UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION IX
75 Hawthorne Street
San Francisco, CA 94105-3901

May 19, 2008

Mr. Robert Smith, Jr.
U.S. Army Corps of Engineers
Los Angeles District
P.O. Box 532711
Los Angeles, CA 90053

Subject: Final Environmental Impact Statement (FEIS) for the Carryover Storage and San Vicente Dam Raise Project (CSP), San Diego County, California (CEQ #20080142)

Dear Mr. Smith:

The U.S. Environmental Protection Agency (EPA) has reviewed the above project pursuant to the National Environmental Policy Act, Council on Environmental Quality regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. These comments were also prepared under the authority of, and in accordance with, the provisions of the Federal Guidelines promulgated at 40 CFR 230 under Section 404(b)(1) of the Clean Water Act (CWA). Our detailed comments are enclosed.

EPA provided detailed comments dated October 9, 2007, on the Draft Environmental Impact Statement (DEIS) for the project. We rated the DEIS as Environmental Concerns - Insufficient Information (EC-2) due to the need for additional information regarding the Purpose and Need, compensatory mitigation sites for waters of the United States, a commitment to the efficient use of emergency and new carryover storage, and mitigation measures for identified adverse air and noise impacts. We appreciate the response to our comments provided in the FEIS, including additional information describing "water storage reliability" versus "water supply reliability" in the context of CSP purpose and need. However, based on our review of the FEIS, EPA continues to have concerns about the proposed project.

We continue to disagree that the submerged aquatic vegetation identified around the perimeter of the reservoir is not regulated by the Corps under Section 404 of the Clean Water Act, and recommend the Record of Decision (ROD) be updated to reflect this and any additional mitigation that may be required due to project impacts to this aquatic vegetation. We are also concerned that the proposed wetland mitigation may be inadequate and inconsistent with the April 10, 2008, Corps and EPA "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule" (Mitigation Rule) 40 CFR 230, which will go into effect June 9, 2008. We

recommend the Corps and San Diego County Water Authority (SCDWA) further evaluate the adequacy of the mitigation and describe consistency with the Mitigation Rule in the ROD. The ROD should identify any changes to the proposed mitigation necessary for compliance with the new rule. Additional mitigation should be committed to as appropriate. We are concerned that enforced water rationing does not appear to be a component of the SDCWA water conservation approach and recommend that these opportunities be described in the ROD to further reduce impacts from the project. Finally, we recognize the challenge of avoiding impacts to air quality from construction in nonattainment zones and recommend several control measures be incorporated to further reduce emissions.

Thank you for the opportunity to review this FEIS. Please send us a copy of the ROD when it is published to the address above (Mail Code: CED-2). If you have any questions, please contact me at 415-972-3846 or Paul Amato, the lead reviewer for this project. Paul can be reached at 415-972-3847 or amato.paul@epa.gov.

Sincerely,

Connell Dunning

FOR Nova Blazej, Manager
Environmental Review Office

Enclosure:
Detailed Comments

cc: Kelly Gage, San Diego County Water Authority

THE ENVIRONMENTAL PROTECTION AGENCIE'S (EPA) DETAILED COMMENTS ON THE FINAL ENVIRONMENTAL IMPACT STATEMENT (FEIS) FOR THE CARRYOVER STORAGE AND SAN VICENTE DAM RAISE (CSP) PROJECT, MAY 19, 2008

Purpose and Need

During the preparation of the Draft Environmental Impact Statement (DEIS), EPA, the U.S Army Corps of Engineers (Corps), and the San Diego County Water Authority (SDCWA) had several discussions regarding the Purpose and Need of the proposed project. In our DEIS comment letter, EPA requested the SDCWA clarify the difference between "water storage reliability" versus "water supply reliability," and the need to provide water storage reliability. We commend the SDCWA for providing a comprehensive response to our request for addition information. We appreciate the discussion of water storage reliability and the need for 100,000 acre-feet of storage in the context of the Regional Water Facilities Master Plan and the Urban Water Management Plan. We also recognize that carryover storage was included in the Master Plan as a component of each supply alternative and that it is one of several water resource projects to be developed over the next 25 years to ensure long-term water reliability for the San Diego Region.

Impacts to Waters of the United States (WOUS) and Section 404 of the Clean Water Act

EPA remains concerned regarding the extent of impacts to WOUS. It is our understanding that the jurisdictional delineation has not been verified by the Corps. As we previously stated in our DEIS letter, while the Corps determined submerged aquatic vegetation does not meet the definition of "vegetated shallow" in the 404(b)(1) Guidelines, the DEIS incorrectly states submerged aquatic vegetation is not regulated under Section 404 of the Clean Water Act (p.3.6-5). While the FEIS noted the aquatic vegetation band present in San Vicente Reservoir does not meet the definition of "vegetated shallows' under the definition of special aquatic sites, the document continues to be incorrect in stating this aquatic vegetation is not regulated by the Corps (p. 3.6-5, 3.6-28). For Clean Water Act purposes, it is a water of the United States.

