



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IX

75 Hawthorne Street

San Francisco, CA 94105-3901

December 15, 2004

Joc Thompson, Project Manager
U.S. Bureau of Reclamation
1243 N Street
Fresno, CA 93721

Subject: EPA Comments on the Draft Environmental Assessment (DEA)
for Renewal of Long-Term Contracts for Delta-Mendota Canal

Dear Mr. Thompson:

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 Section 309 of the Clean Air Act. Our detailed comments are enclosed.

Since 1988, EPA has expressed a strong interest in the Bureau of Reclamation's (Reclamation) renewal of long-term Central Valley Project (CVP) water supply contracts, and their effects on water quality and the environment. Over the past 15 years, EPA has urged Reclamation to undertake a rigorous analysis of alternatives in the context of contract renewals in order to reduce environmental impacts, consistent with the Central Valley Project Improvement Act (CVPIA) and the CALFED Bay Delta program.

EPA is concerned that the DEA does not appear to evaluate the environmental impacts of the proposed federal action. The proposed federal action enables full delivery of the specified contract quantities each year. However, the DEA only evaluates the environmental effects of delivering 50 to 60 percent of the full contract amount on average each year (representing current conditions). An analysis of the full contract deliveries should be included in the FEA. If these impacts are significant (40 CFR 1508.27), and cannot be mitigated, an environmental impact statement may be appropriate.

We are also concerned that the environmental impacts of the existing conditions are not fully evaluated, and therefore the impacts of the preferred alternative and the no action alternative are underestimated. In particular, we note that under the existing conditions there will be continued degradation of water quality and adverse impacts to wildlife refuges. These impacts

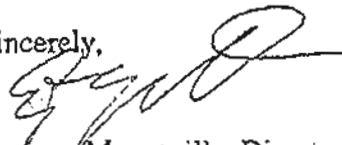
have not been fully disclosed in the DEA. The DEA acknowledges that current management may continue or accelerate adverse environmental impacts to resources that are already in decline (pp 3-152-154). Despite this acknowledgment, the DEA assumes that the no action alternative is equivalent to the existing condition baseline, without considering the cumulative impacts of implementing the proposed federal action at full contract deliveries. An alternative that incorporates water conservation and environmental restoration should be evaluated to inform decision makers and the public about the impacts of the proposed federal action relative to other reasonable management alternatives.

We recognize that this DEA tiers from the CVPIA Programmatic EIS (PEIS). However, the project-specific analyses that were deferred during the PEIS are not provided in this analysis. We are especially concerned that the direct, indirect, and cumulative impacts to water quality, discussed generally in the CVPIA PEIS, are not fully evaluated in this site-specific document.

Water supply conditions in California have changed dramatically in the 40 years since these contracts were originally signed. In response to demands to meet various agricultural and urban needs, overallocations have occurred, altering natural flows, water quality and beneficial uses. We expect these environmental impacts to continue in the future. Water policy that promotes conservation and environmental protection continues to be an EPA priority.

We appreciate the opportunity to review this DEA. Please send two copies of future NEPA documents on the Delta Mendota Canal to the address above (mail code: CMD-2). If you have any questions, please contact me or Summer Allen, the lead reviewer for this project. Summer can be reached at 415-972-3847 or allen.summer@epa.gov.

Sincerely,



Enrique Manzanilla, Director
Cross Media Division

Enclosures:
EPA's Detailed Comments

cc: Arthur Baggett, State Water Resources Control Board
Mike Chrisman, California Secretary for Resources
Joy Winckel, U.S. Fish and Wildlife Service
Patrick Wright, California Bay Delta Authority

