DELTA-MENDOTA CANAL UNIT

ENVIRONMENTAL ASSESSMENT
LONG-TERM CONTRACT RENEWAL

Responses to Comments and Attachments

February 2005

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THEMATIC RESPONSES TO COMMENTS ON DRAFT EA

SUMMARY OF COMMENT PROCESS AND THEMATIC APPROACH

The draft Delta-Mendota Canal Unit (DMC Unit) Long-Term Contract Renewal Environmental Assessment (EA) was available for public review between November 16 and December 15, 2004. Fourteen letters and e-mails representing the comments of 37 different agencies, associations, districts, and other interested parties were received during the public comment period. These comments have been carefully assembled, documented, reviewed, and discussed for consideration in this EA. The comments ranged from editorial changes not affecting the impacts analysis to more complex comments questioning Central Valley Project (CVP) water management, contract terms and conditions negotiated between the U.S. Bureau of Reclamation (Reclamation) and the DMC Unit contractors, the National Environmental Policy Act (NEPA) approach used by Reclamation, and ongoing drainage and water quality issues being more appropriately resolved in wholly separate processes. Responses have been provided for all comments on the EA. Comment letters have been reproduced in Attachment A, Comment Letters.

The DMC Unit EA is an environmental analysis of the chiefly administrative action of fulfilling Reclamation's obligation to renew the current water service contracts with alternate "bookend" proposals for certain administrative and financial changes. Renewal of the contracts is required by Reclamation Law, including the Central Valley Project Improvement Act (CVPIA), and continues the current use and allocation of resources by CVP contractors, within the framework of implementing the overall CVPIA programs. The CVP-wide impacts of such renewals have been analyzed in the CVPIA Programmatic Environmental Impact Statement (CVPIA PEIS), and the present document supplements the CVPIA PEIS and analyzes the local impacts of the alternatives.

Some commentors on the draft DMC Unit EA requested the following general editorial and/or text changes. These changes have been made in the text of this EA and result in no change to the impacts analyses:

- Clarifications and corrections to contractor-specific descriptions
- Updates on district mergers
- Corrections and clarifications to CVP-related laws and regulations

- Other editorial and factual corrections

Some commentors question whether or not Reclamation appropriately selected the group of contracts that was analyzed in the draft DMC Unit EA. The contractors assigned to the DMC Unit are listed in the DMC Unit EA. The original designation or assignment of these contractors to either the DMC or San Luis Unit was primarily an administrative one that can be attributed in part to their receipt of water from one or more facilities at the time the units were formed and to other administrative concerns within Reclamation. Additional discussion of this distinction is included in "Level of NEPA Compliance" (page 11).

Other commentors focused on the language, terms, and conditions of the contracts as negotiated between Reclamation and the DMC Unit contractors. These comments alleged that contract terms dealing with Reclamation rate setting and contractor repayment obligations are generally inappropriate and that the contracts should include conditions for monitoring to ensure the contractors are in compliance with conservation measures. In each case, the contracts are subject to Reclamation policies adopted independently of the contract and subject to their respective public review and environmental documentation, as applicable. Records on each contractor's payment of rates and of conservation program compliance are available in Reclamation's records, but because the rate setting and conservation policies are not being analyzed in this action, they were not included in the EA. The comment that the contract fails to comply with existing laws is answered by the contractual requirement that the contractor comply with existing laws.

The thematic responses presented below address more complex topics requiring more detailed responses than the editorial comments. Thematic responses were developed because several commentors raised issues or concerns that were shared, in whole or in part, by other commentors. Therefore, six thematic responses addressing the areas listed below have been prepared to provide comprehensive and detailed responses that allow for a more complete explanation of the rationale or processes used by Reclamation when it addressed these shared issues. All of the comment letters and e-mails have been rigorously reviewed to ensure that we have adequately responded to the specific themes and to the topics addressed within each theme for these shared issues and comments.

- Central Valley Project Water Management
- Approach and Level of NEPA and Related ESA Analysis
- NEPA Purpose and Need
- NEPA Alternatives Development Process

- NEPA Affected Environment
- NEPA Environmental Consequences

CENTRAL VALLEY PROJECT WATER MANAGEMENT

COMMENTS

Some commentors believe that the draft EA fails to adequately disclose the impacts of the renewal of the DMC Unit long-term contracts to several separate, but interrelated processes that have already been used to evaluate the effects of the entire CVP operations on water resources, Indian Trust Assets, water quality, fishery resources, and other related power and socioeconomic resources. Shared comments expressed within this theme deal with overall CVP operations, CVP operations and processes north of the Delta, and CVP operations affecting the Delta and south-of-Delta deliveries. The following issues and subthemes were taken from those comments:

- ***CVP Operations Overall***: The EA needs to explain how deliveries work from north-of-Delta to the south; the EA fails to consider impacts to fish species and habitats from CVP operations; the EA fails to disclose and analyze outstanding CVP water commitments in the CVPIA PEIS and the CVPIA Biological Opinion (BO); the EA has an inadequate cumulative impacts analysis with respect to CVP operations. The EA should include descriptions and status and applicable terms and conditions of related Endangered Species Act (ESA) consultations (CVP Operations Criteria and Plan [OCAP], Grasslands Bypass Project [GBP], Trinity River) and reasonable prudent measures and impacts. The EA should discuss Reclamation's municipal and industrial (M&I) shortage policy.

- C***VP Operations North of the Delta/Trinity River Issues***: The EA should discuss the relationship between authorization, construction, and operation of the CVP Trinity River Division and irrigation of the DMC Unit and San Luis Unit, and should analyze the effects of contract renewals on Shasta Dam storage capacity and height. The EA should include an analysis of direct and cumulative impacts to Trinity Lake, Trinity River, and Trinity River instream flows. The EA fails to evaluate the direct, indirect, and cumulative effects of 25 to 40 years of long-term contract renewals on Indian Trust Assets—the federally reserved tribal fishery rights and related tribal fishery resources; the legal obligations to protect tribal fishery resources are not addressed in the EA. The EA fails to disclose impacts to CVP power customers (including Trinity Public Utilities District) and an evaluation of Environmental Justice issues as they relate to low-income population and

electricity costs, and the EA fails to analyze the effects of contract renewals on CVP water rights in areas of origin.

- ***CVP Operations in the Delta:*** The EA inadequately evaluated continuing and long-term effects of CVP pumping on the Delta and the San Joaquin River, related beneficial uses, including water quality and fishery entrainment impacts. The EA fails to evaluate impacts on the Coordinated Operating Agreement and the South Delta Improvements Program.

RESPONSES

A detailed response to each of these comments would create unnecessary redundancy and paperwork, because comprehensive descriptions of the operation of the CVP, the coordinated operations of the CVP and the State Water Project (SWP), and other programs and processes that address these themes and sub-themes are all part of the body of literature that has been developed since the CVPIA was implemented, much of which has been updated for the Long-Term Central Valley Project and State Water Project Operations Criteria and Plan (OCAP) Biological Assessment (Reclamation 2004) and Biological Opinions (NOAA/NMFS 2004 and U.S. Fish and Wildlife Service 2005). The following specific responses contain information on relevant CVP or related operations:

The EA needs to explain how deliveries work from north-of-Delta to the south: Please see the CVPIA PEIS; Volume Two – Surface Water Supplies and Facilities Operations, pages II-60 through II-88, General Criteria for the Operation of CVP Facilities; Reservoir Operating Criteria; Streamflow Criteria; Water Rights in the Delta; Regulations and Agreements that Affect CVP Operations; Operations of CVP Divisions and Facilities.

The EA fails to consider impacts to fish species and habitats from CVP operations: Please see the CVPIA PEIS pages IV-70 through IV-114 for an analysis of impacts of CVPIA implementation to fishery resources. Additionally, the DMC Unit EA addresses the action of contract renewal, not CVP water operations.

The EA fails to disclose and analyze outstanding CVP water commitments in the CVPIA PEIS and the CVPIA Biological Opinion: This EA references and supplements the CVPIA PEIS and, as more completely set forth in the Biological Assessment for this renewal, incorporates the commitments in the CVPIA Biological Opinion and prior DMC Unit interim contract renewal Biological Opinions. Restrictions in the available contract water supply, including those occasioned by regulatory constraints, are implemented through the shortage provisions of Article 12, as discussed in the EA.

The EA has an inadequate cumulative impacts analysis with respect to CVP operations: Cumulative impacts are analyzed in the CVPIA PEIS and the draft DMC Unit EA. As an additional note, the DMC Unit water service contractors receive their supply from the Delta, but their supplies are subject to the availability of CVP water supplies that can be developed and reductions in contractual supply can exceed 25 percent. Contractual supplies are one of several considerations that are accounted for when determining the ultimate level of annual deliveries to the DMC Unit contractors. In some years, because of reductions in CVP water supplies and the manner in which current laws are implemented, sufficient supplies are not available to meet all water demands of the DMC Unit water service contractors. In addition, in dry or drought years, water deliveries are also limited because of insufficient northern CVP reservoir storage. The scheduling of water demands, together with the scheduling of the releases of supplies from the northern CVP to meet those demands, is a CVP operational objective intertwined with the Trinity, Sacramento, and American River operations. Because operational decisions are made prior to any decision on the quantities of water that can be delivered, the renewal of the DMC Unit contracts would not cumulatively affect the operational decisions any more after renewal than before renewal.

