

## **Draft Memorandum of Understanding Regarding CALFED Bay Delta Program Activities in the Delta**

### **I. Introduction**

Actions to increase water supply reliability, improve water quality, and protect important fish species in the Delta have frequently been at odds with each other. The purpose of this Memorandum of Understanding (MOU) is to clarify the roles, responsibilities and commitments of the signatory agencies in the implementation of programs, projects, evaluations and other undertakings focused on the Delta region that advance the CALFED Bay-Delta Program goals in the areas of ecosystem restoration, water quality, water supply reliability and science.

The state and federal agencies are coordinating their assumptions and schedules to move forward with a set of activities focused on the Delta that are consistent with the CALFED Program's principle of balanced implementation. Coordination of these key activities will help the signatory agencies implement the CALFED Record of Decision (ROD) in a balanced manner and avoid the conflict and gridlock that the CALFED Program was created to address.

The schedules for many of the proposed actions and commitments listed below are described in Appendix A.

### **II. Water Supply Actions and Commitments**

The signatory agencies intend for the proposed actions and commitments described below to improve water supply reliability from the Delta while protecting water quality and fishery resources.

#### **A. State Water Project/Central Valley Project Integration Plan**

The DWR and USBR will continue to coordinate SWP/CVP operations, and propose to convey up to 50,000 acre feet per year of Level 2 CVP refuge water at the SWP Banks pumping plant, and use up to 37,500 acre feet per year of CVP water to reduce SWP in-basin obligation for Bay Delta water quality and flow requirements. The DWR and USBR are also proposing to increase these amounts up to 100,000 acre feet per year and up to 75,000 acre feet per year, respectively, when full implementation of the SWP Banks pumping plant increase to 8,500 cfs permitted capability is achieved, or earlier if agreed to by DWR and USBR.

#### **B. State Water Project/Central Valley Project Intertie**

The USBR and DWR will evaluate, and the USBR proposes to construct, an Intertie between the Delta-Mendota Canal and California Aqueduct, with an initial capacity of 400 cfs toward the California Aqueduct and a reverse flow capability of 900 cfs toward the Delta-Mendota Canal, to allow for greater operation and maintenance flexibility for both the CVP and SWP, and enable the CVP to recover conveyance capacity. Subsequent to the construction of the Intertie, USBR and DWR propose to further evaluate the potential for increasing the capacity of the Intertie to 900 cfs toward the California Aqueduct.

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## **C. South Delta Improvements Project/Increase SWP Pumping to 8,500 cfs**

DWR and USBR are proposing to increase the permitted pumping rates allowed at the SWP Banks pumping plant, as part of the South Delta Improvements Project (SDIP).

CALFED ROD Commitments regarding Operations: In accordance with the CALFED ROD, implementation of increased permitted pumping is conditional upon avoiding adverse impacts to fishery protection, and in-Delta water supply reliability. In addition, implementation of increased permitted pumping at the SWP Banks pumping plant is also conditioned on:

Interim Implementation: Consistent with the CALFED ROD, prior to the construction and operation of the permanent operable barriers in the South Delta, operating at the 8,500 cfs level will be done under the following conditions:

1. Water levels in the South Delta are sufficient for agricultural water diverters.
2. No significant degradation to Delta water quality for agricultural, municipal and industrial use.
3. No significant negative impact to fishery protection, including a functional Environmental Water Account.
4. All applicable environmental review is completed and permits obtained.

Full Implementation: Full implementation of increased permitted pumping at the SWP Banks pumping plant is now conditioned on:

1. DWR and USBR constructing and operating permanent operable barriers in the South Delta to improve water quality, water level conditions, and provide fishery protection.
2. DWR and USBR, in cooperation with other CALFED agencies and local interests, developing and commencing implementation of a comprehensive San Joaquin River Salinity Management Plan to enable reliable compliance with all existing Delta water quality salinity objectives (electrical conductivity and chloride) for which the state and federal water projects have responsibility, in accordance with SWRCB Water Right Decision 1641.
3. Construction of the Veale and Byron Tracts aspects of the Old River and Rock Slough water quality improvement projects to protect and improve water quality conditions near the Contra Costa Canal.
4. USFWS, NOAA Fisheries, and DFG developing and implementing environmental protection measures, including project-specific and updated programmatic federal biological opinions and state NCCP authorizations to comply with state and federal ESA and state NCCPA requirements that continue to protect and recover covered species as provided for in the CALFED ROD.

