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

February 15, 2007

Anna Sutton
U.S. Army Corps of Engineers
1325 J Street
Room 1480
Sacramento, CA 95814-2922

Subject: Draft Environmental Impact Statement (DEIS) for the Rio del Oro Specific Plan Project (CEQ# 60498)

Dear Ms. Sutton:

The Environmental Protection Agency (EPA) has reviewed the DEIS 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. Our detailed comments are enclosed.

The project is proposed to provide a large scale mixed-use community in eastern Sacramento County, in the Morrison Creek watershed. The development will be on 3,828 acres of former mining and industrial property with phased development planned through 2030. The proposed project involves 11,601 dwelling units, 133 acres of commercial development, and 282 acres of industrial parks with 10 and 14 acre conservation areas and 155 acres of drainage parkways. The northern two-thirds of the site is composed of land that has been highly disturbed by dredge tailings from mining activities. While EPA supports re-use of this site, the project may result in several significant environmental impacts, including impacts to waters of the U.S, air quality, and habitat.

EPA reviewed the Public Notice for this project and on March 29 2004, objected to the issuance of the Clean Water Act (CWA) permit associated with the project, recommending a thorough assessment of the impacts to waters of the U.S. We also recommended at that time that the DEIS demonstrate the project's compliance with the CWA 404(b)(1) Guidelines, including the Least Environmentally Damaging Practicable Alternative (LEDPA) and mitigation for project impacts. We have concerns that the DEIS has not demonstrated that wetlands have been avoided to the greatest extent practicable while achieving the basic project purpose. We are also concerned that adequate mitigation for project impacts to waters of the U.S. and habitat has not been included. There should also be a distinct plan for mitigation of air quality impacts in the area. Based on these concerns, we have rated the DEIS as EC-2, Environmental Concerns - Insufficient Information (see enclosed "Summary of Rating Definitions").

The FEIS should include several modifications to the Proposed Project Alternative: 1) demonstrate that waters of the U.S. have been avoided to the greatest extent practicable and/or modifications should be made to achieve this end, such as low-impact development mitigation measures, 2) clearly document this avoidance and 3) support the selection of the Proposed Project Alternative as the LEDPA based on objective economic criteria. Additionally, the FEIS should 4) include a detailed analysis of the Increased Preserve Alternative to satisfy the USACE NEPA Section 404(b)(1) Guidelines. EPA is supportive of an increased amount of wetland preserve, as mentioned in the Biological Opinion of the U.S. Fish and Wildlife Service. Our attached comments provide specific recommendations for improvements to the project proposal.

We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send (2) copies to the address above (mailcode: CED-2). We would be happy to discuss additional avoidance measures or low impact development measures with you during the preparation of the FEIS. If you have any questions, please contact me at 415-972-3846 or Summer Allen, the lead reviewer for this project at 415-972-3847 or allen.summer@epa.gov.

Sincerely,

/S/Connell Dunning for

Nova Blazej, Manager
Environmental Review Office

Main ID # 4310

Enclosures: Summary of EPA's Rating Definitions
Detailed Comments

Cc: Kelly Fitzgerald, USFWS

Impacts to Waters of the U.S.

In a letter dated March 29, 2004, EPA expressed concerns regarding the significant wetland impacts from the proposed project. In the intervening years, little to no additional avoidance has been proposed by the applicant. The very high impacts (30.3 acres of jurisdictional waters of the U.S. and an additional 12.9 acres of isolated waters) remain a major concern with respect to cumulative impacts, significant degradation, and an inordinately large compensatory mitigation burden. Under normal circumstances, we recognize a draft EIR/EIS would not evaluate alternatives to the level of detail required for 404(b)(1) Guidelines analysis. However, the DEIS states that this document is intended to meet the Guidelines' criteria, and we are providing these comments in the context of our NEPA and CWA 404(b)(1) review.

