

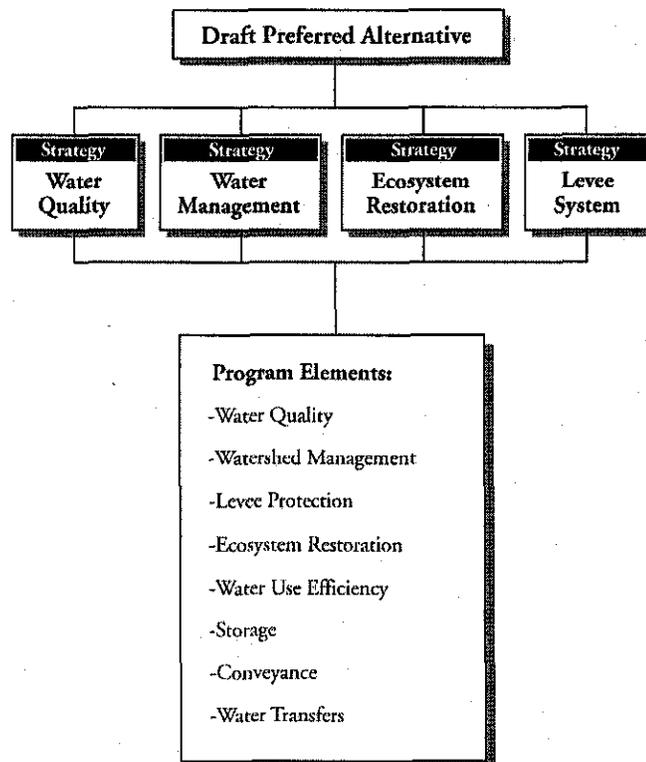
4.0 GOVERNANCE PLAN

The governance and decision-making structure for implementation of the CALFED Preferred Alternative is a key feature in assuring successful program implementation. CALFED is in the process of developing a long-term governance plan for the CALFED Bay-Delta Program and a decision on the long-term governance structure will be made by the time of the Final Programmatic EIS/EIR. Once the decision is made it is expected that it will take some time before the long-term governance structure is in place because of the time needed to enact legislation required to make changes to existing laws and authorities. While the long-term structure is being established, an interim governance structure will need to be in place. For the interim, CALFED proposes the continuation of essentially the current structure being used for the planning phase of the program but adapted to support the implementation phase. The interim structure will be in place only as long as it takes to establish a long-term structure. A basic principle of the interim governance proposal is that there would not be any new legislation or changes in existing legal authorities.

The CALFED Program is complex, multi-objective, involves many agencies and programs, and covers a large geographic scope. In developing a long-term governance structure for the CALFED Program, the implementation principles, functions, and structure/form have been evaluated at two levels--the policy oversight level and the program element level. Each of the program elements supports on or more of the four CALFED resource strategies -- ecosystem restoration, water quality, water supply reliability, and levee system integrity. The strategies for the resource areas are described in the Phase II Report.

Included in this chapter is a discussion of the:

- Governance functions for implementation
- Existing governance for CALFED oversight and the program elements
- Interim governance structure for program oversight and the program elements
- Options for long-term governance (in some cases).



4.1 Background

The current organization of the CALFED Bay-Delta Program is shown below. The Bay-Delta Program is a collaborative effort between state and federal agencies to develop a long-term solution to the Bay-Delta problems. The operating principles were agreed to in the 1994 Framework Agreement, an interagency Memorandum of Understanding between the Governor's Water Policy Council and the Federal Ecosystem Directorate. The Bay-Delta Advisory Council (BDAC) a federally chartered citizens' advisory committee with over 30 members provides formal comment and advice to the agencies.

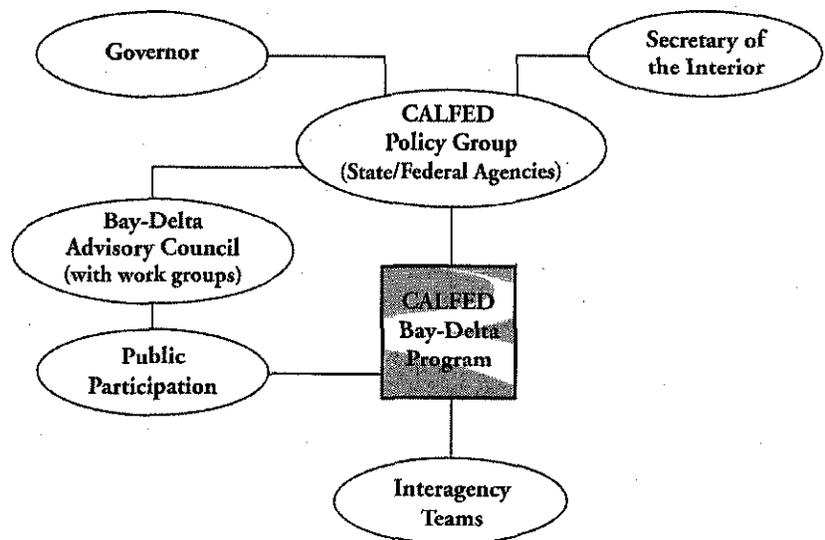
Currently there are 15 CALFED agencies (see list on following page) which have management or regulatory responsibilities for the Bay-Delta or its watershed. In addition, other agencies, such as the California Department of Food and Agriculture, regularly participate in the development of the CALFED policies which affect their agencies.

For the past several years, the CALFED Program has worked with a stakeholder advisory group on the governance issues.

Currently called the BDAC

Governance Workgroup, the Workgroup has focused mainly on the development of the governing structure for the ecosystem program. As the other program areas have become more developed, attention has expanded to governance at the policy oversight level and governance for the other resource areas and program elements.

Existing CALFED Program Structure



State CALFED Agencies

CA Resources Agency
 Department of Fish and Game
 Department of Water Resources
CA Environmental Protection Agency
 Water Resources Control Board

Federal CALFED Agencies

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

4.2 Program Functions for Implementation Phase

In developing a governance structure it is important to first identify the basic functions that need to be performed. The functions serve as the criteria by which to evaluate the different governance structure options. In addition, basic principles that guide development and selection of a governance structure have also been identified for some of the programs. CALFED has organized functions for implementation of the program into three categories to accommodate the complexity of the program. In all cases, the functions described throughout this report do not predetermine the form or governing structure that will be used. The functions helped structure the interim governance proposal and will guide the selection of a long-term governance structure.

Oversight Functions. Oversight of the program is critical to its success. Some entity will need to oversee the CALFED program during implementation, as the Policy Group has done during the planning stage. Because the program has four equal objectives, it will be important for the oversight entity to ensure balance and coordination between the objectives and to provide program direction. Oversight functions include:

- Overall program direction
- Oversight of CALFED program implementation
- Assessing CALFED progress
- Assuring balanced implementation
- Reviewing priorities and funding of programs managed by the CALFED Program

and programs managed by CALFED agencies. Recommending changes and approval to appropriate agencies with program and funding authority.

- Coordination between program elements and dispute resolution among CALFED agencies
- Coordination with related programs
- Stakeholder communication
- Legislative communication

Program Coordination and Management Functions. Program management and coordination for each program element and within each resource area will be critical for effective implementation. Program management and coordination functions include:

- Manage/oversee program element implementation
- Identify priorities, propose actions, develop budgets
- Assess and report on program element performance
- Coordinate with implementing agencies and stakeholders, and between program elements

Direct Implementation Functions. These functions have been identified separately because some agencies which may be involved in CALFED program element implementation may not have program management responsibility. For example, one entity (CALFED in the interim) may direct the Integrated Storage Investigation, while another entity (DWR or USBR) may be the lead on assessment for individual storage sites. Direct implementation functions include:

- Responsibility for direct implementation of individual programs and actions.
- Report on assessment and monitoring of individual programs or actions
- Prepare environmental documentation and obtain permits
- Stakeholder and local coordination for individual programs and actions

4.3 Program Oversight - Governance Structure

Existing Oversight Structure

During the planning phase of the program, the CALFED Policy Group has served as the primary governing body for coordination of individual agency decision-making on CALFED issues. Legal authority for program decisions currently rests with the Governor (for state matters) and the Secretary of Interior (for federal matters). Formal stakeholder input into the program has been provided by BDAC, BDAC Workgroups, Subcommittees, and other Technical Groups. As CALFED moves more into program implementation, new responsibilities will arise and new functions will be required.

