

Master Response 9

Terrestrial Biological Resources

Overview

This master response provides a consolidated response to many comments regarding the approach to the impact analysis. Specifically, this master response addresses the adequacy and legality of the EIR/EIS's biological resources impact analysis and mitigation measures. The topics of discussion include, but are not limited to, the following common topics raised by commenters:

- Wildlife and Plants Evaluated and Terrestrial Survey Data—The process for determining which special-status species were evaluated and the adequacy of the terrestrial survey data
- Wetland Survey Data—The adequacy of the wetland field survey data
- Thresholds of Significance—The appropriateness of the thresholds of significance
- Level of Detail Required by CEQA/NEPA in the Analysis—The level of detail required by a CEQA/NEPA analysis, the differences between a CEQA analysis and a NEPA analysis, and the requirements for biological permits
- Giant Garter Snake—Impacts on giant garter snake
- Adequacy of Mitigation—The suitability of the mitigation measures and inclusion of future required environmental regulatory compliance in mitigation
- Regulatory compliance with FESA/CESA

For ease of reference, this master response includes a table of contents on the following page to guide readers to topics of their concern. Table of contents entries represent general recurring and common themes found in the comments received.

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Wildlife and Plants Evaluated and Terrestrial Survey Data

Multiple commenters stated that the botanical and terrestrial survey data used to assess impacts in the EIR/EIS are insufficient and outdated, given that the original field surveys in the Primary Study Area were conducted between 1998 and 2004. Although field surveys were not conducted in support of the EIR/EIS, the previous surveys conducted for the project help identify which species have been documented in the project area. Given that the original field surveys and subsequent project surveys were conducted over multiple years, with some project features surveyed as recently as 2010–2011, the surveys provide valid data that can support the analysis of environmental impacts in the EIR/EIS. Additionally, the EIR/EIS evaluates the field survey data in the context of regional trends—that is, even if the surveys did not document a species in the project area but it is known to occur in the region, that species was not necessarily excluded from consideration.

For the EIR/EIS analysis, current lists were drafted of special-status species known to occur in the project vicinity; presence of suitable habitat was the primary way of determining which special-status species had potential to occur in project area. (This habitat-based approach enables the impact analysis to include species with potentially suitable habitat located in areas that may have been inaccessible and/or unsurveyed during the field surveys.) Other information used to refine the list included species occurrences, range, elevation range, and threats. Sources were IPac and the California Natural Diversity Database (CNDDDB), which are operated by the U.S. Fish and Wildlife Service (USFWS) and California Department of Fish and Wildlife (CDFW), respectively, as well as the California Native Plant Society's (CNPS's) Online Inventory of Rare and Endangered Plants in California. This methodology is discussed in the EIR/EIS in the following places:

- Chapter 13, *Botanical Resources*
 - Section 13.2.3.2, *Plant Biology and Life History of Federal- or State-Listed Species*
 - Section 13.2.3.6, *Special-Status Plant Species*
 - Table 13-10, CNPS Rare Plant Rank 1, 2, and 3 Plant Species with Potential to Occur in the Primary Study Area
- Chapter 14, *Terrestrial Biological Resources*
 - Section 14.2.3.4, *Special-Status Wildlife Species—Threatened, Endangered, or Candidate Species*
 - Section 14.2.3.5, *Species of Concern and Fully Protected Species*
 - Table 14-5, Terrestrial Wildlife Species of Special Concern that Potentially Occur in the Primary Study Area.

The EIR/EIS evaluated the project's impacts on all species-status species assumed to have potential to occur in the study area. Most species with potentially suitable habitat in the project area were included in the impact analysis, but some species lacking occurrences in the project region were excluded. For example, the CNDDDB does not show occurrences of California tiger salamander or California red-legged frog in the Primary Study Area or in the nine U.S. Geological Survey Quadrangles surrounding the Primary Study Area; accordingly, these species not expected to occur in the Primary Study Area and were excluded from analysis. The EIR/EIS did not use the results of the field surveys to exclude species from the impact analysis but did use this information, in part, to inform the impact analysis.

