

US EPA ARCHIVE DOCUMENT



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105

June 23, 2014

Kristin Thomas
U.S. Marine Corps
Marine Corps Base Camp Pendleton
Building 22165
Camp Pendleton, California 92055-5008

Subject: Santa Margarita River Conjunctive Use Project Draft Environmental Impact Report/
Environmental Impact Statement (EIS), San Diego County, California
[CEQ # 20140144]

Dear Ms. Thomas:

The U.S. Environmental Protection Agency (EPA) has reviewed the above referenced document. Our review and comments are provided pursuant to the National Environmental Policy Act (NEPA), the Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500-1508, and our NEPA review authority under Section 309 of the Clean Air Act.

We have rated this Draft EIS as EC-2 – Environmental Concerns-Insufficient Information (see enclosed "Summary of Rating Definitions and Follow-Up Action"). Our rating is based on our concerns about the proposed project's potential impacts on water resources, habitat, and special status species. We recommend that the Final EIS provide additional information regarding these issues, and include commitments to additional mitigation measures to reduce impacts to water and air quality and biological resources. We also recommend that the Final EIS include the Adaptive Management Plan/Facility Operating Plan, which should clearly articulate the proposed project's management objectives and options for operating facilities to meet these objectives. Our detailed comments are enclosed.

We appreciate the opportunity to review this Draft EIS. If you have questions, please call me at (415) 972-3521 or contact Jeanne Geselbracht at 415-972-3853.

Sincerely,

/s/

Kathleen Martyn Goforth, Manager
Environmental Review Section

Enclosures: EPA's Summary of Rating Definitions and Follow-Up Action
EPA's Detailed Comments

cc: William Steele, U.S. Bureau of Reclamation, Temecula
Brian Brady, Fallbrook Public Utility District
Theresa O'Rourke Bradford, U.S. Army Corps of Engineers
Peter Beck, US. Fish and Wildlife Service, Carlsbad
Rodney McInnis, National Marine Fisheries Service

Summary of Rating Definitions and Follow-up Action

Environmental Impact of the Action

LO--Lack of Objections

The EPA review has not identified any potential environmental impacts requiring substantive changes to the proposal. The review may have disclosed opportunities for application of mitigation measures that could be accomplished with no more than minor changes to the proposal.

EC--Environmental Concerns

The EPA review has identified environmental impacts that should be avoided in order to fully protect the environment. Corrective measures may require changes to the preferred alternative or application of mitigation measures that can reduce the environmental impact. EPA would like to work with the lead agency to reduce these impacts.

EO--Environmental Objections

The EPA review has identified significant environmental impacts that must be avoided in order to provide adequate protection for the environment. Corrective measures may require substantial changes to the preferred alternative or consideration of some other project alternative (including the no action alternative or a new alternative). EPA intends to work with the lead agency to reduce these impacts.

EU--Environmentally Unsatisfactory

The EPA review has identified adverse environmental impacts that are of sufficient magnitude that they are unsatisfactory from the standpoint of public health or welfare or environmental quality. EPA intends to work with the lead agency to reduce these impacts. If the potentially unsatisfactory impacts are not corrected at the final EIS stage, this proposal will be recommended for referral to the CEQ.

Adequacy of the Impact Statement

Category 1--Adequate

EPA believes the draft EIS adequately sets forth the environmental impact(s) of the preferred alternative and those of the alternatives reasonably available to the project or action. No further analysis or data collection is necessary, but the reviewer may suggest the addition of clarifying language or information.

Category 2--Insufficient Information

The draft EIS does not contain sufficient information for EPA to fully assess environmental impacts that should be avoided in order to fully protect the environment, or the EPA reviewer has identified new reasonably available alternatives that are within the spectrum of alternatives analyzed in the draft EIS, which could reduce the environmental impacts of the action. The identified additional information, data, analyses, or discussion should be included in the final EIS.

Category 3--Inadequate

EPA does not believe that the draft EIS adequately assesses potentially significant environmental impacts of the action, or the EPA reviewer has identified new, reasonably available alternatives that are outside of the spectrum of alternatives analyzed in the draft EIS, which should be analyzed in order to reduce the potentially significant environmental impacts. EPA believes that the identified additional information, data, analyses, or discussions are of such a magnitude that they should have full public review at a draft stage. EPA does not believe that the draft EIS is adequate for the purposes of the NEPA and/or Section 309 review, and thus should be formally revised and made available for public comment in a supplemental or revised draft EIS. On the basis of the potential significant impacts involved, this proposal could be a candidate for referral to the CEQ.

