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

April 17, 2006

Kirk C. Rodgers, Regional Director
U.S. Bureau of Reclamation
Mid-Pacific Region
2800 Cottage Way
Sacramento, CA 95825-1898

Subject: EPA Comments on the Draft Environmental Impact Statement (DEIS) and Supplemental Information for Renewal of Long Term Contracts for San Luis Unit Contractors (CEQ# 050411 and 060056)

Dear Mr. Rodgers:

The U.S. Environmental Protection Agency (EPA) has reviewed the above-referenced documents 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 in Attachment A.

We appreciate your efforts to address EPA's concerns. As you know, in January 2005, EPA rated the previous DEIS, released in November 2004, as "Inadequate Information – "3". The document did not present an adequate evaluation of the following: the impacts associated with full delivery of contract quantities; ongoing impacts of water deliveries on water quality, soils, or other natural resources; and associated drainage solutions. A new DEIS, released in October 2005, also excluded this information. On January 26, 2006, you sent a letter to Wayne Nastri, Regional Administrator for EPA, Region 9, acknowledging EPA's concerns and committing to address these issues in a supplemental document. The Supplemental Information, released in February 2006, provides additional analysis of these issues.

The Supplemental Information is a positive development. EPA appreciates this information and considers it a step in the right direction. But we believe there is still further analysis to be done, and we are prepared to work with you to address some remaining issues in the Final Environmental Impact Statement (FEIS). Based on our review, we have rated this DEIS and Supplemental Information as Environmental Objections, Insufficient Information (EO-2) (see enclosed "Summary of Rating Definitions" in Attachment B). The area affected by the project includes waters of the United States (the San Joaquin River and many of the west side

tributaries, such as Mud and Salt Sloughs and the Grasslands channels) that are listed as impaired pursuant to the Clean Water Act. The October 2005 DEIS acknowledges that deliveries under these contracts have adversely altered both groundwater flow and quality (pp. 3.8-4 and 3.8-6) and that all of the alternatives evaluated in the DEIS, including the no-action alternative (i.e., renewal of the contracts with current terms and conditions), would result in the continuing degradation of water quality in the area. According to several studies, renewal of these long term contracts may also increase the potential for mobilization and movement (through shallow groundwater) of pollutants (e.g., selenium) to these impaired waters and contribute to continued exceedances of water quality standards. While they do acknowledge some of these impacts, the DEIS and the Supplemental Information do not fully assess the likelihood and extent of these potential impacts and mitigation measures.

We appreciate the reopener clause proposed for the Westlands Water District contract in the event of significant land retirement currently under consideration in the San Luis Drainage Feature Reevaluation Project (Drainage DEIS), released in September 2005. This proposed reopener clause is a good step towards recognizing the linkage between the long-term water contracts and drainage solutions. We believe the drainage solutions and the features relied upon to implement these solutions should not be separated from the implementation of the long-term water contracts. Delivery of contract supplies has played a major role in creating the current environmental conditions which the proposed drainage service is designed to alleviate, and future contract supplies will continue to affect these conditions and drainage needs. Therefore, we urge you to consider not finalizing these contracts and the associated FEIS until the Drainage Record of Decision is signed. This would not affect implementation of the contracts, as the current contracts do not expire until December 2007 and the Drainage DEIS Record of Decision is expected in this summer.

We look forward to working with you to ensure that the proposed long-term water contracts are issued in a manner that protects both agricultural and water quality needs. We are available to meet with you to discuss our comments. Please send three copies of the FEIS to the address above (Mail Code: CED-2) at the same time it is officially filed with EPA Headquarters. If you have any questions, please call me at (415) 972-3843.

Sincerely,

/s/

Enrique Manzanilla, Director
Communities and Ecosystems Division

Main ID# 4477

Enclosures:
Attachment A: EPA's Detailed Comments
Attachment B: Summary of Rating Definitions

cc: Tam Doduc, State Water Resources Control Board
Mike Chrisman, California Secretary for Resources
Ken Landau, Central Valley Regional Water Quality Control Board
Lester Snow, California Department of Water Resources
Steve Thompson, U.S. Fish and Wildlife Service
Joe Grindstaff, California Bay Delta Authority
Anne Miller, EPA, Office of Federal Activities
Joe Thompson, Bureau of Reclamation

ATTACHMENT A:
EPA DETAILED COMMENTS FOR THE DEIS AND SUPPLEMENTAL INFORMATION FOR RENEWAL OF LONG-TERM CONTRACTS FOR SAN LUIS UNIT CONTRACTORS, CA, APRIL 17, 2006