The EA should include descriptions and status and applicable terms and conditions of related ESA consultations (CVP OCAP, GBP, Trinity River) and reasonable prudent measures and impacts: To the extent that current mandates made pursuant to the ESA have the ability to affect the proposed action, they are incorporated into the analyses for the EA. They are part of the modeling assumption used to assess impacts. For example, the OCAP is relevant to the proposed action for two principal reasons. First, because the OCAP describes the manner in which the CVP is expected to operate and, therefore, the amounts of water that contractors could expect, the OCAP modeling forms a basis for the No Action Alternative and is used, in part, to assess the potential impacts of all alternatives. Second, the OCAP is part of the baseline for the purposes of assessing the potential impacts of the proposed action on protected species under the federal ESA. It is, therefore, critical to the consultation on the proposed action.

On February 15, 2005, the U.S. Fish and Wildlife Service (Service) completed its consultation on the long-term contract renewal of water service contracts in the DMC Unit by issuing a document concurring in Reclamation's conclusion that the proposed renewal of long-term water service contracts is not likely to adversely affect San Joaquin kit fox (*Vulpes macrotis mutic*a), giant garter snake (*Thamnophis gigas*), riparian brush rabbit (*Sylvilagus bachmani riparius*), riparian wood rat (*Neotoma fuscipes riparia*), palmate-bracted bird's beak (*Cordylanthus palmatus*), and the California red-legged frog (*Rana aurora draytonii*), or proposed or designated critical habitat in 20 DMC water districts.

According to the Service, "No designated or proposed critical habitat is present in the action area (excepting that analyzed in the OCAP BO), therefore none shall be affected." This concurrence does not include consultation on the contract for the City of Tracy, which is proceeding separately. The contract for the City of Tracy will not be renewed until the separate consultation has been completed.

Pages 1-10 through 1-41 of the EA include extensive discussions of related projects that affect south-of-Delta deliveries. The relationship between the Grasslands Bypass Project and the DMC Unit long-term contract renewals is discussed under the NEPA Environmental Consequences and Drainage and Water Quality headings (pages 27 and 28, respectively).

The EA should discuss Reclamation's M&I shortage policy: The following description is hereby provided and incorporated as part of this EA.

The CVP has 253 water service contracts (including Sacramento River Settlement Contracts). These water service contracts have had varying water shortage provisions (e.g., in some contracts, M&I and agricultural uses have shared water shortages equally; in most of the larger M&I contracts, agricultural water has been shorted 25 percent of its contract entitlement before M&I water was shorted). Since 1991, Reclamation has been attempting to develop an M&I water shortage policy applicable to as many CVP M&I contractors as appropriate.

For a contractor to receive the M&I minimum shortage allocation by means of the proposed policy, its water service contract must reference the proposed policy. For various reasons, Reclamation expects the proposed policy will not be referenced in contracts for the (1) Friant Division, (2) New Melones interim supply, (3) Hidden and Buchanan Units, (4) Cross Valley contractors, (5) Sugar Pine Units (subjects of title transfer legislation), (6) San Joaquin settlement contractors, and (7) Sacramento River settlement contractors. Therefore, any separate shortage-related contractual provisions will prevail.

The proposed policy provides a minimum shortage allocation for M&I water supplies of 75 percent of a contractor's historical use (i.e., the last three years of water deliveries unconstrained by the availability of CVP water). Historical use can be adjusted for growth, extraordinary water conservation measures, and use of non-CVP water as those terms are defined in the proposed policy. Before the M&I water allocation is reduced, the irrigation water allocation would be reduced below 75 percent of contract entitlement.

The proposed policy also provides that when the allocation of irrigation water is reduced below 25 percent of contract entitlement, Reclamation will reassess the availability of CVP

water and CVP water demand; however, due to limited water supplies during these times, the M&I water allocation may be reduced below 75 percent of adjusted historical use. Shortages for south-of-Delta and north-of-Delta irrigation allocations and M&I allocations are the same, except that the south-of-Delta allocations may be lower when Delta constraints preclude the delivery of water otherwise available for allocation.

The proposed policy provides that Reclamation will deliver CVP water to all M&I contractors at not less than a public health and safety level if CVP water is available, if an emergency situation exists (taking into consideration water supplies available to the M&I contractors from other sources), and in recognition that the M&I allocation may, nevertheless, fall to 50 percent when the irrigation allocation drops below 25 percent due to limited CVP supplies. It should be noted the minimum shortage allocation of 75 percent, as proposed in the September 11, 2001, draft (which was made available for public review and comment) would apply only to that portion of CVP water identified as of September 30, 1994, as shown on Schedule A-12 of the 1996 M&I Water Rates book, and for those contract quantities specified in section 206 of Public Law 101-513. However, under the proposed policy, a contractor may request an M&I minimum shortage allocation for post-1994 identified water that is transferred, assigned, or converted, provided significant impacts upon irrigation supplies or upon irrigation and M&I supplies, respectively, are mitigated.

The draft M&I CVP Water Shortage Policy released on September 11, 2001, notes that "currently, many M&I contractors are not using the full M&I portion of their contract total. If the M&I water shortage allocation were applied to full contract entitlements, the resulting allocation for some contractors would exceed their current demand. M&I water demands within the CVP are continually increasing. Therefore, the provision for '75 percent M&I reliability' will be applied to a contractor's *historic use*, with certain adjustments, up to the CVP projected M&I demand as of September 30, 1994."

Due to the development of policy alternatives generated by Reclamation after consideration of public comment, that portion of CVP water to which the minimum shortage allocation would apply could change prior to policy finalization. Prior to such finalization, Reclamation will meet the requirements of NEPA and the federal ESA.

The EA should discuss the relationship between authorization, construction, and operation of the CVP Trinity River Division and irrigation of the DMC Unit and San Luis Unit: The EA is limited in scope, analyzing the potential impacts of renewing the DMC Unit contracts listed therein. Delivery of water to the San Luis Unit is not part of the proposed action and the authorization and construction of the Trinity Division are outside of that scope. The EA has been prepared according to Council on Environmental Quality

(CEQ) regulations for content and includes "brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted." To the extent the proposed action is potentially affected by operation of the Trinity River Division, the EA includes a discussion of it and it has been incorporated into the impact analyses, for example, through the CVPIA PEIS and OCAP modeling.

The EA should analyze the effects of contract renewals on Shasta Dam storage capacity and height: The EA has been prepared according to CEQ regulations for content and includes "brief discussions of the need for the proposal, of alternatives as required by section 102(2)(E), of the environmental impacts of the proposed action and alternatives, and a listing of agencies and persons consulted." The investigation into actions that could affect Shasta Dam storage capacity and height is outside of the scope of the EA. As that investigation proceeds and if any actions are proposed, Reclamation will assess the process or processes needed to comply with NEPA prior to implementing any measure that could impact Shasta Dam storage capacity or height.

The EA should include an analysis of direct and cumulative impacts to Trinity Lake, Trinity River, and Trinity River instream flows: A separate NEPA process was used to evaluate the effects of CVP operations on the Trinity River. As can be seen from the description of the preferred alternative and Record of Decision for that process, commitments to protect Trinity River resources have been addressed, and these decisions operationally precede decisions regarding deliveries to the DMC Unit contractors, as discussed above.

The Preferred Alternative for the Trinity River Flow Evaluation Study is the Flow Evaluation Alternative, which includes increased variable instream flow releases from Lewiston Dam, a coarse sediment introduction program, 47 new channel projects (mechanical channel rehabilitation), an adaptive management program, and a watershed restoration program. The total volume of water recommended for release from the Trinity River Division to the Trinity River ranged between approximately 369,000 acre-feet and 815,000 acre-feet, depending on the annual hydrology (water-year type) as determined on April 1 of each year. The recommended flow regimens link two essential purposes deemed necessary to restore and maintain the Trinity River's fishery resources: (1) flows to provide physical fish habitat (i.e., appropriate depths and velocities and suitable temperature regimes for anadromous salmonids) and (2) flows to restore the riverine processes that create and maintain the structural integrity and spatial complexity of the fish habitats.

Based on the Record of Decision for the Trinity River Flow Evaluation Study (Interior 2000), 368,000 acre-feet are allocated annually for Trinity River flows. Due to ongoing litigation on the Record of Decision, the Federal District Court for the Eastern District of California issued an order on December 10, 2002, that directed the CVP to release 368,000 acre-feet during critical Trinity River inflow years and 453,000 acre-feet under all other conditions. A July 2004 opinion by the Ninth Circuit Court approved the federal plan to implement the congressional mandate to increase flows into the Trinity River to restore fish habitat. The plan calls for diverting from 368,900 acre-feet to 815,200 acre-feet annually, depending on the annual hydrology. This amount is scheduled in coordination with the Service to best meet habitat, temperature, and sediment transport objectives in the Trinity River basin.

