











Attachment 3 Implementation Memorandum of Understanding

August 28, 2000

CALFED Bay-Delta Program Implementation Memorandum of Understanding Outline

A. Recitals

- B. Definitions
- C. Implementation Principles
- D. CALFED Governance and Implementation Procedures

E. Annual Report

- F. Cost Crediting
- G. Ecosystem Cost-Share Agreement
- H. Contingent on Appropriation of Funds and Future Actions
- I. Legal Consistency
- J. Modification
- K. Term of MOU
- L. Signature in Counterparts
- Attachment A -- Description of Oversight, Management and Support Responsibilities
- Attachment B -- Oversight, Management and Support Responsibilities for Program Elements
- Attachment C -- Table 1, Category A and B State and Federal Programs
- Attachment D -- Operations Decision-Making Process
- Attachment E -- CALFED Science Program

The following State and Federal agencies (collectively, the CALFED Agencies) enter into this Memorandum of Understanding (MOU) on August 28, 2000. Other State or Federal agencies may execute the MOU after its effective date. Upon the execution of this MOU by additional agencies, those agencies shall become a party to this MOU and no amendment executed by the other parties is required for the agencies to become a party.

<u>UNITED STATES</u> Department of the Interior Department of Agriculture

Department of Agriculture Bureau of Reclamation Fish and Wildlife Service U.S. Geological Survey Bureau of Land Management National Marine Fisheries Service Environmental Protection Agency Army Corps of Engineers Natural Resources Conservation Service Forest Service Western Area Power Administration

STATE OF CALIFORNIA Resources Agency

Department of Water Resources Department of Fish and Game Department of Food and Agriculture Environmental Protection Agency State Water Resources Control Board

The purpose of this MOU is to establish a cooperative interagency mechanism for implementing the CALFED Bay-Delta Program (CALFED Program) as defined in the August 28, 2000, Record of Decision (ROD). Unless and until a long-term governing structure is established for the CALFED Program by legislation, the CALFED Agencies will use this decision-making processes and governance structure described in this MOU, and will assume the Agency obligations described in this MOU to implement the CALFED Program. Specifically, this MOU is intended to delineate:

- C Principles for Implementation
- C Roles of the Policy Group and the Program Staff
- C Implementation procedures and decision-making processes
- C Responsibilities of signatory State and Federal agencies
- C Role and process for public and local involvement
- C Integration of science in the CALFED Program
- C Coordination of water project operations
- C Cost sharing agreements for implementation
- C Reporting requirements
- C Term of the MOU

A. Recitals

- 1. This MOU recognizes the:
 - C Critical importance of the Sacramento/San Joaquin River Delta-San Francisco Bay (Bay-Delta) estuary and its tributary watersheds to the natural environment and the economy of California and the nation.
 - C Multiple and complex resource management issues that need to be addressed to restore and enhance the Bay-Delta estuary.
 - **C** ROD issued by the State and Federal agencies is the Programmatic plan for the long-term solution to address these complex resource management issues.
 - C Need for State and Federal agencies to continue to work closely together, and in partnership with stakeholders and Indian tribes, to successfully implement the ROD over 30 years.
- 2. In 1994, the Framework Agreement was signed between the Governor's Water Policy Council and the Federal Ecosystem Directorate (ClubFed) which set forth the operating principles for developing a long-term solution to the Bay-Delta problems. In December 1994, the State and Federal agencies and stakeholders signed the "Principles for Agreement on Bay-Delta Standards between the State of California and the Federal Government" (the Accord), which established interim measures for both environmental protection and regulatory stability in the Bay-Delta.
- 3. The State and Federal agencies developed the CALFED Bay-Delta Program in 1995 to develop the long-term solution to the Bay-Delta problems and prepare a Programmatic EIS/EIR. The State and Federal agencies formed the Policy Group (comprised of State and Federal agency leaders) to oversee and direct the preparation of the Programmatic EIS/R and development of the Preferred Program Alternative.
- 4. The State and Federal CALFED agencies have worked for over five years to develop a Final Programmatic EIS/EIR and Preferred Program Alternative in collaboration with representatives of agricultural, urban, environmental, fishery, business, rural counties, environmental justice, farm labor, Indian tribes and Delta interests.
- 5. The State and Federal administrations released *California's Water Future: A Framework for Action* on June 9, 2000 which sets out actions anticipated to be implemented as part of, or in conjunction with, the Preferred Program Alternative during the first seven years (Stage 1) of the CALFED Program.
- 6. On July 21, 2000, the lead CALFED Agencies released the Final Programmatic EIS/EIR and Preferred Alternative.

- 7. Contemporaneous with this MOU, the lead CALFED Agencies have executed a ROD and have certified the Final Programmatic EIS/EIR and Preferred Alternative.
- 8. The undersigned recognize that public agencies to this MOU have specific statutory and regulatory authority and responsibilities, and that actions of these public entities must be consistent with applicable procedural and substantive requirements. Nothing in this MOU is intended to, or shall 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 shall it have the effect of, waiving or limiting any public entity's rights and remedies under any applicable law.

The undersigned recognize that certain departments, boards, and commissions (Adjudicative Entities) have adjudicative responsibilities with respect to contested regulatory matters that are brought before them. (See California Gov. Code §§ 11400, et seq.) Such adjudicative responsibilities include the requirement that the Adjudicative Entity and its members avoid bias, prejudice, or interest in the adjudicative matters before them, e.g., they cannot decide the outcome of a matter before completion of any required hearing or equivalent proceeding. Some such Adjudicative Entities exist within the undersigned agencies. This MOU does not in any way require or commit an Adjudicative Entity to participate in proposing a project that will come before it for approval, nor does this MOU require or imply that an Adjudicative Entity will approve a project that requires an adjudicative proceeding. Under this MOU, the role of Adjudicative Entities in connection with matters that may require an adjudicative decision is limited to promptly and diligently processing any applications, petitions, or other requests for approval. Nothing in this MOU commits an Adjudicative Entity to an approval or disapproval of any project subject to the authority of the Adjudicative Entity, nor to a term or condition in any approval of a project by the Adjudicative Entity.

9. For the term of this MOU, the CALFED Agencies will rely on the interim governance structure and process described and agreed to in this MOU.

B. Definitions

The following defined terms, when they appear with initial capital letters, shall apply to this MOU.

Adjudicatory Entity: a State or Federal department, board, or commission that has adjudicative responsibilities with respect to contested regulatory matters that are brought before it.

Annual Report: the annual assessment and report as mandated in the ROD.

CALFED Bay-Delta Program (CALFED Program): the entire cooperative program of Federal and State agencies described in this ROD, including eight Program Elements and hundreds of subsidiary actions that will be implemented over a 30 year period.

CALFED Bay-Delta Program Staff (Program Staff): the collection of Federal and State staff members on assignment or detail to the CALFED Bay-Delta Program, paid with funds provided by the Agencies. This includes the Bay-Delta Program Executive Director and staff which are assigned responsibility for various CALFED Program oversight, coordination and management activities.

CALFED Agencies (Agencies): the State and Federal agencies that sign this MOU and will implement the CALFED Program, including California Resources Agency (Resources), Department of Fish and Game (DFG), California Department of Water Resources (DWR), Department of Food and Agriculture (DFA), California Environmental Protection Agency (CalEPA), State Water Resources Control Board (SWRCB), U.S. Department of the Interior (Interior), U.S. Bureau of Reclamation (Reclamation), U.S. Fish & Wildlife Service (USFWS), U.S. Geological Survey (USGS), Bureau of Land Management (BLM), U.S. Environmental Protection Agency (EPA), U.S. Army Corps of Engineers (USACE), National Marine Fisheries Service (NMFS), U.S. Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS), U.S. Forest Service (USFS), and the Western Area Power Administration (WAPA).

Category A and B Programs and Funding: Category A includes programs and funding that should be consistent with the CALFED Program objectives and priorities and submitted to Policy Group for review and recommended approval. Category B includes programs and funding that should be coordinated with the CALFED Program and shared with Policy Group for review and comment.

