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

JAN 2 8 2015

Colonel Michael Farrell
U.S. Army Corps of Engineers
1325 J Street, 14th floor
Sacramento, California 95814-2922

Subject: Public Notice SPK-2004-00116 and Draft Environmental Impact Statement for the proposed Cordova Hills Project, Sacramento County, California [CEQ #20140338]

Dear Colonel Farrell:

The U.S. Environmental Protection Agency (EPA) has reviewed the subject Draft Environmental Impact Statement (DEIS), as well as the Public Notice (PN) for an associated application for a Clean Water Act Section 404 permit, identified by your office's December 4, 2014 Notice of Availability (NOA). The proposed Cordova Hills mixed-use residential development would involve the elimination of over 40 acres of waters of the United States (waters), including rare, high-functioning vernal pool wetlands. The enclosed detailed comments were prepared pursuant to EPA authorities under the National Environmental Policy Act (NEPA), the Clean Water Act (CWA), and the Clean Air Act.[1]

The EPA objects to issuance of a CWA Section 404 permit for the project as proposed because the discharges to waters represent an unmitigated contribution to the significant degradation of vernal pools, and thus a substantial and unacceptable impact to aquatic resources of national importance.[2] It appears that the Proposed Action may not be the least environmentally damaging practicable alternative (LEDPA) and that further analysis of alternatives is needed. We recommend, therefore, that the Corps not permit the project as proposed and work with the EPA during development and identification of the LEDPA and mitigation planning.

Based on these potential impacts, we have rated the DEIS as *Environmental Objections-Insufficient Information* (EO-2). Please see the enclosed "Summary of EPA Rating Definitions." We are also concerned about the project's potential impacts on air quality and climate change.

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[1] The White House Council on Environmental Quality's (CEQ) NEPA Implementation Regulations at 40 CFR 1500-1508; the Federal Guidelines (40 CFR 230) restricting discharges of dredged or fill material to Waters of the United States promulgated under §404(b)(1) of the CWA; and EPA's NEPA review authority under Section 309 of the Clean Air Act.

[2] This letter also follows the field level procedures outlined in the August 1992 Memorandum of Agreement between the EPA and the Department of the Army, Part IV, paragraph 3(a) regarding Section 404(q) of the Clean Water Act.

The outstanding biological resources at the project site include over 100 acres of some of the most intact and high-functioning vernal pool habitat remaining in the state. The site supports ten listed and/or special concern species, and is representative of the habitats that occurred widely across the "Mather Core Recovery Area" in the early 20th century.

The Cordova Hills proposal exists in the landscape context of the larger South Sacramento Habitat Conservation Plan (SSHCP), conceived and developed among diverse stakeholders in wide recognition of the cumulative and significant historical degradation of Sacramento County's vernal pool landscapes. Along with the Sacramento County Association of Governments, County of Sacramento, the Cities of Rancho Cordova and Galt, the Southeast Connecter Joint Powers authority, and other key environmental and regulatory stakeholders, our staffs have worked collaboratively on the SSCHP with the goal of developing a framework that provides 50 years of development certainty for the regulated public, while addressing the considerable cumulative loss of vernal pool wetlands and listed species in the plan area. Absent an integrated, regional approach to the conservation of what remains, impacts at the scale proposed by Cordova Hills may no longer be sustainable given the extremely limited remaining mitigation opportunities. The SSHCP is near completion and provides a regional context for such compensatory mitigation, and a monitoring and preserve management framework that is otherwise unavailable to individual permit applicants such as Cordova Hills.

If the Cordova Hills project proceeds in advance of a viable regional conservation framework, we recommend that the Final Environmental Impact Statement (FEIS) provide additional information demonstrating the project's compliance with CWA Section 404(b)(1), and further describe the project's potential impacts from criteria air pollutants and greenhouse gases.