Scope of Alternatives

Evaluation of the Proposed Federal Action

The proposed federal action enables full delivery of the contract quantities each year. However, the Draft Environmental Assessment (DEA) evaluates the environmental effects of delivering 50 to 60 percent of the full contract amount on average each year (approximately 187,384 to 218,861 acre-feet of water per year) (page 3-164). Over the 25-year term of these contracts, it is envisioned that the average annual deliveries will increase over current averages. For example, Reclamation's rate setting process assumes that project annual deliveries for the DMC will rise from 250,362 acre-feet in 2008 to 357,240 acre-feet in 2030 (Reclamation Mid-Pacific website, rate setting documents, Schedule A-12A). Similarly, the "proposed federal action" in the Endangered Species Act consultation process being carried out between Reclamation and the U.S. Fish and Wildlife Service (FWS) assumes full contract deliveries, not current deliveries (Letter from FWS to Reclamation, dated November 22, 2004). We are concerned that the DEA does not evaluate the impacts of full delivery of contract quantities.

We note that attaining higher average annual deliveries is not dependent on future NEPA compliance for these actions. The DEA states that deliveries averaged 92 percent of contract amounts in 1991, but have declined to around 50 percent due to changes in the regulatory regime (p. 1-7). We are concerned that changes to that regulatory regime by the State Water Resources Control Board or the National Oceanic and Atmospheric Administration (NOAA) Fisheries, for example, could allow substantially increased deliveries under these contracts without further action or NEPA review on the part of Reclamation. The environmental impacts of full deliveries of contract quantities should be evaluated in the FEA.

Assumptions regarding future contract quantities carry over into many parts of the environmental analysis. For example, the discussion of surface water quality impacts finds no alteration to surface water quality "as long as water deliveries remain the same and, thus, drainage also remains the same" (pg 3-168). Since the environmental analysis assumes that increased water deliveries are not part of the federal action, we are concerned that this analysis is incomplete. We are also concerned that the CVPLA PEIS projected impacts to Year 2025 while the study period of this DEA extends to 2030. Therefore, because impacts analyses are lacking in the DEA, it does not sufficiently cover the period between 2025 and 2030. The DEA does not demonstrate that the renewal of long-term contracts for the DMC will have no significant impact.

Recommendations:

Reclamation should develop an analysis of the environmental impacts of full contract deliveries each year, as permitted under these contracts. If that scenario is not reasonably foreseeable, the basis for assuming less than full contract delivery should be clarified. The FEA should disclose whether full contract deliveries until 2030 would result in significant impacts to the human environment (40 CFR 1508.27).

The FEA should evaluate the potential impacts of the CVPLA PEIS Preferred Alternative between 2025 to 2030 and clearly describe projected conditions under this alternative in 2030. We would also like to note that the DEA refers to this project as a 40-year contract. This is not correct, as it is multiple contracts for varying time periods of 25 or 40 years. This should be corrected in the Final EA.

Conservation Alternative

The DEA evaluates the environmental impacts of continuing current contract deliveries. Another reasonable alternative that merits further consideration comprises a wide variety of actions that promote water conservation and environmental restoration. EPA supports the evaluation of a conservation alternative, even if this alternative is outside the scope of Reclamation's statutory authority (see CEQ's 40 Most Asked Questions, 2A). This alternative should be developed to:

- articulate conservation and environmental restoration goals;
- identify incentives for water conservation and address implementation barriers;
- address the environmental effects of tiered pricing;
- evaluate available management tools such as water transfers, adjustments of contract terms (i.e., "reopener clauses"), project repayment, and environmental monitoring;
- forecast changes to water quality, including agricultural drainage water, associated with reduced contract water quantities; and
- analyse changes in timing and quantity of instream flows and beneficial uses.

This alternative should also consider a more aggressive land retirement program, especially in areas that contribute the largest amounts of salt, boron, and selenium. Strategies to manage drainage to avoid further impairment to the aquatic ecosystem and provide good quality water for refuges, wetlands, and the San Joaquin River should also be evaluated. Farm gate measuring devices and volumetric pricing of water to growers could result in reductions in average applied water, improve the quality of instream flows, and reduce impacts to fish. Land retirement should be considered in combination with other drainage reduction measures, which could make CVP water available for environmental needs such as fisheries. We note that the FWS recommends land retirement that is not based solely on groundwater considerations to reduce habitat fragmentation and its effects on listed species (FWS's Recovery Plan for Upland Species on the San Joaquin Valley, 1998).