Community-Based Outreach: working at the community level to gain input in the implementation of the CALFED Program.

Cross-Cut Budget: the compilation of annual CALFED Agency budgets for Category A and B programs.

The Framework: the document entitled *California's Water Future: A Framework for Action*, issued on June 9, 2000.

Implementation MOU: this MOU between Federal and State agencies regarding their mutual governance of the CALFED Program.

Program Element(s): the eight sub-programs of the CALFED Program: ecosystem restoration, watershed, storage, conveyance, water transfers, water use efficiency, water quality, and levee protection.

Program Management/Program Manager: the direction and day-to-day management of one of the eight Program Elements, including development of Program priorities, annual and long-term workplans, Program Element budgets, and promotion of local and regional involvement in the Program Element.

Project Management: the direction and day-to-day oversight of an action or activity selected and assigned by the Program Manager.

C. Implementation Principles

- 1. **Program Integration and Balance:** The Agencies will implement the CALFED Program in an integrated and balanced manner and will ensure that each Program Element shows continuous improvement.
- 2. Consistency and Support for CALFED Program: The Agencies will support the implementation of the CALFED Program as described in the ROD. The Agencies will support and implement actions consistent with the ROD. An Adjudicative Entity that is a CALFED Agency will conduct an independent review of any CALFED action or proposal that requires the approval of the adjudicative entity under State and Federal law to the extent that such actions are consistent with the entity's authorities and responsibilities.
- **3. Agency Coordination:** The Agencies will coordinate their activities which implement the CALFED Program including budget planning, funding, project implementation, scientific development and review, and assessment of the CALFED Program to the extent authorized by law.
- **4. Financing:** The Agencies will seek the necessary funding and resources to support the implementation of the CALFED Program as described in the ROD, consistent with their existing authorities. Funding will be subject to State and Federal legislative action and specific agency authority.
- **5. Public Involvement:** The Agencies will encourage public knowledge of, and active and strong involvement in, the implementation and evaluation of the CALFED Program. The Agencies will establish a broad public advisory committee for this purpose.
- 6. Tribal Involvement: The Agencies will encourage tribal knowledge of, and active and strong involvement in, the implementation and evaluation of the CALFED Program. The Policy Group will invite a Tribal Representative to attend meetings of the Policy Group. The Tribal Representative will be designated by the consensus decision of an organization of recognized tribes in California. The purpose of the Tribal Representative is to enhance communication between CALFED agencies and tribes that may be affected by decisions implementing various aspects of the CALFED Program. Federal agencies participating on the CALFED Policy Group will consult with appropriate tribes before significant Policy Group decisions on matters potentially affecting tribal interests.

- **7. Local Implementation:** The Agencies will promote active and strong involvement of local communities during implementation.
- 8. Environmental Justice: Consistent with the President's Executive Order 12898 and California Public Resources Code section 72000, the Agencies will seek fair treatment of people of all races, cultures, and incomes. CALFED programs, policies and actions shall not cause any segment of the population to bear a disproportionately high or adverse health, environmental, social, or economic impact. CALFED Agencies agree to be responsible for ensuring this policy is carried out across all Program Elements through the development of environmental justice goals and objectives.
- **10. Science-Based Adaptive Management Approach:** The Agencies will implement the CALFED Program using a science-based adaptive management approach. This approach will rely on constant monitoring and evaluation of actions in all Program Elements. The CALFED Science Program will provide information to guide management decisions for CALFED Program actions, and CALFED related actions.
- **11. Single Blueprint for Ecosystem Restoration**: The Agencies will develop a single blueprint for implementing the Ecosystem Restoration Program. The blueprint is a unified and cooperative approach made up of integrated science, a shared vision for a restored ecosystem, and a management framework which defines the process for implementing the blueprint.

D. CALFED Governance and Implementation Procedures

Until a long-term governing structure is established, the Agencies intend to continue the current Policy Group structure with modifications to implement the CALFED Program.

1. CALFED Policy Group

<u>Policy Group Membership</u>: Each agency signing this MOU is a member agency of the Policy Group. Each member agency of Policy Group will identify a representative and alternate for participation in Policy Group meetings. The Secretary of the Interior (or designee) or the Secretary for Resources (or designee) will chair the meetings unless the President or the Governor identifies another member of his cabinet to lead his administration's CALFED efforts.

The membership, alternates and co-chair information will be kept on file by the Program Staff.

Numerous agencies with activities related to CALFED objectives may wish to participate in CALFED activities but may not wish to become members of the Policy Group. Coordination with those agencies will be initiated or continued, and separate coordinating agreements will be established when needed.

<u>Policy Group Responsibilities</u>. The Policy Group will be responsible for overseeing implementation of the CALFED Program to ensure the CALFED Program objectives and targets identified in the ROD are achieved. The overarching mandate of the Policy Group will be to assure effective, balanced, coordinated, and timely implementation of all Program Elements. Existing Agencies retain all regulatory authority and responsibilities. The Policy Group will provide program oversight and coordination of the implementation of the CALFED Program. Policy Group responsibilities are described in *Attachment A* and summarized below.

- C Oversee CALFED Program implementation
- C Assess CALFED Program progress in reaching objectives
- C Review and recommend approval of Category A priorities, workplans and budgets
- C Coordinate Agency and Program Elements
- C Review and coordinate related programs
- C Provide public outreach and communication
- C Communicate with the State and Federal legislatures for CALFED Program as a whole, consistent with State and Federal law
- C Report and track CALFED Program implementation

<u>Policy Group Meeting Requirements/Quorum:</u> The Policy Group will meet a minimum of four times a year, including at least once a year with the public advisory committee. The State and Federal co-chairs will alternate chairing of meetings. Both co-chairs or their alternates must be in attendance in order for the Policy Group to meet. Two-thirds of the State Policy Group members, two-thirds of the Federal Policy Group members and both co-chairs (or their alternates) constitute a quorum for transaction of any business by the Policy Group.

<u>Policy Group Decision Rule</u>: While the Policy Group has no authority to make decisions that would require an agency to exceed its statutory authority or restrict an agency's statutory discretion, the CALFED Agencies agree to follow the process described in this MOU. Policy Group actions require State and Federal consensus. The consensus rule requires that the State and Federal co-chairs reach agreement before an action can be taken by the Policy Group. The State and Federal co-chairs will discuss the State and Federal positions both within their respective caucuses and with each other before the Policy Group takes any action.

<u>Policy Group Subcommittees</u>: The Policy Group can create work groups and subcommittees as needed to carry out its responsibilities.

2. Program Staff.

The CALFED Program was established to develop a long-term comprehensive plan for the Bay-Delta System. The plan has been completed with the execution of the ROD. The CALFED Agencies support the continuation of the CALFED Program Staff for the implementation phase of the CALFED Program. The Governor, subject to concurrence by the Secretary of the Interior, will appoint an Executive Director of the Bay-Delta Program, who will hire staff as needed to support the responsibilities assigned to the Program Staff.

<u>Program Staff Responsibilities</u>: The Program Staff, under the direction of the Policy Group and in coordination with the Agencies will:

- C Provide the necessary staff support for the Policy Group.
- C Provide oversight of, and coordination among, Agencies responsible for managing and implementing each Program Element, and ensure integration and coordination is occurring between Program Elements.
- C Manage the Comprehensive Reporting System.
- C Draft the Annual Report.
- C Manage legislative outreach on behalf of the Policy Group.
- C Manage public, regional, and tribal involvement, including providing the necessary staff support for the public advisory committee.
- C Work with State and Federal agencies, to the extent provided by law, to coordinate an annual budget for CALFED implementation that any Agency may submit as part of its budget review and approval process.
- C Prepare an annual Cross-Cut Budget after the State and Federal budgets have received the respective legislative and executive approvals.
- C Prepare an annual Program Staff budget and workplan which will be reviewed and approved by the Policy Group.
- C Provide Program Management of the Ecosystem Restoration Program, Water Quality Program, Watershed Program and Water Transfers Information Clearinghouse, as assigned by Agencies that receive funding for such activities.
- C Manage the CALFED Science Program, under the leadership of a Lead Scientist.
- C Manage the permit clearinghouse as established by the MOU now planned for execution by the CALFED Agencies by December 2000.
- C Develop and oversee the implementation of the Water Management Strategy.

