Reading File

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

January 27, 2006

Colonel Alex Dornstauder
District Engineer
U.S. Army Corps of Engineers, LA District
Attn: Mark Durham
914 Wilshire Boulevard, 14th Floor
Los Angeles, CA 90017

Subject: Draft Environmental Impact Statement (DEIS) for the San Juan Creek and Western San Mateo Creek Watershed Special Area Management Plan (CEQ # 50490) and associated Special Public Notices

Dear Colonel Dornstauder:

The Environmental Protection Agency (EPA) has reviewed the documents referenced above. Our review is pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and Section 309 of the Clean Air Act. Three Special Public Notices (SPNs) have been published concurrently with the DEIS. If implemented, these SPNs would determine the permitting process for future projects in the SAMP area, including the 22,815-acre Rancho Mission Viejo (RMV) Planning Area. As the documents are so integrally linked, we have combined our comments on the DEIS and SPNs into one response. Our detailed comments are enclosed.

We appreciate the opportunity to meet with you at your offices in Los Angeles on January 18, 2006. EPA supports a watershed-based approach to environmental permitting and planning and recognizes that the establishment of Special Area Management Plans (SAMPs) for areas of special sensitivity where development is planned can help to reduce cumulative impacts to aquatic resources and provide protection for high value resource areas. The proposed SAMP has a strong conservation component that will protect important aquatic resources with permanent conservation easements and long-term management. While four SAMPs are currently planned in southern California, this is the first SAMP that has resulted in the publication of an EIS. The subject SAMP covers a 131,000-acre area in the San Juan Creek and western San Mateo Creek watersheds in southern Orange County, California.

While we are supportive of the overall SAMP framework, we have some questions and concerns regarding the establishment of the proposed development areas, permitting procedures, management strategies, aspects of the SPNs, and compliance with the Clean Water Act (CWA) Section 404(b)(1) Guidelines (Guidelines). We have rated the proposed alternative as Environmental Concerns - Insufficient Information (EC-2) (see enclosed "Summary of Rating Definitions"). We recommend addressing these concerns before the Corps authorizes the long-term Individual Permit (IP) referenced in the SPN for the RMV Planning Area.

We have concerns regarding the alternatives analysis, cumulative impacts, and air quality impacts. In particular, we are concerned that only two action alternatives are analyzed in detail in the DEIS, and additional information is needed to determine if Alternative B-12 could be considered the Least Damaging Practicable Alternative (LEDPA). Sufficient detail to determine the LEDPA is important for the issuance of the CWA Section 404 permit, as only the LEDPA can be permitted. In particular, the rationale for eliminating the less environmentally damaging Alternative B-8 is not clear. The FEIS should explain why an effective conservation program could not be established as a component of Alternative B-8. We also recommend the analysis of an additional alternative that incorporates further on-site avoidance, as described in our detailed comments.

Once the long-term IP is issued, it appears development boundaries within the RMV Planning Area will be established, and no further avoidance or minimization will be required. Consequently, it is critical that prior to issuance of this permit, potential impacts to aquatic resources within the proposed development areas be avoided and minimized to the maximum extent practicable. We recommend requiring sustainable development measures within the areas targeted for development. A primary environmental benefit of developing and implementing a SAMP on a watershed scale is that cumulative impacts to waters can be more effectively evaluated and mitigated. As this document will serve as the basis for the impact analysis for future development in the area, it is important that the cumulative impacts in the area be analyzed in detail, including past and existing impacts or loss of waters of the U.S.

As stated earlier, this document will serve as the basis for the impact analysis for future development in the area. Therefore, it is also important to estimate and mitigate potential cumulative impacts to air quality in the area. The FEIS should evaluate the applicability of Clean Air Act General Conformity requirements for all reasonably foreseeable emissions of criteria pollutants for which the area is nonattainment or maintenance. In addition to air quality, it is also important that the FEIS account for the cumulative effect that past and existing projects have had on agricultural resources and non-aquatic biological resources.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send (3) copies to the address above (mailcode: CED-2). If you have any questions, please contact me at 415-972-3988 or Summer Allen, the lead reviewer for this project. Summer can be reached at 415-972-3847.