**Santa Margarita River Conjunctive Use Project Draft EIS
EPA Comments – June, 2014**

Compliance with Clean Water Act Section 404

According to the Draft EIS, Alternative 1 would result in a permanent loss of approximately 2.67 acres of waters of the U.S. and a temporary loss of 0.80 acres (Table 4.3-3, pg. 4-34). The aquatic ecosystem would be altered by this project through permanent and temporary habitat loss and degradation, and changes to hydrological processes.

The purpose of Section 404 of the Clean Water Act (CWA) is to restore and maintain the chemical, physical, and biological integrity of waters by prohibiting discharges of dredged or fill material that would result in avoidable or significant adverse impacts on the aquatic environment. EPA's *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* (40 CFR 230), promulgated pursuant to Section 404(b)(1) of the CWA (Guidelines), provide the standards by which proposed discharges must be evaluated. The burden to demonstrate compliance with the Guidelines rests with the permit Applicant. The Guidelines contain four main requirements that must be met to obtain a Section 404 permit:

- a) Section 230.10(a) prohibits a discharge if there is a less environmentally damaging practicable alternative to the proposed project.
- b) Section 230.10(b) prohibits discharges that will result in a violation of water quality standards or toxic effluent standards, jeopardize a threatened or endangered species, or violate requirements imposed to protect a marine sanctuary.
- c) Section 230.10(c) prohibits discharges that will cause or contribute to significant degradation of waters. Significant degradation may include individual or cumulative impacts to human health and welfare; fish and wildlife; ecosystem diversity, productivity and stability; and recreational, aesthetic or economic values.
- d) Section 230.10(d) prohibits discharges unless all appropriate and practicable steps have been taken to minimize potential adverse impacts of the discharge on the aquatic ecosystem.

Pursuant to the Guidelines, mitigation of project impacts begins with the avoidance and minimization of direct, indirect, and cumulative impacts to the aquatic ecosystem, followed by compensatory measures if a loss of aquatic functions and/or acreage is unavoidable. Compensatory mitigation is intended only for unavoidable impacts to waters of the U.S. after the least environmentally damaging practicable alternative (LEDPA) has been determined.

The Draft EIS has not clearly demonstrated that all practicable measures to minimize unavoidable impacts to waters of the U.S. have been incorporated into the proposed project design. For project components such as pipelines, transmission lines, access roads, and the wastewater treatment plant, opportunities exist to avoid and minimize direct, indirect, and cumulative impacts to waters by applying sensitive design criteria (e.g., shifting the alignment of roads and placement of wells and power line towers; reducing the footprint of buildings and access roads; etc.).

Recommendations: The Final EIS should discuss and demonstrate compliance with the Guidelines by discussing the steps that would be taken to avoid and minimize impacts to waters of the U.S. For project components that could affect waters of the U.S., the Final EIS should evaluate alternative locations, configurations, and designs to avoid these waters. Avoidance of sensitive plant species should be an important consideration in such evaluations. The Final EIS should provide additional details, including acres of waters of the U.S. avoided for each component as a result of these avoidance measures.

For those impacts to waters of the U.S. that are unavoidable, the Final EIS should describe, in detail, the project commitments to compensatory mitigation measures, as appropriate, consistent with the Compensatory Mitigation for the Loss of Aquatic Resources, Final Rule, 33CFR 325 and 332, April 10, 2008.

Biological Resources

According to the Draft EIS (p. 2-51), the proposed project would reduce lower Santa Margarita River streamflow and groundwater levels relative to historic averages. Riparian and estuarine habitat would be adversely affected through changes in the distribution and duration of seasonal aquatic habitats and reduced productivity of groundwater-dependent riparian vegetation, and these impacts would adversely affect special status species, including least Bell's vireo, southwestern willow flycatcher, arroyo toad, light-footed clapper rail, California least tern, southern California steelhead, and Belding's savannah sparrow. The Draft EIS concludes, however, that the permanent loss of riparian habitat on Marine Corps Base (MCB) Camp Pendleton would be compensated in accordance with the 1995 Riparian/ Estuarine Biological Opinion (BO). The Draft EIS (pp. 2-22, 23) also states that the BO and Special Conservation Measure (SCM) #2 would ensure that pumping would not result in groundwater drawdown deeper than 15 feet below the surface (i.e., the upper limit of willow riparian root zone depth beyond which plants are unable to utilize groundwater), and that the "relationship between the 15-foot (5-m) depth to water and the health of the riparian vegetation" would be improved to prevent changes to the environment that are not within the natural range of conditions.