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5. DWR, USBR, USFWS, NOAA Fisheries, and DFG developing and implementing a long-term Environmental Water Account with appropriate water user and public funding to protect, recover, and restore Delta fisheries while providing water supply reliability commitments to the SWP and CVP exporters.

### **III. Water Quality Actions and Commitments**

The signatory agencies reaffirm their commitment in the CALFED ROD to “a general target of continuously improving Delta water quality for all uses, including in Delta environmental and agricultural uses.” The signatory agencies intend that actions listed below will collectively contribute to meeting this commitment, and commit to the process described in Section V.H. to assess water quality impacts and ensure their actions collectively contribute to continuous improvement.

- A. **South Delta Improvements Project/Permanent Operable Barriers:** DWR and USBR will evaluate and construct permanent operable barriers to improve water quality and water level conditions in the south Delta. DWR, USBR, USFWS, NOAA Fisheries, and DFG will develop operating parameters for these permanent operable barriers as part of the SDIP EIS/EIR. The permanent operable barriers will be constructed and operable prior to DWR fully implementing the proposal to expand SWP pumping to 8,500 cfs.
- B. **San Joaquin River Salinity Management Plan:** The DWR and USBR, in cooperation with other CALFED agencies and local interests, will develop and commence implementation of a comprehensive San Joaquin River Salinity Management Plan (Plan) to comply with all existing Delta water quality salinity objectives for which the state and federal water projects have responsibility, as required by SWRCB Water Right Decision 1641. The Plan will include, but not be limited to, the following salinity control and flow-related actions:
- **Drainage strategy:** Development and adoption of a coordinated agricultural drainage strategy for the San Joaquin River, including activities under the San Joaquin Valley Drainage Program, the USBR drainage program, the Grasslands Bypass Project, and related drainage and source control programs by the SWRCB and the Central Valley Regional Water Quality Control Board, and other agencies.
  - **Salt Load Management and Reduction:** Evaluation of the potential for salt load management and reduction in agricultural and wildlife areas that drain into the San Joaquin River from Salt and Mud Sloughs.
  - **Recirculation:** Through studies, pilot projects, and other actions, evaluation and implementation, if appropriate and authorized, of strategies to recirculate Delta exports using excess capacity from the Tracy pumping plant, the Delta Mendota Canal, the SWP Banks pumping plant, or the California Aqueduct to

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convey water for subsequent release into the San Joaquin River for purposes of reducing salinity concentrations.

- Water Transfers/Purchases: Voluntary water transfers and exchanges to improve water quality.
- Monitoring: Real-time water quality monitoring.

This Plan will be coordinated with and provide input to the SWRCB and Central Valley Regional Water Quality Control Board regulatory processes with the intent of ensuring consistency among these programs.

- C. **Vernalis Flow Objectives:** The USBR and DWR will identify the capability to meet the existing flow objectives contained in SWRCB Water Right Decision 1641. The USBR will continue annually to notify CALFED agencies and local interests when the flow objectives cannot be met from Stanislaus River resources and will petition the SWRCB for an urgency change to permit conditions. The CALFED agencies in the Water Operations Management Team will be consulted on options to provide protection of the fish and wildlife beneficial uses otherwise provided by San Joaquin River flows. The signatory agencies anticipate that the SWRCB will conduct a review of these objectives in the near future, and these agencies will fully participate in the SWRCB process.
- D. **Old River and Rock Slough Water Quality Improvement Projects:** The signatory agencies will work with Contra Costa Water District to relocate agricultural drains in Veale and Byron Tracts. In accordance with the CALFED ROD, these projects will be completed prior to the operation of the proposed permanent, operable barriers in the south Delta. In addition and in support of the CALFED Program objective of continuous improvement in Delta drinking water quality, the signatory agencies will work with CCWD to reduce seepage into the Contra Costa Canal.
- E. **San Joaquin River Dissolved Oxygen:** To help improve water quality beyond their water project obligations, the DWR and USBR, in coordination with USFWS, NOAA Fisheries, DFG, other CALFED agencies, and local interests will develop and implement a comprehensive strategy to improve dissolved oxygen conditions in the Deep Water Ship Channel near Stockton. This strategy will be coordinated with and provide input to the SWRCB and Central Valley Regional Water Quality Control Board regulatory processes with the intent of ensuring consistency among these programs.
- F. **Franks Tract:** Through studies, pilot projects, and other actions, the signatory agencies will evaluate and implement, if appropriate and authorized, a strategy to significantly reduce salinity levels at the CCWD and SWP/CVP export facilities and improve water supply reliability by reconfiguring levees and/or Delta circulation patterns around Franks Tract.