Sincerely,

Duane James, Manager
Environmental Review Office

Main ID # 3665
Enclosures: Summary of Rating Definitions
Detailed Comments

cc: Ken Corey, US Fish and Wildlife Service

Alternatives Analysis

According to the DEIS and Aquatic Resources Restoration Plan (Appendix F2), Alternative B-12, the agency preferred alternative, involves future development and construction of infrastructure within the RMV Planning Area that would result in permanent impacts to 55.46 acres of waters and temporary impacts to 36.89 acres of waters. Additional impacts to waters elsewhere in the larger SAMP area are anticipated, but have not been quantified. Based on our review of the DEIS and the SPN for the RMV planning Area, we believe there is insufficient information to make a determination as to whether Alternative B-12 represents the LEDPA to meet the project purpose, as required under the Guidelines (40 CFR 230.10(a), 230.12).

According to the DEIS (page 3-5), the overall project purpose of the SAMP involves allowing reasonable economic activities and development and establishment of an Aquatic Resources Conservation Program (ARCP) within the SAMP area. Clarification is needed regarding what is considered "reasonable economic activities and development" to determine if less environmentally damaging alternatives that may, in fact, be practicable for the purposes of Section 404 permitting should be considered. For example, according to the DEIS (Table 5-2), Alternative B-8 provides more acres of open space and fewer acres of development and dwelling units than Alternative B-12, the agency preferred alternative. Alternative B-8 is expected to impact fewer acres of waters as well. However, the DEIS lacks sufficient information to justify removing Alternative B-8 from further consideration as a potential LEDPA.

In part, Alternative B-8 is considered to be economically infeasible because the acre ratio of 5:1 for open space-to-development is greater than the 2:1 ratio under other plan areas such as Newport Coast and Otay Ranch (DEIS, page 6-95). We note that the proposed Alternative B-12 has an open space-to-development ratio of 3:1, which is also greater than the two examples cited. Given these incremental differences, the threshold and justification for determining feasibility in terms of open space-to-development ratios is unclear.

Alternative B-8 is also considered infeasible because it would not fully achieve RMV's project needs as described in Chapter 3 of the DEIS. However, no specific information justifying this statement is provided in the document. For example, it is unclear if the 14,000-unit project under Alternative B-12 is being considered as a threshold for defining 'reasonable economic development' or determining the practicability of an alternative. If so, a justification for this threshold needs to be provided. Please note that an alternative that does not fully meet RMV's specific economic goals may still meet project purpose and be practicable for the purposes of Section 404 permitting. For instance, the DEIS lacks information regarding the practicability of increasing the density of units to reduce the overall footprint of development areas and impacts to jurisdictional waters. There also may be practicable options for re-configuring the proposed development to accommodate more dwelling units than the 8,440 units currently associated with Alternative B-8.

According to the DEIS (page 6-96), the development of 3,680 acres under Alternative B-8 would not generate sufficient mitigation funding to address all existing and future needs of the

aquatic resources in the 19,000-acre open space area, including the acquisition of conservation easements. The DEIS (page 6-97) further asserts that Alternative B-8 does not meet the overall project purpose of establishing an Aquatic Resource Conservation Program (ARCP). We do not believe that insufficient mitigation funding should be used as a basis to justify eliminating Alternative B-8, as this does not follow the mitigation sequencing guidelines set forward in the 1990 CWA Memorandum of Agreement between the Corps and EPA. Furthermore, it seems that Alternative B-8 could include a conservation easement component similar to the phased approach of establishing conservation easements under Alternative B-12.

The Aquatic Resources Adaptive Management and Monitoring Program describes short-term and long-term funding for implementation of the program (pages A22 to 24). It appears that the $700,000 from RMV's permitted Ladera Planned Community project and the $700,000 of Santa Margarita Water District funds could apply to Alternative B-8 for short-term implementation. The proposed long-term funding mechanism, based on property owner assessments, could still generate substantial annual funding at build-out under Alternative B-8. The FEIS should evaluate if some type of effective Aquatic Resource Conservation Program could be implemented under this reduced funding scenario.