Thank you for considering our enclosed recommendations for improving the Cordova Hills project application and EIS, and for your ongoing partnership in implementing the regulatory programs of the CWA. We will continue to work with your staff and the applicant to resolve the important environmental issues concerning the proposed project. If you wish to discuss the 404 issues, please call Jane Diamond at (415) 972-3275, or have your Regulatory Division Chief contact Jason Brush at (415) 972-3483. If you wish to discuss our NEPA comments, please call Kathleen Johnson at (415) 972-3873, or have your staff call Kathleen Goforth, Manager of our Environmental Review Section, at (415) 972-3521.

Sincerely,

Jane Diamond, Director
Water Division

Kathleen H. Johnson, Director
Enforcement Division

Enclosures: Summary of EPA Rating Definitions
EPA's Detailed Comments

cc: Jennifer Norris, U.S Fish and Wildlife Service, Sacramento Office
Elizabeth Lee, Central Valley Regional Water Quality Control Board
Tina Bartlett, California Department of Fish and Game, South Coast Region
Michael McKeever, Sacramento Area Council of Governments
Brad Hudson, County Executive, Sacramento County

SUMMARY OF EPA RATING DEFINITIONS

This rating system was developed as a means to summarize EPA's level of concern with a proposed action. The ratings are a combination of alphabetical categories for evaluation of the environmental impacts of the proposal and numerical categories for evaluation of the adequacy of the EIS.

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 analysed 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 analysed in the draft EIS, which should be analysed 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.

*From EPA Manual 1640, "Policy and Procedures for the Review of Federal Actions Impacting the Environment."

U.S. EPA DETAILED COMMENTS ON THE DRAFT ENVIRONMENTAL IMPACT STATEMENT AND CWA 404 APPLICATION FOR CORDOVA HILLS, SACRAMENTO COUNTY, CA, JANUARY 2015

Clean Water Act (CWA) Compliance

Prior to granting a permit pursuant to Section 404 of the CWA, the Corps must determine that the project complies fully with *Federal Guidelines for Specification of Disposal Sites for Dredged or Fill Materials* ("Guidelines" at 40 CFR 230), promulgated pursuant to CWA Section 404(b)(1), and is not contrary to the public interest. Based on the information presented to date, however, the applicant has not demonstrated that the Proposed Action complies with all of the restrictions to discharges under the Guidelines related to alternatives analysis, water quality, endangered species, significant degradation, and/or mitigation. We offer the following comments regarding the project's compliance with the Guidelines.

Alternatives Analysis – 40 CFR 230.10(a)

As EPA explained at a July 19, 2010 scoping meeting sponsored by the Governor's Office of Planning and Research in Sacramento, we believe that less damaging practicable alternatives exist elsewhere for Cordova Hills' development purposes and that the applicant has not overcome the Guidelines' rebuttable presumption that this is so. The Proposed Action appears to have been inappropriately set to align with the applicant's very specific development objectives (8,000 units in six "Villages" with a regional university). In order to practicably meet the project purposes, the project does not need to be the size the applicant has proposed.

Furthermore, Appendix C ("*404(b)(1) Alternatives Information*") of the DEIS identifies an alternative not analyzed in the DEIS, the Modified Proposed Action Alternative, as practicable and less environmentally damaging than the Proposed Action. While we recognize that it is the responsibility of your office to make a determination regarding the least environmentally damaging practicable alternative (LEDPA), the applicant's analysis suggests that this Modified Proposed Action Alternative is practicable and, therefore, should have been evaluated in the DEIS.

In addition, we disagree with the practice of comparing the costs of each alternative to the Proposed Action. The proper cost comparison under the regulations is to a typical project of similar purposes in the market area. We have also previously raised issues with combining the university with the mixed-use commercial/residential development, as it is our belief that these have different purposes and should be analyzed separately. For these reasons, as well as the identification of the Modified Proposed Action Alternative as practicable and having fewer impacts, it appears that the Proposed Action Alternative is not the LEDPA.