Recommendations:

Reclamation should evaluate an alternative that promotes water conservation and allows for adaptive management to changing conditions such as population, land use, and climate conditions. A conservation alternative could address water transfers, pricing, operational flexibility, conjunctive use, and land retirement. Retirement of large contiguous blocks of land that are protected through a conservation easement and managed for conservation should be considered. This alternative should also provide opportunities to enhance environmental water supplies, including allocating water previously used on retired lands to other needs, such as environmental restoration.

Environmental Impacts of the No Action Alternative

The DEA states that under the No Action Alternative (equivalent to the Central Valley Project Improvement Act (CVPIA) preferred alternative), there would be continued degradation of water quality with respect to salt and selenium buildup in the water (p. 3-154). The CVPIA Programmatic Environmental Impact Statement (PEIS) acknowledges that this Preferred Alternative has adverse impacts on resources (Table II-13, CVPIA Final PEIS, p. II-67). The DEA also notes that continuation of current practices and conditions "threaten[s] sustained agriculture" (page 3-152) and that the limited supplies of fresh water, used in combination with saline groundwater, results in salt buildup (page 3-154). The DEA's conclusion that the No Action Alternative would not affect surface water quality (3-166) seems inconsistent with the CVPIA PEIS, and may result in adverse impacts to agriculture and aquatic resources.

Recommendations:

The FEA should include a detailed description of the CVPIA PEIS Preferred Alternative, state the status of its implementation, and report the existing environmental impacts associated with this, as it represents the No Action Alternative.

The impact analysis assumes that future conditions under the No Action Alternative will be the same as the existing condition baseline. This assumption does not address the existing overallocation of water supply and cumulative impacts to water quality, beneficial uses, and conservation efforts. Continuing with the current flow and temperature management program could lead to a decline in anadromous fish populations if the impacts of overallocation are not avoided or mitigated. We are also concerned that the analysis assumes the continued use of groundwater as a supply substitute (p. 3-154). We note that the information provided in the DEA and PEIS indicates adverse impacts as a result of the no action alternative. However, data and analysis needed to determine if these impacts are significant has not been provided.

Recommendations:

The FEA should distinguish the future "no action" scenario from the existing condition. The FEA should provide an accurate description of the existing conditions, including existing environmental degradation and the status of associated environmental improvements. The status of the Environmental Water Account, Drought Risk Reduction Investment Program, Environmental Water Program, and South Delta Improvement Program should be clearly described in the FEA. It should describe in detail the conditions and environmental effects under the No Action Alternative and whether these impacts are significant (40 CFR 1508.27).

The environmental baseline conditions should be clearly established, including drainage and soil salinity problems in the San Joaquin Valley. We recommend including a short description of the historical changes to the basin resources and the environmental effects specific to DMC diversions.

Environmental Impacts of Action Alternatives

Water Quality Impairments

The CVPIA PEIS did not address certain region-specific resources and impacts, including groundwater use and impacts, and water quality. Although this DEA provides an analysis of groundwater, it does not address the impacts of water diversion and use on water quality, aquatic resources, and downstream uses.

The DEA does not fully discuss the Central Valley Regional Water Quality Control Board work relating to water quality impairments in the San Joaquin River and particularly the current and potential implications for water contractors (Page 3-163). The San Joaquin River is included in the CWA Section 303(d) listing for impaired waters.¹ The primary potential source for these impairments is agriculture, municipal point sources, altered channel geometry, and reduced flows.