Additional Avoidance Alternative: The range of development/open space alternatives is not sufficient to determine the LEDPA. In comparing the 2004 Jurisdictional Delineation Maps (Figures 4.1.2-7a-h) with the proposed development areas (Figure 5-13), there appear to be several opportunities to further avoid direct impacts to waters of the United States. According to the DEIS (pages 4.2-4 to 4.2-30) the sub-basins affected by the proposed development areas are basically intact. We presume the waters within the affected sub-basins are intact as well and should be considered for avoidance where practicable. Once the boundaries of the development areas are established under the proposed long-term individual permit, no further avoidance or minimization under Letter of Permission (LOP) procedures will be required for future development within these areas.

For Planning Areas 4 and 8, the exact footprint of future development has not been determined. However, issuance of the long-term IP would provide for the future development of 550 acres and a 175-acre reservoir in Planning Area 4, and 500 acres of future development in Planning Area 8. It is unclear how the number of development acres was determined and if a smaller development footprint would be practicable.

Recommendations:

The FEIS should include specific or more clearly defined economic goals of the SAMP participants that are used to define the project purpose. To support the selection of Alternative B-12 as the LEDPA, the FEIS should disclose what specific goals and objectives are being directly tied to project purpose or used as screening criteria to eliminate alternatives in Chapter 6 and clarify why such goals are appropriate to use.

The FEIS should describe what constitutes a "reasonable level of economic activities and development" and how the criteria have been used to determine whether or not a particular alternative meets the project purpose or is practicable for the purposes of Section 404 permitting.

The FEIS should include a clear demonstration of why Alternative B-8, a less environmentally-damaging alternative, does not meet the overall project purpose or is impracticable in terms of costs, logistics, or existing technology. The FEIS should address the specific issues raised in our comments regarding the economic feasibility and long-term management of aquatic resources under Alternative B-8.

The FEIS should evaluate the practicability of an alternative that incorporates additional avoidance of intact waters in the following development areas:

- Planning Area 2 (Figure 4.1.2-7b) the unnamed tributary along the southeast border of the development area;
- Planning Area 3 (Figure 4.1.2-7c) one or more of the five tributary systems in the development area;
- Planning Area 4 (Figure 4.1.2-7d) the tributary system to lower Vertuga Canyon, near the confluence with San Juan Creek;
- Planning Area 6 (Figure 4.1.2-7f) all direct and indirect impacts of proposed orchard development to Christianito Creek; and
- Planning Area 8 (Figure 4.1.2-7h) the Blind Canyon watershed and intact headwaters of Talega Creek.

We recommend requiring through the federal permit the implementation of Low Impact Development Strategies (LIDS) and other sustainable development measures within the areas targeted for development.[1] Such measures can reduce the adverse impacts of development both on-site and regionally at a watershed-scale. The FEIS should also document any mitigation opportunities or alternatives outside of RMV Planning Area, in addition to the alternatives listed in Chapter 6, to broaden the scope of the alternatives analysis.

Cumulative Impacts

The cumulative impacts discussion is restricted to foreseeable future projects and does not account for past or existing projects and the ongoing, related impacts to the ecosystem. Although the cumulative impacts discussion is limited to future projects, the DEIS still estimates that there will be unavoidable cumulative impacts to non-aquatic biological resources, agricultural resources, mineral resources, air quality, water quality, and noise (pp. 9-53 to 9-55). However, there is no discussion of the contribution of each alternative to these cumulative impacts or methods of alleviating the environmental impacts as a result of these multiple development and transportation projects.

We note that the proposed Southern Orange County Transportation Infrastructure Improvement Project (SOCTIIP) will add to cumulative impacts in the area. This DEIS states that the extent and type of impacts associated with SOCTIIP would vary dependent on the alternative selected. We appreciate the information on direct impacts given in Tables 9-2 to 9-4.