Vernal pool packing

The acreage of vernal pool impacts is very large. To offset these impacts, the project proponent would create over 20 acres of vernal pools on the 507 acre preserve. We are concerned that the addition of this many created vernal pools would more than double the existing density of vernal pools. We are concerned that this "vernal pool packing" may cause disruption to the hydrology of existing swales and pools and could be less effective than restoration of altered vernal pool landscapes to a more natural and dynamic ecosystem

Credit for detention basins

In addition, the project proposes to create a large number of wetlands in detention basins. It is not clear whether the proposed wetlands are being constructed for functions that would be in addition to what is needed for stormwater treatment. We question whether credit should be given for such features given their contaminant loading and purported water quality functions. In 2000, six federal agencies jointly published "Guiding Principles for Constructed Treatment Wetlands: for providing water quality and wildlife habitat."[1] The Guidance states that, "In general, wetlands constructed or restored for the primary purpose of treating wastewater will not be recognized as compensatory mitigation to offset wetland losses authorized under federal regulatory programs…The use of constructed treatment wetlands for mitigation for CWA Section 404 purposes is subject to approval by the U.S. Army Corps of Engineers, in consultation with other Federal and State resource agencies. Such decisions need to be made on a case-by-case basis, considering, among other factors, the appropriateness of the constructed treatment wetland to fully offset the anticipated impacts from the loss of natural wetlands."

Bisected wetland preserve

We note that the proposed wetland preserve is bisected by Rancho Cordova Parkway and, according to the General Plan for the City, is planned to be a rapid transit route. A mitigation area bisected by large-scale transportation projects may not meet the needs outlined in the US Fish and Wildlife Service's *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon, December 2005*. A more complete analysis of compliance with this plan and

[1] http://www.epa.gov/owow/wetlands/pdf/constructed.pdf

the draft goals of the South Sacramento County Habitat Conservation Plan is required before overall compliance with the Guidelines at 40 CFR 230.10(b) can be determined.

Coordinated conservation

The Sunrise Douglas Community Planning Area (SDCPA) is immediately to the south of the project site. There is a proposal to establish over 2,000 acres of wetland preserves in that area, and a comprehensive, coordinated approach to conservation land management in the area should be undertaken. This will be cost-effective for the landowners and provide the agencies with a monitoring plan that can report on both permit compliance and ecological health of the overall system.

Cumulative effects

In addition to the project's significant impacts to waters of the U.S., we are concerned about cumulative effects on the aquatic ecosystem. Since 1990, Sacramento County has seen rapid growth, with more planned for the Elk Grove, Rancho Cordova, and Natomas areas, causing a cumulative loss of vernal pools and habitat in the area (page 4-11). Furthermore, the DEIS notes on page 4-2, that additional environmental impacts can be expected with full build-out. Given this scenario, the Sacramento Area Council of Governments (SACOG) Sacramento Region Blueprint (1993) called for higher residential densities than are currently in place. This document relies on the SACOG Blueprint but the Smart Growth elements of the Blueprint have not been finalized and we are concerned with calls for development within areas that support high density aquatic resources without measures to mitigate for these impacts. With time and increasing development in the area, there are fewer and fewer places that can be used for compensatory mitigation.

"Other Statutory Requirements", exhibit 4-1, shows projects in the immediate vicinity of Rio del Oro. It appears as if the DEIS does not adequately capture proposed impacts from the developments at Mather Air Field, Cordova Hills, Excelsior Estates, the Waegell Family property within and adjacent to the SDCPA, and the Regional Connector Transportation project sponsored by SACOG. From Public Notices, EPA is aware of the projects shown in the table below. Proposed development from projects in this area, not including those from the transportation project, will affect over 15,000 acres. In turn, these projects have the potential for impacting or degrading over 600 acres of waters of the U.S.

Project Name	Total Acres	Acres of Waters of the US	Approximate Vernal Pool Acreage	Impacted Acres of Waters of the US (estimated)
Sunrise Douglas Community Planning Area	5,410	230	170	165
Rio del Oro	3,828	70	38	43
Mather Field	3,568	138	70	30
Waegell Property	1,300	116	22	unknown
Cordova Hills	1,320	63	42	18

TOTAL (approximate)	15,426	617	342	256 (not including Waegell)

Recommendations:

The FEIS should assure that the dense creation of vernal pools as proposed in the project will be effective for restoration and will not disrupt the hydrology of the existing swales and pools. The FEIS should also clearly establish the expected functions of the wetlands that will be created within detention basins and the appropriateness of the constructed treatment wetlands to offset impacts from the loss of natural wetlands onsite.

The FEIS should include a more complete analysis of compliance with US Fish and Wildlife Service's *Recovery Plan for Vernal Pool Ecosystems of California and Southern Oregon, December 2005* and the draft goals of the South Sacramento County Habitat Conservation Plan, specifically with regard to the bisected conservation area. The proponent should establish the same monitoring and assessment procedures used in the SDCPA for any preserve area at Rio del Oro site and coordinate with landowners in the SDCPA to ensure there is one conservation easement holder for all these preserves.