Principles. Several principles should be considered as conditions for any governance structure proposed as an oversight entity:

- State and federal partnership
- Stakeholder involvement in decision-making
- Involvement by elected officials
- No impairment of existing agency regulatory authority
- Efficient decision-making
- Durability of agreements/decisions
- Accountability for agreements/decisions

Oversight Functions

- 1. Oversight of CALFED Program Implementation.** General oversight functions include: providing overall program direction, developing policies and making decisions in order to achieve program goals and objectives, making decisions required for staged decision-making, and providing for balanced implementation and continuous improvement in all resource areas. An oversight entity would also be the forum for assessing overall achievement of program goals and objectives. The assessment would be based on progress reports provided by the entities responsible for program management and implementation. An oversight entity would also be responsible for modification, as needed, of program goals and objectives which would be done in coordination with the management and implementing entities.
- 2. Review Budgets and Priorities -- Recommend Approval to Appropriate Agency.** An oversight entity would be responsible for reviewing and recommending approval of program priorities and budgets. Recommendations from the oversight entity would be forwarded to the agency which has the final program/funding authority. Review by an oversight entity would need to be coordinated with state and federal agency budget development, review, and approval processes. Programs would need to be identified within the state and federal agencies that are most related to CALFED objectives to determine what level of coordination and review those programs should have with/by CALFED. For example, the Delta Levee Subventions and Special Projects Programs, which are administered by DWR, have been fully incorporated into the CALFED Levee Program Plan. Therefore, a high level of coordination would be needed between CALFED and DWR to ensure the subventions and special projects programs support CALFED objectives.
- 3. Coordination and Conflict/Dispute Resolution.** An oversight entity would provide a forum for conflict/dispute resolution between CALFED agencies.

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4. **Coordination of Related Programs.** An oversight entity would provide for coordination of the CALFED Program with other related programs to maximize available resources, to ensure achievement of CALFED goals and objectives, and to reduce conflicts with other programs.
 5. **Stakeholder Communication.** Although implementing agencies for each program element will continue to work with stakeholders, an oversight entity would provide the central forum for stakeholder input and communication.
 6. **Legislative Communication.** An oversight entity would communicate with Congress and the California Legislature to report on program progress, answer legislative inquiries, review and respond to legislative proposals, and to review and submit legislative proposals. Legislative communication would need to be coordinated through the appropriate state and federal agencies.

Interim Oversight Governance

The interim structure will be in place from the time of the ROD and possibly for several years depending on the time required to adopt recommended legislative changes and reorganize existing authorities and structures. CALFED proposes that the interim structure essentially continue the current CALFED structure being used during the planning stage, but with modifications to ensure it is suitable for performing the implementation functions. The modifications would be made in revised or new agreements or contracts that will be in place by the time of the ROD to begin the implementation phase of the program. Continuing the existing structure with modifications will enable the primary focus for governance to be placed on the long-term governance structure. The current structure will provide for an efficient transition to the implementation phase with minimal program delays or disruption.

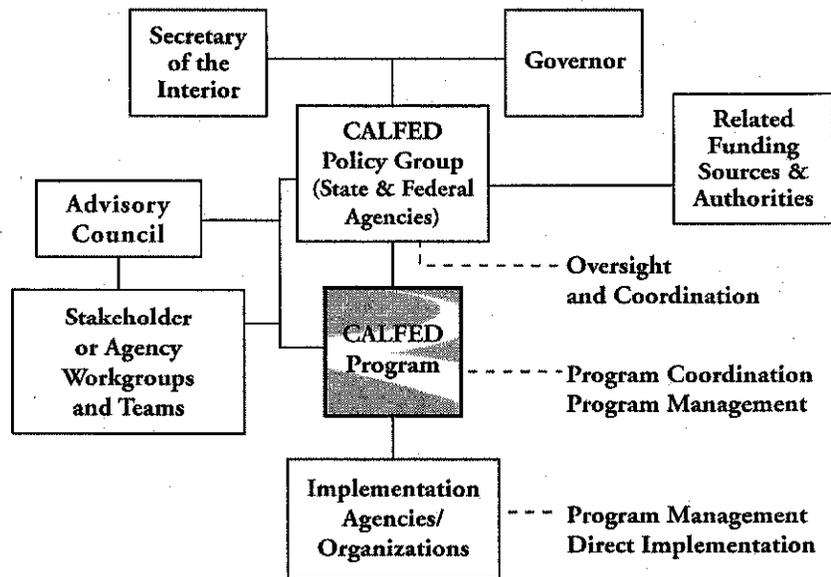
Schedule for Governance Decisions and Implementation

- **Interim Governance**
 - Decision in the Revised draft EIS/R, June 1999
 - Revised Agreements in place by the time of the ROD, June 2000
 - Operates until a long-term governance structure adopted
- **Long-Term Governance**
 - Decision by the time of the ROD, June 2000
 - Legislation expected to be needed

Policy Group. In the interim, the oversight functions will continue to be performed by the CALFED Policy Group. A new Framework Agreement is needed and will be in place by the time of the ROD. The Framework Agreement will describe the agency membership and designated representatives, describe the meeting schedule which will be at least quarterly, identify the frequency of Policy Group public meetings, specify that at least one meeting will be with the advisory council each year to perform a CALFED program assessment, specify decision-making procedures, and describe the oversight functions (listed above) of the Policy Group during the implementation phase.

Bay-Delta Advisory Council (BDAC). In the interim, stakeholder involvement in the decision-making structure will be through BDAC and when Policy Group holds public meetings. An amended Federal Advisory Council Act (FACA) Charter will be prepared by the time of the ROD which will be focused on the new tasks associated with program implementation. The Charter will identify new membership and alternates, describe the new functions and tasks, identify the necessary advisory Workgroups, describe the frequency of meetings, which should be at least quarterly and specify that an annual meeting with Policy Group will be conducted for the purpose of an annual CALFED program assessment.

**CALFED Interim Governance
Structure and Functions**



CALFED Program and CALFED Agencies. A new administrative Memorandum of Understanding between the state and federal CALFED agencies will be prepared by the time of the ROD. The MOU will specify the CALFED Program's functions and responsibilities, and establish the interim operating budget and necessary positions.

Long-Term Oversight

There is no recommendation at this time on long-term oversight. Based on the discussions within the Assurances/Governance Workgroup, CALFED staff and the Workgroup have developed three basic options for long-term governance. Before a final decision is made on a long-term structure, additional options will be identified and evaluated. A final decision on the

long-term governance structure will be made by the time of the ROD. Options under consideration are:

1. Maintain existing Policy Group structure; extend/modify Framework Agreement (Minor modifications to the interim structure)
2. Formalize existing CALFED agency structure (JPA with Federal MOU)
 - Three agreements needed --A formal arrangement would be established among the state CALFED agencies through a joint powers agreement (JPA), or similar legal instrument, an MOU among the federal agencies; and another MOU between the federal agencies and the state JPA.
 - The California agencies' joint powers agreement would delegate authority from the parent agencies to carry out the necessary oversight functions (e.g., policy direction, funding priorities, inter-agency coordination, conflict resolution, etc.). The state JPA would be governed by a Board of Directors, appointed (presumably) by the Governor or Secretary for Resources. The precise composition of the Board, the number of members, the specific agencies to be represented, and the procedures to be used would be spelled out in the joint powers agreement, presumably as a result of state interagency negotiation, or by direction of the Governor.
 - No federal legislation required; state legislation would be required if the state JPA were to have any authority beyond the authority of the parent agencies or if powers or duties were to be shifted from a parent agency to the JPA.
 - The stakeholder role would be advisory.
3. New Joint Entity for Program Oversight (agency, commission, board)
 - A new joint state/federal entity would be created to oversee and govern the CALFED Bay-Delta Program. State and federal legislation would be required to create such an entity.
 - Appointed members of the board would be representatives of state and federal agencies, and public members.