The Program Staff may be assigned additional responsibilities by the CALFED Policy Group, but no Program Staff actions will supplant any action or decision required by law to be performed by a CALFED Agency.

<u>Funding for Program Staff</u>: To the extent authorized and appropriated, the State and Federal CALFED Agencies agree to share equally (50% State and 50% Federal) the cost to support the annual budget for the Program Staff, subject to annual Policy Group approval. DWR and Reclamation will assume primary responsibility for administering and funding the Program Staff budget. Such allocations of support shall include the direct and indirect costs of assigning personnel to the Program Staff.

3. Program Element Management

To effectively implement the CALFED Program, the management of each Program Element has been assigned to one or more CALFED Agencies or the Program Staff. *Attachment A*, which is incorporated into this MOU, describes the oversight, management, and support functions. *Attachment B*, also incorporated in this MOU, describes the assignment of those responsibilities for each Program Element.

For Program Elements in which the Program Staff is assigned management responsibility, CALFED Agencies will retain and exercise their statutory authorities. Program Management by the Program Staff does not suggest any delegation of an agency's authority to the Program Staff.

Program Staff or Agencies assigned the responsibility for management of Program Elements agree to coordinate with appropriate agencies and operate under the oversight of the Policy Group to ensure consistency with the CALFED Program plan and objectives as described in the ROD.

4. Planning, Budget and Implementation Procedures

<u>Program and Funding Categories</u>: Programs and funding subject to Policy Group recommended approval or coordination are divided into two categories, Category A and B. Attachment C, Table 1 includes an initial list of existing Category A and B programs and funding. This Table shall be reviewed and revised as necessary by Policy Group. The addition of programs and funding to Category A will only be allowed upon concurrence by the agency with funding authority. Any revisions of this Table by the Policy Group do not require modification of this MOU pursuant to Section J.

- C Category A -- Consistent Programs and Funding: Includes those programs and funds that should be managed and implemented consistent with the CALFED objectives. Category A includes both long-term existing programs that should be managed consistent with CALFED objectives, and more recent funding and programs specifically targeted at CALFED objectives and actions.
- C *Category B -- Related Programs and Funding*: Includes those programs and funds that have related and overlapping program objectives and whose geographic area of focus overlaps with the CALFED solution area.

<u>Category A Procedures</u>: For Category A programs and funds:

- a. CALFED Agencies responsible for Program Management and/or implementation agree to coordinate with Program Staff and other CALFED Agencies to develop program priorities, workplans, proposed budgets, and significant program products (such as regulations, grant or loan solicitations, environmental documentation, project selection).
- b. When the Program Staff is assigned responsibility for Program Management it shall coordinate with appropriate agencies to develop Program priorities, workplans, proposed budgets, and significant program products (such as regulations, grant or loan solicitations, environmental documentation and project selection).
- c. CALFED Agencies or the Program Staff, as appropriate, shall then submit Program priorities, workplans, budgets and significant Program products to the Policy Group for review, recommended approval, and statement of consistency with the CALFED Program objectives.
- d. Final approvals will remain with those Agencies with the program and funding authority.

<u>Category B Procedures:</u> CALFED Agencies with authority for Category B programs and funding agree to:

- C Work with appropriate CALFED Agencies and the Program Staff in the development of Category B programs and projects
- ^C Share annual plan for programs and projects located in the CALFED solution area to the Policy Group to identify opportunities for coordinating resources and funding to increase efficiency, and to avoid duplication

<u>Cross-Cut Budget Procedures</u>: CALFED Agencies agree to participate, to the extent authorized by law, in the preparation of annual CALFED Cross-Cut Budgets. CALFED Agencies agree to provide funding information, to the extent authorized by law, to the Program Staff in a timely fashion for all programs and activities related to the CALFED Program. The Cross-Cut Budget will at a minimum include all Category A and B programs and funding.

5. Public and Local Involvement

The CALFED Agencies remain committed to encouraging the public to work with the Policy Group, State and Federal implementing agencies, and scientific and technical advisors in the design, implementation and evaluation of the CALFED Program. Public involvement in the CALFED Program will be provided through advisory committees and groups, public meetings and workshops, newsletters, and other publications that provide updated information. Consistent with the Federal Advisory Committee Act (FACA), the CALFED Agencies propose to provide public involvement through three levels of advisory groups:

- C Broad public advisory committee
- C Program Element work groups
- C Local work groups

<u>Broad public advisory committee</u>: The Secretary of the Interior will charter a public advisory committee to assist the Policy Group in its responsibilities of CALFED Program integration, coordination, balance and assessment. The advisory committee will meet as needed. Membership would include qualified representatives of Indian tribes and stakeholder groups. The advisory committee members would be selected based on their experience and expertise in relevant fields, such as ecosystem restoration, agriculture, hydrology, urban water management, fishery biology, water quality, flood management, water conservation and recycling, environmental justice, local government and economics. Appointments would be made to assure that the advisory committee as a whole is both balanced and diverse. Representatives of the Policy Group and CALFED Agencies would be charged with attending advisory committee meetings and providing the information and reports as the committee may request. The responsibilities of the advisory committee will include:

- C Advice on priorities, long-term plans, CALFED Program performance, balance and integration
- C Liaison between public work groups, subcommittees and the Policy Group
- Creation of subcommittees and work groups, as needed and subject to Policy Group approval
- C Consideration of recommendations from subcommittees and local work groups

The Policy Group will provide information to the advisory committee explaining the reasons and basis for Policy Group decisions.

<u>Program Element Work Groups</u>: CALFED Agencies and the Program Staff will continue to rely on Program Element work groups in the refinement and implementation of the CALFED Program. The role of Program Element work groups would be to provide specialized technical or policy expertise for specific Program Elements. Membership would include individuals with technical/policy expertise pertinent to the Program Element, such as ecosystem restoration and drinking water quality experts from non-governmental organizations, tribes, water agencies, State and Federal agencies, and the public at-large. For example, the Delta Drinking Water Council, Ecosystem Roundtable, and Watershed Workgroup are Program Element work groups that will be needed during implementation.

Local Work Groups: CALFED Agencies and the Program Staff will establish local work groups, as needed, to provide forums to support Community-Based Outreach. Local work groups may represent specific geographic areas in the CALFED Solution Area, such as northern California, San Joaquin Valley, Delta/Bay Area, and southern California. Alternatively, they may represent various watersheds, basins or ecological zones within the CALFED Solution Area. Membership would include local government representatives, local non-governmental organizations, local tribal representatives, and others interested in, or affected by, the CALFED Program. As envisioned, responsibilities of the local work groups will include:

- C Effective communication/interaction with local governments and citizens
- C Liaison between local communities and CALFED Agencies
- C Local insight and advice on Program Element priorities and performance
- C Access for the local community to shape and help to implement the Program Elements of the CALFED Program

6. Water Project Operations

The CALFED Agencies involved in operations are: Reclamation, USFWS, NMFS, DWR, DFG, EPA, USACE, and WAPA. State and Federal agencies and stakeholders will continue to coordinate and resolve operations issues through a multi-step process. (See *Attachment D* diagram). This process is intended to:

1. Ensure full consideration of all appropriate factors required for a decision based on the then-available best scientific data and evaluation, particularly including water supply, water quality, and endangered species as well as tradeoffs.

- 2. Expedite the elevation of conflicts among these sometimes competing objectives.
- 3. Provide an "early warning," to senior policymakers in the State and Federal governments.
- 4. Draw on stakeholder knowledge and creativity in resolving issues.