The impacts to the regional aquatic ecosystem from multiple large-scale projects are very high, and the FEIS should carefully evaluate and mitigate the cumulative impacts to the resources. The FEIS should evaluate the feasibility of a larger wetland preserve that encompasses much of the southern area of the project boundary. We note that in their Biological Opinion for the project, the Fish and Wildlife Service asked for establishment of a 1,310-acre contiguous preserve, and we agree with this recommendation.

LEDPA Determination

We disagree that the compliance with the CWA 404(b)(1) Guidelines has been shown (DEIS, page 2-3). Although the DEIS analyses a few alternatives in detail, the evaluation is not sufficient to meet the needs of an alternatives analysis prepared under the Clean Water Act 404(b)(1) Guidelines. At this time, this project does not appear to be the Least Environmentally Damaging Practicable Alternative (LEDPA). In particular, the DEIS has not demonstrated that more wetland areas cannot be avoided while achieving the basic project purpose, such as with a larger wetland preserve that encompasses much of the southern area of the project boundary.

Although the DEIS briefly analyzes the potential for an increased preserve size, it notes that due to the decrease in retail and commercial development, "[t]he loss of these development impact fees could require a scaling back of the City's vision for added community amenities" (page 2-80). Page 2-81 states that implementation of the Increased Preserve Alternative would "likely satisfy the USACE NEPA Section 404(b)(1) Guidelines, [but] it was eliminated from further detailed study because it would not achieve the key CEQA project objectives." Using the City's vision is not a reasonable cost criterion for alternative rejection. The following citation is from the field memo, "Memorandum: Appropriate Level of Analysis Required for Evaluating Compliance with the Section 404(b)(1) Guidelines Alternatives Requirements", issued by the Corps and EPA in 1993:

The Guidelines provide the Corps and EPA with discretion for determining the necessary level of analysis to support a conclusion as to whether or not an alternative is practicable. Practicable alternatives are those alternatives that are "available and capable of being done after taking into consideration cost, existing technology, and logistics in light of overall project purposes." 40 CFR 230.10(a)(2).

In these guidelines, it does not assume that the project has to generate sufficient funds to support a City's vision. In addition, the Guidelines Preamble, "Alternatives", 45 Federal Register 85339 (December 24, 1980) , notes that: "the level of analysis required for determining which alternatives are practicable will vary depending on the type of project proposed. The determination of what constitutes an unreasonable expense should generally consider whether the projected cost is substantially greater than the costs normally associated with the particular type of project. Generally, as the scope/cost of the project increases, the level of analysis should also increase." The preamble to the Guidelines, "Economic Factors", 45 Federal Register 85343 (December 24, 1980) notes that: "It is important to emphasize, however, that it is not a particular applicant's financial standing that is the primary consideration for determining practicability, but rather characteristics of the project and what constitutes a reasonable expense for these projects that are most relevant to practicability determinations."

Relevant case law also describes the role of costs in analyzing project alternatives. "While the applicant's wish to minimize his costs is obviously a factor which the Corps can consider, that factor alone must not be allowed to control or unduly influence the Corps' definition of project purpose, or 'practicable alternative', or any other part of the 404(b)(1) evaluation. (From Permit Elevation, Plantation Landings Resort, Inc. Department of Army Findings at p. 8-9). The Corps findings from the 1989 Hartz Mountain 404(q) Elevation note that the alternatives analysis should not be constrained by a narrowly-defined project purpose and often, Federal concerns (including environmental concerns), "will result in decisions that are inconsistent with local land use approvals." When we review and comment on large scale development proposals, EPA normally expects a reasonably rigorous quantitative analysis of residential development alternatives considered and the appropriateness of the level of housing development identified in the preferred alternative.

Recommendations:

The FEIS should analyze the Increased Preserve Alternative in detail in order to support the project's compliance with the 404(b)(1) Guidelines and selection of the LEDPA, including a justification that the project has incorporated all potential avoidance of waters of the United States. If possible, the Proposed Alternative should be modified to further minimize impacts to Waters of the U.S. Clearly defined economic goals should be used to explain the rationale for eliminating the Increased Preserve Alternative. The FEIS should discuss how the applicant determined the proposed project is the LEDPA, using acceptable cost, logistical, and technical feasibility criteria, in light of concerns over significant degradation and cumulative impacts. It should discuss specifically the transportation infrastructure impacts from the off-site alternatives.