The EA fails to evaluate the direct, indirect, and cumulative effects of 25 to 40 years of long-term contract renewals on Indian Trust Assets (i.e., the federally reserved tribal fishery rights and related tribal fishery resources): The legal obligations to protect tribal fishery resources on the Trinity River are not addressed in the EA. Contract deliveries are made after obligations relative to the Trinity River flow decision are met. Please see the above response.

The EA fails to disclose impacts to CVP power customers (including Trinity Public Utilities District): There would be no impacts to CVP power customers when compared to the No-Action Alternative. Under either of the DMC Unit long-term contract renewal alternatives, deliveries to the DMC Unit contractors would commit the same amount of water to be applied to the same lands as would be expected for the next 25 to 40 years under No-Action Alternative conditions. The amount of CVP power anticipated to support such supplies is not expected to change when compared to No-Action Alternative conditions.

The EA fails to evaluate Environmental Justice issues as they relate to low-income population and electricity costs: Long-term renewal of DMC Unit water service contracts would result in no Environmental Justice impacts when compared to the No-Action Alternative. Under either of the DMC Unit long-term contract renewal alternatives, deliveries to the DMC Unit contractors would commit the same amount of water to be applied to the same lands as would be expected for the next 25 to 40 years under No-Action Alternative conditions. Low-income populations would experience the same trends in electricity costs as they would when compared to No-Action Alternative conditions.

The EA fails to analyze the effects of contract renewals on CVP water rights in areas of origin: Contract renewals do not affect CVP water rights. Federal law provides that

Reclamation obtain water rights for its projects and administer its projects pursuant to state law relating to the control, appropriation, use, or distribution of water used in irrigation, unless the state law is inconsistent with expressed or clearly implied congressional directives. See 43 USC 383; *California v. United States*, 428 U.S. 645, 678 (1978); appeal on remand, 694 F.2d 117 (1982). Thus, Reclamation must operate the CVP in accordance with its permit terms and laws that protect senior or prior water rights.

The EA inadequately evaluated continuing and long-term effects of CVP pumping on the Delta and the San Joaquin River and related beneficial uses, including water quality and fishery entrainment impacts: The long-term effects of CVP pumping on the Delta and San Joaquin River and related beneficial uses were addressed in the CVPIA PEIS. Renewal of the contracts has no effect on ongoing operations.

The EA fails to evaluate impacts of the Coordinated Operating Agreement and the South Delta Improvements Program: To the extent the proposed action is potentially affected by or impacts the Coordinated Operating Agreement and the South Delta Improvements Program, the EA includes a discussion and those effects or impacts have been incorporated into the analyses.

While the above is provided for informational purposes, the contract does not affect either the influence of the Coordinated Operation Agreement or ongoing planning of the South Delta Improvements Program.

APPROACH AND LEVEL OF NEPA AND RELATED ESA ANALYSIS

COMMENTS

Commentors on the draft DMC Unit EA made the following general comments on the NEPA approach and level of analysis:

- ***Tiering:*** The EA represents inadequate tiering from the CVPIA PEIS.
- ***Level of NEPA Compliance:*** An environmental impact statement (EIS) should be prepared for the DMC Unit contract renewals; the San Luis Unit and DMC Unit analyses should be combined into one EIS; Reclamation is acting in an arbitrary and capricious manner in its NEPA process; the EA does not meet NEPA requirements and is legally inadequate; and comments specific to the San Luis Unit.
- ***Public Review Process:*** The public comment period on the EA should have been extended; there was inadequate time for public review.

- ***DMC Unit Renewals ESA Process***: The EA should describe the relation of the EA to the DMC Unit BO; the DMC Unit ESA process and its analyses of impacts to listed species should be included in the EA; ESA consultations should be completed and their results considered in final EA.

RESPONSES

The CVPIA PEIS provided a program-level assessment of renewing all CVP long-term water supply contracts, in the context of implementing the suite of actions required or authorized by the CVPIA. The CVP-OCAP Biological Opinion updates and continues the analysis of CVP operations for implementing both the long-term contract renewals and other CVPIA programs. This draft DMC Unit EA both references the CVPIA PEIS and the OCAP and provides supplemental analysis of the environmental effects of renewing this particular group of CVP contracts. As further discussed below, the draft DMC Unit EA fulfills the requirements of NEPA and represents the appropriate next step of environmental review for long-term contract renewals in the DMC Unit.

LEVEL OF NEPA COMPLIANCE

The EA meets NEPA requirements and is adequate. The EA and the scope of the analysis were, therefore, developed consistent with NEPA regulations and guidance from the CEQ and in conformance with the direction provided in *NRDC v. Patterson* (Civ. No. S-88-1658). The analysis in the EA finds in large part that the renewal of the contracts is essentially a continuation of the status quo, and although there are financial and administrative changes to the contracts, they perpetuate the current use and allocation of resources (i.e., the same amount of water is being provided to the same lands for current and ongoing purposes and beneficial uses). The analysis in the EA, therefore, addresses the proposed changes to the contract and the potential environmental effects of those changes. The basis of this comparison is the evaluation of the proposed contractual changes as compared to a No Action Alternative that in essence reflects a continuation of the status quo. Use of the status quo as a No Action Alternative is supported by CEQ's opinion concerning renewal of some of the Friant Unit contracts that appeared in the Federal Register on July 6, 1989, and its guidance document addressing the "Forty Most Asked Questions" (on NEPA regulations). We have addressed these types of comments in our response to comments. As indicated in the EA, these contract changes would not result in significant effects to the environment.

In accordance with NEPA, an EA is initially prepared to determine if there are significant impacts from carrying out the proposed action. Reclamation has followed applicable procedures in the preparation of the EA. The EA includes the required components as described in CEQ's NEPA regulations:

- Discussion of the need
- Alternatives, as required
- Environmental impacts
- Listing of agencies consulted

The diversion of water is an ongoing action and the current conditions of that diversion are discussed in the CVPIA PEIS. The impacts of continuing the diversions through the implementation of the CVPIA have been discussed in the CVPIA PEIS. Under the action of long-term contract renewals, the proposed action is to continue delivering the water under contract as described in the CVPIA PEIS and CVPIA Record of Decision.

Reclamation has analyzed the proposed action in accordance with NEPA. An EA that references and supplements the CVPIA PEIS is the appropriate level of documentation. Because the proposed action will in essence maintain the environmental status quo (i.e., the same amount of water will go to the same areas for the same uses, albeit under a different legal arrangement), we believe there are no significant environmental impacts associated with the proposed action.

Drainage and the San Luis Unit. Some commentors believed that an EIS should be prepared for the DMC Unit contract renewals or that the analyses for the DMC and San Luis Units should be combined into a single EIS for both units. The contractors in the DMC Unit are described on page 1-5 of the DMC Unit EA and do not include contractors within the San Luis Unit. The reason for segregating the San Luis Unit is explained on page 1-4, which describes the complexity of the CVP with its many divisions, and on page 1-5, which indicates that:

- The Pacheco, Panoche, San Luis, and Westlands Water Districts are not included because their principal sources of deliveries are features of the San Luis Unit.
- The San Luis Act obligates the United States to provide drainage service to contractors in the San Luis Unit.
- The DMC Unit contracts contain no provisions for drainage service because of the differences in applicable statutes.

To correct some comments, drainage issues for the DMC Unit contractors are, therefore, not identical to those in the San Luis Unit. For example, Westlands Water District has no drainage outlet, while almost all lands within the DMC Unit have drainage available.

Some of the DMC Unit contractors drain solely subsurface water, while others drain only surface water. Thus, drainage is not a uniform, uniting condition that requires a single environmental evaluation of the DMC Unit contract renewals together with the San Luis Unit.

Another distinction is the relative extent and level of controversy about drainage in the different geographic areas. When the NEPA process was initiated for both the DMC and San Luis Unit long-term contract renewals, there was substantial controversy with regard to drainage in the San Luis Unit, especially as it related to the Sumner-Peck litigation and Reclamation's obligation to provide drainage service consistent with the provisions of the San Luis Act of 1960. Because of the level of controversy associated with drainage in the San Luis Unit and the relative lack of controversy associated with drainage issues in the DMC Unit, which had undergone a full EIS for the Grassland Bypass Project to address the most serious drainage issues, Reclamation opted to prepare an EIS for the San Luis Unit and an EA for the DMC Unit. Additional technical discussion regarding drainage issues and their separate treatment in different processes is discussed under the thematic responses to comments on the EA Environmental Consequences (page 27).

For those comments applicable only to the San Luis Unit, Reclamation is preparing an EIS for the long-term contract renewals in the San Luis Unit. Issues associated exclusively with the San Luis Unit will be addressed in that document.