Most operational conflicts will be resolved at the operator or agency director level, but Policy Group members need to remain informed as conflicts develop. As conflicts arise, an "early warning" will be provided to the Governor and Secretary of Interior to expedite the resolution of conflicts. As conflicts develop, they will be referred first to the CALFED Operations Group (Ops Group). The Ops Group was established by the 1994 Framework Agreement and the CALFED Agencies will continue the Ops Group. The Ops Group will work with the CALFED Operations and Fish Forum (OFF) (formerly known as the "No-Name Group"), and technical subgroups. Ops Group will communicate decisions and remaining conflicts to the Water Operations Management Team (WOMT).

Environmental Water Account operations will be managed pursuant to the EWA Operating Principles Agreement.

The WOMT is a high level agency group which includes the directors of DWR and DFG, and the regional directors of Reclamation, USFWS, NMFS and EPA. The WOMT will meet as the need arises to resolve conflicts among competing resource demands. As the WOMT resolves issues, it will explicitly consider water supply, water quality, and fishery impacts, as well as energy resource impacts in its decisions, and through the Ops Group, inform the public, stakeholders, and the legislature of the decision and basis for the decision. Nothing in this MOU is intended to prevent any CALFED Agency from carrying out its statutory duties.

7. Science

The purpose of the CALFED Science Program is: (1) to provide a comprehensive framework for developing new information and scientific interpretations necessary to implement, monitor, and evaluate the success of the CALFED Program (including all Program Elements); and (2) to communicate to managers and the public the state of knowledge of issues critical to achieving CALFED goals. The scope of the CALFED Science Program will include scientific information necessary for the CALFED Program and for State and Federal water operations. Specific objectives include:

- C Provide a comprehensive and integrated scientific context for CALFED activities
- C Ensure continuous advancement of credible scientific information that will guide regulatory decisions, adaptive management, and water project operations
- C Establish a framework to identify and articulate areas of scientific uncertainty relevant to key issues both before and after actions
- C Develop strategies to reduce uncertainties and track performance and progress toward CALFED goals

The work described in the Comprehensive Monitoring, Assessment, and Research Program (CMARP) technical appendix (Final EIS/EIR, July 2000) is now under the direction of the CALFED Science Program.

Attachment E, included within this MOU, describes the responsibilities and structure of the CALFED Science Program.

E. Annual Report

The CALFED Policy Group will submit an Annual Report to the Governor, the Secretary of the Interior, Congress, the California Legislature, and other interested parties that describes the status of implementation of the CALFED Program. Prior to November 15 of each year, the Policy Group, in consultation with other interested persons and agencies, will review the progress in meeting the implementation schedule established in the final programmatic EIS/EIR and ROD, and the progress in meeting CALFED Program objectives and targets.

The Annual Report will be submitted by December 15. The report will include a status report on all actions taken to meet CALFED objectives, as described in the ROD.

F. Cost Crediting

State and Federal agencies and stakeholders have contributed, and will continue to contribute, funds to support the CALFED Program. Crediting for costs incurred for CALFED programs or actions will be addressed as cost allocations are determined for specific programs or actions.

G. Ecosystem Cost-sharing Agreement

The Department of Interior and the Resources Agency agree that the *Agreement for Cost Sharing Related to Restoration Under Proposition 204 and the Bay-Delta Act*, dated January 28, 1998 ("Ecosystem Cost Sharing Agreement"), shall remain in effect unless modified or terminated by the parties thereto under the terms of that Agreement. The Department of Interior and the Resources Agency confirm that the Ecosystem Cost Sharing Agreement satisfies the requirements of Proposition 204, as codified in Water Code section 78684.10, which requires a cost-sharing agreement between the State of California and the United States prior to the expenditure of the \$390 million appropriated for ecosystem restoration. Pursuant to paragraph II(D)(1)(a) of the Ecosystem Cost Sharing Agreement, the Secretary of the Interior and the Secretary for Resources approve the inclusion of the sources of funding listed under paragraph II(B)(2) of that agreement. The Department of Interior and the Resources Agency intend to amend the Ecosystem Cost Sharing Agreement and the Resources Agency intend to amend the Ecosystem Cost Sharing Agreement of Interior and the Resources Agency intend to amend the Ecosystem Cost Sharing Agreement of Interior and the Resources Agency intend to amend the Ecosystem Cost Sharing Agreement by December 31, 2000 provided both parties have the authority to do so.

H.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 shall be contingent upon appropriation or allotment of funds in accordance with 31 USC 1341(Anti-Deficiency Act). No liability shall accrue to the United States or the State of California 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 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 shall accrue to the State of California for failure to perform any obligation under this MOU in the event that funds are not appropriated.

I. Legal Consistency

All provisions of this MOU are intended and shall be interpreted to be consistent with all applicable provisions of State and Federal law.

J. Modification

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

K. Term of the MOU

This MOU shall expire on September 30, 2003 unless terminated or extended by written agreement of all parties hereto.

L. Signature in Counterparts

This MOU may be executed in counterparts.

Having considered the contents of this document, its attachments and the documents supporting this decision, we hereby adopt this Implementation Memorandum of Understanding. By signing this document together, we exercise our respective authorities over only those portions relevant to our authority.

Signed and dated:

United States of America

David J. Hayes, Deputy Secretary of the Interior U.S. Department of the Interior

Richard E. Rominger, Deputy Secretary U.S. Department of Agriculture

8.2.8.00 Date

Date

28/00

Michael J. Spear, Manager California-Nevada Operations U.S. Fish and Wildlife Service

Lester A. Snow, Director, Mid-Pacific Region U.S. Bureau of Reclamation

John D. Buffington, Regional Director U.S. Geological Survey

Al Wright, Acting State Director U.S. Bureau of Land Management

CALFED Bay-Delta Program Attachment 3 Implementation Memorandum of Understanding

15

Date

Date

Date

August 28, 2000

Having considered the contents of this document, its attachments and the documents supporting this decision, we hereby adopt this Implementation Memorandum of Understanding. By signing this document together, we exercise our respective authorities over only those portions relevant to our authority.

Signed and dated:

United States of America

David J. Hayes, Deputy Secretary of the Interior U.S. Department of the Interior

Date

Date

28/00

Richard E. Rominger, Deputy Secretary U.S. Department of Agriculture

Michael J. Spear, Arnager California-Nevada Operations U.S. Fish and Wildlife Service

Lester A. Snow, Director, Mid-Pacific Region U.S. Bureau of Reclamation

28/00

John D. Buffington, Regional Director U.S. Geological Survey

Al Wright, Acting State Director U.S. Bureau of Land Management

8/28/00

Date

Date

August 28, 2000

Felicia Marcus, Regional Administrator U.S. Environmental Protection Agency

Brigadier General Peter T. Madsen, Commander South Pacific Division U.S. Army Corps of Engineers

Ø Date

28 1Jung 00 Date

State Conservationist Jeffrey Natural Respurces Conservation Services

Bradley E. Powell, Regional Forester Pacific Southwest Region U.S. Forest Service

Rebecca Lent, Ph.D., Regional Administrator Mational Marine Fisheries Service

Toenyes, Regional Manager Sierra Nevada Region Western Area Power Administration

8.28.00

Date

8-28-00 Date

8/28/60 Date

128/00

State of California

Mary D. Nichols, Secretary California Resources Agency

ector omas M. Hannigan, Di

California Department of Water Resources

Robert C. Hight, Director California Department of Fish and Game

1. Actox

Winston H. Hickox, Secretary California Environmental Protection Agency

Edward C. Anton, Acting Executive Director California State Water Resources Control Board

Will J. Lvons Jr., Secreta (m (a Department of Food and A priculture Cali

Date

000

600

Date

Date

8/18/00

Date

00

CALFED Bay-Delta Program Attachment 3 Implementation Memorandum of Understanding

17

August 28, 2000

0

9/8/00 Ďate

Barbara LeVake, President The Reclamation Board

August 28, 2000 (Rev. 9/8/00)

Dianal M. Bontá, R.M., Dr.P.H., Director 4 California Department of Health Services

22/00 9 Date

17b

ity

00 9 Dat

Patrick N. McCarty, Chairman Delta Protection Commission

CALFED Bay-Delta Program Attachment 3 Implementation Memorandum of Understanding August 28, 2000 (Rev. 9/28/00)