Recommendation:

The Record of Decision (ROD) should clarify that the aquatic vegetation band present in San Vicente Reservoir is regulated by the Corps under Section 404 of the Clean Water Act and subject to appropriate avoidance and compensatory mitigation requirements. In addition, mitigation for these impacts should be identified in the ROD (see below).

Compensatory Mitigation for Impacts to WOUS

EPA is concerned the proposed mitigation described in the FEIS will not compensate for impacts to acreage and functions of aquatic resources that result from the Project. We are also concerned that the proposed mitigation does not fully comply with the April 10, 2008, Corps and EPA "Compensatory Mitigation for Losses of Aquatic Resources; Final Rule" (Mitigation Rule) 40 CFR 230. The Mitigation Rule, which goes into effect June 9, 2008, can be found at http://www.epa.gov/EPA-WATER/2008/April/Day-10/w6918a.pdf. The SDCWA proposed mitigation for permanent impacts to waters of the United States (WOUS) through preservation within and along San Vicente Creek and wetland creation within the planned Tijuana River Valley Wetland Mitigation Banking Project. The FEIS also mentions availability of excess riparian mitigation in Lakeside, excess wetland mitigation in Encinitas, and potential wetland

creation and southern coast live oak riparian forest/cottonwood-sycamore woodlands on the San Luis Rey River.

It is unclear whether the Tijuana River Valley Wetland Mitigation Bank is appropriate mitigation and when it will be available for mitigation credits. Although the geographic service area has not been determined for the proposed bank, EPA continues to be concerned with the use of a mitigation bank outside of the watershed where impacts will occur. The Mitigation Rule does acknowledge the benefits of appropriate use of mitigation banks, however credits from outside the watershed where impacts occur appears to be in conflict with the Mitigation Rule approach which reinforces a watershed-based approach to compensatory mitigation and states that mitigation "should be located within the same watershed as the impact site and should be located where it is most likely to successfully replace lost functions and services..." This concern also applies to the Lakeside, Encinitas, and San Luis Rey River sites unless they are determined to be in locations consistent with the approach described in the Mitigation Rule.

The FEIS also states that the one-to-one compensation to impact ratio is appropriate as the created wetlands would be in place prior to the actual impacts. The Mitigation Rule states that "mitigation bank credits are not released for debiting until specific milestones associated with the mitigation bank site's protection and development are achieved..." The FEIS does not clearly identify whether it would be an approved bank supporting wetlands and achieving necessary milestones prior to project impacts associated with the CSP. The Mitigation Rule also states that "the district engineer must require a mitigation ratio greater than one-to-one where necessary to account for the method of compensatory mitigation, the likelihood of success, differences between the functions lost at the impact site and the functions expected to be produced by the compensatory mitigation project, temporal losses of aquatic resource functions, the difficulty of restoring or establishing the desired aquatic resource type and functions, and/or the distance between the affected aquatic resource and the compensation site." These factors should be considered by the Corps and the SDCWA in determining appropriate mitigation ratios and whether adequate mitigation is available.

EPA supports the preservation of the Rancho Cañada property as part of a compensatory mitigation package; however the Corps and SDCWA should clarify consistency with the five mandatory preservation criteria described in the Mitigation Rule, as they pertain to this site.

The proposed project will result in temporary impacts to approximately 31 acres of submerged aquatic vegetation. Submerged aquatic vegetation provides habitat and foraging for aquatic insects, fish and other wildlife. The submerged aquatic vegetation at the water's edge would be subjected to desiccation during the period of drawdown. The applicant states propagules necessary for colonization would remain in receding waters and reestablish at the lowered water level during the dam raise construction period. When the reservoir fills following dam completion, submerged aquatic vegetation is expected to travel upward and establish at the new water level. A potential increase in square footage is anticipated due to an increase in surface area. Additional information is necessary to determine the extent of impacts and mitigation to submerged aquatic vegetation such as the schedule for water drawdown, the length of time necessary to reestablish aquatic vegetation, the potential for steep slopes along the banks of the reservoir to limit establishment of submerged aquatic vegetation, and revegetation success

monitoring commitments. Additional mitigation to compensate for the temporary and potentially permanent impacts to submerged aquatic vegetation may be required.

Recommendations:
EPA recommends the Corps and SDCWA review the proposed mitigation for compliance with the Mitigation Rule and document the results of this review in the ROD. The ROD should identify specific mitigation proposal changes that are necessary for compliance with the Mitigation Rule.

The ROD should describe whether locations of the proposed Tijuana River Valley Wetland Mitigation Bank and the lakeside, Encinitas and San Luis Rey locations are consistent with the Mitigation Rule.