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- G. **Delta Cross Channel Program:** USBR and the signatory agencies will evaluate Delta Cross Channel gate operational strategies to improve central and south Delta water quality while improving fish passage through the Delta.
- H. **Through-Delta Facility:** DWR and the signatory agencies will complete the feasibility studies on a 4,000 cfs diversion facility in the north Delta to assess its potential benefits and impacts on water quality, water supply, and environmental conditions in the Delta.

#### IV. Environmental Protection Actions and Commitments

The signatory agencies recognize the need to continue to provide the protections for covered species that were established in the CALFED ROD, and believe that the actions below will meet this commitment for those covered species that are dependent in part or entirely on the Delta ecosystem.

- A. **OCAP ESA Consultation:** The DWR and USBR have prepared a Biological Assessment for the OCAP. Based on this document, USFWS and NOAA Fisheries will prepare coordinated Biological Opinions, including Preliminary Biological Opinions on SDIP. This integrated package will allow USFWS and NOAA Fisheries to comprehensively analyze the effects of proposed water project operations to federally listed species.
- B. **SDIP ESA Consultation:** Consistent with the CALFED ROD Multi-species Conservation Strategy (MSCS), DWR and USBR are preparing an Action Specific Implementation Plan (ASIP) for MSCS covered species potentially affected by the SDIP. USFWS and NOAA Fisheries will evaluate the SDIP Preliminary Biological Opinions and the ASIP to determine if reinitiation of consultation for SDIP is appropriate. The DFG will evaluate the ASIP for NCCP authorization.
- C. **Update of CALFED ROD Programmatic Regulatory Commitments:** The USFWS, NOAA Fisheries, and DFG will evaluate and may update the CALFED ROD programmatic regulatory commitments. The USFWS, NOAA Fisheries and DFG authorized programmatic compliance under FESA, CESA, and the NCCPA by establishing and implementing the Stage 1 milestones for restoration and species recovery, as detailed in the MSCS and the MSCS Conservation Agreement. The CALFED ROD requires USFWS, NOAA Fisheries, and DFG to review these regulatory commitments provided to DWR and USBR by September 30, 2004, based in part on progress in implementing the milestones and the efficacy of the EWA, and to issue updated or supplemental documentation to maintain the regulatory commitments to DWR and USBR described in the CALFED ROD. In part, these regulatory commitments are provided by the operation of the EWA and funding for

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the ERP at levels sufficient to provide for adequate protection and recovery of covered species, as described in the CALFED ROD.

- D. **Environmental Water Account:** DWR, USBR, USFWS, NOAA Fisheries, and DFG will determine whether to continue the short-term Environmental Water Account through Stage 1. If a decision is made to continue an EWA, DWR, USBR, USFWS, NOAA Fisheries, and DFG will develop and implement a long-term Environmental Water Account based on criteria developed by USFWS, NOAA Fisheries, and DFG to protect and restore Delta fisheries while providing water supply reliability assurances to the SWP and CVP exporters with appropriate water user and public funding.
- E. **Delta Regional Ecosystem Restoration Implementation Plan (DRERIP):** The DRERIP is the first of several regional plans intended to refine the existing planning foundation guiding the long-term implementation of the CALFED Ecosystem Restoration Program element. The DRERIP will update the ERP's planning foundation specific to the Delta, refine existing Delta-specific restoration actions and guidance for Delta-specific EPR tracking, performance evaluation, and adaptive management feedback. The DFG, USFWS, and NOAA Fisheries, in collaboration with other CALFED agencies, will continue to develop this regional restoration plan for the Delta.

## V. Science Actions and Commitments

The signatory agencies will continue to conduct workshops, studies, independent reviews, and other activities to evaluate the relationship between SWP/CVP operations, water quality, and biological resources, and to incorporate the best available information into their planning and regulatory activities.