(A variation on this alternative is to create a new state entity with federal participation through an MOA. The new state entity would have basic authorities to allow for efficient program administration such as receiving direct state appropriations, hiring staff, and issuing contracts)

4.4 Program Element - Governance Structure

This section describes the governance proposals or options for the program elements. As described in the Phase II Report, each of the program elements supports one or more of the four

resource strategies -- Levee Protection, Water Quality, Ecosystem Restoration, Water Management. These strategies and program elements are interwoven and each must be viewed in the context of the other strategies and program elements. In this section, governance for each program element is discussed and presented separately although the implementation and governance of the program elements will be integrated through the four resource strategies. For each of the eight program elements, as well as the Environmental Water Account (EWA), and Comprehensive Monitoring Assessment and Research Program (CMARP), this chapter includes the following information:

- A description of existing agency authorities and stakeholder processes,
- Program coordination and management functions and direct implementation functions,
- The proposed interim governance structure and decision-making process, including interagency and stakeholder processes, and
- Long-term governance options (for some programs).

Interim Governance for Program Element Implementation

In the interim, for each of the program elements, the CALFED Program will perform the program coordination functions. This is because the CALFED Program has knowledge of the CALFED program objectives and the experience in coordination with the agencies and stakeholders, making the transition to implementation easier and avoiding new interim structures from being established. This also avoids fragmentation of the coordination function within the CALFED agencies.

In the interim, program management functions for each of the program elements, will be distributed among the state and federal agencies which currently have the program authority and funding. For example, water quality program management will remain with either SWRCB, DHS, USEPA and other agencies for existing programs. If new programs and funding are directed to CALFED, the CALFED program may assume program management functions. In coordination with state and federal agencies, CALFED will continue performing program management functions for the CALFED ecosystem restoration program, specifically for the funding available through the Federal Bay-Delta Ecosystem Enhancement and Water Security Act and Proposition 204. With program management distributed among many agencies in the interim, it is important that agencies closely coordinate to achieve the CALFED objectives. In the interim, direct implementation would continue to be done by existing agencies because in most cases CALFED does not have either the authority or staff to implement projects/programs called for in Stage I.

4.4.1 Levee System Integrity Program

Existing Programs and Authorities

Currently, several state and federal agencies have authority and program responsibility related to Delta levees. Beginning in the 1970s the state legislature passed several laws which gave DWR, the Reclamation Board, and the California Water Commission (CWC) legal responsibilities related to protection of the Delta levees. Specifically DWR and the Reclamation Board have responsibility for the Delta Levee Maintenance Subvention Program, a subventions program for local reclamation districts to share in the cost of levee maintenance and repair. DWR and the CWC have responsibility under the Delta Flood Protection Act for the Special Projects Program which targets state funding to areas/levees requiring additional flood protection based on statewide benefits. The Resources Agency, under the authority of Water Code Section 12318, has established a Delta Levees and Habitat Advisory Committee to resolve Delta levee and habitat issues and problems. For levees under federal jurisdiction, the Corps of Engineers provides emergency repair funding and may provide funding to repair or rehabilitate levees to federal standards. Emergency funding for flood damage repairs is also provided by the Federal Emergency Management Agency (FEMA). Local districts carry out the levee maintenance, repair and rehabilitation with state or federal financial assistance.

Description of CALFED Levee Program

The objective of CALFED's Levee Program is to "Reduce the risk to land use and associated economic activities, water supply, infrastructure, and ecosystem, from catastrophic breaching of Delta levees." In developing the Long-Term Levee Protection Plan, a Levee Technical Group was established to advise the Program on problems and solutions during all phases of the CALFED Program. The Levee Technical Group is made up of representatives from agencies and stakeholder groups with an interest in Delta levees. CALFED proposes to continue existing levee protection programs but with greater and more reliable long-term funding, and to higher standards. CALFED proposes to, as needed, expand the scope of the existing levee programs to include greater integration with other CALFED programs such as ecosystem restoration, water quality, through-Delta conveyance, and water supply reliability. Integration of these program elements will require significant coordination among CALFED program elements, with agency and stakeholder input.

The major elements of the CALFED Levee Program are:

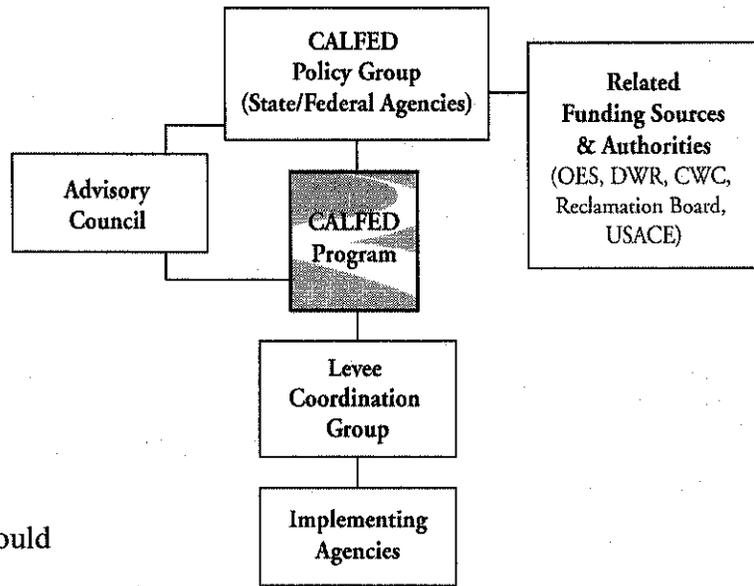
- Base Level Protection Plan -- Continue the existing levee subventions program to improve Delta levees to a uniform levee standard referred to as PL 84-99
- Special Projects -- Continue the existing special projects program to provide flood protection based on statewide benefits

- Subsidence Control Plan -- Reduce or eliminate the risk to levee integrity from subsidence
- Emergency Management and Response Plan -- Enhance existing emergency management response capabilities in order to protect critical Delta resources
- Delta Levee Risk Assessment -- Quantify the risks to Delta Levees, evaluate the consequences, and implement an effective risk management strategy

Interim Levee Program Governance

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below. Program coordination would be the responsibility of the CALFED Program, and program management would primarily reside with state and federal agencies with existing authority for Delta levees. The CALFED Program would work with agencies (DWR, FEMA, OES, the Corps and local agencies) and stakeholders to ensure levee programs are consistent with CALFED objectives. Final decision-making authority would continue to rest with existing agencies. However, Program priorities and funding should be coordinated and reviewed by the CALFED Policy Group.

**CALFED Levee Program
Interim Governing Structure**



CALFED Program. Program staff would provide interagency and stakeholder coordination. Coordination is also needed between the levee program and other CALFED program elements such as ecosystem, water quality, and monitoring and assessment, in order to maintain linkages and to provide input to the adaptive management process. CALFED may assume program management responsibilities if additional funding and program responsibility is specifically directed to CALFED.

Levee Coordination Group. (See Table 4.1) CALFED proposes the formation of a Levee Coordination Group to provide technical coordination between agencies and stakeholders and to advise CALFED and the implementation agencies (OES, DWR, USACE) on program

management and implementation. The Group would provide for technical input to the implementation agencies from regulatory agencies, stakeholders, and CALFED Program Managers, and provide recommendations on broad program policy issues and specific program actions and projects.

The Levee Coordination Group would review levee program projects and priorities, and provide advice to DWR and/or CALFED regarding levee program implementation; to review monitoring and assessment results; and to make recommendations regarding adaptive management changes to the program. The Group would consist of technical experts from CALFED staff, agencies and stakeholders. The Levee Coordination Group could combine the two existing levee advisory groups (CALFED Levee and Channels Technical Team and Resources Agency Levees and Habitat Advisory Committee) for improved coordination and efficiency.

Delta Levee Implementation Agencies. DWR would function as lead management agency for the levee program. To the extent federal funding is provided to bring levees up to federal standards, DWR would work with the Reclamation Board to coordinate with USACE, to ensure the funds are applied in the most efficient manner. Levee work would continue to be subject to review and approval by DFG pursuant to Water Code section 12314, and subject to consultation with USFWS and/or NMFS where required under the federal ESA. Legal authority over state levee funding would remain as it is now, with subventions funding vested in the Reclamation Board and special projects funding priorities vested in the Department of Water Resources and Water Commission. The following is a list of the agencies/entities with funding approval over levee programs.