PUBLIC REVIEW PROCESS

Some commenters sought an extension of time for public comment. Throughout the 10 years of negotiation of contract renewals for the DMC Unit, Reclamation has been committed to a full and open process for public input. Consistent with that approach, contract negotiations have been held in public and each session has included an opportunity for public comment. To date, more than 190 such sessions or workshops have been open to the public. Reclamation has also maintained an extensive website (www.usbr.gov/mp/cvpia/3404c/index.html) to inform the public of the status and content of contract negotiations and has posted the relevant environmental documents. That process was available for commenting both on the language, terms, and conditions of the contracts and on the rate setting and repayment processes. That process also included a period for the public to comment on the negotiated contracts. Public comment opportunities on related consultations were available before and during the review period for the DMC Unit contracts and during the 30-day public review period of the draft EA (November 16 through December 15, 2004). In addition, the overall CVP OCAP Biological Assessments were available via Reclamation's Central Valley operations office

for some months before the draft DMC Unit EA was released. Thus, there has been ample time to review the environmental analyses that will be considered by decision makers.

DMC UNIT RENEWALS ESA COMPLIANCE

The impacts of CVP water delivered to the DMC Unit contractors to fisheries resources protected under the ESA have been considered through multiple consultations. Two more recent consultations are the consultation on the proposed action and on the revised OCAP and the resultant Biological Opinions.

Also, on February 15, 2005, the Service concluded its consultation on the long-term contract renewal of water service contracts in the DMC Unit. The DMC Unit Letter of Concurrence is included as Attachment B and covers the contractors listed in the draft DMC Unit EA, except the City of Tracy, for which Reclamation and the Service are conducting a separate consultation. Based on its review, the Service has determined that the proposed renewal of DMC Unit long-term water service contracts is not likely to adversely affect the San Joaquin kit fox (*Vulpes macrotis mutic*a), giant garter snake (*Thamnophis gigas*), riparian brush rabbit (*Sylvilagus bachmani riparius*), riparian wood rat (*Neotoma fuscipes riparia*), palmate-bracted bird's beak (*Cordylanthus palmatus*), and the California red-legged frog (*Rana aurora draytonii*), or proposed or designated critical habitat. According to the Service, "No designated or proposed critical habitat is present in the action area (excepting that analyzed in the OCAP BO), therefore none shall be affected."

The Service concluded that the renewal of CVP water service contracts in the DMC Unit may affect, but is not likely to adversely affect, the San Joaquin kit fox and the giant garter snake for the following reasons:

- The only service areas likely to undergo significant land use changes from agricultural uses to urban uses are in San Joaquin County, where such changes are covered activities under the San Joaquin Multi-Species Conservation Plan, the implementation of which will ensure the conservation of all covered species. Additionally, changes in water use from agricultural to M&I within the DMC Unit contractors' boundaries are subject to separate environmental compliance, including consultation as part of the ESA review.

- Selenium drainage of DMC Unit contractors is currently addressed in the Service's biological opinion on the Grasslands Bypass Project through 2009 and subsequently will be addressed through the San Luis Drainage Feature Re-evaluation, the implementation of which is a future federal action subject to review under the ESA.

- The Service does not anticipate additional agricultural land conversions in the DMC Unit because the contractors are fully developed.

- Effects of farming activities attributable to the increment of agricultural activity that have no independent utility apart from the provision of federal water in the fully developed water districts of the DMC Unit are not subject to a severable analysis of effect from agricultural activities in the contract service areas supported by non-CVP water and are therefore discountable.

On January 13, 2005, Reclamation received a letter from the National Oceanic and Atmospheric Administration (NOAA) stating that Reclamation had provided sufficient information on the anticipated effects of the proposed federal action on federally endangered Sacramento winter-run chinook salmon, Central Valley spring-run chinook salmon, and threatened Central Valley steelhead in the OCAP BO, and therefore, a formal consultation on the DMC Unit long-term contract renewals was considered unnecessary. The letter also stated that no further action pursuant to the ESA is required at this time.

NEPA PURPOSE AND NEED

COMMENTS

Commentors on the draft DMC Unit EA made the following general comments.

- Issues relating to the geographic scope of the DMC Unit and the San Luis Unit and the split of contractors within each, based on their water supply sources.

- The EA contains a narrowed and inadequate purpose and need statement; proposed action is not legal and does not comply with the intent and provisions of state and federal laws.

RESPONSE

Renewal of the DMC Unit contracts represents a portion of the continuing operations of the CVP and, as noted, was an action considered in the CVPIA PEIS. The EA defines the proposed action as: "The purpose of the federal action is to renew the DMC Unit long-term water service contracts, consistent with Reclamation authority and all applicable state and federal laws, including the CVPIA." As stated in the EA, the need fulfilled by the purpose of the proposed action is, in part, the continued beneficial use of water developed and managed by the CVP. Continued beneficial use is part of the balancing required under the provisions of the CVPIA and allows for the continued repayment to the federal government for CVP construction, operation, and maintenance costs, as appropriate.

NEPA ALTERNATIVES DEVELOPMENT PROCESS

COMMENTS

Commentors generally made the following comments regarding the NEPA alternatives development process for the EA:

- ***Reasonable Range of Alternatives and Differences Between Alternatives:*** The EA considers an insufficient number and unreasonable range of alternatives; there were no [real] differences between alternatives.

- ***Non-Renewal Alternative:*** The EA does not consider a "non-renewal" alternative wherein Reclamation does not renew one or more of the DMC Unit contracts.

- ***No-Action Alternative/CVPIA Preferred Alternative:*** Why does the EA use the CVPIA PEIS Preferred Alternative as the No-Action Alternative?

- ***Alternatives Based on Key Contract Terms:*** The EA fails to analyze meaningful alternatives on key contract terms (i.e., tiered water pricing, water quantity, water conservation, land retirement).

- ***Alternatives Reducing CVP Water Delivery to the DMC Unit or for Meeting CVPIA-Mandated Fishery Restoration Flows***: The EA does not consider alternatives reducing CVP water delivery to the DMC Unit or an alternative for meeting CVPIA-mandated fishery restoration flows; it should include an alternative incorporating water conservation and environmental restoration/dedication of water to public trust resources.

RESPONSES

REASONABLE RANGE OF ALTERNATIVES AND DIFFERENCES BETWEEN ALTERNATIVES

The EA was prepared to determine the environmental effects of the range of negotiating positions that were expressed in the forms of contracts considered by Reclamation and the DMC Unit contractors consistent with the purpose of the action, renewal of the long-term water service contracts. Therefore, the alternatives were negotiated through a process consistent with the provisions of reclamation law and acceptable to the contractors and Reclamation. The alternatives were also developed based on the programmatic evaluation and decisions made for implementation of the CVPIA, as the proposed action is part of that program.

NON-RENEWAL ALTERNATIVE

As stated on page 2-22 of the EA and consistent with the CVPIA mandate, Reclamation does not have the discretionary authority to not renew CVP water service contracts. Reclamation law mandates renewals at existing contract amounts when the water is being beneficially used. Non-renewal of the contracts is, therefore, considered infeasible. Therefore, this alternative was considered but eliminated from analysis in the EA. Please see the "Response" section under NEPA Purpose and Need (page 15) regarding the congressional mandate to renew the contracts consistent with applicable sections of the CVPIA.

NO-ACTION ALTERNATIVE/CVPIA PREFERRED ALTERNATIVE

The Record of Decision for the CVPIA PEIS was signed in January 2001. The CVPIA PEIS is the tiering document for subsequent NEPA documents for the long-term contract renewals. The Preferred Alternative for the CVPIA PEIS is presently being implemented. The document titled *Central Valley Project Improvement Act, 10 Years of Progress: A Summary of Activities and Accomplishments in the Implementation of the Central Valley Project Improvement Act; Title 34, Public Law 102-575, 1993 – 2002* is available at Reclamation's website (http://www.usbr.gov/mp/cvpia/index.html). It provides information on the status of implementation of the Preferred Alternative of the CVPIA. Because of the ongoing status of the implementation of the CVPIA Preferred Alternative, it is the logical "baseline" or No-Action Alternative for the DMC Unit EA. In comparison, to use the same No Action Alternative as the one presented for the CVPIA PEIS would be to ignore the PEIS Record of Decision and the progress that has been made to date in implementing the CVPIA. The No-Action Alternative of the DMC Unit EA describes the effects of continuing deliveries in quantities not exceeding the quantities historically delivered under the current long-term contracts.

ALTERNATIVES BASED ON KEY CONTRACT TERMS (WATER PRICING, WATER QUANTITIES, WATER CONSERVATION, LAND RETIREMENT)

Reclamation law mandates renewals for existing contract amounts when the water is being beneficially used. The Water Needs Assessments identified the amount of water that has been and in the future could be beneficially used by each water service contractor. The contract amounts in the EA alternatives were constrained to not exceed the beneficial use amount or the existing contract amount—whichever is less.