The meaning of this commitment is unclear, and the specific needs (e.g., distribution and duration of seasonal aquatic habitats, saturated soils, recruitment conditions, etc.) of the potentially affected biological resources are not identified in the Draft EIS. In addition, the metrics that would represent the "natural range of conditions" in the context of SCM #2 are unclear. For example, would project-induced drawdown within the natural range of conditions be allowed for an extended number of years (e.g., during a drought) or during seasons when shallow groundwater or saturated soil is critical for various species? Conditions that could further stress the system and have adverse impacts on habitat and wildlife should be avoided. EPA is concerned that SCM #2 may not sufficiently protect or improve the functions of the lower Santa Margarita River aquatic, estuarine, and riparian habitats and their associated wildlife.

Recommendation: The Final EIS should describe the specific habitat needs of the potentially affected species, and commit to measures that would be implemented to meet these needs. The Final EIS should also describe commitments to improve habitat in the project area, and discuss the anticipated effects of these efforts. This information should

feed into the objectives, triggers, thresholds, and action commitments associated with affected resources to be addressed in the Adaptive Management Plan/Facility Operating Plan (AMP/FOP), which is further discussed below. Careful consideration of these objectives, triggers, thresholds, and action commitments should factor into development of the water management details of the proposed project (e.g., timing, duration, flow rates, diversion rates, pumping rates, water sources, etc.). As development of the AMP/FOP progresses and these details are further analyzed and incorporated into the plan, the proposed action may need refining, and the Final EIS should clarify any such refinements.

Adaptive Management

Management of water resources within the Santa Margarita River watershed is complex because of its dynamic natural system; competing resource needs; natural- and human-induced stressors, including cleanup of contaminated groundwater in Installation Restoration areas; and legal and regulatory requirements. The Draft EIS describes the AMP/FOP that would be developed by MCB Camp Pendleton to adaptively manage project diversion, recharge, production, and delivery facilities. The AMP/FOP would incorporate tools and models to describe the natural system's response to various stressors, management objectives and a logic-based series of responses to guide active basin management, and monitoring to gather near real-time physical data.

The Draft EIS describes SCMs #1-3 for project operations and SCMs #4-83 for project construction. While many of the SCMs address seasonal restrictions to protect special status species during construction or maintenance activities, the operational SCMs do not identify the needs/restrictions for protecting these species throughout project operations. It is unclear, therefore, what the AMP/FOP will be based upon with respect to triggers, thresholds, and action commitments for biological resources.

Recommendation: The AMP/FOP should clearly articulate the proposed project's numerous management objectives and options for operating facilities to meet these objectives, and should be included in the Final EIS. The objectives identified in the plan should be explicit and measurable, and the triggers, thresholds, and associated action commitments should be well defined. The uncertainties in the lower Santa Margarita River system should be identified so that appropriate monitoring is developed to not only track anticipated responses to management, but to also uncover unexpected results. The AMP/FOP should identify the parties who will be involved in implementing it (e.g., stakeholders, parties who will be monitoring resources and assessing system responses, decision makers, etc.). A well-considered and thorough plan will be critical to successful management of the lower Santa Margarita River watershed.

The Draft EIS (p. 2-13) provides general plans under Alternative 1 for restricting groundwater pumping during dry and below normal water years to maintain groundwater levels within their historical range, prevent aquifer compaction and seawater intrusion, and reduce potential impacts to riparian habitat. During drought periods when groundwater is insufficient to meet demand or during emergency situations, groundwater pumping would be curtailed and imported water would be delivered from the San Diego County Water Authority (SDCWA) to MCB Camp

Pendleton at an average rate of 500 acre-feet per year to help meet the base's potable water demand.

