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

August 4, 2008

Ms. Liz Holland
Environmental Resources Branch
U.S. Army Corps of Engineers
Sacramento District
1325 J Street, 10th Floor
Sacramento, California 95814-2922

Subject: Draft Environmental Impact Statement (DEIS) for 408 Permission and 404 Permit to Sacramento Area Flood Control Agency for the Natomas Levee Improvement Project (CEQ# 20080230)

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced document pursuant to the National Environmental Policy Act (NEPA), Council on Environmental Quality (CEQ) regulations (40 CFR Parts 1500-1508), and our NEPA review authority under Section 309 of the Clean Air Act. Our comments are provided in accordance with the EPA-specific extension to the comment deadline date from July 28, 2008 to August 5, 2008 granted by you on July 21, 2008. The extension is appreciated.

As currently proposed, EPA is not able to determine whether or not the preferred alternative represents the Least Environmentally Damaging Practicable Alternative (LEDPA). We recommend that no 404 permit be issued without a more definitive demonstration of compliance with the Clean Water Act 404(b)(1) Guidelines. We recommend the final environmental impact statement (FEIS) include additional information to support the conclusion that the preferred alternative represents the LEDPA. Our comments in response to the Public Notice SPK-2007-211 for the proposed Natomas Levee Improvement Project are provided in the attached July 24, 2008 letter from David Smith, Supervisor, Wetlands Regulatory Office, to Colonel Thomas C. Chapman, Sacramento District Engineer.

Significant planned growth is proposed for the Natomas Basin. EPA is concerned with the residual flood risk to development in a floodplain protected by levees. We recommend implementation of the proposed Natomas Basin flood safety plan prior to approval of additional development. We also recommend the FEIS describe how Sacramento Area Flood Control Agency (SAFCA) and its members will ensure development does not compromise the flood-damage-and-risk-reduction achievements of this project nor constrain effective flood protection management.

We are also concerned with the indirect and cumulative environmental effects of planned development facilitated by this levee project. We recommend SAFCA and its members continue to work closely with the US Fish and Wildlife Service and California Department of Fish and Game to ensure this project and future development adhere to, and do not undermine, the underlying assumptions, goals, and objectives of the Natomas Basin Habitat Conservation Plan.

Based upon the above concerns, we have rated the DEIS as Environmental Concerns – Insufficient Information (EC-2) (see enclosed "*Summary of Rating Definitions*"). We appreciate the opportunity to review this DEIS. When the FEIS is released for public review, please send one hard copy and one CD ROM to the address above (mail code: CED-2). If you have any questions, please contact Laura Fujii, the lead reviewer for this project, at (415) 972-3852 or fujii.laura@epa.gov, or me at (415) 972-3521.

Sincerely,

Kathleen M. Goforth, Manager
Environmental Review Office

Enclosures:
Summary of EPA Rating Definitions
Detailed Comments
EPA Letter on Public Notice SPK-2007-211 for the Natomas Levee Improvement Project

cc: Ken Sanchez, U.S. Fish and wildlife Service
Robert Solecki, Central Valley RWQCB
Jeff Drongesen, California Department of Fish and Game
John Bassett, Sacramento Area Flood Control Agency

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."

EPA DETAILED DEIS COMMENTS FOR 408 PERMISSION AND 404 PERMIT TO SACRAMENTO AREA FLOOD CONTROL AGENCY FOR THE NATOMAS LEVEE IMPROVEMENT PROJECT, SACRAMENTO, CA., AUGUST 4, 2008

Clean Water Act 404(b)(1) Guidelines

Demonstrate compliance with Clean Water Act 404(b)(1) Guidelines. EPA is not able to determine whether or not the preferred alternative, as currently proposed, represents the Least Environmentally Damaging Practicable Alternative (LEDPA).

> ***Recommendation:***
> We recommend that no 404 permit be issued without a more definitive demonstration of compliance with the Clean Water Act 404(b)(1) Guidelines. We recommend the final environmental impact statement (FEIS) include additional information to support the conclusion that the preferred alternative represents the LEDPA. Our comments in response to the Public Notice SPK-2007-211 for the proposed Natomas Levee Improvement Project are provided in the attached July 25, 2008 letter from David Smith, Supervisor, Wetlands Regulatory Office, to Colonel Thomas C. Chapman, Sacramento District Engineer.