The CVPIA required the CVP to institute additional specific environmental management as part of its operations, such as the allocation of 800,000 acre-feet, refuge water supply, and acquisition of water from willing sellers. These requirements, in addition to federal and state requirements for CVP operations (including CVPIA, State Board Order 95-06,

and compliance with biological opinions on CVP operations), are expected to constrain the actual delivery amounts. Under each of the alternatives, annual water supplies vary, based upon the shortage provisions of Article 12, primarily as the result of either hydrological conditions or regulatory constraints that were promulgated to protect water quality, aquatic resources, and downstream uses.

Reclamation is unaware of any provision within the CVPIA that modified pre-existing law concerning the contractors' rights to a stated quantity of the project yield for the duration of their contracts and any renewals thereof, provided they complied with the terms and conditions of those contracts and law. Reclamation, therefore, believes it is required to offer an alternative including the current contract quantity when a Water Needs Assessment has demonstrated a need for such water for beneficial use, another requirement of Reclamation law, and when an alternative for a lesser quantity of water was not reasonable due to existing law. The DMC Unit contractors beneficially use the water for agricultural supply and municipal and industrial uses, consistent with the beneficial uses stated in the San Joaquin Valley Basin Plan. Reclamation does not consider market pricing to be a feasible method of water conservation for many CVP irrigation contractors, many of which are on ability-to-pay relief.

The proposed contracts and alternatives are not substantially different with respect to contract quantities delivered by Reclamation, except as adjusted by the Water Needs Assessments used by Reclamation to determine the amount of water contractors would beneficially use over the course of the renewed contract. Each contract is being renewed for up to the full contract amount, which will enable Reclamation to deliver the full contract amount in those years when these amounts are available. This capability is required by the contractual obligations to renew and provide available water for beneficial uses. Reclamation is fully capable of implementing its legal responsibilities without changing the water supply quantity under the contracts through Article 12. If that is not sufficient to put the contractors on notice that their full supplies may not be deliverable in many years, Article 3(b) goes further:

> *Because the capacity of the CVP to deliver Project Water has been constrained in recent years and may be constrained in the future due to many factors including hydrologic conditions and implementation of Federal and State laws, the likelihood of the Contractor actually receiving the amount of Project Water set out in Subsection (a) of this Article in any given Year is uncertain. The Contracting Officer's most recent modeling referenced in the PEIS projected that the Contract Total set forth in this Contract will not be available in the Contractor in many years. During the most recent five (5) years, the Recent Historic Average of water made available to the Contractor was _____ acre-feet. Nothing in subdivision (b)*

of this Article shall affect the rights and obligations of the parties under any provision of this contract.

ALTERNATIVES REDUCING CVP WATER DELIVERY TO THE DMC UNIT OR FOR MEETING CVPIA-MANDATED FISHERY RESTORATION FLOWS

Please see the thematic response to Central Valley Project Management (page 3). These issues have been addressed in the forums wherein their direct, indirect, and cumulative impacts and the interrelationships with other ongoing programs are appropriately placed in a wider context encompassing CVP and SWP operations.

NEPA AFFECTED ENVIRONMENT

COMMENTS

Commentors on the draft DMC Unit EA made the following general comments:

- ***Water Needs Assessments***: The DMC Unit Water Needs Assessments are inadequate; copies of the Water Needs Assessments should be included in the EA, explained with respect to how they were developed, and justified with respect to their content.

- ***Transfers and Assignments***: The EA does not include information clearly analyzing or describing the status of proposed transfers and assignments affecting the DMC Unit deliveries and contractors.

- ***Water Conservation***: The EA needs to identify whether contractors are meeting water conservation requirements; the effects of small trust exemptions to preparing water conservation plans needs to be analyzed, and a contractor must have a Reclamation-approved water conservation plan prior to renewing contract.

- ***Additional Discussion of Potentially Affected Natural Resources:*** The EA should clarify discussions of water sources for management in Significant Natural Areas, needs clarification of water sources for wildlife management, and should include Grasslands Water District in the wetlands discussions. The EA should include additional maps indicating selenium, chromium, boron, and molybdenum concentrations in the unit and the leaching paths and associated costs.

RESPONSES

WATER NEEDS ASSESSMENTS

A Water Needs Assessment was completed for each CVP contractor that was not exempt from the requirement. Attachment C includes copies of 15 Water Needs Assessments for

the DMC Unit contractors. The water needs methodologies were made available to the contractors and interested public for review and comment before the studies were performed. The methodologies generally reflect historic crop databases; projected cropping information contained in California Department of Water Resources (DWR) Bulletin 160-98; regional land use and planning studies; annual evapotranspiration requirements, annual effective precipitation and crop irrigation requirements consistent with DWR Bulletin 113; university data and/or cooperative extension publications; crop leaching requirements consistent with Food and Agricultural Organization publications; generally accepted residential and nonresidential demand distribution models; and CALFED planning assumptions.

The Water Needs Assessments and provisions of federal and state law support the balance struck in the contracts. The assessments show that the contractors' needs were at least equal to the contract totals and frequently exceeded those amounts. While hydrologic and regulatory conditions may currently prevent the delivery of full contract totals, federal reclamation law (for example, through Public Laws 108–361 and 102-575) and the Water Code (for example, through section 79410 *et seq.)* provide that during the term of the proposed action, actions may be taken that mitigate for some of the limitations caused by current regulatory conditions. Reasonably foreseeable actions are included in the analyses through the use of the OCAP modeling. All other actions are considered unforeseeable at this time. Thus, the modeling results reflect the amount of water that is reasonably foreseeable under each of the alternatives. Accordingly, the EA is based upon both actual circumstances and those reasonably foreseeable circumstances.

Purpose: Section 3406 (c) of the Central Valley Project Improvement Act states that upon request, the Secretary shall renew any existing long-term repayment or water service contract for the delivery of water from the Central Valley Project (CVP) for a period of 25 years and may renew such contract for successive periods of up to 25 years each. In response to this provision, the Region submitted a Basis of Negotiation (BON) to the Commissioner on January 26, 1999, which required the Region to conduct water needs demand assessments for as many as 113 long-term contract renewals. As stated in the BON, the water demands, in conjunction with information on available water supplies, will be used to demonstrate historic beneficial use of both CVP and non-CVP water for each contractor. Also, a determination of future need for CVP water will be made, based on comparisons of future water demands and the determination of non-CVP water supplies for each contractor.

Background: Four public workshops were held in early November 1998 to address the development of water demand methodologies for both irrigation and M&I purposes. The various proposed steps to assess potential water needs for irrigation and M&I purposes and

subsequent total potential demands for CVP water are detailed in the document "Proposed Water Need Methodologies, LTRC, Central Valley Project."

On December 30, 1998, the U.S. Bureau of Reclamation (Reclamation) requested information for water needs assessments for long-term contract renewals from all CVP interim renewal irrigation and municipal and industrial (M&I) contractors and all CVP irrigation and M&I contractors subject to binding agreement. The request stated that although Reclamation recognized that the water demand methodologies were still in draft form and that the comment period had been extended to January 8, 1999, Reclamation believed the required information would likely be needed, irrespective of any changes in methodologies. The information was to be provided by February 19, 1999.

On January 29, 1999, Reclamation held technical discussions on the proposed irrigation contractor methodology for the water needs assessments. As an outcome of this meeting, Reclamation committed to perform comparisons in order to streamline the irrigation water demand analysis: This analysis had four steps:

- Evaluate crop water needs plus distribution system water requirements for 1979 through 1997 for six representative districts to arrive at an "average" beneficial use of water for that period and to establish a correlation between scientifically calculated beneficial use and actual deliveries.

- Compare the result to determine if a close correlation between scientifically calculated beneficial use and actual deliveries can be made.

- Using the districts' Water Management Plans, calculate the crop water needs and distribution system water requirements for the "representative" year (either 1989 or 1996) and compare that with the actual water deliveries in that year.

- Determine whether the "representative year" method appears to be a scientifically credible substitute for the "average year" method.

Based on Reclamation's analysis, a letter was sent out February 22, 1999, to update its December 30, 1998 request for information from the irrigation contractors. The letter extended the deadline for the submittal of information and provided contractors with the findings of the comparative analysis described above. The conclusion in the comparative analyses was that the information provided in the water management plans was sufficient to meet the current water demand and supply information and the determination whether the historical water deliveries were beneficially used. Therefore, contractors were provided the opportunity to have the information presented in their water management

plans as the basis for the analysis of historic and current use. If that information was unavailable, contractors were requested to submit information for 1995.

A similar letter was also sent to M&I contractors on February 22, 1999. This letter extended the deadline for submittal of water needs assessment information to March 19, 1999, and provided the contractors with the option of using information provided in their water management plan or current Integrated Resource Plan, if that plan contained information corresponding to that information in Reclamation's December 30, 1998 information request.

A follow-up letter dated June 3, 1999, was sent to those contractors that had not yet submitted the requested water assessment information. The letter asked that the information be submitted by June 25, 1999.