17c

Barryl W. Young Director Department of Conservation

25/01 Date

CALFED Bay-Delta Program Attachment 3 Implementation Memorandum of Understanding

Attachment A

Description of Oversight, Management and Support Responsibilities

CALFED Program Oversight and Coordination

- <u>Oversight of CALFED Implementation</u>: Policy Group and Program Staff will provide overall oversight and coordination for implementation of the CALFED Program to ensure balanced implementation, integration and continuous improvement in all Program Elements. Policy Group will develop policies and make recommendations regarding integration, coordination, and consistency for significant CALFED Program products for each Program Element. Program Staff will oversee and direct the CALFED Science Program and coordinate environmental compliance for the CALFED Program, and evaluate the status and efficacy of mitigation measures.
- 2. <u>CALFED Program Assessment and Modification</u>: The Policy Group will review and approve an annual performance assessment across all Program Elements prepared by Program Staff with agency, public, and scientific review by CALFED Independent Science Board and panels. Prior to submission to the Policy Group, the CALFED Independent Science Board will review the assessment for determination of whether the CALFED Program is achieving its objectives. The Policy Group will be responsible for modification, as needed, of CALFED Program goals and objectives which will be done in coordination with the appropriate agencies and with public input.
- 3. <u>Recommend Approval of Category A Priorities, Workplans, and Budgets</u>: The Policy Group will review annual and long-term priorities, workplans and proposed budgets for Category A Programs and funding in each Program Element and either recommend modifications or recommend approval and provide a statement of consistency. The Policy Group will review and recommend approval for significant program products throughout planning and implementation of the CALFED Program. Annual workplans will be submitted to the Policy Group after first being reviewed by the Executive Director and Program Staff.
- 4. <u>Final Approval of Priorities, Workplans and Budgets</u>: Agencies with funding authority will review and provide final approval of priorities, workplans, and budgets considering recommendations by the Policy Group.
- 5. <u>Agency and Program Element Coordination</u>: The Policy Group and Program Staff will provide coordination and facilitation between agencies, and coordination and integration between Program Elements to ensure CALFED Program objectives and schedules are being met. The Policy Group will mediate conflicts among agencies implementing the CALFED Program.

- 6. <u>Review and Coordination of Related Programs</u>: The Policy Group and Program Staff will provide for coordination (and integration as appropriate) of the CALFED Program with other related programs (including Category B Programs) to maximize available resources and reduce conflicts. The Policy Group will approve the CALFED Cross-Cut Budget prepared by the Program Staff. Policy Group will provide recommendations to the appropriate agencies on Program modifications needed to increase coordination with CALFED activities.
- 7. <u>Public Outreach and Communication</u>: The Policy Group and Program Staff will maintain contact and communications with the public and media regarding CALFED Program development, implementation, and performance.
- 8. <u>Legislative Communication</u>: Policy Group agencies, in coordination with the Bay-Delta Executive Director, will maintain contact and communications with Congress and the State Legislature regarding the status of CALFED Program development, implementation, and performance.
- 9. <u>CALFED Program Reporting and Tracking</u>: Program Staff will develop and manage a Comprehensive Reporting System which will provide status on expenditures, schedule, and meeting of objectives for each Program Element measured against established targets. The schedules will be set consistent with the Framework for Action and the ROD. Performance will be measured against cost, schedule and CALFED Program objectives. The reporting system will include information on expenditure and work progress on a regular basis from the implementing agencies and entities.

Program Element Management

Described below are the responsibilities of the Program managers for each CALFED Program Element. Program managers will only manage those Category A Programs where they have been assigned responsibility by this MOU and by the agency with funding authority. For example, Resources Agency has assigned responsibility for Ecosystem Proposition 204 funds to the Program Staff. In certain cases, Category A Programs will be managed by other agencies and not the Program Manager assigned to manage the Program Element. For example, the CVPIA programs listed in Category A should be managed consistent with CALFED objectives, but management responsibility will remain with USFWS and Reclamation . In these cases, the agencies with responsibility for managing Category A Programs will follow the review process described in this MOU and coordinate with Program Staff and appropriate Program managers.

1. <u>Develop priorities, workplans and budgets</u>: The Program manager(s) will develop Program Element priorities, workplans and budgets in coordination with appropriate agencies, Program Staff, the public, and technical and scientific resources. Program managers will submit proposed priorities, workplans, budgets, and significant program products to Program Staff for review and to the Policy Group for review, recommended approval and statement of consistency. Program Managers will work with Program Staff regarding environmental compliance/permit coordination and scientific aspects of each Program Element.

- 2. <u>Propose projects and actions</u>: The Program manager will 1) manage the solicitation and selection process for grants and loans and 2) submit proposed projects and actions to Program Staff for review and to Policy Group for review, recommended approval, and statement of consistency.
- 3. <u>Implement projects and actions</u>: The Program manager will: 1) oversee the implementation of the Category A projects and actions to ensure completion as proposed and, 2) provide regular status reports on projects and actions to Program Staff and Policy Group as part of Comprehensive Reporting System.
- 4. <u>Program Element assessment</u>: The Program manager will draft initial assessment of Program Element performance with appropriate agencies, Program Staff, the public, and with technical and scientific review and input. Assessment is submitted to Program Staff for review and submitted to the Policy Group for approval and incorporation into the Annual Report.
- 5. <u>Coordination</u>: The Program manager coordinates with, and obtains input from, Program Staff, appropriate agencies, public, local regions, and technical and scientific sources in the design and implementation of the Program Element.

Program Support

Numerous governmental and nongovernmental agencies will be involved in critical aspects of CALFED implementation. This MOU describes the various roles of the State and Federal agencies signing this MOU. Although many CALFED Agencies will have a coordinating role in CALFED implementation, for the purposes of this MOU, only the agencies with a key role in implementation have been listed.

Attachment B

Oversight, Management and Support Responsibilities for Program Elements

1. Levee System Integrity

The CALFED Levee System Integrity Program (Levee Program) in large part adopts an existing program (Delta Subventions and Special Projects) currently managed by DWR with oversight by DFG, Resources Agency, California Water Commission and Reclamation Board. Because of the expertise and existing program authority and structure in place, the CALFED Levee Program will be co-managed by the DWR and the USACE. The Policy Group and Program Staff will provide oversight in coordination with existing oversight agencies.

Oversight and Coordination

- C The Policy Group and Program Staff
- C The California Water Commission will continue to be responsible for Program approval for the Special Projects Program, and Reclamation Board for the levee subvention program, but will consider the recommendations from the Policy Group
- C The Resources Agency and DFG will continue their responsibilities under current law to review and approve DWR levee plans (subventions and special projects). The Resources Agency and DFG will coordinate with the CALFED Levee and Ecosystem Restoration Programs.

Program Management

C DWR and the USACE will co-manage the CALFED Levee Program. DWR and the USACE will develop a recommendation to the Policy Group by February 1, 2001, in coordination with other interested agencies and stakeholders, that describes how the Levee Program will be co-managed and responsibilities distributed.

Program Support

- C NRCS will coordinate with the Levee Program on NRCS-related programs such as the Emergency Watershed Protection Program which provides emergency financial and technical assistance, and the Floodplain Easement Program.
- C Regulatory Agencies -- USFWS, NMFS, DFG, SWRCB, Central Valley Regional Water Quality Control Board, State Lands Commission.

2. Ecosystem Restoration Program

The governance of the Ecosystem Restoration Program (ERP) has been a focus of discussion for over three years. This Program has received significant attention primarily because of the size and complexity of the Program and the current fragmentation of the restoration Programs among State and Federal agencies. CALFED believes the ERP will be managed most successfully by the Program Staff, with input from appropriate agencies, the public, and scientific and technical sources. The ERP includes the ecosystem water quality actions. The ERP would continue to be under the oversight of the Policy Group.