The DMC contributed approximately a half million tons of salt, which is 47 percent of the lower San Joaquin's salt load at Vernalis between 1977 and 1997 (Water Quality Control Plan for the Sacramento River and the San Joaquin River Basins, Draft Final Staff Report, July 2004). To comply with the state requirements, alternatives to the existing management program should be considered. However, the EA does not address the connection between supply quality and use (p. 3-158). In addition, the Regional Board will soon release a draft document addressing salinity standards upstream of Vernalis on the San Joaquin River (page 1-34). The standards and locations of these compliance points could substantially alter the ways in which salt loading is addressed and may focus on source reduction.

Many of the DMC contractors experience problems with drainage (San Joaquin Valley Drainage Report, 1998). Some of the contractors are within the Grasslands Bypass Project, which is implementing selenium load reduction pursuant to a waste discharge requirement issued by the State. Sumps and check drains along the DMC discharge poor quality subsurface drainwater into the DMC upstream of the Mendota Pool and the Grassland Wetland Supply Channels, contributing to high levels of selenium in drainage water. To address these problems, the Central Valley Regional Water Quality Control Board is developing a program to remedy significant water quality impairments in the Sacramento and San Joaquin valleys through an irrigated lands waiver program and through Basin Plan Amendments incorporating TMDLs (total maximum daily loads) for dissolved oxygen, including a reduction of agricultural-source pollutants.

¹ The San Joaquin River is impaired for electrical conductivity (salinity), boron, mercury, DDT, and other pesticides. Many related tributaries have also been listed for unknown toxicity, salinity, and selenium.

Recommendations:

We recommend that the FEA include the following information:

- An updated and detailed analysis of water quality conditions and impacts on water quality from the alternatives. For example, the information included on page 3-160 is data from 2000. If appropriate, contract terms should incorporate updated information and adjust timing, amount of water allocation, and water conservation accordingly.
- Water quality data and program information to address impairments. The continued degradation of water quality shows that drainage conditions are not sustainable. The resulting loss of agricultural lands and fish and wildlife impairments should be discussed. The FEA should provide updated information on the salt/boron Basin Plan Amendment (BPA) and explain the current standards at Vernalis (page 3-163).
- The status of the Basin Plan Amendment and the relationship to the San Joaquin River Salinity Management planning and other programs to manage salt in the root zone. The FEA should also include the status of the Endangered Species Act consultation for the Operations and Maintenance actions related to the DMC (including sumps and check drains).
- The recent history of federal-state drainage programs, beginning with the San Joaquin Valley Drainage Program 1990 (referenced on page 3-158). The FEA should explain whether the contractors have altered their water management or land use practices as a result of the Grassland Bypass Project (by altering quantities applied or removing some lands from irrigation).

Also, groundwater pumping unconstrained by water quality requirements should not be assumed. The impacts under Alternative 2 should take into account the possibility that groundwater pumping would be limited by need to meet salt load reductions under the TMDL (rather than being purely dependent on preferability of less saline water for agriculture uses) (see Page 2-16, Table 2-6).

Impacts to Wildlife Refuges and Wetlands

The Plan Formulation Report Addendum (Reclamation, July 2004) states that in the Northerly Area, there are drainage flows (uncontrolled seepage into deep drains, tailwater, and storm run-on) that "could reach the adjacent wildlife refuges on the San Joaquin River, resulting in adverse effects to water quality and wildlife" (p. 3-19). We note that the U.S. Fish and Wildlife Service, in their November 22, 2004 letter to Reclamation, acknowledged that many of the planning documents that these contracts are tied from are out-dated and do not ensure that listed species habitats are protected (p. 4).

Recommendations:

The FEA should describe the role of DMC water, agricultural drainage and return flows, and conveyance facilities in the management of the San Luis National Wildlife Refuge, the Mendota Wildlife Management Area, and the North Grasslands Wildlife Management Area. Water quality conditions and any pollutants of concern in the refuges and wetlands (including the private wetlands in the Grasslands), should be incorporated into the information on page 3-179.

