



United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
Carlsbad Fish and Wildlife Office
2177 Salk Avenue, Suite 250
Carlsbad, California 92008



In Reply Refer To:
FWS-OR-17B0093-17CPA0078

February 2, 2017
Sent by Email

Tom Barnes
Environmental Science Associates
626 Wilshire Boulevard, Suite 1100
Los Angeles, California 90017

Subject: Notice of Preparation of a Draft Environmental Impact Report for the Proposed San Juan Watershed Project, Orange County, California

Dear Mr. Barnes:

The U.S. Fish and Wildlife Service (Service) has reviewed the Notice of Preparation (NOP) for the proposed San Juan Watershed Project in southern Orange County, California. The proposed project will develop facilities to manage surface water resources and to enhance groundwater resources of the San Juan Basin. The project will be constructed in multiple phases. The first phase includes the construction of three rubber dams in San Juan and/or Arroyo Trabuco Creeks and will be assessed at the project level in the Draft Environmental Impact Report (DEIR). Subsequent phases will be assessed at a programmatic level because they are largely conceptual. Portions of San Juan and Arroyo Trabuco Creeks are located within the Habitat Reserve (Reserve) established under the Southern Orange County Subregion Habitat Conservation Plan (HCP), and at least one of the project proponents, Santa Margarita Water District, is a permittee under the HCP.

The primary concern and mandate of the Service is the protection of public fish and wildlife resources and their habitats. The Service has legal responsibility for the welfare of migratory birds, anadromous fish, and endangered animals and plants occurring in the United States. We offer the following comments and recommendations regarding project-associated biological impacts based on our review of the NOP and our knowledge of declining habitat types and species within Orange County. We provide these comments pursuant to the Endangered Species Act of 1973 (Act), as amended (16 U.S.C. 1531 *et seq.*), as a signatory to the HCP and in keeping with our agency's mission to work "with others to conserve, protect, and enhance fish, wildlife, and plants and their habitats for the continuing benefit of the American people."

The San Juan Creek Watershed is ecologically significant because it is one of the only remaining large watersheds in southern California that is not substantially impeded by dams and thus retains the natural flows and associated processes necessary to support native aquatic resources along the majority of its length. Some of the native aquatic species that are dependent on surface flows in the watershed include arroyo chub (*Gila orcutti*), arroyo toad (a. southwestern t.) [*Anaxyrus californicus* (*Bufo microscaphus c.*); arroyo toad], threespine stickleback (*Gasterosteus aculeatus*), southwestern pond turtle (*Actinemys marmorata pallida*), and southern California steelhead

(*Oncorhynchus mykiss*). While surface flows in portions of the watershed are already affected by groundwater withdrawals (PCR and Dudek 2002), the proposed expansion of groundwater recovery and treatment facilities has the potential to further reduce the frequency and extent of surface flows available to support native aquatic resources in the watershed.

In consideration of the scarcity of native aquatic species in southern California and to facilitate the evaluation of the proposed project from the standpoint of these rare resources, we request that the DEIR contain the following specific information:

1. A description of the environment in the vicinity of the project from both a local and regional perspective, including an aerial photograph of the area with the project site outlined.
2. A complete discussion of the purpose and need for the project and each of its alternatives.
3. A complete description of the proposed project including the limits of construction, changes in distribution of water resources within the basin, and project-related operations and maintenance.
4. Quantitative and qualitative assessments of the biological resources and habitat types that will be affected by the proposed project and its alternatives. These assessments should include direct, indirect, and cumulative project impacts from all facets of the project (i.e., construction, operation, and maintenance) to fish and wildlife and their associated habitats.
 - a. Assessments should include a list of Federal candidate, proposed, or listed species, State-listed species, and locally sensitive species that are on or near the project site. They should also include a detailed discussion of these species, including information pertaining to the local status and distribution. The analysis of impacts to biological resources should include detailed maps and tables summarizing the specific acreages and locations of all habitat types, as well as the number and distribution of all Federal candidate, proposed, or listed species, State-listed species, and locally sensitive species, within the project's or its alternatives' area of potential effect.
 - b. Many of the species covered under the HCP (Covered Species) are dependent on aquatic and riparian habitats [e.g., arroyo chub, threespine stickleback, arroyo toad, southwestern pond turtle, least Bell's vireo (*Vireo bellii pusillus*), yellow-breasted chat (*Icteria virens*), yellow warbler (*Dendroica petechia brewsteri*)]. Changes to hydrology and water quality associated with implementation of the HCP were anticipated to be controlled through implementation of Water Quality Management Plans (WQMPs) for each development Planning Area within the Southern Subregion (HCP, Appendix K) and the San Juan Creek and Western San Mateo Creek Watershed Special Area Management Plan (SAMP, Corps 2005). The WQMPs will be implemented, such that "hydrologic conditions of concern" and "pollutants of concern" (as defined by the San Diego Regional Water Quality Control Board) are monitored and corrected as necessary to generally maintain baseline flow and water quality conditions following development of the Planning Areas. In addition, the U.S. Army Corps of Engineers (Corps) requires that specific channel