Air Quality

The Sacramento Federal Non-Attainment Area (SFNA) in which this project is located is currently designated as serious non-attainment for ozone, and Sacramento County is designated as moderate non-attainment for the particulate matter less than 10 microns in diameter (PM10) under the National Ambient Air Quality Standards (NAAQS). In 2007, the State of California and the SFNA districts will submit a new ozone plan known as a State Implementation Plan (SIP) to meet the 8-hour ozone NAAQS.

The proposed project converts 3,800 acres of rural, undeveloped land to urban land uses and will have cumulatively significant increases to peak-hour and daily traffic volumes with resulting long-term increases in emissions that would exacerbate existing and projected non-attainment conditions. The DEIS notes that "Project-related long-term operational emissions of reactive organic gases (ROGs), oxides of nitrogen (NOx), and particulate matter less than or equal to 10 microns in diameter (PM10), when combined with emissions from other reasonably foreseeable future projects in the Sacramento Valley Air Basin as a whole, would contribute to long-term increases in emissions that would exacerbate existing and projected nonattainment conditions." (p.g. 4-12). It concludes that "the project's contribution to regional air quality violations would be cumulatively considerable."

In addition, we are concerned that the DEIS contains outdated information. For example, page 4-14 notes that the region is not required to update the SIP before the ozone 8 hour ozone plans are due in 2006 and that the new Metropolitan Transportation Plan (MTP) 2025 no longer contains regional transportation projects. It notes that this issue will be resolved after the SIP is approved in 2006 and the new MTP 2025 is adopted. While the 8-hour plan is due June 15, 2007, the MTP 2025 (now referred to as MTP 2035) may not be approved until August/September 2007 potentially delaying the SIP until late 2007. This information is not included in the DEIS.

This project will need consultation and coordination with the Sacramento Metropolitan Air Quality Management District (SMAQMD) on requirements for General Conformity. In order to comply with section 176(c) of the Federal Clean Air Act, the project must conform to the applicable SIP required under Section 110(a) of the Federal Clean Air Act before the action is otherwise approved. Hence, conformity means that federal actions must be consistent with a SIP's purpose of eliminating or reducing the severity and number of violations of the NAAQS and achieving expeditious attainment of those standards. Each federal agency must determine that any action that is proposed by the agency and is subject to the regulations implementing the conformity requirements will in fact conform to the applicable SIP before action is taken. The Rio del Oro project is subject to the General Conformity Rule since it is sponsored and supported by a federal agency. The DEIS notes that with the exception of the No Project Alternative, both Phase 1 construction and operational emissions will exceed general conformity de minimus thresholds: 100 Tons per Year (TPY) for PM_{10} and 50 TPY for NOX and ROG. However, the DEIS does not disclose if coordination with the SMAQMD has taken place. This is important as all emissions from the project will have to be mitigated through reductions, offsets, controls, etc. in order to comply with the Clean Air Act and proceed with the project.

Recommendations:

The FEIS should ensure that all mitigation outlined in Chapter 3.15 will be implemented in association with the project. The FEIS should include updated information regarding the SIP and the MTP and how these will guide the mitigation measures associated with the project. The FEIS should analyze compliance with conformity requirements and include information on recommendations from SCAQMD. As an example of a draft general conformity determination please refer to the Draft Environmental Impact Statement for Folsom Dam Safety (Section 3.3 - Air Quality) found at http://www.usbr.gov/mp/nepa/nepa_projdetails.cfm?Project_ID=1808 We also refer you to EPA's the web link for general conformity requirements. http://www.epa.gov/ttn/oarpg/genconformity.html

Habitat Impacts

The project site includes habitat that is suitable for numerous special status birds, including the Swainson's hawk, Burrowing owl, Northern harrier, and loggerhead strike. It is also suitable habitat for the California tiger salamander, the western spadefoot toad, and multiple types of fairy shrimp. The project will involve removal of 867 acres of woodland and riparian habitat, with this type of habitat in the region rapidly declining (p. 4-11). The U.S. Fish and Wildlife Service (FWS) has been involved since 2002 and, in 2005, questioned the project design in that it did not avoid impacts to upland areas that are important for maintenance of hydrologic conditions and for providing habitat for vernal pool plant pollinators.