- OES provides final decisions on Emergency Response Program (Water Code §128, 12994 and the California Emergency Services Act, Ch. 7);
- Reclamation Board provides final decisions on the levee subventions program (Water Code § 12984, 12985,12986,12987);
- DWR and CWC provides final decisions on the Levees Special Projects (Water Code §12313);
- USACE has continuing jurisdiction over project levees subject to coordination with Reclamation Board and provides funding appropriated through the federal Water Resources Development Act.

Long-Term Levee Governance

The long-term implementation structure would probably be much the same as the interim.

Table 4.1	
Levee Coordination Group	
CALFED Staff	Functions/Responsibilities
Levee Program	Chair Meetings, Coordinate: Funding, Permits, Policy, Project Priorities, Conflict Resolution, Project Performance, Report to Policy Group, etc.
Environmental Restoration Program	Coordinate ERP Actions with Levee and Conveyance Actions
Conveyance Program	Coordinate Conveyance Actions with Levee and ERP Actions
CMARP	Coordinate CMARP Levee Actions with other CALFED CMARP Actions
Agencies	
Department of Fish and Game	Coordinate DFG Permits and Levee Maintenance Agreements
US Fish and Wildlife Service	Coordinate USFWS Permits and Levee Maintenance Agreements
National Marine Fisheries Service	Coordinate NMFS Permits
Central Valley Regional Water Quality Control Board	Coordinate Water Quality Certification for Dredging and Waterside Work
Department of Water Resources	Represent the Reclamation Board, Coordinate Levee Program, Coordinate Comprehensive Study, Represent DWR, Coordinate Emergency Response Actions
U.S. Army Corps of Engineers	Represent the Corps on implementation Issues, coordinate the Comprehensive Study
Delta Protection Commission	Coordinate Levee Actions with DPC Delta Resources Management Plan
Stakeholders	
Environmental	Coordinate Levee Actions with Environmental Interests Concerns
SWP and CVP	Coordinate Levee Actions with SWP and CVP Contractors and Concerns
Delta Interests - NDWA, CDWA, SDWA	Coordinate Levee Actions with In-Delta Water User Concerns

4.4.2 Water Quality Program

Existing Programs and Authorities

Currently, there are several federal and state agencies with authority over surface water quality, drinking water standards, water quality monitoring, enforcement, and planning including:

- **U.S. Environmental Protection Agency** has broad regulatory authority over surface water quality and pollution control under the federal Clean Water Act, and over drinking water pursuant to the Safe Drinking Water Act.
- **State Water Resources Control Board and Regional Water Quality Control Boards** have state law jurisdiction over surface water and groundwater, including waste discharges to waters of the state, under the Porter-Cologne Act.
- **California Department of Health Services.** Drinking water quality is under the jurisdiction of EPA, pursuant to the Safe Drinking Water Act, but primacy has been delegated to DHS, which also has this responsibility under state law.
- **Department of Water Resources.** Pursuant to Water Code section 14903 et seq (the San Joaquin Valley Drainage Relief Act) DWR may acquire land for the purpose of addressing drainage problems in the San Joaquin Valley.
- **Department of Food and Agriculture.** DFA also has water quality responsibilities associated with fertilizer and pesticide management.
- **Department of Pesticide Regulation.** The Food and Agricultural Code authorizes DPR to regulate the sale, storage, handling, and use of pesticides, and to protect the environment from harmful pesticides.
- **Department of Fish and Game.** Fish and Game is responsible for enhancing and protecting fish populations and their habitat with some authority in the Fish and Game Code to control surface water quality.
- **U.S. Geological Survey.** USGS conducts extensive water quality and ecological monitoring within the Bay-Delta System.

Description of CALFED Water Quality Program

The CALFED Water Quality Program has been responsible for developing a Water Quality Program Plan for the Bay-Delta Estuary and watersheds as part of the long-term Bay-Delta Program. In preparing the Plan, CALFED established a Water Quality Technical Group to advise the Program on problems and solutions during all phases of the CALFED Program. The Water Quality Technical Group is made up of representatives from agencies and stakeholder groups with an interest in water quality.

The CALFED Program proposes to expand efforts to improve the water quality of the Bay-Delta Estuary for all beneficial uses (domestic, industrial, agricultural, recreation, and aquatic habitat). Water Quality implementation actions proposed for the first two years (Stage 1a) benefit both drinking water and the ecosystem. These actions focus on pesticide management, mercury source

control, on-farm selenium control practices, investigations and control of low dissolved oxygen, and other actions and studies designed to improve Delta water quality.

Interim Water Quality Governance

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below. The CALFED Water Quality Program will require significant efforts to coordinate actions among agencies and to maintain linkages with the ecosystem restoration, storage, conveyance and water use efficiency programs.

CALFED Program. CALFED staff would perform the program coordination functions in the interim. This would include staff support to the Water Quality Technical Group and the Ecosystem Roundtable or the Water Quality Council, if

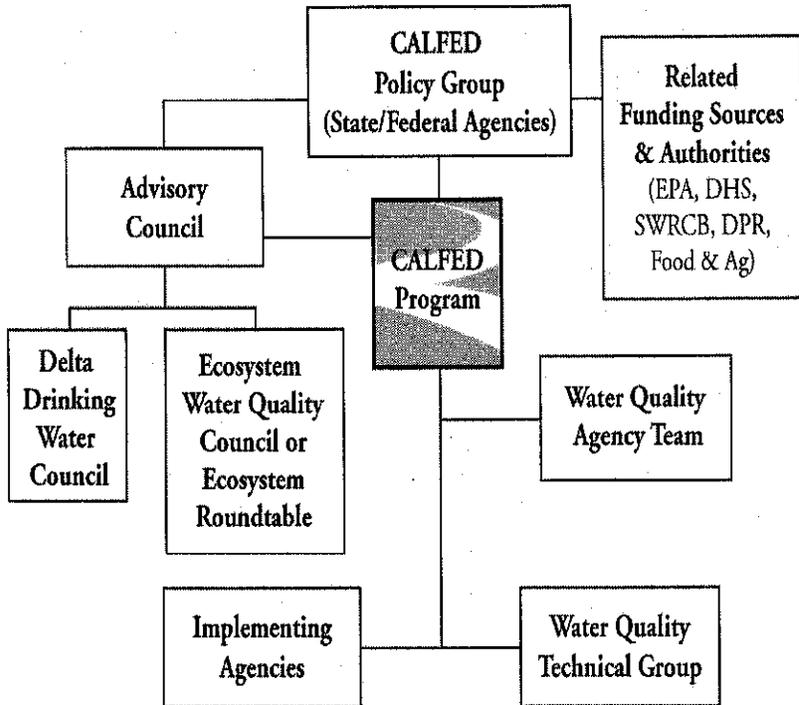
established. Program coordination would also be necessary between the water quality agencies and the other CALFED program managers. The Program would also coordinate with the Comprehensive Monitoring, Assessment and Research Program (CMARP) staff within CALFED to support the CALFED adaptive management process. CMARP functions and interim organization is described in Section 4.4.10 of this Appendix.

If additional state or federal funding for CALFED Water Quality Program actions becomes available (possibly in FY 2000), the CALFED Program may assume some of the responsibility for management of those funds, including priority setting and project selection. Funding would be passed onto water quality agencies for implementation based on project selection. Recommendations for project funding would be reviewed by the appropriate stakeholder process (Drinking Water Council or Ecosystem Roundtable), the Water Quality Agency Team and the CALFED Policy Group. Final approval would rest with the agency with authority for the funds.

Water Quality Agency Team. Water quality agencies would continue to coordinate through an inter-agency team. The team would be responsible for coordination of water quality programs

CALFED Water Quality Program

Interim Governing Structure



and actions of each agency on the team. The team would provide recommendation on program priorities and funding for CALFED and for each water quality agency.

Water Quality Technical Group. The Technical Group would include technical representatives from agency and stakeholder groups. The function of the group is to advise CALFED on priority actions, targets, monitoring and assessment.

Delta Drinking Water Council. A Delta Drinking Water Council is proposed as the forum for stakeholder advice and input into the decision-making process for drinking water issues. The Council would be a workgroup of BDAC. It would consist of representatives of various stakeholder interests and representatives from designated agencies with jurisdiction over drinking water issues (EPA and DHS.)