As the alternatives analysis is "the heart of the environmental impact statement," the EIS "should present the impacts of the proposal and the alternatives in comparative form, thus sharply defining the issues and providing a clear basis for choice among options by the decisionmaker and the public." (40 CFR 1502.14) We do not believe that the DEIS provides sufficient information to demonstrate that the Proposed Action is the LEDPA in compliance with the Guidelines.

Recommendations:

- Fully analyze in the FEIS one or more alternatives that comply with the Guidelines, and document how the alternative(s) comply with the Guidelines. The Modified Proposed Action Alternative should be fully analyzed.
- Identify the Corps' Preferred Alternative, the Environmentally Preferable Alternative, and the LEDPA in the FEIS, and explain the bases for these designations.
- Rectify in the FEIS the existing discrepancies between the DEIS and Appendix C, and include a completed CWA Section 404(b)(1) alternatives analysis.

Compliance with other Environmental Standards – 40 CFR 230.10(b)

EPA remains concerned that the project's impacts to 16.90 acres of intermittent drainages and Carson Creek could adversely affect Laguna Creek and the Cosumnes River downstream. The Cosumnes River, valued statewide for its extraordinary aquatic resources, is currently listed on the 303(d) list as impaired for bacteria, invasive species, and sediment, and we are concerned that projects of this magnitude can exacerbate downstream water quality issues. It remains to be determined, however, whether the proposed project could cause or contribute to violations of state water quality standards, as the Central Valley Regional Water Quality Control Board has yet to evaluate a CWA Section 401 water quality certification application for this project.

It also remains to be determined whether the project would jeopardize the continued existence of, or critical habitat for, several threatened or endangered species, as the U.S. Fish and Wildlife Service (FWS) has yet to produce a Biological Opinion on this project. The FWS' Biological Opinion is critical to determination of compliance with the 404(b)(1) Guidelines 230.10(b).

Recommendations:

- Demonstrate in the FEIS how the project will ensure existing water quality standards are met.
- Analyze the project in a regional watershed planning context with respect to its potential take of listed species (possibly as a component of a Habitat Conservation Plan).
- If the project proceeds separately from a Habitat Conservation Plan, we recommend that the FEIS:
    - Discuss the project's consistency with the mitigation requirements of the SunRidge Record of Decision; and
    - Include the rationale for endangered species compliance for this permit action.

Cumulative Impacts and Significant Degradation -- 40 CFR 230.10(c)

Section 230.10(c) prohibits discharges that will cause or contribute to significant degradation of the waters of the United States. 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. Vernal pool wetlands in general, but in south Sacramento County in particular, have been significantly degraded historically, and the Cordova Hills project lacks appropriate mitigation to ensure that it does not further contribute to this degradation.

According to recent studies on the status of these vulnerable aquatic resources, California's vernal pools continue to sustain an unacceptable level of destruction. An estimated 135,000 acres of vernal pool grasslands were lost between 1995 and 2005, with 6,598 acres of Sacramento County vernal pool grasslands lost during this period.[3] Between 2005 and 2012, an additional 1,563 acres of wetlands in the Great Valley have been lost.[4]

We are aware of several reasonably foreseeable projects in the immediate vicinity of the Cordova Hills project site which either have or are seeking CWA 404 permits. These projects together would fill approximately 330 acres of waters of the U.S. (DEIS, Table 3.0-2). Considering the large number of projects in the Sacramento County area that have already been constructed, the unmitigated losses due to agricultural conversions, and the reasonably foreseeable additional impacts of future projects, this project would exacerbate the ongoing significant degradation of vernal pool resources in southern Sacramento County.

The ecosystem diversity of the Cordova Hills and adjacent Pilatus sites is known to be outstanding based on the presence of numerous rare or endangered species and the extent of intact vernal pool complexes, named and unnamed drainages, seasonal wetlands and other waters of the U.S. These outstanding biological resource values include over 100 acres of some of the most intact and high-functioning vernal pools remaining in the state. These habitats are representative of the kinds of resources that occurred widely across the Mather Core Recovery Area before urban development destroyed the majority of the habitat.