In the April 25, 2006 Section 7 consultation, the FWS expressed the need for the proposed avoided area to have a Service-approved, third-party conservation easement, a Management and Monitoring Plan, and a long-term funding mechanism in place. They requested management and monitoring of the conservation areas for either ten consecutive years or seven years over a 15 year period, with monitoring reports submitted for each monitoring year. These terms were in addition to other, significant conservation recommendations such as restricted residential and municipal development at Rio del Oro to the 2,519-acre mine-tailings area and establishment of the 1,310-acre grassland area as a single contiguous preserve. While the document references consultation with the FWS regarding mitigation measures such as setbacks from waters of the U.S., there is no reference to the final Biological Opinion or how the project is responding to the measures that FWS has asked for regarding impacts.

Recommendation:

Given that sensitive habitat as seen in the project site is declining and the large-scale impacts of the project, the FEIS should document the status of the Biological Opinion and specifically, which of the FWS-recommended mitigation measures will be implemented. It should include a more detailed habitat map for the proposed action and increased preservation alternatives like the ones associated with the off-site alternatives in Exhibits 2-20 and 2-21 to more clearly weigh impacts.

Smart Growth

Regional congestion on Highway 50 and Sunrise Boulevard has continued to be a problem. In an effort to address this issue, the Rancho Cordova General Plan notes on page 1 that "Neighborhood, village, and district design will start with the pedestrian and work its way up to the cars." It is unclear how the proposed project will be designed in this manner. While we appreciate the inclusion of the High Density Alternative to correspond with smart growth principles, this Alternative would impact the same amount of acreage as other alternatives. The DEIS does not justify why, if housing density was increased, the amount of land developed could not be decreased to still meet the purpose and need of the project.

Additional recommendations for smart growth design of the planned communities are described in detail by the Smart Growth Network.[2] Community-designed strategies can achieve economic goals while meeting environmental measures. Under the 1991 Intermodal Surface Transportation Efficiency Act (ISTEA) and the 1990 Clean Air Act Amendments, all metropolitian areas with populations greater than 50,000 must adopt a 20 year transportation plan that results in emissions consistent with the SIP. The DEIS notes that the Regional Metropolitan Transportation Plan for 2025 (SACOG 2002) identifies roadway improvements and that some feeder bus services are included for Sunrise Boulevard, Mather Boulevard, and Zinfandel Drive. However, while the City has developed a transit system map identifying corridors for potential transit routes (p. 3.14-16/17) no additional information is included on the feasibility of these measures.

Recommendations:

We remain concerned that not all measures have been examined that could minimize unavoidable impacts. To do so, we encourage the use of "Low Impact Development" (LID) principles.[3] These measures should be incorporated into the design, and the FEIS should demonstrate the reduction in impacts to resources from these modifications:

- Establish minimum upland buffer zones of 100 feet extending from each bank of all avoided waters.
- Minimize the amount of impervious cover.
- Establish new legal status for avoidance areas (*i.e.*, new individual parcels with restrictive covenants on all avoided waters and associated buffer zones). Record these legal restrictions within 30 days of 404 permit issuance.
- Establish responsibility and oversight of the preserve areas by an independent third-party with appropriate expertise (*e.g.*, conservation organization, regional parks district).
- Analyze the practicability of front-loaded streets to minimize impacts to aquatic habitat.
- Ensure that all detention basins provide required water-quality functions and site them off-stream where practicable.
- Ensure that recreational trails are placed outside the buffer zones associated with washes (*i.e.*, trails no closer than 100' from the edge of bank).

[2] http://www.epa.gov/smartgrowth/getting_to_sg2.htm
[3] http://www.epa.gov/smartgrowth

In addition, more information should be included on transit options and plans for the area to mitigate further congestion and significant air quality impacts resulting the increase in vehicular miles traveled.

Water Quality

The DEIS notes that the majority of overland watercourses in the area have disappeared due to mining activity and the northern two-thirds of the site is composed of highly disturbed land from dredge tailings. Because it is downstream, Morrison Creek is subject to Central Valley Regional Water Quality Control Board (RWQCB) regulation for designated uses, such as municipal water supply, irrigation, recreation, migration, and habitat. Wet weather samples in Morrison Creek had consistently elevated coliform bacteria and total suspended solids as well as high values for polycyclic aromatic hydrocarbons (PAHs-a byproduct of combustion or asphalt sealants) and the pesticide diazinon. The 2002 version of the Section 303(d) list identifies a 21 mile stretch of Morrison Creek as impaired for diazinon (from agriculture and urban runoff) and it is considered a high priority for a Total Maximum Daily Load (TMDL).

Recommendation:
The FEIS should address the additional impacts of the proposed developments on Morrison Creek, include updated information on the results of sampling in this area, and include mitigation as appropriate.