Ecosystem Roundtable or Ecosystem Water Quality Council. A modified version of the Ecosystem Roundtable or a new group - Ecosystem Water Quality Council - is proposed to serve as the forum for incorporating stakeholder review and input into the decision-making process for actions or programs related to ecosystem water quality. This group would also be a workgroup of BDAC and consist of stakeholders and agencies interested and with jurisdiction over ecosystem water quality issues.

Water Quality Implementation Agencies. State and federal agencies with existing program responsibilities as described above, as well as local agencies, would continue to be responsible for direct implementation of water quality actions. Where appropriate, some of the existing programs or funding (under the Clean Water Act and the Safe Drinking Water Act and others) would be coordinated through the CALFED process in order to ensure consistency with the CALFED objectives.

Long-Term Water Quality Governance

The long-term governance structure has not been developed. One of the options would be to continue the interim governance. Other options may involve a shifting or consolidation of authorities. A long-term governance structure would be proposed by the time of the ROD.

4.4.3 Ecosystem Restoration Program

Existing Programs and Authorities

Ecosystem restoration is currently planned and implemented by many of the CALFED agencies either through their existing regulatory or natural resource stewardship authorities. In addition, the CALFED program has the responsibility for developing the CALFED Ecosystem Restoration Program Plan (ERP) and managing the early implementation program for CALFED ecosystem restoration (described below). Some of the existing agencies with ecosystem restoration

responsibilities include the DFG, SWRCB, USFWS, NMFS, USEPA, USACE, USFS, USBR, and NRCS. With the many agencies involved, the current administrative and governing structure for Bay-Delta ecosystem restoration is complex and overlapping.

CALFED Ecosystem Restoration Planning. In developing the ERP, CALFED has received stakeholder and public input through the Ecosystem Restoration Workgroup, numerous workshops and meetings and agency input/review. The Workgroup is comprised of several members of BDAC.

CALFED Early Implementation. Pursuant to the 1994 Bay-Delta Accord, an early implementation program was established for non-flow related projects for ecosystem restoration (Category III). Early implementation is currently managed by the CALFED Restoration Coordination Program (RCP). This program, with technical and stakeholder input, sets short-term restoration priorities, solicits projects, issues contracts and grants for restoration projects and actions, and oversees implementation of those restoration projects and actions. It conducts these activities within the context of development of the Ecosystem Restoration Program (ERP). The RCP also coordinates with other restoration programs such as the Central Valley Project Improvement Act and the Four Pumps Agreement.

Currently the CALFED RCP coordinates and assists the Resources Agency in program management under Proposition 204, passed by the voters in 1996. CALFED also coordinates and assists the USBR with program management of the federal funding under the Bay-Delta Enhancement and Water Security Act of 1997. Stakeholder input during early ecosystem implementation is provided by the Ecosystem Roundtable, a BDAC subcommittee. The role of the Roundtable and BDAC is to advise the CALFED agencies on the annual ecosystem restoration funding package.

Scientific and technical advice on project selection is provided by technical review panels and an Integration Panel, whose membership includes scientists representing different technical disciplines, public agencies, and stakeholder groups. The Roundtable and Policy Group receive scientifically based funding recommendations from the Integration Panel prior to a recommended decision to the Secretaries.

Description of CALFED Ecosystem Restoration Program

The CALFED Bay-Delta Ecosystem Restoration Program Plan is a complex and comprehensive proposal designed to restore ecosystem health to the Bay-Delta. The actions proposed are interlinked with each other and with actions in other CALFED programs. When approved and documented through a Record of Decision, the plan would move forward into implementation as the ERP.

The goal of the ERP is to restore and mimic ecological processes and to increase and improve aquatic and terrestrial habitats to support stable, self-sustaining populations of diverse and

valuable species. Principles, functions and responsibilities that would guide the implementation of the program and help to shape the governance structure include:

ERP Principles

- Implement the Program using an adaptive management framework
- The Program is science based — management would be based on scientific and biological principles and processes, which incorporates independent science review
- The Program would be pro-active in restoring the ecosystem
- Implement the ERP as efficiently as possible; act quickly and responsibly
- Integrate stakeholders in the decision-making process
- The Program will assume no regulatory functions
- The Program will retain a focus on ERP implementation
- Management of the Program will be a state/federal partnership

ERP Functions

Described below are the primary functions that need to be undertaken to implement the CALFED Ecosystem Restoration Program. This list does not predetermine the form or governing structure that will implement these functions. CALFED has a proposal below for interim governance structure but has not recommended a long-term structure for ERP implementation.

1. Program Coordination and Management Functions

- Management of the implementation of the ERP; preparation of contracts and grants, management of contracts and grants, conduct public solicitation of project proposals, provide oversight of projects and directed programs
- Information gathering, assessment and adaptive change for the ERP in partnership with CMARP; ERP internal audit, incorporate the results of monitoring, the assessment of indicators and progress in meeting objectives into an adaptive management framework for decision-making
- Public involvement and education, conduct effective public outreach and education program, prepare periodic progress reports
- Coordination within and outside of CALFED; provide for coordination with related programs outside of CALFED, provide for ERP coordination with the rest of the CALFED Program
- Priority setting; continuing program planning and refinement on a project specific basis
- Internal and independent science review; support and conduct science related to the program
- Funding/Budgets; administration and coordination of program funds derived from state, federal and private sources, preparation of program budgets

- Dispute resolution; resolve disputes with other CALFED program actions and policies, stakeholders and project implementers; resolve conflicts between scientific and policy recommendations

2. Direct Implementation Functions

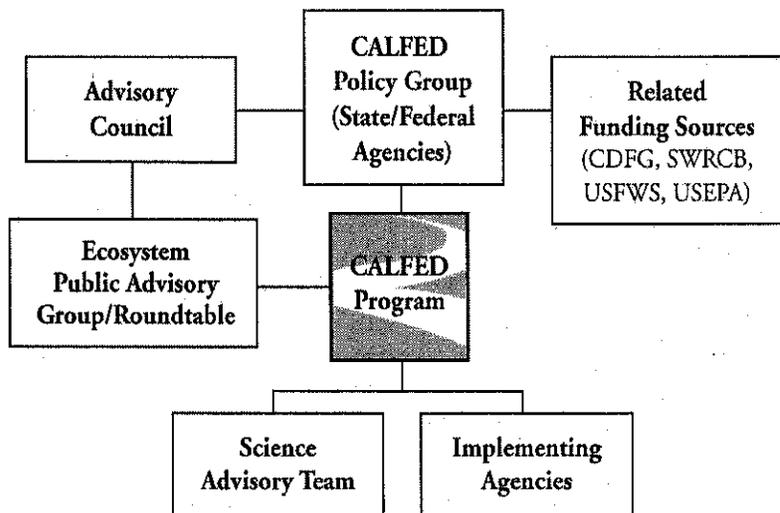
- Implementation of selected projects and actions
- Permit acquisition and environmental compliance
- Acquisition of rights, easements and title to real property, including water
- Coordinate with the Environmental Water Account (EWA)
- Coordinate with CMARP

Interim Ecosystem Restoration Governance

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below.

**CALFED Ecosystem Restoration Program
Interim Governing Structure**

CALFED Ecosystem Restoration Program. The CALFED Program would perform both program coordination and program management functions. Program coordination and management functions would be performed in coordination with the agencies with the primary program and funding authority. Responsibilities would include: coordination with related ecosystem programs, preparation of annual and longer-term work plans, the identification of budget and staffing needs, public outreach and education, the preparation and management of contracts and grants, preparation of periodic progress reports, assist implementing agencies in acquiring property and rights to property, management or delegation of management of property, and on behalf of lead agencies preparation of environmental documents and obtaining necessary permits. The ERP would be responsible for public solicitation of project proposals and for conducting the evaluation of those proposals in coordination with the lead funding agency. The ERP would participate in the coordination of the Environmental Water Account (EWA). ERP would also coordinate with the CALFED Chief Scientist and CMARP technical support staff in developing monitoring plans



and assessing program/project results. CMARP would conduct initial assessment of monitoring data and coordinate closely with the ERP staff when incorporating assessed data into an adaptive management framework for project selection, program priorities and overall program decision-making.