Residual Flood Risk

Implement flood safety plan and ensure development does not compromise project risk-reduction gains. The General Plans of the City of Sacramento and Sutter and Sacramento Counties, and the Blueprint for Regional Growth, propose significant urban growth for the Natomas Basin (pps. 5-23 to 5-24). The Natomas Basin would remain subject to a residual risk of flooding after project implementation and future achievement of a 200-year level of flood protection. EPA is concerned with urbanization in a deep floodplain protected by levees, and the exposure of people and property to the residual flood risk.

> ***Recommendations:***
> We commend Sacramento Area Flood Control Agency's (SAFCA) commitment to a Natomas Basin flood safety plan and development fee to address the increase in residual risk as new development occurs in Natomas Basin. We recommend implementation of the flood safety plan as soon as possible and prior to approval of additional development.
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> We recommend the FEIS describe how SAFCA and its members will ensure existing and future development does not compromise the flood-damage and risk-reduction achievements of this project nor constrain effective flood protection management.

Describe how Smart Growth concepts will be used to reduce the residual flood risk. The 2005 Blueprint for Regional Growth integrates smart growth concepts such as higher-density, mixed-use developments and reinvestment in existing developed areas into the regional growth vision (5-26). As an already-built parcel with existing transportation and utility infrastructure, Natomas Basin is assumed as a reinvestment area for future development. While EPA supports smart growth concepts, we remain concerned with the

potential indirect and cumulative impacts of development in a floodplain protected by levees.

> ***Recommendation:***
> We recommend the FEIS include specific information on how Smart Growth concepts will be implemented to avoid and minimize residual flood risk to future development and populations, and indirect and cumulative impacts on environmental resources.

Indirect and Cumulative Effects

Ensure the project adheres to the assumptions, goals, and objectives of the Natomas Basin Habitat Conservation Plan. Significant urban growth is proposed for the Natomas Basin which would contribute to indirect and cumulative loss in habitat acreage and values, effects on special-status species and sensitive habitats, and an increase in air pollutant emissions (Chapter 5 Cumulative and Growth-Inducing Effects). The project incorporates habitat creation, modification, and preservation components, and preparation and approval of management plans to reduce adverse effects. Given the magnitude of planned development, EPA remains concerned with the potential adverse indirect and cumulative effects of development facilitated by this levee improvement project.

> ***Recommendation:***
> We recommend that SAFCA and its members continue to work closely with the US Fish and Wildlife Service and California Department of Fish and Game to ensure this project adheres to, and does not undermine, the underlying assumptions, goals, and objectives of the Natomas Basin Habitat Conservation Plan (NBHCP). We recommend SAFCA continue to refine the project design to avoid and minimize potential impacts to the maximum extent feasible.

Provide concurrence by the U.S. Army Corps of Engineers that construction of the adjacent setback levee would eliminate the need to remove waterside vegetation. The preferred alternative would construct an adjacent setback levee along the Sacramento River east levee to provide adequate freeboard to prevent wind- and wave-induced overtopping (p. 2-20). An objective of constructing an adjacent setback levee would be to move the waterside slope of the levee landward, thus reducing the need to remove 30 acres of mature vegetation on the waterside of the levee in accordance with U.S. Army Corps of Engineers (USACE) levee operation and maintenance requirements (pps. 2-10, 4-41). Waterside vegetation provides important habitat for anadromous fish, Swainson's Hawk, and other sensitive fish and wildlife species.

EPA supports efforts to avoid and minimize the removal of mature vegetation on the waterside and landside of the levees. It is not clear in the draft environmental impact statement (DEIS) whether the USACE has concurred with the position that the adjacent setback levee would eliminate the requirement to remove waterside vegetation.

Recommendation:
We recommend the FEIS include concurrence by the USACE that construction of the adjacent setback levee would eliminate the need to remove waterside vegetation pursuant to their levee operation and maintenance requirements.