Environmental Impacts

Pollution Mobilization and Movement

Neither this DEIS nor the Drainage DEIS analyzed the irrigation of upslope lands as sources of selenium mobilization into drainage water. Studies since the early 1990's have established that irrigation and associated drainage from the San Luis Unit contribute significantly to mobilization of pollutants, particularly selenium, which affect surface and ground water within the region.[1] Selenium in soils from the San Luis Unit is mobilized by irrigation and storm water run-off (1990 Drainage Management Plan for the West San Joaquin Valley, California, Fig. 6, p. 28) with the highest concentrations of salts and selenium located down slope (Fig. 2.5, Drainage Feature Reevaluation Preliminary Alternatives Report, Dec. 2001).

Selenium concentrations exceeding water quality standards affect important resources such as the Grassland Ecological Area (which has been declared a Ramsar "Wetland of International Importance")[2] and the San Joaquin River. Although the "Grasslands Bypass Project" is implementing a Total Maximum Daily Load (TMDL) to reduce selenium loading in this area, continued exceedences of the 2 ppb objective have led the State Water Resources Control Board to recommend placing the Grasslands channels back on the Clean Water Act (CWA) 303(d) list of impaired waters. Concentrations in some canals have reached levels 20 times higher than the 2 ppb objective.

Subsurface drainage flow comes, in part, from the Westlands Water District and other water districts upgradient of the northerly districts with high selenium/Total Dissolved Solid (TDS) concentrations (Plan Formulation Report Addendum, July 2004).[3] There is potential for the water deliveries to exacerbate mobilization of pollutants and movement (through shallow groundwater) into areas where there could be fish and wildlife exposure. The closure of Kesterson Reservoir and the San Luis Drain in 1995 has also "…exacerbate[d] the aerial extent of shallow groundwater in the district, which has compounded problems associated with

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[1] Early seminal work was accomplished through the San Joaquin Valley Drainage Program, which released its Final Report, "A Management Plan for Agricultural Subsurface Drainage and Related Problems on the Westside San Joaquin Valley," in September 1990 (prepared by Bureau of Reclamation, Fish and Wildlife Service, US Geological Survey, CA Dept. of Fish and Game, and CA Dept. of Water Resources).

[2] http://www.ramsar.org/

[3] The "Review of Selenium Concentrations in Wetland Water Supply Channels in the Grasslands Watershed (Water Years 1999-2000)," staff report from the Central Valley Regional Water Quality Control Board acknowledges that subsurface agricultural drainage from upslope lands (including areas in the San Luis Unit) contributes to selenium loads reaching Grasslands area channels.

waterlogging and evapoconcentration of salts in the shallow aquifer and crop root zone" (Supplemental Information, p. 11).

Recommendation:
The FEIS should include information on the relationships between irrigation in the San Luis Unit (Westlands Water District and northern districts) and ground water movement downslope, in terms of flow and water quality. It should provide information on the San Luis Unit's role in groundwater accretions and discharges of pollutants into wetland channels and the San Joaquin River and identify impacts to wetlands and wildlife. Based on this additional information, the FEIS should consider mitigation measures, such as monitoring and adaptive management tools, contract provisions, or changes in amounts[4] and location of water applied, which will reduce drainage production and selenium mobilization. We note that shortage provisions in the contracts, while an important adaptive management tool, do not address voluntary actions by Reclamation to address environmental impacts, such as the need for environmental water for refuges.

Impacts to the Delta

The DEIS assumes that the "affected environment does not extend to the Delta" (p. 3.2-3). There are, however, two direct impacts of deliveries under these contracts on the Delta. First, we note that other studies and plans, such as work done for the Salinity/Boron TMDL to meet objectives at Vernalis on the Lower San Joaquin River [California Regional Water Quality Control Board, September 10, 2005 (Salinity/Boron TMDL)] have identified potential Delta impacts from constituents that originate in the San Luis Unit project area. In particular, analyses related to implementation of the salinity/boron TMDL have considered loads coming from subwatersheds such as the Grasslands area, which includes the Northern contract area. Recent analyses for the South Delta Improvement Program (DEIS, October 2005) also consider effects on agriculture and drinking water of salt inputs from the San Joaquin River Valley to the Delta.