Public Advisory Group. In the interim, the functions of the Ecosystem Restoration Work Group and the Ecosystem Roundtable would be consolidated into one group. This consolidation would strengthen the stakeholder's and the public's role in the ERP. The public advisory group would be an evolution of the existing Ecosystem Roundtable, likely with changes to its membership. The Roundtable's role would expand to providing advice on the planning portion of the ERP, as well as the implementation portion. Agency representatives would also take a more active role in the new group. The group would continue to serve as a subcommittee or work group of BDAC, which in turn, would be advisory to the CALFED Policy Group on matters of program priorities, coordination, public involvement, adaptive management, project selection and funding support. Their meetings would provide a regular forum for public input. The group would meet six to eight times per year.

ERP Science Advisory Team. The ERP Science Advisory Team would include five members of proven scientific expertise, and they would be appointed by the CALFED Policy Group following nominations suggested by the Public Advisory Group and Council. The duties of the ERP Science Advisory Team would include: ERP science review and the conduct of scientific peer review, the review or development of project level scientific inquiry, the review of scientific output from the program such as monitoring results and indicators of ecosystem health and the development of the scientific basis for adaptive management decisions. They would also review and provide recommendations to the Policy Group on matters of program science and priorities. The chair of the Team would rotate annually. Initially, the group would meet about once a year; as data accumulate, it would likely meet more often.

The ERP Science Advisory Team would coordinate with the CALFED Science Review Board and Chief Scientist, described in Section 4.4.10. The ERP Science Advisory Team would focus on reviewing and advising on individual projects and actions. The CALFED Science Review Board would consider the larger science issues for CALFED including interrelationships, conceptual models and indicators.

Existing Implementing Agencies. In the interim, agencies with existing programs, funding and authorities would continue those programs but would coordinate with CALFED on certain activities most related to CALFED objectives. Final program and funding decisions during the interim would continue to rest with the lead agency but would be coordinated and reviewed by CALFED Policy Group. Some of the programs that would be coordinated with CALFED include the Anadromous Fish Restoration Program under the CVPIA, DWR's Four Pumps Mitigation Program and Sacramento San Joaquin River Flood Management Study.

Long-Term Governance

Over the course of the past two years, discussions between CALFED staff and the Assurances/Governance Workgroup have led to the identification of six possible options for a long-term ERP governance structure. The options, along with their advantages and disadvantages are described on the following pages. Although discussion is still needed before a preferred option is selected, the Governance Workgroup currently prefers Option 4 because of the advantages described for that option. CALFED will work with stakeholders to select an option for the long-term governance of the ERP by the time of the ROD.

1. Existing Agencies--No new entities
2. Federal Public Corporation
3. Private Non-profit
4. Joint Federal State Agency
5. State Entity with Federal participation
6. Federal Entity with State participation

To assist CALFED in the evaluation and development of a long-term governance structure for the ERP, an expert panel is being convened in June 1999 by the California Environmental Trust. The purpose of the panel is to provide information on ecosystem governance of other programs across the nation.

1. Option 1 -- Existing Agencies (DFG/USFWS/NMFS) - No New Entities

Description -- This option would rely on the three fish and wildlife agencies as the agencies responsible for ERP implementation. No new legal entities would be created.

Decision-Making Process -- An ERP Implementation Management Office would be managed by an executive director (selected by the three agencies or rotating between the three agencies.) DFG, NMFS, and USFWS would each designate a high level staff person to participate in the management of the ERP with the executive director. The executive director would direct the program on a day-to-day basis and would supervise staff assigned from these three agencies (and probably other agencies as well.) Some implementation functions would be assigned to other federal, state or local agencies, depending on the specific project, available agency expertise, and the type of funding available, but all ERP projects and programs would be supervised and coordinated through the ERP Implementation Management Office, and program responsibility and accountability would rest with the Executive Director and the three agencies.

Agency Coordination -- There would be an operating agreement (an MOU or MOA) between the agencies defining which agency would be responsible for which aspects of the ERP; for describing a consistent methodology for incorporating CMARP and other scientific input; for making adaptive management decisions and for measuring

achievement of performance objectives. There would be a multi-agency coordination committee to ensure that ERP programs and projects are implemented in a manner compatible and consistent with other CALFED programs (e.g., levees, water quality) and with related non-CALFED programs (e.g., AFRP).

Stakeholder Involvement -- There would be a stakeholder advisory committee to provide advice on overall ERP implementation.

Funding -- State funding under Proposition 204, and other state sources, would be allocated to the Resources Agency and/or directly to the DFG budget for ERP implementation. Federal funds would be appropriated to USFWS and/or NMFS for ERP implementation.

Legislation -- No new legal entity would be created to govern the implementation of the ERP. However, legislation might be necessary to modify or enhance one or more agencies' legal authorities, powers and/or purposes, budget authorization or funding mechanisms.

Advantages

- Faster and easier to implement than other options; does not require legislation; can be in place before ROD.
- DFG, NMFS and USFWS have been involved in development of ERP; maintains continuity.
- DFG, NMFS, and USFWS already work in coordination on many projects; established relationship exists.
- As federal and state agencies there is a direct advocate for funding before the legislatures.

Disadvantages

- Accountability for program implementation and meeting performance objectives is not focused on one agency; no single agency with ERP as primary mission;
- Would require existing agencies to incorporate a very large complex program in addition to all other existing duties and responsibilities; could reduce the attention and focus needed to effectively implement the program.
- Potential for conflicts between existing regulatory responsibilities and ERP responsibilities. Examples of possible conflicts: ESA obligations vs. striped bass management; Suisun Marsh management issues of ecosystem vs single habitat type; refuge water vs. instream flows; possible budget and funding conflicts between regulatory duties and resource management duties.
- Stakeholder integration in the decision-making process would not improve over the existing situation.
- Stakeholder concern that this option does not provide sufficient assurances for effective ecosystem program implementation

2. Option 2 -- Federal Public Corporation

Description -- Federal law would establish a publicly chartered corporation within the Department of the Interior. The corporation would be a quasi-governmental entity and would be similar to the National Fish and Wildlife Foundation. It would be governed by a board of directors and would hire staff to implement the program.

Decision-Making Process -- The staff would be responsible for the day-to-day implementation of the program and would rely on the board of directors for broader policy direction and priorities. The governing board would be made up of representatives of the Resources Agency, Department of the Interior, Department of Commerce (NMFS), local government (at least one from within the Delta), and representatives of the environmental community, agriculture and urban water users who have knowledge and expertise in ecosystem restoration.

Agency Coordination -- The corporation would prepare its budget request as part of the Department of the Interior. Congress would appropriate money to Interior for the purposes of the corporation. The corporation would coordinate with agencies also conducting ecosystem restoration in the Delta to assure efficient use of funds and maximum benefit from the funds available.

Stakeholder Involvement -- Stakeholders would be represented on the board of directors.

Funding -- Federal funding would be dedicated to the organization by the Department of the Interior, or other appropriate federal agency. Expenditure of the state bond funds would be directed by the Resources Agency, the agency assigned responsibility for spending \$390 million Proposition 204 funds following certification of the environmental impact statement and report. The organization could also seek private funding for the ecosystem restoration efforts.

New Legislation -- Federal legislation establishing the corporation and defining the duties to implement the ecosystem restoration program, the necessary authorities, its staff and governing board structure and its funding. State legislation may also be useful in defining the relationship between the Resources Agency and the Federal Corporation.

Advantages

- Single-purpose corporation with the ability to focus on implementing the ecosystem restoration program and coordinating with others engaged in similar activities.
- May be able to streamline contracting procedures and requirements.
- Can have broad cross-section of stakeholders represented on the governing board.

-
- Can be responsible for reporting on expenditures and progress toward reaching ecosystem restoration goals.
 - Can engage in fund-raising activities with private individuals.

Disadvantages

- Cannot direct expenditures of state money.
- Multiple state and federal agencies remain responsible for the implementation of the program and expenditure of the funds. Does not improve efficiency of implementing the program.
- Does not have governmental authority or the ability to direct other governmental entities.
- May be difficult to delegate agency authority to new corporation (CVPIA mitigation obligations, for example).

3. Option 3 -- Private Non-Profit

Description -- A private non-profit entity would be established under California law that also meets the requirements of federal tax laws in order to maintain tax-exempt status. The non-profit would be a non-governmental entity established for a specific purpose. The entity could be a non-profit established under 501(c)(3) of the IRS code, or 501(c)(4) (trust), or a supporting organization. The precise vehicle requires additional research. The non-profit would be governed by a board of directors and would hire staff to implement the program.