The five State and Federal agencies that execute the EWA Operating Principles Agreement will have responsibility for implementing the EWA. The EWA management agencies will be USFWS, NMFS, and DFG. The management agencies will exercise their biological judgement to determine what SWP/CVP operational changes are beneficial to the Bay-Delta ecosystem and/or the long-term survival of fish species, including those listed under the State and Federal Endangered Species Acts. The project agencies (Reclamation, and DWR) will cooperate with the management agencies in administering the EWA, including banking, borrowing, and conveyance of EWA assets and making operational changes proposed by the management agencies. The project agencies will also be responsible for acquiring EWA assets for the first year. Policy Group will oversee the EWA.

Oversight and Coordination

- C Policy Group/Program Staff/Executive Director
- C Final Program and Funding Approval -- Numerous State and Federal agencies will participate in funding ERP actions and therefore will have final program authority for those actions (such as Resources Agency, DFG, USFWS, NMFS, Reclamation)

Program Management

- C Program Staff for ERP
- C Fishery Agencies for EWA

Program Support

- C Regulatory Agencies -- USFWS, NMFS, USACE, DFG, SWRCB, Regional Boards, State Lands Commission, Reclamation Board
- C Implementing Agencies -- EPA, BLM, USFWS, USACE, NRCS, DFG, SWRCB, DFA, Department of Parks and Recreation, Department of Conservation, DWR and Reclamation.

3. Watershed Program

The CALFED Watershed Program (Watershed Program) will be managed initially by Program Staff with a final decision on management by February 1, 2001. The Policy Group will provide program oversight and coordination.

Oversight Coordination

- C Policy Group
- C Final Program and Funding Approval -- Numerous State and Federal agencies will participate in funding Watershed actions and therefore will have final program authority for those actions (such as Resources Agency, SWRCB, DFG, DWR, USFS, NRCS, USFWS, EPA)

Program Management

C Program Staff will initially assume Program Management responsibility for the Watershed Program. SWRCB, Resources Agency and NRCS, with input from other interested agencies and stakeholders, will develop a recommendation in an MOU to Policy Group by February 1, 2001, on the future program management of the Watershed Program. Approval by the Policy Group of the recommendations in the Watershed MOU shall not require modification of this Implementation MOU by the process set forth in Section J.

Program Support

- ^c Implementing Agencies -- USFS, NRCS, EPA, BLM, SWRCB, Regional Boards, DWR, DFG, DFA, DOC, DPR, CDF.
- C Regulatory Agencies.-- USFWS, NMFS, USACE, DFG, SWRCB, Regional Boards.

4. Water Quality (Drinking Water)

Responsibility for drinking water quality in the Bay-Delta ecosystem is currently shared among several State and Federal agencies. The CALFED Drinking Water Quality Program (DWQ Program) includes a broad array of actions and approaches. Program management for the DWQ Program is assigned initially to Program Staff with a final decision on management by February 1, 2001. Policy Group will provide oversight and coordination.

Oversight and Coordination

- C Policy Group
- ^C Final Program and Funding Approval -- Several State and Federal agencies will participate in funding Drinking Water Quality actions and therefore will have final program authority for those actions (such as SWRCB, Central Valley RWQCB, DHS, DWR, EPA).

Program Management

C Program Staff will initially assume Program Management responsibility for the DWQ Program. DHS, SWRCB, and EPA, with input from other interested agencies and stakeholders, will develop a recommendation in an MOU to Policy Group by February 1, 2001 on the future program management of the CALFED DWQ Program. Approval by the Policy Group of the recommendations in the DWQ MOU shall not require modification of this Implementation MOU by the process set forth in Section J.

Program Support

- C Implementing Agencies: SWRCB and Central Valley RWQCB will implement studies and research on source water improvements, develop water quality objectives in revised basin plans to address drinking water contaminants and contaminant precursors. USEPA and DHS will implement treatment and health effects research and studies. DWR and Reclamation will participate in engineering and other aspects of actions related to source water improvement, storage and conveyance. DFA will participate in drainage management and salt utilization.
- C Regulatory Agencies. DHS, SWRCB, Central Valley RWQCB, and EPA.

5. Water Transfers Program

Three agencies (Reclamation, SWRCB, and DWR) have current authority for water transfers in California. The CALFED Water Transfers Program adopts actions that will reduce the barriers to water transfers and increase the access to information on water transfers. The three agencies will assume responsibility for managing and implementing the Water Transfer Program actions, and the Policy Group and Program Staff will provide Program oversight and coordination. To ensure equal oversight of the Water Transfers Information Clearinghouse by the three agencies, the Program Staff will manage the Clearinghouse under the direction and coordination of the three agencies.

Oversight and Coordination

- C Policy Group and Program Staff
- C Final Program and Funding Approval -- DWR, SWRCB, and Reclamation will participate in funding Water Transfer Program actions and therefore will have final program authority for those actions.

Program Management

- C SWRCB, DWR, and Reclamation will co-manage the Water Transfers Program
- C Program Staff will manage the Water Transfer Information Clearinghouse in coordination with and under the direction of the DWR, SWRCB, and Reclamation, as well as the Policy Group.

6. Water Use Efficiency

The CALFED Water Use Efficiency Program (WUE Program) includes water conservation and water recycling components.

- A. <u>Conservation</u>: The Water Conservation component builds upon existing State and Federal Water Conservation programs within DWR, Reclamation, and NRCS, but is broader in scope and adopts new approaches. The Water Conservation component will be co-managed by DWR, Reclamation, and NRCS. Assignment of responsibility for program management is based on agency expertise and program authority. Assigning responsibility for Program Management to existing State and Federal agencies will increase the integration and coordination with existing related programs.
- B. <u>Recycling</u>: The SWRCB and Reclamation will manage the recycling component of the WUE Program because of their expertise and current authority with these programs and to increase integration with existing programs. The Policy Group and Program Staff will provide oversight and coordination.

Oversight and Coordination

- C Policy Group and Program Staff
- ^C Final Program and Funding Approval -- Several State and Federal agencies will participate in funding WUE and Recycling actions and, therefore will have final Program authority for those actions (such as Reclamation, NRCS, USFWS, SWRCB, and DWR).

Program Management

- C DWR will manage the WUE loan and grant program (excluding CVPIA and NRCS financial assistance) and co-manage technical assistance programs with Reclamation and NRCS.
- C Reclamation will manage the CVPIA WUE financial and technical assistance programs and Federal recycling programs in coordination with SWRCB.
- C NRCS will co-manage the on-farm agricultural WUE technical assistance with DWR.
- C SWRCB will manage State recycling programs in coordination with Reclamation.

Program Support

C Implementing Agencies -- the USFWS will continue, as part of the CVPIA, to be the lead implementing agency for providing financial and technical assistance for managed wetlands. DFA will continue to cooperate with NRCS, Reclamation, and DWR in supporting the onfarm efficient water management practices and the activities of the Agricultural Water Management Council.

7. Storage

The CALFED Water Storage Program (Storage Program) includes planning, design and possible construction of surface and groundwater storage facilities. DWR and Reclamation are the State and Federal agencies with expertise and program and funding authority in the planning, and construction of water storage facilities. DWR and Reclamation will continue to manage the storage activities. WAPA will support the implementing agencies in evaluating and analyzing power- related storage alternatives. The Policy Group and Program Staff will provide oversight and coordination.

Oversight and Coordination

- C Policy Group and Program Staff
- ^C Final Program and Funding Approval --The Reclamation and DWR will provide funding and therefore will have final program authority for those actions.

Program Management

^C DWR and Reclamation will co-manage the CALFED Surface and Groundwater Storage Program. Distribution of responsibilities will be determined based on expertise, funding authority, and location of the proposed project in the State or Federal water project service area.

Program Support

- C Regulatory Agencies -- USACE, USEPA, NMFS, USFWS, DFG, State Lands Commission, SWRCB
- C Implementing Agencies -- DWR, Reclamation.

8. Conveyance

The Conveyance Program of the CALFED Program includes actions to improve ecosystem health, water supply reliability, and water quality. DWR and Reclamation will co-manage the Conveyance Program. Project management responsibility will remain with Reclamation, DWR, DFG, and other state, Federal or local entities with expertise in individual projects. The Program Staff and Policy Group will provide oversight and coordination for the Conveyance Program.

