1. Western Field Ornithologists, Camarillo, CA, and California Department of Fish and Game, Sacramento, CA.
- California Bird Records Committee (R. A. Hamilton, M. A. Patten, and R. A. Erickson, editors.). 2007. Rare Birds of California. Western Field Ornithologists, Camarillo, CA.
- Hamilton, R. A., R. A. Erickson, E. Palacios, and R. Carmona. 2001–2007. *North American Birds* quarterly reports for the Baja California Peninsula Region, Fall 2000 through Winter 2006/2007.
- Hamilton, R. A. and P. A. Gaede. 2005. Pink-sided × Gray-headed Juncos. *Western Birds* 36:150–152.
- Mlodinow, S. G. and R. A. Hamilton. 2005. Vagrancy of Painted Bunting (*Passerina ciris*) in the United States, Canada, and Bermuda. *North American Birds* 59:172–183.
- Erickson, R. A., R. A. Hamilton, S. González-Guzmán, G. Ruiz-Campos. 2002. Primeros registros de anidación del Pato Friso (*Anas strepera*) en México. *Anales del Instituto de Biología, Universidad Nacional Autónoma de México, Serie Zoología* 73(1):67–71.
- Hamilton, R. A. and J. L. Dunn. 2002. Red-naped and Red-breasted sapsuckers. *Western Birds* 33:128–130.
- Hamilton, R. A. and S. N. G. Howell. 2002. Gnatcatcher sympatry near San Felipe, Baja California, with notes on other species. *Western Birds* 33:123–124.
- Hamilton, R. A. 2001. Book review: The Sibley Guide to Birds. *Western Birds* 32:95–96.
- Hamilton, R. A. and R. A. Erickson. 2001. Noteworthy breeding bird records from the Vizcaíno Desert, Baja California Peninsula. Pp. 102-105 in Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.
- Hamilton, R. A. 2001. Log of bird record documentation from the Baja California Peninsula archived at the San Diego Natural History Museum. Pp. 242–253 in Monographs in Field Ornithology No. 3. American Birding Association, Colorado Springs, CO.

- Hamilton, R. A. 2001. Records of caged birds in Baja California. Pp. 254–257 in *Monographs in Field Ornithology* No. 3. American Birding Association, Colorado Springs, CO.
- Erickson, R. A., R. A. Hamilton, and S. N. G. Howell. 2001. New information on migrant birds in northern and central portions of the Baja California Peninsula, including species new to Mexico. Pp. 112–170 in *Monographs in Field Ornithology* No. 3. American Birding Association, Colorado Springs, CO.
- Howell, S. N. G., R. A. Erickson, R. A. Hamilton, and M. A. Patten. 2001. An annotated checklist of the birds of Baja California and Baja California Sur. Pp. 171–203 in *Monographs in Field Ornithology* No. 3. American Birding Association, Colorado Springs, CO.
- Ruiz-Campos, G., González-Guzmán, S., Erickson, R. A., and Hamilton, R. A. 2001. Notable bird specimen records from the Baja California Peninsula. Pp. 238–241 in *Monographs in Field Ornithology* No. 3. American Birding Association, Colorado Springs, CO.
- Wurster, T. E., R. A. Erickson, R. A. Hamilton, and S. N. G. Howell. 2001. Database of selected observations: an augment to new information on migrant birds in northern and central portions of the Baja California Peninsula. Pp. 204–237 in *Monographs in Field Ornithology* No. 3. American Birding Association, Colorado Springs, CO.
- Erickson, R. A. and R. A. Hamilton, 2001. Report of the California Bird Records Committee: 1998 records. *Western Birds* 32:13–49.
- Hamilton, R. A., J. E. Pike, T. E. Wurster, and K. Rademaker. 2000. First record of an Olive-backed Pipit in Mexico. *Western Birds* 31:117–119.
- Hamilton, R. A. and N. J. Schmitt. 2000. Identification of Taiga and Black Merlins. *Western Birds* 31:65–67.
- Hamilton, R. A. 1998. Book review: Atlas of Breeding Birds, Orange County, California. *Western Birds* 29:129–130.
- Hamilton, R. A. and D. R. Willick. 1996. The Birds of Orange County, California: Status and Distribution. Sea & Sage Press, Sea & Sage Audubon Society, Irvine.
- Hamilton, R. A. 1996–98. Photo Quizzes. *Birding* 27(4):298-301, 28(1):46-50, 28(4):309-313, 29(1):59-64, 30(1):55–59.
- Erickson, R. A., and Hamilton, R. A. 1995. Geographic distribution: *Lampropeltis getula californiae* (California Kingsnake) in Baja California Sur. *Herpetological Review* 26(4):210.
- Bontrager, D. R., R. A. Erickson, and R. A. Hamilton. 1995. Impacts of the October 1993 Laguna fire on California Gnatcatchers and Cactus Wrens. in J. E. Keeley and T. A. Scott (editors). *Wildfires in California Brushlands: Ecology and Resource Management*. International Association of Wildland Fire, Fairfield, Washington.
- Erickson, R. A., R. A. Hamilton, S. N. G. Howell, M. A. Patten, and P. Pyle. 1995. First record of Marbled Murrelet and third record of Ancient Murrelet for Mexico. *Western Birds* 26: 39–45.
- Erickson, R. A., and R. A. Hamilton. 1993. Additional summer bird records for southern Mexico. *Euphonia* 2(4): 81–91.
- Erickson, R. A., A. D. Barron, and R. A. Hamilton. 1992. A recent Black Rail record for Baja California. *Euphonia* 1(1): 19–21.