In Chapter 13, *Botanical Resources*, Mitigation Measure Bot-2 requires pre-construction surveys to be conducted for special-status plant species to determine presence/absence and location, extent, and size of the occurrences. The surveys will be conducted according to USFWS, CDFW, and CNPS guidelines,

which will require the surveys be conducted over multiple seasons to capture the blooming periods of all potentially occurring species-status plant species. Similarly, Chapter 14, *Terrestrial Biological Resources*, includes mitigation measures that require pre-construction surveys and protective actions for terrestrial wildlife species with potential to be present in the project area. In some cases, a monitoring biologist is also required. Conducting biological surveys near the commencement of construction will provide the most accurate picture of species presence. Pre-construction survey data can also be reviewed in combination with older data included in the EIR/EIS to provide a more accurate picture of a species' distribution and extent in the project area.

Wetland Survey Data

Some commenters stated that the wetland field survey data are outdated and incomplete and suggested that surveys should be conducted prior to the recirculated DEIR/DEIS. Wetlands and other waters of the United States were documented throughout the entire project area based on aerial interpretation and field verification, as stated in Chapter 15, *Wetlands*, between 1998 and 2011. This dataset represents the best available information on wetlands and waters of the United States at the time of the EIR/EIS development. The DEIR/DEIS explains that the wetlands and other waters of the United States may be altered by the project, and this impact is identified as potentially significant. The potential acreage of impacts is included in the chapter.

Field-verification of wetland and other waters features will occur during the permitting process for the U.S. Army Corps of Engineers (USACE). A wetland delineation will be conducted to identify the extent and distribution of aquatic habitats within the project area; a wetland delineation is not required under CEQA/NEPA. Please see the *Adequacy of Mitigation* section below for more information on compliance with environmental regulations and regulatory permitting.

Thresholds of Significance

Several commenters raised concerns that the EIR/EIS did not appropriately analyze the significance of impacts from the project on terrestrial species. An EIR is required to evaluate the impacts of a project on various resource topics based on the thresholds of significance provided in Appendix G of the State CEQA Guidelines or other criteria developed by the lead agency. As stated in EIR/EIS, the suggested significance criteria in Appendix G were tailored for the project based on current regulations and standards, consultations with the agencies, knowledge of the area, and the context and intensity of the environmental effects, as required by NEPA. Given the geographic scope of the project, the types and acres of habitat impacts, and the number of special-status species with potential to be present, the thresholds of significance were developed to be broad enough to encompass all potential impacts on biological resources; in this way, the impact analysis would not miss any potential impacts if the thresholds were too narrowly defined.

Under CEQA, the lead agency has the authority to determine whether an impact is significant, which can vary based on the type of impact and environmental conditions. The lead agency can rely on the judgement of scientific experts to determine if the impact will be significant. The analysis for the EIR/EIS was developed by scientific experts based on field survey data, biological species occurrence data, vegetation maps, and regulatory agency consultations. The EIR/EIS found that the project would have potentially significant impacts on some biological resources.

Level of Detail Required by CEQA/NEPA in the Analysis

Several commenters suggested that the analysis for biological resources in the EIR/EIS is too broad and not detailed enough to adequately evaluate the significance of the impacts on biological resources. An EIR is required only to analyze the direct impacts and reasonably foreseeable non-speculative indirect impacts on the environment. An EIR is required to evaluate an environmental impact only to the extent that it is “reasonably feasible” to do so (CEQA Guidelines Section 15151). More generally, “the adequacy of an EIR is determined in terms of what is reasonably feasible, in light of factors such as the magnitude of the project at issue, the severity of its likely environmental impacts, and the geographic scope of the project” (CEQA Guidelines Section 15204(a)). As a corollary to this rule, CEQA does not require a lead agency to engage in speculative analysis (CEQA Guidelines Section 15145 [“If, after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact”]). As the court in *Citizens for a Sustainable Treasure Island v. City & County of San Francisco* (2014), 227 Cal.App.4th 1036, 1060–61, explained:

An EIR is not required to engage in speculative analysis [CEQA Guidelines Section 15145]. Indeed, this core principle is well established in the guidelines and case law. While a lead agency must use its “best efforts” to evaluate environmental effects, including the use of reasonable forecasting, “foreseeing the unforeseeable” is not required, nor is predicting the unpredictable or quantifying the unquantifiable [CEQA Guidelines Section 15064, subd. (d)(3) (“A change that is speculative or unlikely to occur is not reasonably foreseeable”); *Cadiz Land Co. v. Rail Cycle* (2000), 83 Cal.App.4th 74, 107–108, 99, Cal.Rptr.2d 378 (“agency is required to forecast only to the extent that an activity could be reasonably expected under the circumstances”)].