Second, there are a number of stresses on the Delta system, which have led to adverse impacts, including a marked decline in key fish species such as the delta and longfin smelt and striped bass. Export water supply, which affects key variables such as channel configuration, delta hydraulics, delta inflows, and water quality, is identified as one of the contributors in this decline (as well as toxics and invasive species).[5] The continuing effects of the current export operations are being reexamined through the Interagency Ecological Program[6] and California

[4] The Supplemental Information notes that "…an alternative to reduce the contractual water quantity is inconsistent with the framework of the ROD for implementing the provisions of the CVPIA." However, See 40 CFR 1502.14 (b) and CEQ's NEPA 40 Most Asked Questions, which emphasize the need to evaluate all reasonable alternatives, even if they conflict with local or federal law (2b).
[5] http://science.calwater.ca.gov/pdf/workshops/IEP_POD_2005WorkSynthethsis-draft_111405.pdf
[6] http://calwater.ca.gov/Programs/Programs.shtml

Bay Delta Authority Science Program[7], among others. The San Luis Unit accounts for approximately 20% of Delta exports.

Recommendation:
The FEIS should evaluate recent stresses to the Delta ecosystem and discuss the current state of knowledge about the role of water exports in the decline of fish species. The environmental analysis in the FEIS should include an evaluation of Delta impacts and methods of mitigating these impacts.

Water Supplies and Agricultural Drainage

The current water quality impairments are in large part associated with the area's long-standing drainage problems and the contaminated subsurface drainage flow coming from the San Luis Unit, including Westlands Water District. While we recognize that Reclamation is preparing a separate plan for drainage service, the San Luis Drainage Feature Reevaluation Project (Drainage DEIS), it has yet to be completed. We are concerned that the impacts analysis in the DEIS assumes implementation of drainage service (p. S-4, 5). Given the appreciable technical, regulatory, and financial hurdles for implementation of drainage service on the scale anticipated, the predicted 2010 implementation date for drainage service may be optimistic. Delay of drainage implementation could lead to adverse environmental impacts in the area. In particular, the document notes that if drainage service were not provided, there would be an increase in the acreage of Westlands Water District being put out of production as crop yields decline and the costs of production exceed agricultural revenue (pp. A-18-19).

Even if drainage service is fully implemented, there could be impacts to water quality as a result of the water deliveries. The DEIS does not acknowledge the many significant and unresolved environmental impacts associated with the planned drainage service or mitigation for these impacts (Drainage DEIS, Table ES-10 and p. 2-93). The California Central Valley Regional Water Quality Control Board shares these concerns. See Letter from Kenneth Landau, Regional Water Quality Control Board Assistant Executive Director to Claire Jacquemin, Reclamation, August 25, 2005. We are concerned that drainage service alone may not be able to reverse or remediate some water quality impacts due to uncertainties regarding effective and safe treatments to remove selenium from drainage water (see our Drainage DEIS comments) and the mitigation for these impacts has not been developed. In particular, some scenarios in the Drainage DEIS, allow reallocation of supplies to other District lands. We are concerned that redistribution of supplies from lands which are no longer in production to lands currently dependent on groundwater could lead to expansion of drainage-impaired lands (p. 84, "Land Retirement Final Report", Feb. 1999). Water redistributed upslope can create conditions of shallow groundwater in downslope areas, leading to more widespread drainage problems.

As detailed previously, future use of contract water supplies at the delivery levels allowed in the contracts could perpetuate drainage problems within the region, without or with drainage service. According to the Supplemental Information, an additional 46,000 acres (currently

[7] www.iep.ca.gov

removed from agriculture production due to impacts from drainage), might again be irrigated with contract water (p. 12). As stated earlier, delivery of contract supplies has played a major role in creating the current environmental conditions for which the proposed drainage service is designed to alleviate, and future contract supplies will continue to affect these conditions and drainage needs in the future. Therefore, the Drainage solutions and the features relied upon to implement these solutions should not be separated from the implementation of the long-term water contracts.

Recommendations:
The FEIS should describe the actions Reclamation would take relevant to the contracts if drainage service is not provided by 2010. For example, we recommend evaluation of additional contract re-opener clauses, modified contract conditions, implementation of short-term drainage management techniques and other provisions, such as the redirection of water to lands that will not contribute to agricultural drainage problems or increased soil salinity, and reduction in the irrigated land acreage and applied water.

As we have discussed in meetings and in our previous correspondence, Reclamation should coordinate the timing of the water supply commitments and drainage solutions as these actions are linked. Given that the Drainage Record of Decision is due this year and the earliest of these contracts does not expire until December 31, 2007, we recommend that the Long Term Water Contracts Record of Decision not be finalized until that decision is made. Planning that incorporates the goals of both projects may help avoid exacerbation of ongoing environmental impacts.