Decision-Making Process -- The staff would be responsible for the day-to-day implementation of the program and would rely on the board of directors for broader policy direction and priorities. The governing board would be made up of representatives of the Resources Agency, local government (at least one from within the Delta), and representatives of the environmental community, agriculture and urban water users who have knowledge and expertise in ecosystem restoration. Federal legislation may be necessary in order to allow federal agencies to be a member of the board.

Agency Coordination -- The non-profit would work with the state and federal entities responsible for public financing. In addition, the non-profit would seek to coordinate similar ecosystem restoration efforts within the same areas as the ERP.

Stakeholder Involvement -- Stakeholders would be represented on the board of directors.

Funding -- Federal funding would be dedicated to the organization by the Department of the Interior, or other appropriate federal agency. State funding would also be dedicated to the organization by the Resources Agency, although expenditure of the state bond funds would be directed by the Resources Agency, the agency assigned responsibility for

spending future Proposition 204 funds. The corporation could also seek private funding for the ecosystem restoration efforts.

New Legislation -- No new legislation is required to establish this option except that it would be necessary to formalize federal agency participation on the board of directors or recognizing the organization as the appropriate entity to implement the ecosystem restoration plan.

Advantages

- Single-purpose organization with the ability to focus on implementing the ecosystem restoration program and coordinating with others engaged in similar activities.
- May be able to streamline contracting procedures and requirements.
- Can have broad cross-section of stakeholders represented on the governing board.
- Can be responsible for reporting on expenditures and progress toward reaching ecosystem restoration goals.
- Can engage in fund-raising activities with private individuals.
- Can adopt by-laws to govern the operations of the organization.

Disadvantages

- Cannot direct expenditures of state or federal money.
- Multiple state and federal agencies remain responsible for implementing the ERP and spending any public money because although funding can be directed to the organization, the final funding and program authority would have to remain with the existing state and federal agencies.
- Does not have governmental authority or the ability to direct other governmental entities.
- Very difficult, if not impossible, to delegate agency authority to new corporation (CVPIA mitigation obligations, for example).
- Tax-exempt status limits the types of activities in which the organization can participate.
- By-laws can probably be changed with notice and following specified procedures.

4. Option 4 -- Joint Federal/State Agency

Description -- A new joint federal/state agency would be established to manage and implement the ERP. The new entity would reside within the Department of Interior on the federal side and the Resources Agency on the state side. There are no known working models of such an agency, but this agency would have some of the attributes of an agency like the Tahoe Regional Planning Agency (which is based on an interstate compact between Nevada and California and federal authorization).

Decision-Making Process -- The new agency would be empowered to carry out all the functions necessary to implement the ERP, including the powers to own and manage land and water. This agency would be independent of any other state or federal agency, but for budget and/or administrative reasons, it could be deemed to be within both the Resources Agency and the Department of Interior. It would be governed by a 7-9 member board of designated federal (2) and state (2) agency representatives, as well as local government (2) and stakeholder representatives (1-3). The governing body would hire an executive director, who would manage and direct day to day operations of ERP implementation.

Agency Coordination -- A board with both state and federal representatives would increase coordination between those agencies. Receiving direct federal and state funding would allow for more efficient coordination. The new agency would also be responsible for coordinating with non-CALFED related Programs (e.g., AFRP) and with the other CALFED programs (e.g., levees, water quality etc.)

Stakeholder Involvement -- Stakeholder representatives would be members of the governing body of the new entity. Public input would also be through the public board meetings.

Funding -- Federal and state money would be appropriated to the new agency through the DOI and Resources Agency budgets to carry out the ERP and for necessary administration. The entity could also receive state bond money.

New Legislation -- A joint federal/state agency would require both federal and state legislation. The legislation would provide parallel authorizations for federal and state agency participation and enumerate the powers and purposes of the new agency. The legislation would have to specify whether federal or state law would apply in a number of areas, such as access to records, public information and meetings; conflicts of interest; status of agency employees; contracting and procurement rules.

Advantages

- Authorizing legislation can be specifically drafted to include all desired functions and principles, powers and purposes.
- ERP would be primary focus of new entity. High degree of accountability since responsibility for ERP is clearly assigned.
- Can have state, federal and stakeholder representatives on a governing board. Can draw from state and federal laws for authorities. Can assume state or federal authorities as appropriate.
- Can receive direct appropriations from state and federal sources.
- As a governmental entity, more ability to influence actions of the other state and federal agencies. To the extent Congress and federal agencies support transfer of other programs to the new joint entity, consolidation of programs can occur.

Disadvantages

- There is no good model for a joint state/federal entity with similar functions and responsibilities.
- Complexity of legislation may result in longer period of time necessary to become established (possibly 2-4 years).

5. Option 5 -- State Entity with Federal Participation

Description -- A Conservancy within state government, with federal participation, would be established to implement the Ecosystem Restoration Program. The Conservancy would be a semi-autonomous department-level entity under the Resources Agency. The Conservancy Board would hire an Executive Director, who in turn would hire staff to carry out the ERP. Models include the Coastal Conservancy.

The Conservancy would need to coordinate with the CALFED Oversight Entity on project timing, overall funding, permitting and environmental review, monitoring, accounting and evaluation/reports. Its relationship to the Oversight Entity would be the same as other participating state agencies.

Decision-Making Process -- Decisions would be made by a Conservancy board. It would be governed by a 7-9 member board of federal (2) and state (2) agency representatives, as well as local government (2) and stakeholder representatives (1-3). Day-to-day management and administrative decisions would be handled by the Executive Officer and staff. While appointments would be made by the state and federal executive branches, the appointments would come from lists provided by state officials and stakeholder organizations.

Agency Coordination -- The Conservancy would act as the lead to coordinate with the other CALFED programs, with the oversight entity, and with other related non-CALFED programs. Direct project implementation would most often be done by existing agencies and organizations through contracts or other agreements.

The Conservancy would have a high degree of independence. Most functions would be carried out independently, including policy-setting, priority-setting, project work and stakeholder relations. Resources Agency would have review and approval on overall funding and state budget policy. Staff would be state employees, and state laws would apply to meeting rules, court venues, etc.

Stakeholder Involvement -- Stakeholders would have one to three seats on the Conservancy board, allowing direct participation in decision-making. As with other state entities, participation would occur through public hearings and workshops.

Funding -- State bond funds and annual state appropriations could be received and expended directly by the Conservancy. Depending upon bond and appropriation language, the Conservancy could have a wide authority to decide how best to spend these funds. The Conservancy would be under the same funding and expenditure rules and restrictions that apply to other state agencies, unless modified in the authorizing legislation. Federal funds would be appropriated to a cooperating federal agency and passed through to the Conservancy. The degree of federal agency control of the funds would depend on the type of appropriation to the federal agency, and the associated budget language. Control could range from simple accounting and audit requirements all the way up to substantial policy direction of funds. Federal budget language could also direct the federal funding agency, and other federal agencies, to cooperate with the Conservancy and its purposes.

New Legislation -- State legislation to create and fund the Conservancy would be required. Also, Congressional legislation allowing federal representatives to be members of the Conservancy board would be required.

Advantages

- As a state agency, the Conservancy would have a stronger link to other state agencies. As a government agency, it would have more influence over other state and federal agencies than would a non-governmental option.
- The conservancy structure has been used before in state government, and is familiar to the Legislature, the Legislative Analyst and Dept. of Finance. This familiarity increases political viability.
- A Conservancy with a specific ERP mission would provide a clear structure for accountability, and would have the ERP as its focus.
- Federal participation would be included through voting seats on the Conservancy. Legislation could be written to allow future integration of federal agencies in a joint agency.
- Because the Conservancy would have appointed board members it would have substantial autonomy. Also, enabling legislation could include intent for a high degree of autonomy.

Disadvantages

- Federal funding is not integrated into the structure.
- State civil service, accounting, expenditure and contracting requirements could slow program implementation, although authorizing legislation could provide some streamlining.
- Because federal funding would need to be provided through a federal agency, that federal agency could have considerable latitude regarding expenditure of funds by the Conservancy, limiting its autonomy and ability to consolidate decision-making.