This rule rests on both economic and practical considerations. It has long been recognized that premature attempts to evaluate effects that are uncertain to occur or whose severity cannot reliably be measured is “a needlessly wasteful drain of the public fisc. [citation]” (*Environmental Council of Sacramento v. City of Sacramento* [2006], 142 Cal.App.4th 1018, 1031; 48 Cal.Rptr.3d 544) (see, e.g., *Save Round Valley Alliance v. County of Inyo* [2007], 157 Cal.App.4th 1437, 1450–1451; 70 Cal.Rptr.3d 59 [an EIR for a subdivision of single-family residences was not deficient in failing to consider the possibility that the future lot owners might build a second dwelling on their lot pursuant to a local ordinance allowing such dwellings, because the possibility was remote and speculative]).

However, the fact that the CEQA analysis is broad does not invalidate its findings. As discussed above, the analysis is broad in order to cover the large geographic area and suite of species that have the potential to occur therein. The CEQA analysis includes project-specific biological data, consisting of both literature and survey data, that was reviewed by scientific experts. The CEQA/NEPA analysis evaluates all the potential effects on biological resources from the proposed project features. For additional information regarding the level of detail required by CEQA and NEPA, please see Master Response 4, Process.

It should also be noted that the CEQA/NEPA analysis is separate from the regulatory permitting process. The CEQA/NEPA analysis is primarily designed to identify and disclose to the public the significant environmental impacts of a proposed project, while regulatory permits authorize “take” (defined in the section below) of endangered and threatened species or dredge and fill of aquatic resources. Under CEQA/NEPA, the level of detail required to make a significance determination is less than the level of

detail needed to ensure that there is no net loss of wetlands functions and values or a project will not jeopardize the continued existence of a listed species. As stated above, CEQA is only required to analyze impacts that are reasonably foreseeable based on the geographic scope of the project or magnitude of the project. Technical studies are developed (e.g., wetland delineation, biological assessment) to gather the information necessary for the regulatory permits; these technical studies are not required under CEQA/NEPA.

Giant Garter Snake

Some commenters stated that the EIR/EIS does not adequately assess impacts on special-status species from the construction of the Terminal Regulating Reservoir Complex (TRR Complex), especially in relation to giant garter snake. Although no special-status species were observed within the vicinity of the TRR Complex or associated facilities, rice fields impacted by the TRR Complex have the potential to support giant garter snakes. Proposed construction activities have the potential to disturb giant garter snakes or cause direct mortality by excavation of hibernating snakes if work is conducted from October 1 through May 1. Construction activities associated with development of the TRR Complex and associated facilities resulting from implementation of the proposed project could, therefore, have a potentially significant impact on the giant garter snake, when compared to the Existing Conditions/No Project/No Action Condition. In the EIR/EIS, these potential impacts were included in the impact evaluation for Impact Wild-2 and will be less than significant after implementation of Mitigation Measure Wild-2d.

Adequacy of Mitigation

Some commenters questioned mitigation of the impacts resulting from the proposed project on terrestrial biological resources, including the level of detail in the mitigation measures, and whether the mitigation approach satisfies legal requirements. CEQA requires that agencies adopt feasible mitigation measures to substantially lessen or avoid otherwise significant adverse environmental impacts (Public Resources Code Section 21081(a); State CEQA Guidelines Sections 15002(a)(3), 15021(a)(2), 15091(a)(1)). In fashioning mitigation measures, agencies are not required to adopt specific mitigation for certain types of projects but, instead, are guided by the “rule of reason” (see *San Franciscans for Reasonable Growth v. City and County of San Francisco* (1st Dist. 1989) 209 Cal.App.3d 1502, 1526; *Concerned Citizens of South Central Los Angeles v. Los Angeles Unified School District* (2d Dist. 1994) 24 Cal.App.4th 826, 841). NEPA does not include the same requirement to mitigate where possible; instead, NEPA requires discussion of mitigation measures to ensure fair evaluation of environmental consequences (40 Code of Federal Regulations Parts 1502.14(f), 1502.16(h)).