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[1] http://www.lid-stormwater.net/clearinghouse/
http://www.calthorpe.com/
http://www.uli.org/AM/Template.cfm?Section=Press_Releases1&CONTENTID=7285&TEMPLATE=/CM/ContentDisplay.cfm

However, the LEDPA recently selected for SOCTIIP is not designated in the DEIS for the SAMP.

In addition, while we are supportive of the mitigation and the special conditions proposed in Section 7 that will be part of the permits, the management plan that will evaluate the effectiveness of these measures is not described in the document.

Recommendations:
The FEIS should include past/existing impacts to the area as contributing to the impacts of the area. EPA recommends the FEIS also include a discussion of each alternative's potential to contribute to cumulative impacts. If these impacts are assumed to be similar, the document should include a discussion of the reasoning that led to this conclusion. EPA recommends the FEIS include a general map of the projects in the area, both completed and planned as well as a map of "protected" areas and the level of protection (in terms of potential for fill discharges) for biological resources.

The document should address the steps that will be taken to lessen the cumulative impacts as a result of these projects through mitigation or avoidance. All of the projects analyzed as cumulatively impacting the area have particular mitigation measures designed to reduce the impacts of the project in isolation. However, the FEIS should explain how ecosystem goals will be met with all of these projects in combination. It should describe the monitoring planned for the area for the foreseeable future and the adaptive management plan that will be used to respond to ecosystem degradation. The applicability and status of the Natural Community Conservation Plan/Habitat Conservation Plan in and outside of the RMV Planning Area should be described.

We request that additional information be included that describes the LEDPA for the SOCTIIP project, which will be the permittable alternative. A detailed evaluation of this alternative will allow a more accurate representation of the cumulative impacts resulting from the project.

Air Quality

Orange County is located in the South Coast Air Basin (SCAB). Carbon Monoxide (CO) levels in the SCAB are approximately two times the federal National Ambient Air Quality Standard (NAAQS) (p. 4.1-158). This area is classified as a serious nonattainment area for this pollutant. SCAB is designated as severe non-attainment for the 8-hour ozone NAAQS. The 2001-2003 design value for 8-hour ozone in SCAB was 131 parts per billion by volume (ppbv), considerably higher than the 8-hour ozone NAAQS of 80 ppbv. SCAB is also designated nonattainment for particulate matter with an aerodynamic diameter less than or equal to a nominal ten micrometers (PM_{10}) and particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers ($PM_{2.5}$). For 2000 through 2002, the SCAB had the highest $PM_{2.5}$ annual mean concentration (29 micrograms per cubic meter or $\mu g/m^3$) in the country, indicating that significant emissions reductions will be needed to attain the annual NAAQS for $PM_{2.5}$ of 15 $\mu g/m^3$. In addition, data from 2000-2002 show that for the 24-hour

$PM_{2.5}$ NAAQS,[2] South Coast is one of two areas in the nation that are designated as nonattainment for this standard of 65 $\mu g/m^3$.

The DEIS states that the operation of the proposed alternative would result in significant emissions of all pollutants except sulfur dioxides on a regional scale based on South Coast Air Quality Management District (SCAQMD) thresholds of significance (p. 7.5-14). Specifically, the DEIS states that the "... short-term, construction-related emissions of NO_x [nitrogen oxides], CO, VOC [volatile organic compounds], and PM_{10} during the peak construction period would remain significant after mitigation (Alternative B-12, pp. 7.5.7.3)." The DEIS also states that the "[l]ong-term operational emissions of CO, VOC, NO_x, and PM_{10} would remain significant and unavoidable (Alternative B-12, pp. 7.5.7.3)."