In the fall of 1999, Reclamation staff completed development of an Access© database that was used to analyze the data submitted by the contractors. An output file provided information on the contractors' water supply and agricultural and/or urban water demands. A summary column on the output provided the amount of water by which the contractor's water demands exceeded or were less than its supplies. Information for each contractor was input for a historic year to demonstrate beneficial use and for a future year (2025) to demonstrate future need. Between November 1999 and March 2000, this information was sent to most of the contractors in draft form with the results of the assessment. The contractors were asked to review the assessment to determine if all the information and assumptions were accurate.

Revisions to final needs assessments were made in a few cases. These revisions were required when new information presented by the contractors or identified by Reclamation would impact either the contractor's water demand or water supply. New information could include an anticipated change in water use (such as agricultural or urban) or a change in the future amount of local water supply that will be available to the contractors. In each case, a letter identifying the revised information was sent to the specific contractor.

Reclamation requested actual historic water demand and supply information to determine the contractor's past beneficial use and estimated cropping pattern to determine the future beneficial use. Water needs assessments for water service contracts included non-contract water supplies (such as groundwater), including the conjunctive use of surface and groundwater, SWP supplies, local surface water supplies, recycled water, interdistrict return flows, and water transfers.

Future demand was projected in most cases for year 2025. The data requested from the districts in December 1998 was for the year 2025 because it was then believed that the contracts would be finalized by 2000 and the irrigation contracts would be for 25 years. Although M&I water service contracts are for 40 years, it was assumed that build-out would occur by 2025. In the few instances in which an M&I contractor could demonstrate that build-out would not occur by 2025, those contractors were allowed to provide projections to the year 2040.

The assessments were performed by technical staff in the Mid-Pacific Region's Resources Division and Reclamation's Technical Service Center (TSC). Reclamation used experts from the California Department of Water Resources and the TSC to perform the urban water assessments. The Reclamation technical staff who performed the agricultural needs analysis included agricultural engineering staff from the Mid-Pacific Region and the TSC and water conservation staff from the Mid-Pacific Region. These staff interacted with contractors and other stakeholders to develop the assessment tools, based on a combination of technical literature and personal knowledge. When background information such as crop evapotranspiration information was in dispute, Reclamation funded consultants with technical expertise in the field to serve as independent sources of information.

Resources that Reclamation staff used to substantiate estimates provided by the contractors included the State Water Plan: Bulletin 160-98 (urban and agricultural water use trends and water use efficiency estimates), California Department of Finance (population trends), County Master Plans and Land Use Planning Reports (population trends, water supplies, and land use trends), Agricultural Commissioners Annual County Crop Reports (agricultural crop acreages), and Bulletin 113-3 (crop evapotranspiration).

The methodology for the water needs assessments was finalized in May 2001 with the inclusion of provisions for the Friant Unit. M&I contractors with a contracted water supply of 2,000 acre-feet or less, and irrigation contractors with an irrigable acreage of 2,000 acre-feet or less were exempted from the needs assessment. Along with general assumptions for all of the needs assessments, the methodology contained specific assumptions on evapotranspiration and effective precipitation for the Friant and Delta Regions and an assessment of groundwater conditions in the Friant Region resulting in the assumptions used to determine the safe yield of groundwater.

Reclamation began sending final water needs assessments to CVP contractors starting in September 2000. The majority of the assessments were sent under a cover letter for each of the major divisions in the CVP. The divisions included the Sacramento Division, Tehama-Colusa Canal; Friant Division, Buchanan Unit, Hidden Unit, and Cross Valley Canal; Delta Division; and the Delta-Mendota Canal, Delta-Mendota and San Luis Units.

These assessments were analyzed as groups since the data and methodology developed for the analysis were unique to each of these divisions. Assessment for contractors with a majority of their supplies used for M&I purposes went out under an individual cover letter. The last final needs assessment was completed in December 2004.

Transmittal letters sent with each water needs assessment included a determination of whether the contractor had been beneficially using its past water supplies and if it was anticipated that the contractor needed its current allocation of CVP water to meet future demands.

TRANSFERS AND ASSIGNMENTS

Transfers. Transfers are approved individually as separate actions, subject to their own specific environmental review. For example, current transfers affecting the DMC Unit are shown on the table on the following page. The contracts do not cover specific transfers; they merely provide for transfers under applicable law. Questions concerning area-of-origin issues will be addressed in the separate environmental reviews of specific transfers, as appropriate. A history of short-term transfers does not guarantee future transfers. Specific future (speculative) transfers are not addressed in this EA. Such transfers would require separate environmental analysis before Reclamation could approve them.

Assignments. Reclamation has determined that the permanent assignment of a CVP water service contract, whether a full or partial assignment, is a separate federal action subject to its action-specific review under NEPA, independent from the renewal of that contract. The NEPA review of any proposed assignment will consider both the environmental effects related to the assigning contractors and the environmental effects of the use of the water by the assignees. To date, several such assignments in the DMC Unit have been completed.

For long-term contract renewal purposes, renewal of DMC Unit contracts that have been assigned to other contractors in the DMC Unit are analyzed in the DMC Unit EA, as part of the water supply of the assignee. One example is the contract that was assigned from Centinella Water District to Westlands Water District. Renewal of assigned contracts that been assigned to contractors outside the DMC Unit will undergo a NEPA review either in an individual NEPA review or as part of the review of the renewal of the acquiree's contract. An individual review may be more appropriate in the case of more complex assignments, such as a single assignment going to multiple assignees. The same approach will be applied for pending contract assignment requests that are sufficiently close to completion that the inclusion of the water supply in the contract of the acquiring contractor is reasonably foreseeable.

Transfers Affecting the Delta-Mendota Canal Unit

Contractor (Source)	Full Contract Amount	Transfers	
		To	Amount (acre-feet)
Banta-Carbona Water District	20,000	San Luis Water District	301
		Westlands Water District	12,500
Broadview Water District (will be part of WWD#1)	20,600	USBR (Water Acquisition Program)	5,400
		Westlands Water District (3 transfers)	1,927
		Panoche Water District	454
		San Luis Water District	678
Centinella Water District (now part of WWD#1)	2,500	Westlands Water District (2 transfers)	1,750
City of Tracy	17,500	Banta-Carbona Irrigation District (2 transfers)	1,329
		The West Side Irrigation District	248
		Westlands Water District (2 transfers)	1,500
Coelho Family Trust	2,080	No Transfers	
Del Puerto Water District	140,210	Santa Clara Valley Water District (Exchange)	5,000
		Plain View Water District (3 transfers)	438
		Panoche Water District	534
		San Luis Water District (7 transfers)	3,117
		Westlands Water District (11 transfers)	9,118
Eagle Field Water District	4,550	No Transfers	
Fresno Slough Water District	4,000	No Transfers	
James Irrigation District	35,300	No Transfers	
Laguna Water District	800	Panoche Water District	40
Mercy Springs Water District	2,842	Panoche Water District	1,700
Oro Loma Water District	4,600	No Transfers	
Patterson Water District	16,500	USBR (Water Acquisition Program)	10,000
		Banta-Carbona Irrigation District	425
		Patterson Irrigation District	425
		Westlands Water District	300
Panoche Water District (San Luis Unit)	94,000	Broadview Water District	70
		Mercy Springs Water District	1,500
		Pacheco Water District (6 transfers)	1,198
		San Luis Water District (5 transfers)	1,167
		Westlands Water District (15 transfers)	9,771
Plain View Water District (Byron-Bethany)	20,600	Banta-Carbona Irrigation District	134
		Del Puerto Water District	181
		Westlands Water District (6 transfers)	9,701
Reclamation District No.1606	228	No Transfers	
San Luis Water District (San Luis Unit)	128,080	Santa Clara Valley Water District (Exchange)	2,000
		Del Puerto Water District	27
		Westlands Water District (11 transfers)	4,880
The West Side Irrigation District	5,000	Panoche Water District (4 transfers)	3,500
Tranquillity Irrigation District	13,800	No Transfers	
Tranquillity Public Utility District	70	No Transfers	
West Stanislaus Water District	50,000	Del Puerto Water District	2,500
		San Luis Water District	2,000
		Westlands Water District	1,000
Widren Water District (pending assignment to WWD#1)	2,990	No Transfers	

Since the release of the draft DMC Unit EA, it is now reasonably foreseeable that the Broadview Water District contract and the Widren Water District contract will be assigned to Westlands Water District. Before approving these assignments, Reclamation will also analyze and consider the environmental effects related to the assigning contractors and the environmental effects of assignee's use of the water. Reclamation will also analyze and consider the long-term renewal of the assigned contracts either as part of the long-term contract renewal of the acquiring contractor's contract or in an individual review.

At this time, any other assignment is uncertain. As a result, a generalized analysis of potential assignments within or outside the DMC Unit would be speculative and is inappropriate as part of this contract renewal environmental review.

WATER CONSERVATION PLANS

The CVPIA PEIS examined alternatives for water conservation and the CVPIA Record of Decision defined the program for water conservation under the CVPIA. The long-term contracts require that each contractor implement aggressive water conservation programs under current Reclamation guidelines.