Oversight and Coordination

- C Policy Group and Program Staff
- ^C Final Program and Funding Approval -- Several State and Federal agencies will participate in funding the conveyance actions and, therefore will have final program authority for those actions (such as Reclamation, DWR, DFG).

Program Management

C DWR and Reclamation will co-manage the Conveyance Program actions. Distribution of program and project management between the two agencies will be based on expertise and relationship to State and Federal water project operations. DWR and Reclamation will report to the Policy Group on the recommended distribution of responsibilities between their two agencies by December 1, 2000.

Program Support

- C Implementing Agencies/ Project Management -- DWR, Reclamation
- C Regulatory Agencies -- SWRCB, USEPA, USACE, USFWS, NMFS, DFG, Reclamation Board, State Lands Commission, Regional Boards

Funding Agency / Program Element	Category A	Category B
	Programs (Funding Source)	Programs (Funding Source)
Resources Agency		
Ecosystem Restoration	CALFED Ecosystem Restoration (Prop 204 \$390 million)	
Department of Water Resources		
Ecosystem Restoration	CVPIA State Cost Share (Prop 204) Four Pumps Agreement (State Water Project (SWP))	Sacramento-San Joaquin Comprehensive Study Urban Streams and Flood Protection Corridor (Prop 13) Suisun Marsh Protection (SWP, General Fund (GF))
Water Quality	Bay-Delta Multi-purpose Water Management (Prop 13 - Iow dissolved oxygen & abandoned mine drainage)	Agricultural Drainage Program (SWP, Prop 204)
Water Use Efficiency (WUE)	Agricultural and Urban WUE technical assistance (GF) WUE Loans (Prop 13)	
Water Transfers	Water Transfers Facilitation and Marketing (SWP)	
Levees	Delta Levee Maintenance Subventions (Prop 13) Special Flood Control Projects (Prop 13) Delta Levees Emergency Response (Prop 13)	
Storage	Integrated Storage Investigations (GF) Groundwater Storage/Conjunctive Use (Prop 13) Groundwater Recharge (Prop 13)	Statewide Planning Program/Bulletin 160 (GF) Bulletin 118 process/Groundwater Assessment (Prop 13)
Conveyance	Bay-Delta Multi-purpose Water Management (Prop 13 - In-Delta Ag Drainage, SWP/CVP fish facilities, South Delta Barriers, and Grant Line Canal Barrier) Delta Facilities Planning (SWP)	
Science Program	Interagency Ecological Program (SWP)	

Funding Agency / Program Element	Category A	Category B
	Programs (Funding Source)	Programs (Funding Source)
State Water Resources Control Board		
Water Use Efficiency (WUE)	Water Recycling (Bond MeasuresProp 204, Prop 13, etc) Water Recycling (Clean Water State Revolving Fund)	
Watershed		Watershed Protection (Prop 13)
Water Quality		Nonpoint Source Pollution (Clean Water Act 319h, 205j, 104b3, 106, 604b, Prop 13) Water Quality Planning (Clean Water Act 205j, 604b) Total Maximum Daily Load (Clean Water Act 104b3, 106, 319)
Science Program	Interagency Ecological Program	,
Department of Fish and Game		
Ecosystem Restoration	CVPIA State Cost Share (Prop 204)	Lands and Natural Areas Program (multiple funds) Watershed Program/Trinity portions Restoration Programs (multiple funds)
Science Program	Interagency Ecological Program	Salmon and Steelhead Assessment and Monitoring Program (GF)
Wildlife Conservation Board		
Ecosystem Restoration		Land Acquisition Programs (Wildlife Restoration Fund (WRF), Habitat Conservation Fund (HCF)) Inland Wetlands Conservation Program (WRF, HCF) California Riparian Habitat Conservation Program (WRF, HCF)
Department of Parks & Recreation		
Ecosystem Restoration	Sacramento, San Joaquin, and Cosumnes River Corridors (Prop 12 - \$13 million one time FY 00-01)	Land Acquisition and Restoration (multiple funds)
Department of Boating and Waterways		
Ecosystem Restoration		Egeria & Water Hyacinth Management Programs (Harbors and Watercraft Revolving Fund (HWRF))
Department of Health Services		
Water Quality		Safe Drinking Water State Revolving Fund
Department of Forestry and Fire Protection		
Watershed		California Forest Improvement Program (CFIP) (State Forest Resources Improvement Fund) Stewardship Incentive Program (SIP) (Federal Cooperative Forestry Assistance Act of 1978 (FCFAA)) Forest Stewardship Program (FCFAA)

Funding Agency / Program Element	Category A	Category B
	Programs (Funding Source)	Programs (Funding Source)
Department of Food and Agriculture		
Ecosystem Restoration		Integrated Pest Control Branch - Hydrilla Eradication Program (GF, HWRF, Agricultural Fund, Reimbursable Funds)
Water Quality		On-farm Ag Drainage Management (Prop 204) Fertilizer Research and Education Dairy Quality Assurance Program
State Lands Commission		
Ecosystem Restoration		Land Acquisition and Conservation (Kapiloff Land Bank)
U.S. Bureau of Reclamation		
CALFED Program Implementation	CALFED Appropriation (includes Bay-Delta Act)	
Ecosystem Restoration Water Use Efficiency (WUE)	CVPIA, Anadromous Fish Restoration Program & Anadromous Fish Screen Program (Restoration Fund (RF)) CVPIA, Water Acquisition (RF, WRR) CVPIA, Dedicated Project Yield (RF) CVPIA, Clear Creek Restoration (RF, WRR) CVPIA, Butte Creek Restoration (WRR) CVPIA, Butte Creek Restoration (WRR) CVPIA, Spawning Gravel/Riparian Habitat (RF) Tracy Direct Loss Mitigation Program/Tracy Agreement (WRR) CVPIA, Water Conservation (WRR, CVP Operations & Maintenance)	Suisun Marsh Protection (Water and Related Resources (WRR))
Water Transfers	Water Recycling (Title XVI) Water Transfers Facilitation and Marketing (WRR,	
Water Quality	CVP, Water Marketing)	CVPIA, Land Retirement (RF) Drainage Management Program (WRR) CVPIA, San Joaquin Basin Action Plan (WRR)
Storage	CVP Yield Feasibility, Shasta Enlargement (WRR) CVPIA, Project Yield Increase (3408(j))	· · · · · · · · · · · · · · · · · · ·
Conveyance	CVPIA, Tracy Fish Facilities Improvement Program (RF)	
Science Program	Interagency Ecological Program (WRR)	Central Valley Assessment/Monitoring Program (CAMP) (RF)

Funding Agency / Program Element	Category A	Category B
	Programs (Funding Source)	Programs (Funding Source)
U.S. Army Corps of Engineers		
Ecosystem Restoration	Prospect Island (Section 1135) Cosumnes/Mokelumne Study (GI)	Sacramento-San Joaquin Comprehensive Study (Energy and Water Appropriations Act, General Investigations (GI)) Section 1135 Programs for projects in the CALFED Solution Area (Section 1135, WRDA 86) General Investigations Program (for projects in the CALFED solution area) (GI)
Levees	Delta Study (GI)	
Science Program	Interagency Ecological Program	
Natural Resource Conservation Service		
Watershed/Ecosystem		Wetlands Reserve Program (Federal Agriculture Improvement & Reform Act of 1996 (Farm Bill)) Environmental Quality Improvement Program (Farm Bill)
Water Use Efficiency (WUE)		Environmental Quality Incentive Program (Farm Bill)
U.S. Fish & Wildlife Service		
Ecosystem Restoration	CVPIA, Anadromous Fish Restoration Program & Anadromous Fish Screen Program (RF) CVPIA, Water Acquisition (RF, WRR) CVPIA, Clear Creek Restoration (RF, WRR) CVPIA, Butte Creek Restoration (WRR) CVPIA, Spawning Gravel/Riparian Habitat (RF)	Federal Aid in Wildlife Restoration (Pittman-Robertson Act) Cooperative Endangered Species Conservation Fund North American Wetlands Conservation Fund Land Acquisition Program Partners for Fish & Wildlife Program
Science Program	Interagency Ecological Program	
U.S. Geological Survey		
Science Program	Interagency Ecological Program	Monitoring Programs in the Bay-Delta System
U.S. Environmental Protection Agency		
Ecosystem Restoration Water Quality		 National Estuary Program (CWA 320) Nonpoint Source Pollution (Clean Water Act 319h, 205j, 104b3, 106, 604b) Water Quality Planning (Clean Water Act 205j, 604b) Total Maximum Daily Load (Clean Water Act 104b3, 106, 319) Safe Drinking Water State Revolving Fund Clean Water State Revolving Fund Sacramento River Watershed Program
Science Program	Interagency Ecological Program	