CEQA Guidelines Section 15370 defines “mitigation” as: (1) avoiding the impact altogether by not taking a certain action or parts of an action; (2) minimizing impacts by limiting the degree or magnitude of an action and its implementation; (3) rectifying the impact by repairing, rehabilitating, or restoring the impacted environment; (4) reducing or eliminating the impact over time by preservation and maintenance operations during the life of the action; or (5) compensating for the impact by replacing or providing substitute resources or environments. The EIR/EIS employs all five of these “mitigation options” to reduce impacts on biological resources from the proposed projects. In some cases, the project does “not take the action” in locations where a species or habitat is most likely to occur or when a species is most active. The general approach to mitigation is that the EIR/EIS first identifies whether the potential environmental effects of each project alternative, whether permanent or temporary, are adverse and

potentially significant. If so, the EIR/EIS then considers whether mitigation measures would lessen the significant adverse environmental effects and include the level of detail necessary to outline the process necessary to implement the mitigation measures and illustrate that the mitigation measure would reduce the significance of the impact.

Some commenters asserted that the mitigation measures improperly defer mitigation to future coordination with federal and state regulatory agencies. CEQA allows mitigation to require compliance with environmental regulations when compliance with said regulations will result in the impact being mitigated—see *Robert T. Sundstrom v. County of Mendocino* (1988). For example, the mitigation measures for wetlands in Chapter 15, *Wetlands*, are all subject to USACE or CDFW determinations. Because the impact assessment in the EIR/EIS identifies impacts on wetlands and streams that are potentially jurisdictional under Section 401 of the Clean Water Act and Section 1600 of the California Fish and Game Code, future coordination with these regulatory agencies is required; environmental permits from these agencies must be acquired in order for construction to commence. Development and acquisition of permits for impacts on federal and state waters and wetlands will fully mitigate for impacts on aquatic resources in the Primary Study Area, given that the USACE has a mandated goal to incur no net loss of wetlands functions and values and, accordingly, requires a mitigation at a minimum of 1:1 functional replacement (U.S. Environmental Protection Agency and U.S. Department of the Army 1990).

Regulatory Compliance with FESA/CESA

The project has the potential to “take” federally and state listed species (or affect federally designated critical habitat); consequently, the project must comply with Section 7 of the federal Endangered Species Act (FESA) and Section 2090 of the California Endangered Species Act (CESA). Take, as defined by FESA, means “to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct.” Harm is defined as “any act that kills or injures the species, including significant habitat modification.” CESA prohibits the take of endangered and threatened species; however, habitat destruction is not included in the state’s definition of take.

Take of federally listed species is authorized through the Section 7 consultation process for actions by federal agencies. Federal agency actions include activities that are on federal land, conducted by a federal agency, funded by a federal agency, or authorized by a federal agency (including issuance of federal permits and licenses). Under Section 7, the federal agency conducting, funding, or permitting an action (the federal lead agency) must consult USFWS or National Marine Fisheries Service (NMFS), as appropriate, to ensure that the proposed action will not jeopardize endangered or threatened species or destroy or adversely modify designated critical habitat. If a proposed action “may affect” a listed species or designated critical habitat, the lead agency is required to prepare a biological assessment (BA) evaluating the nature and severity of the expected effect. In response, USFWS and/or NMFS issues a biological opinion (BO), with a determination that the proposed action:

- May jeopardize the continued existence of one or more listed species (jeopardy finding) or result in the destruction or adverse modification of critical habitat (adverse modification finding) or
- Will not jeopardize the continued existence of any listed species (no jeopardy finding) or result in adverse modification of critical habitat (no adverse modification finding).

If the BO issued by USFWS and/or NMFS results in a no jeopardy/no adverse modification finding, the USFWS and/or NFMS issue an incidental take permit which allows take of federally listed species in accordance with the included terms and conditions. If the BO results in a jeopardy/adverse modification

finding, it may stipulate discretionary “reasonable and prudent” alternatives that would avoid jeopardy/adverse modification of critical habitat.

Section 2090 of CESA requires state agencies to comply with endangered species protection and recovery and to promote conservation of these species. CDFW administers the act and authorizes take through Section 2081 agreements (except for species designated as fully protected). CDFW can adopt a federal BO as a state BO under California Fish and Game Code Section 2095. In addition, CDFW can write a consistency determination for species that are both federally listed and state-listed if CDFW determines that the avoidance, minimization, and compensation measures will ensure no take of species.

References Cited

U.S. Environmental Protection Agency and U.S. Department of the Army. 1990. *Memorandum of Agreement regarding Mitigation under CWA Section 404(b)(1) Guidelines*.