- A. **CBDA Independent Science Board:** The CBDA Independent Science Board (ISB) will continue to provide input to the CBDA on implementation of this MOU regarding the long-term risks and challenges associated with providing water supply reliability, improving water quality, and protecting key species by restoring the Delta ecosystem.
- B. **EWA Independent Reviews:** The CBDA Science Program, in cooperation with the signatory agencies, will undertake a comprehensive review of the first four years of the Environmental Water Account, in preparation for the annual EWA Review Panel analysis of water project operations and its impact on key species. The EWA Review Panel will continue, as necessary, to conduct independent annual reviews, and a comprehensive assessment every four years, and the CALFED agencies will consider the recommendations from the EWA Review Panel in their annual operations planning.

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- C. Focused Study on South Delta Hydrodynamics and Fish:** DWR, USBR, USGS, DFG, and USFWS will investigate fish movement, distribution, and entrainment in the south Delta to improve understanding of the effects of south Delta export and barrier operations and flows. This information, in combination with information from the Vernalis Adaptive Management Plan experiments and other studies, will be used to evaluate water project operation and fishery management actions.
- D. Focused Study on Delta Smelt and Fish Facilities:** DFG will complete studies to evaluate Delta smelt survival at the South Delta export and fish salvage facilities.
- E. Science Program PSP:** The CBDA Science Program will undertake a Proposal Solicitation Process to evaluate and fund studies to address the gaps in information about the relationship between water management activities and biological resources.
- F. SWRCB Periodic Review:** The CBDA Science Program will work with the signatory agencies to provide key summaries and analyses of research on Delta water operations, water quality, and biological resources to the SWRCB as part of its periodic review of Delta water quality objectives. These summaries and analyses will include but are not limited to: (1) salinity and flow objectives in the South Delta; (2) the X2 standard; and (3) the Vernalis Adaptive Management Program.
- G. South Delta Fish Facilities:** The USBR and DWR will continue to evaluate potential improvements to fish facilities in the South Delta to ensure operation as originally intended to accommodate changing environmental conditions and proposed operations. In addition, recommendations on alternative facilities, combined operations, and intake locations will determine how fish facilities should be implemented with SWP operations in the future.
- H. Performance Evaluation and Monitoring Program:**  
The signatory agencies, working with the Interagency Ecological Program and the Central Valley Regional Water Quality Control Board, will design and implement a Performance Evaluation and Monitoring Program. This program will evaluate the water quality and biological resource effects of the CVP, SWP, and the Delta activities described in this MOU. This program will be designed to fully evaluate compliance with existing regulatory requirements (including the MSCS and the SWRCB Water Right Decision 1641) and progress towards achievement of CALFED Program goals, including continuous improvement in Delta water quality for all uses, and restoration and recovery targets for endangered species.

This program will include, at a minimum, performance measures, conceptual models, adaptive management strategies, data handling and storage protocols, expected products and outcomes, regular reporting, and an independent review of existing monitoring programs. The proposed program will be submitted to the CBDA Science Program for

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external review, and to the CBDA Independent Science Board for a recommendation on the proposed program to CBDA.

The proposed program will include an annual technical report by the signatory agencies, in a form acceptable to, and submitted to, the CBDA Lead Scientist, that describes significant advances in scientific understanding of the system, status and trends of water quality and biological resources, causes for any significant changes in water quality or biological resources, and recommendations for further study.

Significant findings from this annual technical report will be summarized by the CBDA Science Program, in cooperation with the signatory agencies, and provided to the CBDA. This annual summary of significant findings to the CBDA will identify any failure to meet existing water quality objectives, achieve continuous improvement in Delta water quality, and restoration and recovery targets for endangered species, and any necessary corrective actions as needed.

## **VI. Provisions**

### **A. Relationship with the CALFED ROD**

The signatory agencies acknowledge the programmatic nature of the CALFED ROD, and also acknowledge that the CALFED ROD provides for revising specific projects and programs in the CALFED Bay Delta Program to account for new information or changed circumstances. The signatory agencies believe that the projects, programs, and commitments in this MOU are consistent with the CALFED ROD. Nothing in this MOU is intended to replace or change the implementation commitments in the CALFED ROD (pp 32-35).