The ROD should also describe whether the Tijuana River Valley Wetland Mitigation Bank will be available for credits prior to CSP implementation and whether one-to-one mitigation compensation is consistent with the new rule.

The ROD should include an expanded discussion of the rationale used to determine that a one-to-one mitigation ratio is appropriate, in light of the Mitigation Rule.

We recommend the ROD describe whether the proposed Rancho Cañada preservation site will comply with the five mandatory preservation criteria in the Mitigation Rule.

The ROD should provide additional information describing the potential impacts and revegetation potential for submerged aquatic vegetation that will be affected by reservoir drawdown and the raised water level post-project. The Corps and SDCWA should maximize measures to avoid impacts to submerged aquatic vegetation. Avoidance measures should be identified in the ROD, along with a quantification of the benefits achieved by additional avoidance measures.

Water Use Efficiency

While the FEIS mentions various water conservation measures including the Blueprint for Water Conservation, Voluntary Extraordinary Conservation, the Interruptible Agriculture Water Program, the Urban Water Management Plan, and future water supply alternatives, EPA remains concerned that enforced water rationing during drought conditions does not appear to be a part of the SDCWA's water conservation approach. The FEIS describes an estimated shortage of 94,482 acre feet that would occur under Years 2026-2028 worst-case scenario, even with the CSP in place. Based on the FEIS analysis, it is unclear to what extent enforced water rationing could reduce this estimated shortage and perhaps reduce the impacts associated with the CSP, or future water supply infrastructure.

Recommendation:
EPA recommends the Corps and SDCWA include in the ROD an assessment of water conservation and environmental benefits that could result from additional conservation measures such as enforced water rationing during severe drought. The assessment should

include a discussion of opportunities to reduce CSP impacts from reduced carryover storage demands resulting from enforced water rationing.

Air Quality Effects

The FEIS states that construction-related air quality impacts will not be reduced to less than significant even with implementation of all feasible mitigation measures. EPA recognizes the challenge of avoiding construction-related impacts to air quality standards, especially in nonattainment areas, and recommends the Corps and SDCWA adopt additional control measures in the ROD to maximize the reduction of construction emissions.

Recommendation:
In addition to the *General Conditions and Standard Specifications* Sections for Air Quality in the FEIS, EPA recommends that all of the following mitigation measures be adopted in the ROD to further reduce impacts associated with emissions of particulate matter and other toxics from construction-related activities:

Fugitive Dust Source Controls:

- Stabilize open storage piles and disturbed areas by covering and/or applying water or chemical/organic dust palliative where appropriate. This applies to both inactive and active sites, during workdays, weekends, holidays, and windy conditions.
- Install wind fencing and phase grading operations where appropriate, and operate water trucks for stabilization of surfaces under windy conditions.
- When hauling material and operating non-earthmoving equipment, prevent spillage and limit speeds to 15 miles per hour (mph). Limit speed of earth-moving equipment to 10 mph.

Mobile and Stationary Source Controls:

- Reduce use, trips, and unnecessary idling from heavy equipment.
- Maintain and tune engines per manufacturer's specifications to perform at EPA certification levels and to perform at verified standards applicable to retrofit technologies. Employ periodic, unscheduled inspections to limit unnecessary idling and to ensure that construction equipment is properly maintained, tuned, and modified consistent with established specifications. Engine certification data can be found at the EPA Engine Certification Data web page: http://www.epa.gov/OMS/certdata.htm.
- Prohibit any tampering with engines and require continuing adherence to manufacturer's recommendations
- If practicable, lease new, clean equipment meeting the most stringent of applicable Federal or State Standards. In general, only Tier 2 or newer engines should be employed in the construction phase.
- Utilize EPA-registered particulate traps and other appropriate controls where suitable to reduce emissions of diesel particulate matter and other pollutants at the construction site.

Administrative controls:
Identify all commitments to reduce construction emissions and update the air quality analysis to reflect additional air quality improvements that would result from adopting specific air quality measures.

- Identify where implementation of mitigation measures is rejected based on economic infeasibility.
- Prepare an inventory of all equipment prior to construction and identify the suitability of add-on emission controls for each piece of equipment before groundbreaking. (Suitability of control devices is based on: whether there is reduced normal availability of the construction equipment due to increased downtime and/or power output, whether there may be significant damage caused to the construction equipment engine, or whether there may be a significant risk to nearby workers or the public.) Utilize cleanest available fuel engines in construction equipment and identify opportunities for electrification. Use ultra low sulfur fuel (diesel with 15 parts per million or less) in engines where alternative fuels such as biodiesel and natural gas are not possible.
- Develop a construction traffic and parking management plan that minimizes traffic interference and maintains traffic flow.
- Identify sensitive receptors in the project area, such as children, elderly, and infirm, and specify the means by which you will minimize impacts to these populations. For example, locate construction equipment and staging zones away from sensitive receptors and fresh air intakes to buildings and air conditioners.