Recommendations:
In addition to the construction emissions control measures cited in the DEIS, EPA recommends that the FEIS include a *Construction Emissions Mitigation Plan (CEMP)* that incorporates, to the extent appropriate, additional measures including the following:

- Use particulate traps, oxidation catalysts and other suitable[3] control devices on all construction equipment used at the construction site. Control technologies such as traps control approximately 80 percent of diesel particulate matter (DPM). Oxidation catalysts control approximately 20 percent of DPM, 40 percent of carbon monoxide emissions, and 50 percent of hydrocarbon emissions.
- Ensure that diesel-powered construction equipment is properly tuned and maintained to ensure they perform up to EPA certification levels and/or to ensure retrofit technologies perform up to verified standards. Shut off equipment when not in direct use.
- Prohibit engine tampering to increase horsepower.
- Locate diesel engines, motors, and equipment as far as possible from residential areas and sensitive receptors (schools, daycare centers, and hospitals).
- Lease or buy newer, cleaner equipment (1996 or newer model), using a minimum of 75 percent of the equipment's total horsepower.
- Work with the South Coast Air Quality Control District to implement the strongest suitable mitigation for reducing construction emissions, and include the above measures as part of the CEMP in the USACE Order authorizing the SAMP.

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[2]On January 17, 2006, EPA published a Federal Register Notice on proposed revisions to the $PM_{2.5}$ NAAQS. The proposal includes lowering the existing level of the 24-hour standard from 65 $\mu g/m^3$ to 35 $\mu g/m^3$. The final rule is expected by September 27, 2006. The proposal is available at: http://www.epa.gov/fedrgstr/EPA-AIR/2006/January/Day-17/.

[3]Suitability of control devices may be based on the following: whether there is reduced normal availability of 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. The project sponsor may want to consider that such determination may be made in consultation with the control device manufacturer, equipment owner and the Air District.

EPA recommends that the FEIS consider additional mitigation for operational emissions that would reduce the project's VMT, including incorporation of Smart Growth measures and increased transit. EPA encourages coordination with the South Coast Association of Governments (SCAG) on transportation improvements to support future development.

Regarding applicable Federal Clean Air Act (CAA) requirements, EPA notes that only the PM_{10} portion of SCAB's 2003 Air Quality Management Plan (AQMP) has been approved by EPA. The 1997/1999 AQMP is the current approved State Implementation Plan (SIP) for 1-hour ozone, and the 1997 AQMP is the current approved SIP for CO and NO_2.

Recommendations:
The FEIS should include the information that was used to determine that the project's operational impacts to air quality will be consistent with the current Air Quality Management Plan. The appropriate SIP should be referenced for all applicable Federal CAA requirements. The FEIS should clarify how these additional developments, in combination with other proposed projects, such as SOCTIIP, will not interfere with the attainment goals of PM_{10} and ozone, set for December 2006 and November 2010, respectively.

The General Conformity requirement of the CAA (§176(c)(1)) mandates that the Federal government not license, permit, or approve any activity not conforming to an approved CAA implementation plan. EPA anticipates taking final rulemaking action to amend the General Conformity rule to address PM2.5, including the establishment of de minimis levels, by the end of the statutory grace period (April 5, 2006). Before the project can be approved by the Corps, General Conformity may need to be demonstrated for emissions associated with the Federal action for all criteria pollutants for which the area is nonattainment or maintenance. Since the proposed action is located in a nonattainment area for PM2.5, conformity must also be demonstrated for that pollutant after the end of the statutory grace period.

Recommendations:
The FEIS should evaluate the applicability of Clean Air Act General Conformity requirements for all reasonably foreseeable emissions of criteria pollutants for which the area is nonattainment or maintenance. EPA recommends that all mitigation, offsets, controls, credits and/or other measures needed to achieve and maintain General Conformity for the project should be discussed in the FEIS and included as specific commitments for the authorization of Clean Water Act §404 permits and any other permits associated with the Federal action in the SAMP. EPA will work with the Corps to determine the appropriate method for meeting the General Conformity requirements, according to the relevant requirements at the time of the Federal action.

Special Public Notice No. 199916236-2-YJC for Letter of Permission (LOP) Procedures outside the RMV Planning Area

Within areas eligible for abbreviated permits, the proposed LOP procedures could authorize any fill activity with no acreage limit except for activities that alter compensatory mitigation sites and capital improvement projects that convert soft-bottom channels to concrete-

lined channels. The locations of these existing mitigation sites should be documented and mapped. In addition, the SAMP should also identify potential wetland mitigation opportunities outside of the RMV planning area.