While we appreciate the inclusion of the reopener clause now proposed for the Westlands Water District contract, it should not be exclusively relied upon to bridge the connection between these two projects as it would apply only if a certain amount of land is retired and impacts from other approaches to drainage control will not trigger a reanalysis of the needs assessments. The FEIS should, therefore, assure consistency with elements of drainage planning that will affect land base, water management, and water supply and explain how contract commitments can be adjusted to accommodate for these changes.

Water quality and drainage information included in the Drainage DEIS should be summarized and incorporated into the FEIS. Our comments and recommendations in response to the Drainage DEIS are applicable to the proposed contract renewal action and are hereby incorporated by reference.

Needs Assessments

As noted in our January 25, 2005 comments on the previous DEIS, the needs assessments that support the projected water supply demand are based on information which does not fully reflect future conditions such as agricultural drainage conditions or service, high water use efficiencies, and water marketing. We also note that the needs assessment, completed in 2000,

assumes delivery to Britz/Sumner Peck settlement lands (approximately 40,000 acres) but these have been retired by means of non-irrigation covenants that prohibit the application of CVP water.

Furthermore, the water needs analysis assumes that land would remain in production even though increasing soil salt balances are already forcing irrigated agricultural lands out of production. With or without a drainage service program, it is likely the irrigated land base and water supply management will change, as documented in the Drainage DEIS. The Drainage DEIS includes an "In-Valley/water needs land retirement alternative" which scales land retirement to match a delivery, on average, of 70% of the full contract amounts. Although the Drainage DEIS does not discuss water needs for the upper range land retirement alternative (308,000 acres or over half of the acres in Westlands Water District) (pp. 2-45), the reliable delivery requirements would presumably be less. As we have stated previously, a comprehensive analysis of the needs assessments and restoration and mitigation to address water quality, drainage, and fish and wildlife impacts may lead to reassessment of present water allocations and water supply management practices.

Recommendations:
The FEIS should evaluate additional parameters for the needs assessments to incorporate more realistic land use assumptions, including land retirement, and the impacts of water use on the ability to meet water quality standards in the area.

Cumulative Impacts Analysis

The contract periods for the San Luis Unit continue beyond the time frame addressed in the CVPIA PEIS which extends to 2025. The 40-year time frame for San Luis Unit Municipal and Industrial (M&I) contracts ends in 2045 and the 25-year time frame for Agricultural contracts ends in 2030. The DEIS does not provide information or analyze the time frame gap between tiered documents, i.e., 2025 to 2045, but assumes minimal cumulative impacts for the entire contract periods.

We are concerned that the conclusions finding minimal cumulative impacts are dependent on the timely implementation of future agricultural drainage service, habitat restoration, land acquisition and retirement, water conservation, and CVPIA programs (i.e., p. 3.8-12). The DEIS assumes that several mitigation proposals will be fully effective in remediating the adverse impacts of these contract renewals despite problems implementing these proposals to date. For example, some important ecosystem restoration provisions of CVPIA, such as acquisition of full Level 4 refuge water supplies, have lacked funding for adequate implementation. Purchase of environmental water under the CVPIA b(3) program has also fallen substantially short of targeted needs due to inadequate funding mechanisms. This unmet need may increase in the future as market prices for water have more than doubled since 1997.

Further, past and present efforts to meet water quality standards in the San Joaquin Basin have been significantly hampered by the lack of adequate fresh water supplies, as noted in the Salinity/Boron TMDL.

In addition, there is no discussion in the October 2005 DEIS or Supplemental Information of how contracts are adjusted to meet Trinity Restoration needs. In July 2004, the Ninth Circuit decided to reinstate the Trinity River Record of Decision, bringing annual releases in the range of 340,000 to 815,000 acre-feet back to the Trinity River.

Recommendations:

The cumulative impacts analysis in the FEIS should be based on the past and present trends of supplies available for redirection to meet restoration and refuge needs in the area, including Trinity Restoration needs. Where information is available, the analysis should reflect the actual implementation status of CVPIA restoration actions.

The FEIS should include the status of Endangered Species Act (ESA) consultation with U.S. Fish and Wildlife Service (FWS) and the National Marine Fisheries Service (NMFS) for the San Luis Unit contract renewals and the related CVP Operations Criteria and Plan.

The FEIS should also disclose projected future conditions through 2045 and evaluate the potential impacts of the CVPIA PEIS Preferred Alternative, as the No Action Alternative, from 2025 to 2045.