Consider implementation of Alternative 3 – Adjacent Levee with Setback. EPA recognizes that the preferred alternative, Alternative 1 – Adjacent Setback Levee, reduces adverse environmental effects since it theoretically eliminates the need to remove waterside riparian woodland habitat, reduces disruptions to the Garden Highway and local residences, and reduces the urgency of fixing bank erosion sites which would adversely affect waterside habitat. We note that Alternative 3 – Adjacent Levee with Setback would implement the preferred alternative in addition to a setback levee along 1.5 miles of the Sacramento River east levee in Reaches 1 and 2. It appears that Alternative 3 would provide the same environmental benefits as the preferred alternative plus the potential advantage of enhanced habitat along the river within the levee setback area.

Recommendation:
We recommend the FEIS evaluate whether Alternative 3 may better represent the LEDPA. If determined to be the LEDPA, we recommend implementation of Alternative 3 - Adjacent Levee with Setback given its potential to provide additional environmental benefits.

Air Quality

Aggressively implement all feasible mitigation measures to reduce construction-related emissions. Even with proposed mitigation measures, construction-related emissions would result in exceedences of significance criteria for reactive organic gases (ROG) and particulate matter with aerodynamic diameter of 10 micrometers or less (PM_{10}) in Sutter County and PM_{10} in Sacramento County (p. 4-101). Sutter and Sacramento Counties are in nonattainment for one or more of the state and federal standards for these pollutants (p. 3-56).

Recommendations:
In addition to all applicable local, state, and federal requirements, EPA recommends that the following mitigation measures be included in the Construction Emissions Mitigation Plan, if not already proposed, in order to reduce impacts associated with emissions of particulate matter (PM) and other emissions from construction-related activities:

Fugitive Dust Source Controls:

- 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 California Air Resources Board (CARB) and/or EPA certification (where applicable) 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. CARB has a number of mobile source anti-idling requirements. See their website at: http://www.arb.ca.gov/msprog/truck-idling/truck-idling.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.) Meet CARB diesel fuel requirement for off-road and on-highway (i.e., 15 parts per million (ppm)), and, where appropriate, use alternative fuels such as natural gas and electric.
- 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.
- Consider additional phasing of the project to reduce emissions to below significance thresholds.

Climate Change

Describe climate change and its effects on the Natomas Levee Improvement Project. The potential for climate change is now considered a significant possibility. Current research estimates that climate change could cause sea level rise and change the amount, timing, and intensity of rain and storm events. A significant change in the weather patterns of our region could have important implications for how we manage flood control facilities and the long-term reliability of our levee systems.

> ***Recommendation:***
> We recommend the FEIS include a description of climate change and its implications for Natomas Basin flood protection efforts. For example, describe and evaluate projected climate change consequences such as sea level rise, frequency of high intensity storms, and amplified rain events, and their effects on the levees protecting Natomas Basin and the proposed levee improvements.

General Comments

Describe and minimize energy use. Salvage, recycle, and reuse demolition waste. Obtain a firm, reliable water supply for environmental mitigation measures. The proposed action would require energy for construction and generate construction-related waste. In addition, the project design includes managed marsh creation and rice paddy preservation which would require procurement of a firm, reliable water supply of good quality. The DEIS does not appear to describe the project energy use, reuse or recycling of construction-related waste, or the procurement of a mitigation water supply.

> ***Recommendations:***
> We recommend the FEIS evaluate and minimize the proposed action's energy use. Potential measures to reduce energy use should be described in the FEIS.
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> EPA recommends maximization of resource conservation and pollution prevention in accordance with Executive Order 13148 Greening the Government Through Leadership in Environmental Management. We recommend the project design include the salvage, recycling, and reuse of the construction-related waste. We also recommend new construction maximize the use of materials with recycled content, where appropriate. The following websites provide useful information on pollution prevention, green building, and waste recycling:
> http://www.epa.gov/region09/waste/p2/business.html
> http://www.epa.gov/opptintr/p2home/index.htm
> http://www.epa.gov/epaoswer/osw/pubs/recycling.htm
> http://www.epa.gov/osw/infoserv.htm#other
>
> We recommend procurement of a firm, reliable water supply for the managed marsh creation and rice paddy preservation be a stated component of the selected project alternative.