> **Recommendation:** Demonstrate in the FEIS that this project would not cause or contribute to significant degradation of the aquatic ecosystem, in accordance with the Guidelines.

Avoidance, Minimization, and Compensation -- 40 CFR 230.10(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. Cordova Hills has proposed to fragment the avoided areas into 12 separate parcels. This habitat fragmentation, while protecting the stated wetted surface acres of wetlands, does little to maintain the integrity of the aquatic ecosystem. To the contrary, it creates "edge effects" which are known to add environmental stressors on existing habitats (Saunders et al. 1991).[5] Many organisms move in and out of wetlands or are known to respond negatively to human

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[3] Holland, R.F. 2009. California's Great Valley Vernal Pool Habitat Status and Loss: Rephotorevised 2005. Prepared for Placer Land Trust.
http://www.vernalpools.org/vpreports/Great%20Valley%20Vernal%20Pool%20Distribution_Final.pdf

[4] Witham, C.W., R.F. Holland and J.E. Vollmar. 2013. 2005 Great Valley Vernal Pool Map, Plus Merced, Placer and Sacramento County Losses 2005-2010. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. 80270-A-G509 with the USFWS.
Witham, C.W., R.F. Holland and J.E. Vollmar. 2014. Changes in the Distribution of Great Valley Vernal Pool Habitats from 2005 to 2012. Sacramento, CA. Report prepared for the U.S. Fish and Wildlife Service and Bureau of Reclamation CVPIA Habitat Restoration Program under Grant Agreement No. F11AP00169 with the USFWS.

[5] Saunders, D.A., R.J. Hobbs, and C.R. Margules. 1991. Biological consequences of ecosystem fragmentation: a review. Conservation Biology. Vol. 5: 1, pp 18–32.

encroachment. A site-specific example of this is the western spadefoot, which is negatively phototaxic and will stop breeding in response to light pollution.

In addition, the proposed compensatory mitigation actions for this project would result in a net loss of waters of the United States and are, therefore, not sufficient, particularly for permittee-responsible projects (as opposed to bank or in-lieu fee credits) under existing South Pacific Division procedures (the ratio "checklist") and the 2008 compensatory mitigation rule. In addition, the proposed onsite and offsite mitigation locations are small, involve creating vernal pools at unnaturally high densities, and would result in additional habitat fragmentation. This compensation plan also relies on preserved waters of the U.S. to meet mitigation objectives, which can only occur under the regulations if all five substantive requirements are met (40 CFR 230.93(h) i-v). The DEIS does not disclose whether all of the criteria for preservation have been met. We are concerned, however, that there will likely be few credits available for the proposed preserved waters on the Cordova Hills project site and the three offsite locations.

> **Recommendations:** Document the availability of mitigation for this project in the FEIS, and include a revised mitigation plan that shows compliance with the South Pacific Division's recently published mitigation guidelines. This includes documenting the project's ability to fully and appropriately offset the loss of nearly 40 acres of outstanding vernal pool, seasonal wetland, and stream habitats.

Air Quality

Criteria Pollutants

Based on the discussion in the DEIS regarding direct and indirect air emissions, it is unclear whether Table 3.3-6 includes both direct and indirect construction emissions. The DEIS (p. 3.3-22) incorrectly states that a General Conformity analysis is only applicable to the project's direct emissions, in this case, the direct construction emissions resulting from earth fill activities. The General Conformity rule at 40 CFR Section 93.153(b), however, applies to "the total of direct and indirect emissions in a nonattainment or maintenance area caused by a Federal action." Indirect emissions are defined as "those emissions of a criteria pollutant or its precursors that: (1) Are caused by the Federal action, but may occur later in time and/or may be further removed in distance from the action itself but are still reasonably foreseeable; and (2) The Federal agency can practicably control and will maintain control over due to a continuing program responsibility of the Federal agency." 40 CFR Section 93.152. EPA recognizes that the Corps will not maintain practicable control over emissions after the permitted actions have been completed; however, both the direct and indirect emissions of project construction, which are subject to CWA 404 permit approval, are subject to the conformity rule.