The proposed ARCP applies exclusively to the RMV Planning Area. The SAMP does not include a conservation component for aquatic resources outside the RMV Planning Area. We are particularly concerned with the maintenance of flood control channels. According to the SPN, even within higher value aquatic resource areas generally not eligible for an abbreviated permit process, the maintenance of flood control channels could still be authorized under LOP procedures with no acreage limit (page 9). The DEIS and SPN lack a description of the Santa Margarita Water District's (SMWD) program for maintaining flood control channels. It is unclear how extensive the program is, what the existing baseline conditions of the affected stream reaches are, or if mitigation was ever provided for the maintained stream reaches.

EPA should be involved in the pre-application coordination for LOPs both within and outside the RMV Planning Area. Under the general condition number 8 (page 12), the second sentence should most likely read "...liquid substances, will be stored..." In addition, in the section regarding offsets for temporal loss (page 15); it is unclear why the ratios of compensatory mitigation vary depending on the stratum of vegetation impacted.

Recommendations:
The FEIS should include a map of the existing compensatory mitigation sites in the SAMP area and a description of potential mitigation opportunities outside of the RMV Planning Area. The specific stream reaches potentially affected under this provision of the proposed LOP should be identified.

The FEIS should include a description of SMWD's program for maintaining flood control channels, as indicated above. The FEIS should describe and identify the specific stream reaches supporting high value aquatic resources that could be affected by the maintenance of flood control channels. It should clarify how this provision of the LOP is consistent with the SAMP objective of protecting high value aquatic resources.

Special Public Notice No. 199916236-3-YJC for Long-term Individual Permit and LOP Procedures within the RMV Planning Area

As indicated in our comments on the alternatives analysis, we do not believe that sufficient information has been presented to demonstrate that Alternative B-12, the agency preferred alternative, represents the LEDPA to meet the project purpose as required under the Guidelines. The same concerns apply to the proposed long-term individual permit that would establish the boundaries of development areas within the RMV Planning Area, in accordance with Alternative B-12. According to the SPN (pages 9, 10), once the development areas are established, no further avoidance or minimization under future LOP procedures will be required. As stated earlier, it is important that prior to issuance of the long-term IP, impacts to waters of the United States within the proposed development areas be avoided to the extent practicable.

Additional information should be provided in the DEIS and SPN regarding the phased approach to recording conservation easements within the RMV Planning Area. It would be useful to include a copy or summary of the RMV Open Space Agreement cited in the SPN.

According to the SPN (page 11), the maintenance of flood control channels, even in higher value aquatic resources areas, would still be eligible for LOP procedures with no acreage limits. The DEIS and SPN lacks a description of the Santa Margarita Water District's (SMWD) program involving the maintenance of flood control channels. It is unclear how extensive the program is, what the existing baseline condition is of the affected stream reaches, or if mitigation was ever provided for the maintained stream reaches. The specific stream reaches potentially affected under this provision of the proposed LOP should be identified and quantified.

Regarding wildlife movement corridors (page 15), it is unclear if the 400-meter wide corridor applies to all of the named tributaries or just San Juan Creek upstream of Trampas Canyon.

Recommendations:
The FEIS should fully address concerns regarding the analysis of alternatives and the proposed long-term individual permit, as described in the discussion above.

The FEIS should include a description of the proposed phased approach to recording conservation agreements within the RMV Planning Area.

The FEIS should include a description of SMWD's program for maintaining flood control channels, as indicated above. The FEIS should describe and identify the specific stream reaches supporting high value aquatic resources that could be affected by activities associated with the maintenance of flood control channels. It should clarify how this provision of the LOP is consistent with the SAMP objective of protecting high value aquatic resources.

The FEIS should indicate the width of wildlife movement corridors to be established for each tributary specifically named in the SPN.