Recommendation: The Final EIS should clarify the conditions under which these measures would be taken. The Final EIS should also identify the source of the SDCWA water and the potential maximum annual delivery from SDCWA to MCB Camp Pendleton, and describe the indirect and cumulative effects related to the consumption of water from this source.

Air Impacts

Measures identified in the Draft EIS (p. 2-36) to reduce PM₁₀ emissions from construction activities include watering unpaved roads and actively graded surfaces up to three times daily, reducing speeds on unpaved roads to 15 miles per hour (mph), suspending grading activities if wind speeds exceed 25 mph, and replacing ground cover in graded areas as soon as possible. We support use of these measures and offer additional measures to reduce emissions of other air pollutants.

Recommendation: The Final EIS should identify additional mitigation measures that would be implemented to minimize air pollutant emissions from the proposed project, and specifically include measures to address potential impacts to nearby residents, including sensitive receptors. Diesel particulate matter (DPM), criteria pollutants, and greenhouse gas emissions can be reduced by implementing appropriate mitigation measures, such as the following:

- Use particle traps and other appropriate controls to reduce emissions of DPM and other air pollutants. Traps control approximately 80 percent of DPM, and specialized catalytic converters (oxidation catalysts) control approximately 20 percent of DPM, 40 percent of carbon monoxide emissions, and 50 percent of hydrocarbon emissions;
- Minimize construction-related trips of workers and equipment, including trucks and heavy equipment;
- Procure new vehicles that are non-diesel or use diesel engines from model year 2010 or later to ensure low black carbon emissions; and
- Employ periodic, unscheduled inspections to ensure that construction equipment is properly maintained at all times and does not unnecessarily idle, is tuned to manufacturer's specifications, and is not modified to increase horsepower except in accordance with established specifications.

Climate Change

The Draft EIS discusses the proposed project's potential climate change impacts in terms of its potential greenhouse gas emissions, but does not address potential impacts of climate change on the project. Executive Order 13653 (November 1, 2013) directs the Departments of Defense and Interior, and other agencies, to undertake various action to promote greater climate change

resilience. Department of Interior Secretarial Order 3289¹ also instructs its bureaus to address the impacts of climate change, including the following recommendations:

- Adapt water management strategies to address the possibility of shrinking water supplies and more frequent and extended droughts;
- Conserve and manage fish and wildlife resources, including migratory birds and federally listed threatened and endangered species; and
- Continue to provide state-of-the-art science to better understand the impacts of climate change and to develop science-based adaptive management strategies for natural and cultural resource managers.

Recommendations: EPA recommends that the Final EIS analyze the potential impacts of climate change, over the life of the project, on resources such as water quality and quantity, vegetation/habitat, wildlife, and economic factors. The AMP/FOP should account, in advance, for climate change and take a conservative approach to adaptation objectives, triggers, thresholds, action commitments, and monitoring needs.

We recommend that the lead agencies and their partners consider and incorporate commitments to energy efficiency and renewable energy options in all aspects of the project, such as procurement/sourcing, construction, and operations, including for water and wastewater treatment and pumping.

Special Conservation Measures

EPA supports MCB Camp Pendleton's plan, per SCM #3, to incorporate recycled water use, Installation Restoration site remediation, and other water-related management activities into the AMP/FOP, as well the low impact development features identified in SCM #31. EPA encourages efficient use and management of water supply, including a focus on demand-side management measures. We advocate development and implementation of water conservation plans, use of conservation performance requirements, and strong assurances that certain levels of conservation will be attained.

Recommendation: The Final EIS and AMP/FOP should include specific details on the objectives, triggers, thresholds, and action commitments related to SCM #3 management activities.

SCM #31 states that noxious weeds may be controlled by hand weeding or herbicide application in disturbed areas as necessary to prevent their establishment.

Recommendation: The Final EIS should identify the herbicides that could be used for the project and the trigger(s) for their use, and discuss precautions that would be taken to ensure against detrimental effects on non-targeted species, including special status species. EPA recommends that herbicides be used only in the context of an integrated pest management program that prioritizes non-chemical and least toxic pest management methods.

¹ Department of Interior Secretarial Order 3289, Amendment No. 1, February 22, 2010, Addressing the Impacts of Climate Change on America's Water, Land, and Other Natural and Cultural Resources.