As a condition for contract renewal, each contractor subject to the DMC Unit EA has complied with Reclamation's 2002 CVPIA Guidelines by preparing a Water Management Plan that meets the conservation and efficiency criteria established pursuant to Section 3605(e) of the CVPIA. This is a formal process requiring five-year updates, wherein each contractor receives notice either that its Water Management Plan has been approved or that further action is required until the terms for approval have been satisfied. In addition, the Water Needs Assessment used to determine the contractor's continuing need for CVP water has taken into account projected water conservation by 2025. Because water conservation plans were required by the Reclamation Reform Act of 1982, water conservation implementation, including water measurement, is part of all of the alternatives. Reclamation's criteria and individual contractor plans are part of the ongoing record of contract administration, and the DMC Unit EA has not attempted to include specific conservation measures implemented by each contractor. Exemptions to the requirement to submit a Water Management Plan pursuant to the 2002 CVPIA Guidelines were based on the considerations and environmental review process for those criteria. A review of the exemptions is not a part of the proposed action of contract renewal.

NEPA ENVIRONMENTAL CONSEQUENCES

COMMENTS

Commentors on the draft DMC Unit EA generally stated that the environmental effects were not adequately addressed, including an inadequate evaluation of significant effects and cumulative impacts, and that the area of potential effect was limited to the DMC Unit service area instead of a larger area. Specific areas of concern included:

- ***Drainage and Water Quality:*** The EA fails to adequately analyze drainage problems or drainage-impacted soils and should include soils maps for the DMC and San Luis Units that show concentrations of selenium, chromium, boron, molybdenum and an analysis of how the long-term contract renewals will affect elevated groundwater concentrations of these constituents. The EA fails to analyze the environmental effects of selenium contamination or groundwater recharge programs or the effects of pumping selenium into the Delta-Mendota Canal and its effects on biological resources and the encroachment of croplands. The EA contains an inadequate analysis of the downstream effects of drainage/impacts to water quality; regional water quality impacts from the CVPIA PEIS are not fully analyzed on a site-specific basis. The EA fails to analyze direct and indirect human health impacts potentially resulting from water quality degradation and should include an analysis of the biological and water quality effects of the proposed discharge to the San Joaquin River. The EA fails to analyze land retirement and its effects and should reconsider the continued use of the Grasslands Bypass Project as it relates to the creation of drainage problems.

- ***Wildlife Habitat/Refuges/Wetlands:*** Biological impacts are not adequately disclosed in the EA; the EA fails to analyze waterfowl impacts caused by contaminated drainage water and related water quality impacts to waterfowl and other birds (selenium). The EA contains an inadequate analysis of impacts to wildlife refuges and wetlands; the EA should identify mitigation measures to avoid harming waterfowl.

- ***Fisheries:*** The EA fails to disclose the impacts of contract renewals to fishery resources.

- ***Contract Amounts and Conversions:*** The EA does not analyze effects of full contract quantities and should analyze the effects of transferring agricultural water to M&I use on environmental conditions.

- ***Operations and Maintenance:*** The EA fails to analyze the effects of contract renewals on the ongoing operations and maintenance of Reclamation facilities used to deliver CVP water over the term of the renewal and the effects of maintenance practices in canal areas.

- ***Cumulative Impacts:*** The EA contains an inadequate evaluation of cumulative impacts; impacts to air quality and biological resources based on pesticide use are not analyzed.

RESPONSES

DRAINAGE AND WATER QUALITY

DMC Unit contractors have drainage outlets, a condition assumed in the DMC Unit EA. Continued delivery of CVP water in quantities that do not exceed the full contract quantities, where drainage is available, will not adversely impact groundwater (page 3-161) or water quality (pages 3-169 and 3-170) over the No-Action Alternative conditions. The same is true for impacts to biological resources (pages 3-187 and 3-188). The DMC Unit Draft Biological Assessment (July 14, 2003) at pages 28-37, 79–96, and 129 are also part of the record considered for the DMC Unit EA, along with the final environmental impact statement/report for the Grassland Bypass Project (May 25, 2001).

The proposed action of contract renewal does not require the inclusion of a "drainage solution." The long-term resolution of drainage problems is a complicated, difficult issue that will be resolved through a variety of site-specific projects beyond the scope of the DMC Unit EA. For example, Reclamation is preparing a draft environmental impact statement (anticipated by summer 2005) for the San Luis Drain Feature Re-Evaluation Program, which analyzes drainage service actions for the San Luis Unit. Those actions are a separate federal action arising from a statute particular to the San Luis Unit, and the environmental impact statement will provide additional information on possible drainage management techniques for the San Luis Unit, with one alternative applicable to the Broadview, Eagle Field, Mercy Springs, and Oro Loma Water Districts. Any such federal action will occur later, dependent upon the availability of future federal funding, and is not a part of the current action.

Drainage solutions for DMC Unit contractors that are not subject to waste discharge requirements for the Grassland Bypass Project are also evolving under current regulatory programs, such as the Regional Board's Conditional Waiver Program for Irrigated Lands, which provides the regulatory framework for all drainage reaching the San Joaquin River. The Conditional Waiver program will either continue as the mechanism for achieving implementation schedules to meet water quality objectives or will bridge to alternate

regulatory mechanisms. Major features of the Conditional Waiver Program are the collaboration and increased coordination among state and local agencies, including County Agricultural Commissioners, and the development of highly integrated databases based on monitoring data that help to pinpoint both water quality issues and develop effective and timely BMPs to address the issues identified. Organizations representing the DMC Unit contractors also participate in the San Joaquin River Water Quality Management Group, discussed more fully in the information on water quality below. To summarize, drainage is now available to DMC Unit contractors under current regulatory programs; long-term drainage solutions are evolving and will be subject to appropriate NEPA and California Environmental Quality Act (CEQA) review as actions separate from the proposed action.

Reclamation is preparing a Draft EIS for the San Luis Drainage Feature Re-evaluation, in which land retirement is currently being evaluated as an alternative. Land retirement is one strategy for addressing the need for drainage service for drainage-impaired lands. In and of itself, land retirement does not meet the purpose and need of the federal action of renewing the DMC Unit long-term renewal contracts and is, therefore, more appropriately analyzed as part of the San Luis Drainage Feature Re-evaluation study and EIS.

APPLICABLE WATER QUALITY STANDARDS AND STATUS OF DMC UNIT COMPLIANCE

The Regional Board is developing an EIR for the implementation of all water quality objectives. It is anticipated that the current regulatory programs will remain in place or be replaced with alternate compliance programs as better information is developed about both the nature and sources of water quality impairments and the tools available to address them. Any such process not included in the EIR would be subject to separate environmental reviews.

Salt and Boron: On September 10, 2004, the Regional Board adopted R5-2004-0108, the Basin Plan Amendment for the control of salt and boron discharges into the lower San Joaquin River. As required by California law, the Basin Plan Amendment has been submitted to the State Board for review and action, which may be approval, disapproval and remand, or other action. No date for a hearing or proposed action by the State Board has been set.

Dissolved Oxygen: On January 28, 2005, the Regional Board adopted a resolution approving the Basin Plan Amendment for the control program for factors contributing to the dissolved oxygen impairment in the Stockton Deep Water Ship Channel. As required by California law, the Basin Plan Amendment will be submitted to the State Board for review and action, but no date for a hearing or proposed action by the State Board has been set.

The San Joaquin River Water Quality Management Group is a voluntary stakeholder group including such participants as DWR, Reclamation, the Service, California Department of Fish and Game, San Joaquin River Exchange Contractors Water Authority, Metropolitan Water District of Southern California, San Luis and Delta-Mendota Water Authority, San Joaquin Valley Drainage Authority, San Joaquin River Group, South Delta Water Agency, San Joaquin County, Delta Water Quality Coalition, and many others. The group's primary objective is to develop a plan for achieving salinity-boron and dissolved oxygen objectives on the lower San Joaquin River, along with implementing the plan as a compliance mechanism for the salt and boron and dissolved oxygen TMDLs. The San Luis and Delta-Mendota Water Authority represents all of the contractors covered by the DMC Unit EA in this process. Environmental documentation will be prepared for the implementation plan, if not covered by other environmental documents.

Initial modeling data developed by the San Joaquin River Water Quality Management Group and Reclamation indicate that salinity violations at Vernalis are few under updated baseline conditions (13 monthly violations over the 73-year period of analysis, 11 of which occurred during the 1987–1992 drought). Further, ongoing reductions in discharges planned to meet load requirements for the Grassland Bypass Project are likely to eliminate all salinity violations at Vernalis (San Joaquin River Water Quality Management Group, unpublished Draft Summary Recommendation for Meeting Water Quality Objectives for Salinity Measured at Vernalis and Dissolved Oxygen in the Stockton Deep Water Ship Channel, February 2005).