> **Recommendation:** Clarify this distinction in the FEIS, and ensure that the projected air pollutant emissions in Table 3.3-6 reflect both direct and indirect emissions from construction activities for the purpose of comparison with the conformity rule *de minimis* thresholds.

EPA is concerned that the proposed action would result in significant cumulative impacts to air quality due to operational emissions in the Sacramento Valley Air Basin. As stated above, EPA is aware of multiple federal development projects, in which the Corps is involved, and which are

planned in the Sacramento Valley Air Basin for the same general time period as the proposed Cordova Hills project. In discussing cumulative impacts to air quality, the DEIS (p. 3.3-40) refers to Table 3.3-7, which provides operational emissions estimates (in tons per year) for only the Proposed Action. The DEIS does not, however, quantify cumulative air quality impacts associated with specific reasonably foreseeable projects in the cumulative effects study area. Such information helps clarify the intensity of cumulative impacts, as well as future challenges the region would face in attaining federal air quality standards. EPA understands that such information is available and was incorporated into existing Corps documents (i.e., Placer Vineyards and Westbrook DEISs).

> **Recommendation:** Evaluate cumulative emissions for potential contributions to violations of the National Ambient Air Quality Standards. Provide a table in the FEIS with criteria air pollutant and precursor emissions estimates from all applicable reasonably foreseeable future actions located within the geographic scope of the cumulative air analysis (where information is readily available). The table should include, for each project, emissions from both construction and operational phases, project size (in acres), and the number of residential units planned.

Greenhouse Gas Emissions

According to the DEIS (p. 3.5-17), even with implementation of Final Environmental Impact Report Mitigation Measure CC-1, per capita transportation emissions associated with all of the action alternatives would exceed the Sacramento County Climate Action Plan's April 2011 threshold of significance, and project-related operational greenhouse gas emissions would remain significant and unavoidable.

EPA is also concerned that the proposed project may not be consistent with the Metropolitan Transportation Plan/Sustainable Community Strategy (MTP/SCS), a consensus of 22 cities and six counties (including Sacramento County). The DEIS (p. 3.5-20) cites the Sacramento Area Council of Government's (SACOG) 2012 determination that the proposed project could make the region's ability to meet the 2035 greenhouse gas emissions reduction target pursuant to SB 375 challenging under the "without university" scenario. SACOG also determined that the proposed project would create higher transportation greenhouse gas emissions relative to other development opportunities in the region, with or without a university, and these emissions would be significantly greater without a university.[6] SACOG has indicated that, with or without a university, Cordova Hills will face challenges being included in the next MTP/SCS, largely based on market feasibility considerations, and may require some additional efficiencies elsewhere in the region's land use and transportation system beyond those included in the current MTP/SCS.

Furthermore, while we acknowledge the applicant's strong desire to include a university at Cordova Hills, we remain concerned that it is does not appear reasonably foreseeable. SACOG (2012) has also indicated some doubt about the reality of a university at the site by 2035. If a university is not developed at Cordova Hills, the DEIS significantly underestimates both criteria

[6] SACOG memorandum from Mike McKeever, Chief Executive Officer, to Sacramento County Supervisors, dated January 22, 2012, Subject: Response to Cordova Hills Questions.

pollutant and greenhouse gas emissions projections for the proposed project. We have previously recommended that the DEIS assess the impacts of the "without university" scenario for each alternative, but this not been done.

> **Recommendation:** For each alternative, we recommend that the FEIS include both the greenhouse gas and criteria pollutant emissions estimates under the "without university" scenario, and discuss the implications of the project not being included in the MTP/SCS.