### **B. Further Environmental Review**

The projects and programs described in this MOU are at different stages of development and implementation. Many of these projects and programs are at an early stage and need to complete further technical studies and complete appropriate NEPA and CEQA and other environmental and regulatory reviews. The signatory agencies acknowledge that changes may be made to the proposed projects and programs, or they may not be approved, as a result of these future reviews.

### **C. Contingent on Appropriation of Funds and Future Actions**

The expenditure or advance of any money, or the performance of any obligation of the United States under this MOU, will be contingent upon appropriation or allotment of funds in accordance with 31 USC 1341(Anti-Deficiency Act). No liability will accrue to the United States for failure to perform any obligation under this MOU in the event that funds are not appropriated or allotted.

The project schedules described in this document and the ROD depend upon certain assumptions about state and federal budgets, optimized construction schedules, willing sellers, and other contingencies. These assumptions may change as the CALFED Program progresses and

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appropriate revisions to the CALFED Program may be necessary. Consistent with federal law, nothing in this document or the ROD constrains the discretion of the President or his successors to make whatever budgetary or legislative proposals he or his successors deem appropriate or desirable.

The commitments and obligations under this MOU of the State of California are subject to the availability of appropriated funds. No liability will accrue to the State of California for failure to perform any obligation under this MOU in the event that funds are not appropriated.

#### **D. Nature of MOU**

This MOU is not intended to, and does not, create any other right or benefit, substantive or procedural, enforceable at law or equity by a party against the United States, the State of California, any agencies thereof, any officers or employees thereof, or any other person.

#### **E. Legal Consistency**

All provisions of this MOU are intended and will be interpreted to be consistent with all applicable provisions of state and federal law. The undersigned recognize that public agency signatories to this MOU have specific statutory and regulatory authority and responsibilities, and that actions of these public agencies must be consistent with applicable procedural and substantive requirements. Nothing in this MOU is intended to, nor will have the effect of, constraining or limiting any public entity in carrying out its statutory responsibilities. Nothing in this MOU constitutes an admission by any party as to the proper interpretation of any provision of law, nor is anything in this MOU intended to, nor will it have the effect of, waiving or limiting any public entity's rights and remedies under any applicable law.

The program or activities conducted by or funded by any federal agency under this MOU will be in compliance with the nondiscrimination provisions contained in Titles VI and VII of the Civil Rights Act of 1964, as amended; the Civil Rights Restoration Act of 1987 (Public Law 100-259); and other nondiscrimination statutes: namely, Section 504 of the Rehabilitation Act of 1973, Title IX of the Education Amendments of 1972, the Age Discrimination Act of 1975, and American's With Disabilities Act of 1990. They will also be in accordance with applicable federal regulations, which provide that no person in the United States will on the grounds of race, color, national origin, gender, religion, age, disability, political beliefs, sexual orientation, and marital or family status, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity receiving federal financial assistance.

The parties recognize that this MOU is not a contract. This MOU does not delegate to any agency, or the collective group of agencies, the authority to: (1) control another agency's final decision on a project; (2) modify or halt an agency's project; or (3) compromise an agency's discretion to pursue projects according to its individual agency legal authority. This MOU facilitates cooperation and advice among the agencies; it will not be interpreted to form a

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May 21, 2004

partnership, joint venture, or contract that requires federal agencies to analyze state projects and programs under the National Environmental Policy Act.

## **F. Modification**

This MOU can be modified if agreed to in writing by all parties hereto.

## **G. Term of the MOU**

This MOU will become effective as to an agency upon the date of its execution by that agency.

## **H. Signature in Counterparts**

This MOU may be executed in counterparts.

## **I. Additional Signatories**

Other state or federal agencies may execute this MOU. Upon the execution of this MOU by additional agencies, those agencies will become a party to this MOU and no amendment executed by the other signatories is required for the agencies to become a party.

## **J. Termination/Withdrawal**

Any signatory agency may withdraw from this MOU by providing written notice to all of the undersigned parties explaining the reasons for the proposed withdrawal. The withdrawal becomes effective 60 days after the date of such notice, at which time the MOU will have no further force and effect as to that agency. Withdrawal by any one agency shall not invalidate this MOU as to any agency not tendering its own independent notice of withdrawal.

## **VII. Signatures**

## **VIII. Appendices**

Appendix A: Summary of Actions and Schedules

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