Funding Agency / Program Element	Category A	Category B
	Programs (Funding Source)	Programs (Funding Source)
U.S. Forest Service		
Watershed		Land Stewardship, restoration, and reforestation programs
		(National Forest System Appropriations, Prescribed Fire and
		Brush Disposal Trust Funds, Salvage Harvest Funds)
Science Program		Pacific Southwest Forest & Range Research Program
National Marine Fisheries Service		
Science Program	Interagency Ecological Program	





Attachment E

CALFED Science Program

<u>Functions and Responsibilities</u>: The CALFED Science Program will provide one Comprehensive Monitoring, Assessment and Research program to serve all the CALFED Program Elements. This will be accomplished by building on the foundation of existing agency and stakeholder science programs, including the Interagency Ecological Program (IEP). IEP consists of representatives from USGS, Reclamation, FWS, EPA, NMFS, USACE, SWRCB, DWR, DFG, and stakeholder communities. The Science Program will be neither fully independent, nor fully imbedded in the CALFED Program Elements. Rather, the Science Program will provide a balance of independent review/oversight to ensure credibility. The CALFED Science Program will have a role in performing and/or overseeing the following functions:

- 1. Planning and Priorities
- 2. Monitoring
- 3. Data Management
- 4. Assessment (e.g. status and trends, project, regional)
- 5. Research
- 6. Trial Implementation Actions
- 7. Reporting
- 8. Independent Science Review
- 9. Coordination

<u>Lead Scientist and Program Staff</u>: The Science Program will be directed by a Lead Scientist that reports directly to the CALFED Executive Director. The Science Program will be developed and directed by an Interim Lead Scientist, who will also serve in the role of Lead Scientist in the initial years of Program implementation.

The Lead Scientist will facilitate integration among Program Elements, especially where technical issues and outcomes of actions have implications for more than one Program Element. The Lead Scientist will be supported by a technical staff member who will interface with Program Staff, scientists, other technical experts and agency staff from other related programs, including regulatory staff. Science Program staff will not actually do fieldwork and data collection, but will direct and integrate science and management activities with a focus on the "big picture." Some Science Program Staff will be dedicated to specific CALFED Program Elements and will have joint reporting responsibility to both the Lead Scientist and the respective Program Manager. Each CALFED Program Element will retain science/technical staff, as appropriate, with responsibilities for their particular program and coordination with the CALFED Science Program.

The Lead Scientist has the responsibility to assure that monitoring is conducted to provide information to assess progress toward meeting goals and objectives of the CALFED Program. The Lead Scientist is responsible for establishing an overall monitoring strategy and performance measures for CALFED. System-wide status and trends monitoring and regional monitoring are particular responsibilities of the Lead Scientist with oversight of the monitoring of individual projects conducted by the Program Elements. Coordination of monitoring components among CALFED Program Elements is part of this responsibility.

With regard to research, the Lead Scientist will be responsible for CALFED producing studies that are relevant, authoritative and objective. The studies should progressively reduce uncertainties about critical issues, add to the knowledge that aids water management and ecosystem restoration, and help prepare for future uncertainties. Identifying the state of knowledge will be accomplished by white papers, workshops of experts, or other objective, expert-based analyses. Prioritization of research will begin with the 12 uncertainties specified in the ERP Strategic Plan.

The Lead Scientist has the responsibility for making sure that the findings of the CALFED Science Program are shared with the Policy Group, Program managers, the public, and the scientific community.

<u>Adaptive Management</u>: An overarching principle of the Science Program is adaptive management. Adaptive management is defined as using and treating actions as partnerships between scientists and managers, designing those actions as experiments with a level of risk commensurate with the status of those species involved, and bringing science to bear in evaluating the feasibility of those experiments. New information and scientific interpretations will be developed via adaptive management as the programs progress, and will be used to confirm or modify problem definitions, conceptual models, research, and implementation actions.

Adaptive management will be conducted within the programs, and as such must be carried out within the programs. However, the Lead Scientist will, in collaboration with the programs, develop a general strategy with regard to the scientific aspects of the adaptive management. The strategy will be common among the programs to the extent possible. The Lead Scientist will report annually to the Executive Director and the Policy Group on the implementation by the CALFED Program of science and the scientific aspects of the adaptive management process.

<u>Science Coordination Team</u>: Consistent with FACA, the Science Program will establish a Science Coordination Team chaired by the Lead Scientist to assist in implementing the Science Program. The team will consist of technical experts and scientists from the CALFED Agencies and stakeholder communities implementing and or monitoring major elements of the CALFED Program. Agency/stakeholder technical workgroups will be formed to assist in defining and implementing various aspects of the Science Program. For example, the existing Agency/Stakeholder Ecosystem Team (ASET) will likely continue to provide assistance to implementing the ERP.

<u>Independent Science Review</u>: The Science Program is committed to extensive external peer review and extensive use of expert technical panels to clarify the state of knowledge and recommend scientific directions. The Science Program will include two levels of independent review: a standing Independent Science Board for the entire CALFED Program, and a variety of Science Panels focused on specific programs/issues.

The Independent Science Board will be responsible for advising the Science Program and CALFED Executive Director on key scientific issues as well as providing periodic reviews of the quality and effectiveness of the CALFED Science Program itself.

Program/issue specific Science Panels may be standing bodies or convened on an as needed basis. For example, an independent EWA Science Panel will be convened before the end of 2001. Also, the existing ERP Interim Science Board will likely become the ERP Science Panel and provide ongoing independent review of the ERP.

<u>Mitigation Monitoring</u>: It is the responsibility of the Science Program to review the overall efficacy of mitigation and to identify areas of uncertainty about mitigation approaches or areas that require more monitoring or study.

In order to fulfill this requirement, the lead agencies responsible for environmental review of project-specific actions will assure that appropriate programmatic mitigation, as well as project-specific mitigation measures are adopted, implemented, and monitored periodically, but at least annually. The lead agencies will report on their progress to Program Managers. Program Managers will evaluate and report their assessments to the Lead Scientist.

The Lead Scientist will provide a summary of this information to the Executive Director and Policy Group as a portion of the Annual Report described in Section E of this MOU.

<u>Interface with Regulatory Actions</u>: There will be a formal role for the Lead Scientist in advising on regulatory issues which entails:

- C review and clarify the state of knowledge
- C identify critical areas of study that could narrow uncertainties and ensure that such studies are on going
- C oversee and coordinate regional monitoring
- C advise programs about the composition of advisory committees
- C coordinate broad reviews and assessments of the detectable environmental responses to regulatory decisions and management actions and use that information to feedback into the plans for future actions and evaluations of those actions

The Lead Scientist will identify, through consultation with stakeholders and technical experts, controversial issues that have arisen in previous regulatory activities and set up a process to address, clarify and make progress toward resolving those issues.

The role of the Science Program will be one of guidance, review, and overall performance assessments. Independence from day-to-day activities is needed to assure the credibility of reviews and studies designed to reduce uncertainties and facilitate better management. The Lead Scientist (and Science Program) will not be directly involved in making regulatory decisions, but rather in ensuring that CALFED and the CALFED agencies are incorporating the best available knowledge into activities and decisions that are made, as well as continuously working toward narrowing uncertainties, improving that knowledge and advancing the debate. The Science Program will not be involved in day-to-day management decisions regarding water operations and the EWA.