Selenium. The materials concerning selenium that the Natural Resources Defense Council has asked Reclamation to consider are all part of the body of information concerning selenium and the Grassland Bypass Project that has been before Reclamation and the Service. The Broadview, Eagle Field, Mercy Springs, Oro Loma, and Widren Water Districts participate in the project. No other portion of the DMC Unit has been identified as producing selenium. Most of the information is analyzed in the Grassland Bypass Project Final EIS/EIR and the responses to comments provided in Appendix 1, as well as in the Biological Assessment and Biological Opinion for that project. Should the Biological Opinion's terms and conditions implementing reasonable and prudent measures for the project be violated, reconsultation is required and provides additional protection. In addition to the monitoring program required under the Agreement for Use of the San Luis Drain (Use Agreement), the Drainage Oversight Committee has formed the Tracy Data Collection and Reporting Team, which reviews monitoring data and serves as a forum for the consideration of selenium effects from the project. The Use Agreement provides for termination if selenium load values are exceeded by 20 percent annually, whereas the most recent annual projection is that project participants will have not only met the selenium

load values, but also reduced their selenium discharges by an additional 20 percent. Reclamation and the Service also have in their records for the Grassland Bypass Project and, by reference, for the DMC Unit EA, "Selenium in the San Joaquin River System," prepared in March 2004 by Dr. Tom Mongan for the Grassland Basin Drainage Steering Committee of the San Luis and Delta-Mendota Water Authority. Dr. Mongan's paper reviews the scientific literature and technical reports about selenium bioaccumulation and applies that information to facts specific to the Grassland Bypass Project and the San Joaquin River system, describing how the levels of selenium from the bypass project are not causing problems downstream. Based on the complete and ongoing consideration of selenium science and of the impacts from those DMC Unit contractors that discharge selenium in the context of the Grassland Bypass Project, no separate consideration is required for the renewal of the DMC Unit contracts.

As another example, the environmental impact statement for the Grassland Bypass Project analyzed drainage service for the Broadview, Eagle Field, Oro Loma, Mercy Springs, and Widren Water Districts, which are regulated through waste discharge requirements for selenium and salts. As a part of that document, additional drainage solutions were preliminarily analyzed. Additional site-specific environmental review will be required as projects come on line.

Groundwater: In addition to the analysis contained in the DMC Unit EA, additional analysis relating to groundwater is found in the administrative record in the DMC Unit Draft Biological Assessment, July 14, 2003, at pages 25–27.

The following is an explanation of groundwater programs within the DMC Unit. Reclamation believes that there are no significant effects related to groundwater resources arising from the action of contract renewal as compared to the No-Action Alternative because nothing in any of the alternatives would change current groundwater practices, obligations, agreements, or other programs having direct or indirect impacts on groundwater resources.

Groundwater Programs Within the DMC Unit: The Water Needs Analysis that Reclamation prepared for the DMC Unit contractors includes a quantification of groundwater usage within each district.[1] Fresno Slough Water District, James Irrigation District, and Tranquility Irrigation District are the only DMC Unit contractors that own the

[1] The Needs Analysis is discussed earlier in this document. Copies of Needs Analyses by contractor are also available from Reclamation.

groundwater wells used to produce their water supplies. All other groundwater wells are owned by landowners.

In general, contractors within the DMC Unit do not use CVP water in intentional groundwater recharge programs within their service areas. Instead, the CVP water is described as "supplemental" to the local water supply, which is primarily groundwater. Given overall short water supplies, the cost of pumping, limited availability of good quality groundwater, and, in some areas, the existence of high, poor-quality groundwater tables, DMC Unit contractors have focused their water conservation plans on capturing and reusing field runoff through surface water return systems and on curtailing excess deep percolation, rather than on applying water for recharge.

The current interim renewal contracts permit groundwater recharge programs consistent with state law and the contractor's water conservation plan. At least one long-term contract expressly provides that groundwater recharge is part of authorized agricultural use of CVP water, although that contractor does not engage in intentional recharge. Other long-term contracts have no express terms except that agricultural and M&I water must be put to reasonable and beneficial use that is consistent with Reclamation law. Although not subject to the water conservation plan requirements of CVPIA, the long-term contractors are subject to the conservation planning requirements of the Reclamation Reform Act of 1982 and, like interim renewal contractors, have submitted plans deemed to have met the CVPIA requirements. Those plans include obligations to adopt groundwater management plans. The interim and long-term DMC Unit contracts require the Contracting Officer to consent to the use of a contractor's water outside its boundaries.

Various programs in place throughout the DMC Unit project area regulate the pumping and use of groundwater in the DMC Unit contractor's districts. These programs include the following:

- **Pumping Ordinances—**San Joaquin and Fresno Counties have groundwater pumping ordinances. These counties also impose controls on the transfer of pumped groundwater outside their respective counties.

- **San Luis and Delta-Mendota Water Authority Groundwater Management Activity Agreement—**The Widren, Pacheco, Panoche, Plain View, and San Luis Water Districts and Central California Irrigation District have entered into an activity agreement with the San Luis and Delta-Mendota Water Authority to implement a program for pumping groundwater into the Delta-Mendota Canal, pursuant to Warren Act contracts issued by Reclamation.

- **San Luis and Delta-Mendota Water Authority Northern Delta-Mendota Canal Assembly Bill 3030 Plan Activity Agreement—**Banta-Carbona Irrigation District, Del Puerto Water District, Patterson Irrigation District, The West Side Water District, West Stanislaus Irrigation District, the City of Tracy, Plain View Water District, and San Joaquin County Flood Control and Water Conservation District have adopted a coordinated water management plan pursuant to Assembly Bill 3030 and pursuant to an activity agreement with the San Luis and Delta-Mendota Water Authority.

- **Agreement Regarding the Dismissal of Drainage Lawsuit—**In December 1998, Broadview, Panoche, and Westlands Water Districts executed an agreement with Firebaugh Canal Water District and Central California Irrigation District to develop groundwater data gathering and projects as the basis for the dismissal of Broadview and Panoche from ongoing litigation in *Firebaugh Canal Water District, et al. v. United States* (CV-F-88-634). An "Initial Drainage Study Area" defined in the agreement includes Broadview, Eagle Field, Oro Loma, and Mercy Springs Water Districts, the latter three comprising a portion of Panoche Drainage District. The agreement requires the implementation of drainage reduction principles aimed at the reduction of excess deep percolation and the production of shallow groundwater drainage.

- **Land Fallowing Practices—**Each year, some land in the DMC Unit project area that had been farmed in the past remains fallow. The specific districts with fallowed land and the amounts and locations of the fallowed land vary during each growing season. Among the numerous reasons that land is fallowed include shortages in CVP deliveries without affordable alternate water supplies being available, leading to fewer acres planted.

- **Water Transfers—**The current long-term contracts authorize transfers outside the contractor's service area only with the consent of the Contracting Officer. Interim renewal contracts are subject to Section 3405(a) of the CVPIA, which specifies criteria for transfers and authorizes transfers outside the CVP service area. Reclamation policy on transfers has facilitated transfers among DMC Unit contractors that occur within a single year and are from irrigation use to irrigation use or M&I use to M&I use. Such transfers assist in the efficient management of CVP water and offset the impacts of shortages imposed under drought or regulatory conditions. Reclamation policy has been to require an environmental review of all transfers, including a review for ESA compliance.

FISHERIES

There are no impacts to fisheries in the action alternative when compared to the No Action Alternative. Effects to listed aquatic species were addressed in the ESA compliance processes for the CVP OCAP.

CONTRACT AMOUNTS AND CONVERSIONS

The primary differences in the alternative contract proposals relate to the contract term and the water rates and water charges, including tiered pricing. However, based on negotiations between Reclamation and the DMC Unit contractors, these differences will likely not result in substantial differences in the physical expression of the alternatives when implemented. In order for the differences in proposed contract terms, rates and charges, and pricing to result in substantial differences in the physical expression of the alternatives, substantially different quantities of CVP water would have to be delivered to the DMC Unit contractors under each proposed contract.

The DMC Unit EA considers the effects of the proposed action, which contemplates, in part, Reclamation delivering water to each contractor up to its full contract total, if sufficient water is available. However, the proposed action also reflects the probability that hydrologic and regulatory conditions will likely prevent Reclamation from delivering the full contract totals to all contractors in certain years, and thus those conditions will limit Reclamation's obligations to the contractors accordingly. Projecting potential impacts for full contract deliveries in all years would be inconsistent with reasonably foreseeable circumstances.

Operations and Maintenance: Operations and maintenance activities would not differ when comparing the No-Action Alternative to the action alternatives. These activities are already required to comply with all applicable federal and state environmental regulations and are evaluated in separate environmental reviews.

CUMULATIVE IMPACTS

Cumulative impacts are analyzed in the CVPIA PEIS and the draft DMC Unit EA. In particular, the CVPIA PEIS analyzed the cumulative impacts of implementing the CVPIA, including the long-term contract renewals, on a regional basis, while the cumulative impacts analysis of the DMC Unit EA is focused on the proposed federal action described in that document. Because the contract renewals maintain the status quo of deliverable quantities and CVP operations and, in essence, change only the legal arrangements of a continuing action, they would not contribute to cumulative impacts in any demonstrable manner.