The FEA should include a short description of the status and results of Endangered Species Act consultations with US Fish and Wildlife Service and National Oceanic and Atmospheric Administration-Fisheries for the DMC contract renewals and related CVP Operations Criteria and Plan (OCAP). The FEA should address FWS requests for more information regarding the proposed action, the area affected, the impacts to listed species or critical habitat, the effects of related actions, and cumulative effects. (November 22, 2004 letter from the Assistant Field Supervisor to the Chief of Reclamation, South-Central California Office). The FEA should identify how ongoing efforts of the Mitigation Working Group regarding impacts to wildlife are being incorporated into mitigation and monitoring plans.

Needs Assessment

The analysis in the DEA used to establish existing and future demands for water supply is not supported by available data on diversion and application. In particular, the water needs assessment in the DEA does not consider the constrained delivery of CVP water (p. 2-10). The needs assessment also justifies amounts equal to or greater than the existing total contract quantity for both the renewed contracts and expected future demand, in most cases (see Table 2-4). In contrast, analyses being developed by the State Department of Water Resources project a future trend of substantially declining agricultural water demand in the Central Valley, particularly the San Joaquin River Basin (briefings by the Department of Water Resources to the Bulletin 160 State Water Plan Advisory Committee on October 14, 2004, and to the CALFED Agency Coordination Team on October 26, 2004).² The CVP analysis appears to project increasing deliveries for agricultural use during the same time period (Reclamation Mid-Pacific Region website, rate setting documents).

We also note that the water needs assessment is based on the assumption that land would remain in production even though the increasing salt balance problems in some areas are forcing some lands out of production. It is likely that in the future, significant portions of the DMC water may be transferred (Table 2-4, year 2025). For example, at the present, Westlands Water District is proposing to acquire Broadview Water District and transfer the water outside of the immediate drainage area. These proposals include: (1) Proposed Negative Declaration, October 11, 2004: Acquisition and Annexation of Broadview Water District Lands into Westlands Water

² Additional information on the water demand trends is available at the State Water Plan website: <http://www.waterplan.water.ca.gov/landwateruse/wateruse/wuoview.htm>.

District; and (2) Broadview Water District Assignment to Pajaro Valley Water Management Agency EA/IS that would allow assignment of BWD's CVP Water Supply Contract (Contract No. 14-06-200-8092-IR7) for 27,000 acre-feet per year. (Reclamation Mid-Pacific Region website, rate setting documents).

Recommendations:

The FEA should include a summary of the water needs assessment process and results, including a description of key assumptions, and how these water needs were calculated. The FEA should also include a description of urban development or other land use influences on specific irrigation districts. It should also discuss the effect that transfers of agricultural water to urban water use have on projections and environmental conditions.

The renewed contract quantities should reflect documented historic use levels, and where this use has contributed to significant environmental degradation, document the impacts, and address appropriate mitigation measures.

Water Use and Conservation

The negotiated contract includes direction for the contractor and contracting officer to develop a mutually agreeable surface water delivery water measurement program. This program must be consistent with the conservation and efficiency criteria for evaluating water conservation plans as provided in the applicable long-term contracts. These contracts stipulate that the contractor shall have implemented an effective water conservation and efficiency program prior to diversion of Project Water. The water conservation and efficiency program should be based on the Basin-Wide Water Management Plan. The DEA does not demonstrate whether the contractors are meeting this water conservation requirement.

Although we are supportive of water conservation planning efforts, we are concerned that small trusts are given exemptions from preparation of water conservation plans. Cumulatively, this could lead to a situation where a substantial quantity of water is being delivered without an applicable water conservation plan.

Recommendations:

The FEA should include specific conservation measures being taken or proposed by the contractors. It should disclose the status of development and implementation of the Basinwide Water Management Plan referenced in the DEA. The effect of small trust exemptions on conservation plans should also be addressed.