Alternatives Analysis

Typically, federal agencies proposing actions that have a range of possible implementation scenarios develop analyses that bracket the range of the future federal action. This approach reduces the need for additional NEPA review in the future. This approach is especially desirable in a situation such as this project, in that contractual commitments are being made for 25-40 years and may be difficult to revise in the future to respond to environmental concerns. There are a variety of implementation scenarios under these contracts, including full contract delivery due to future regulatory changes and average deliveries under current regulatory and physical constraints. Another possible scenario includes deliveries associated with large-scale land retirement or additional regulatory and physical constraints. Each of these delivery scenarios and their associated environmental impacts should be analyzed in the FEIS.

The proposed San Luis Unit contract renewals commit approximately 1.4 million acre-feet per year to the San Luis Unit for the next 25-40 years, with an automatic right to renew (p. 2-4). The federal action enables full delivery of the contract quantities each year for the contract term. We appreciate that the Supplemental Information includes a limited analysis of the environmental impacts of increased delivery reliability under these contracts. However, the Supplemental Information confirms that Reclamation's analysis in the DEIS is based on the modeled deliveries during the 1922 to 1994 hydrologic record under current structural

configurations and regulatory constraints. Therefore, the DEIS analysis is based on the assumption that current regulatory and physical constraints will continue to limit Reclamation's ability to deliver water under these contracts to an average of about 60% of the stated contract amounts (Supplemental Information, pp. 5-6). Additionally, the "Qualitative Analysis/ Discussion of Increased Contractual Deliveries" in the Supplemental Information relies in large part on the substitution of other sources of water to maintain agricultural deliveries in the San Luis Unit. This new information does not resolve issues regarding the sustainability of agriculture under those projected deliveries. As stated earlier, potential impacts include groundwater quality impacts and impacts to fish and wildlife caused by selenium and other contaminants.

We believe that it may be more reasonable to assume that regulatory and physical constraints will change over the 40-year life span of some of these contracts. Reclamation's projection of current physical and regulatory conditions into the next 40 years discounts significant recent developments affecting Delta exports. Aside from the broad goals of the CALFED Bay Delta Program Record of Decision in August 2000 (CALFED ROD), Reclamation's assumption of "status quo" does not account for specific projects being proposed that would increase delivery reliability under these contracts such as the Intertie Project and the South Delta Improvements Program (SDIP). For example, the CALFED ROD, made a commitment to increase "water supply reliability" and explicitly anticipated that implementing the CALFED ROD would "result in normal years in an increase to CVP south-of-Delta agricultural water service contractors of 15 percent (or greater) of existing contract totals to 65 to 70 percent" (CALFED ROD, p. 41). Although CALFED implementation has been slow, the CALFED ROD commitments do not support maintaining the status quo for water supply reliability south of the Delta as assumed in the DEIS. We also note that the November 2004 DEIS indicated that without the imposed fish and wildlife constraints, reliability may be over 90% of full contract amounts (DEIS, p. 1-7). With additional regulatory flexibility in addition to physical changes to the water management system, this high amount of reliability may be feasible during the life of these contracts.

In addition to analyzing the environmental impacts of high reliability of contract deliveries, the FEIS should analyze the contract supplies needed and the associated impacts under high end land retirement. We note that the Drainage DEIS suggests that land retirement in the range of 194,000-308,000 acres could substantially diminish drainage production, extent of reuse areas and evaporation ponds. We believe that analysis of supplies required to support an agricultural land base in a "high" land retirement scenario provides a meaningful "lower range" for the DEIS analysis, but this is not included in the Drainage DEIS.

Recommendations:

The FEIS should update the modeled delivery schedule to include the most recent data on exports from the Delta, up to and including 2005. In addition, the FEIS should include a more detailed quantitative analysis of the impacts of full contract deliveries. While the qualitative summary analysis included in the Supplemental Information could

serve as the starting point, a more detailed quantitative analysis of the impacts of higher delivery reliability of full contract quantities on groundwater quality and soil productivity within the unit and regionally should be performed. This detailed quantitative analysis should also include an evaluation of the impacts to the extent and location of the irrigated land base; quality of applied irrigation water, including salt loads from Delta surface supplies and groundwater; and long-term soil productivity.

The FEIS should also include an analysis of potential water delivery amounts that would be associated with high land retirement. As these resource commitments are being made now, the environmental evaluation should encompass the entire range of outcomes enabled by these contractual commitments, including the higher delivery reliability envisioned by the CALFED process and corresponding environmental impacts. Shortage provisions should not be relied upon to respond to the full range of potential environmental factors associated with water contracts as they are only implemented as a result of external regulatory events.