- geomorphologic and hydrologic conditions are maintained in the watershed as part of the SAMP. In the biological opinion for the HCP (FWS-OR-812.8), it was anticipated that implementation of the WQMPs and the SAMP would ensure riparian and aquatic habits were maintained for Covered Species within the Reserve. The DEIR should address whether the proposed project is consistent with the WQMPs and the SAMP and if Covered Species will be impacted by the redistribution of water resources in the San Juan Watershed in a manner not anticipated under the HCP.
- c. Direct impacts to vegetation communities and habitats should be thoroughly discussed with detailed maps provided in the DEIR. Direct impacts include areas graded for facilities, areas of remedial grading, pipeline corridors, access roads, fuel modification zones, non-native landscape areas, soil and materials stockpile areas, and construction staging areas.
 - d. Include a detailed analysis of the potential indirect impacts to aquatic and riparian species due to changes in hydrology and the redistribution of water resources associated with the proposed project. The following potential indirect effects include, but are not limited to:
 - i. Impacts to fish migration due to operations of the rubber dams or other proposed facilities;
 - ii. A reduction in the quality and extent of surface and subsurface flows available to support aquatic and riparian resources due to project-related increases in groundwater pumping;
 - iii. Changes in channel geometry, slope, and substrate composition that reduce the quality of habitat for aquatic species due to project-related changes in hydrology
 - iv. An increase in available habitat for non-native aquatic species that are predators on native species [e.g., American bullfrog (*Lithobates catesbeianus*), largemouth bass (*Micropterus salmoides*), and red swamp crayfish (*Procambarus clarkii*)] due to the stagnant or slow-moving ponds of water that will form behind the rubber dams or other recharge facilities.
 - v. Reduction in estuarine resources and cues for southern California steelhead migration due to the reduction in freshwater flows at the mouth of San Juan Creek; and
 - vi. An increase in the frequency and extent of beach nourishment activities and concurrent increase in disruptions to benthic communities and shorebirds due to a reduction in sediment transport to the beach
5. A detailed discussion of the measures taken to avoid, minimize, and offset impacts to biological resources. Mitigation measures for adverse project-related impacts to sensitive

plants, animals, and habitats should be discussed. Because of the scarcity of native aquatic resources in southern California, the proposed project should emphasize avoidance of impacts to naturally functioning stream processes to the extent possible.

In summary, the San Juan Creek watershed is one of the most ecologically significant watersheds remaining in southern California, and we request that the DEIR address all of the potential direct and indirect effects to the biological resources within the watershed. We appreciate the opportunity to comment on the subject NOP and look forward to continuing participation as project develops. If you have any questions regarding these comments, please contact Christine Medak of this office at (760) 431-9440 ext. 298.

Sincerely,

for Karen A. Goebel
Assistant Field Supervisor

cc:

Laura Eisenberg, Rancho Mission Viejo
Corice Farrar, U.S. Army Corps of Engineers
Kevin Hupf, California Department of Fish and Wildlife

LITERATURE CITED

[Corps] U.S. Army Corps of Engineers. 2005. Draft Environmental Impact Statement San Juan Creek and Western San Mateo Creek Watershed Special Area Management Plan (SAMP). Los Angeles District, Corps of Engineers.

[PCR and Dudek] PCR Services Corporation and Dudek & Associates. 2002. Geomorphic and hydrologic needs of aquatic and riparian endangered species. San Juan/Western San Mateo Watershed, Orange County, California. Prepared for Rancho Mission Viejo, San Juan Capistrano, California.