-
- A separate ERP entity may be subject to more focused reductions in budget appropriations.

6. Option 6 -- Federal Agency With State/Stakeholder Participation

Description -- This option would require federal legislation to create a new federal agency with a governing board that includes federal, state and stakeholder representatives. The agency would reside within the Department of Interior, reporting directly to the Secretary. The CALFED oversight entity would advise the Secretary regarding the ecosystem entity's budget and progress in relationship to other CALFED entities.

Decision-Making Process -- This agency would be led by a 7-9 member board of directors, but managed day-to-day by an executive director and staff. The Board would include two representatives each from federal, state and local (in-Delta and tributary) agencies, and 1-3 public/stakeholder members. While the President would appoint the Board members, his appointments would come from lists provided by state officials and stakeholder organizations.

Agency Coordination -- This agency would coordinate with other state and federal agencies through both its board membership and the CALFED oversight entity.

Stakeholder Involvement -- Stakeholders would participate in the decision-making directly as Board members and indirectly through the oversight entity's advisory council.

Funding -- As part of the Department of the Interior, it would submit a budget request to Congress through Interior, and to the state legislature through the Resources Agency. State funding would be appropriated to the Resources Agency and coordinated with the new federal entity but not appropriated directly to the federal entity.

New Legislation -- Federal legislation would be required to create this entity. State legislation would not be required, but would be helpful to authorize state participation and appropriations.

Advantages

- Clear authority and mandate from the federal level, but with participation from the state.
- Relationship to Interior provides federal advocate.
- Participation from stakeholders in decision-making process.
- Direct federal appropriations available.

Disadvantages

- Subject to Interior's budget cap and other general federal requirements.

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- Similar organizations have legislative sunset provisions. May lead to delay in creation in order to get Congressional approval.

4.4.4 Watershed Program

Existing Programs and Authorities

Programs and activities which are organized on a watershed basis are dispersed among several state and federal agencies. Federal agencies which conduct land management, technical assistance, and/or regulatory activities on a watershed basis are the U.S. Fish and Wildlife Service (USFWS), Environmental Protection Agency (EPA), U.S. Forest Service (USFS), Natural Resource Conservation Service (NRCS), and the Bureau of Land Management (BLM). USFS conducts its activities as part of its overall management of the National Forest System. NRCS receives its authority from the Soil Conservation Act of 1935 and delivers its services to more than 100 local Resource Conservation Districts (RCDs) and BLM.

State agencies' responsibilities are primarily regulatory or assistance oriented, and are less focused on land management. State agencies include the State Water Resources Control Board (see Water Quality Section) and regional water quality control boards, Resources Agency, Department of Water Resources, Department of Fish and Game and the Department of Forestry and Fire Protection (CDF). Under the Forest Practices Act of 1973 CDF regulates private and state forest activities.

Other non-CALFED agency participants in watershed activities derive their authorities from a range of federal, state and local laws, as well as non-government related by-laws of non-government organizations. By their nature, watershed conservation, maintenance, restoration and enhancement authorities are widely distributed and complex. One of the purposes of the CALFED Watershed Program is to facilitate coordination and collaboration among these agencies.

CALFED Watershed Program Planning. As with the other CALFED programs, the CALFED Policy Group is the decision-making body for the Watershed Program. The Policy Group acts primarily on the advice received from three areas of constituent input, including the Interagency Watershed Advisory Team (IWAT), the Bay-Delta Advisory Council (BDAC), and the BDAC Watershed Workgroup (Workgroup).

Interagency coordination begins with IWAT, whose membership includes representation from the CALFED agencies mentioned above. Coordination with non-CALFED entities occurs generally through BDAC and its Watershed Workgroup.

Ideas generated from within the Workgroup, IWAT, CALFED staff, or by other constituents are discussed in open Workgroup sessions. From these discussions, a facilitated consensus is

reached, which is then articulated by CALFED staff and circulated among the constituency for review. From time to time, special sub-committees are formed on an ad hoc basis to refine particular elements brought to the groups for discussion before final recommendations to the Policy Group are made.

Description CALFED Watershed Program

The CALFED Watershed Program is a program that takes its lead from its constituent partners in the tributary watersheds of the Bay-Delta system. The purpose of the Program is to help coordinate and integrate existing and future local watershed programs, and to provide technical assistance and funding for watershed activities that protect and enhance natural resources to further the goals and objectives of the CALFED Bay-Delta Program.

The Watershed Program uses a developed set of principles of participation in the design and execution of Program implementation. CALFED supports watershed activities that:

- Are community based,
- Collaborate with CALFED and are consistent with its mission, goals and objectives,
- Address multiple watershed issues,
- Are coordinated with and supported at multiple levels of government,
- Provide for ongoing implementation,
- Include monitoring protocols,
- Increase learning and awareness.

The program coordination, program management, and direct implementation functions listed below for the Watershed program would foster and support effective, sustainable, and locally appropriate stewardship of the Bay-Delta watershed system.

- Coordination and Assistance -- facilitate and improve coordination and assistance among government agencies, other organizations, and watershed groups.
- Adaptive Management and Monitoring -- In coordination with CMARP, develop watershed monitoring and assessment protocols.
- Education and Outreach -- support interactive education and outreach.
- Integration with other CALFED programs -- integrate and collaborate with other CALFED Programs.
- Watershed Processes and Relationships -- illustrate the relationship of watershed processes and CALFED goals and objectives.

Interim Governance Proposal

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below.

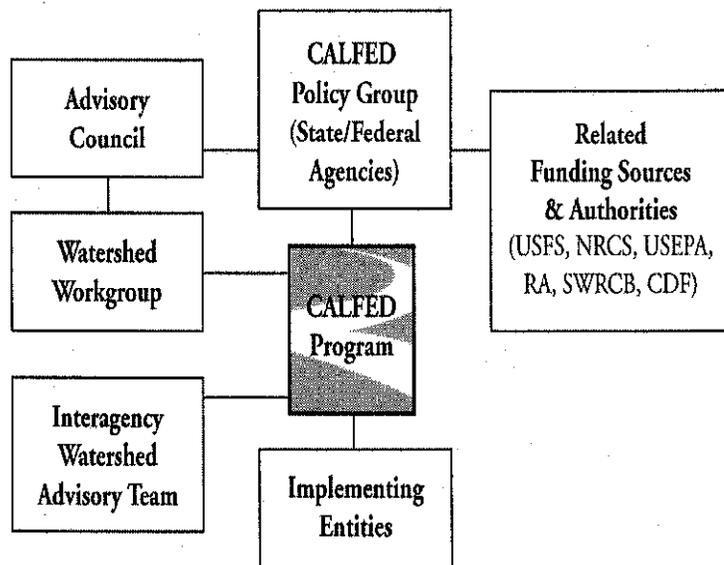
CALFED Program. The primary function of the CALFED Watershed Program would be to facilitate and coordinate communication among the various watershed groups/agencies to increase consistency with CALFED objectives as much as possible. In addition to the formal processes, communication would be facilitated by establishing an interactive web page, in addition to maintaining normal day-to-day interactions. The Program would track progress toward meeting the goals of the Watershed Program, ensure the groups, that are part of Program implementation, are functioning in an appropriate manner, and report to those groups. The Program would be the lead in assessing and reporting on the programs' progress in meeting objectives. To the extent additional funding is allocated and directed toward watershed management, CALFED staff would serve the program management functions related to that funding. Priorities and project selection would be coordinated with IWAT and the Workgroup--additional processes may need to be developed.

Interagency Watershed Agency Team.

IWAT would provide advice to the CALFED Program on program priorities, funding, and implementation. IWAT would be the forum for coordination between the agencies which have lead program management and funding authorities. IWAT and the ERP, water quality and other related program agency teams may be combined or integrated to increase the integration of program elements.

Watershed Workgroup. The Watershed Workgroup would continue to be the main forum for formal communication among CALFED agencies, CALFED program and other stakeholders. The workgroup would have the primary responsibility for ensuring there is appropriate local participation in the Watershed program development and implementation and that capacity at the local level for restoration and management is strengthened without creating dependency on

CALFED Watershed Program Interim Governing Structure



public funding. It would take the lead in supporting public education and outreach on watershed issues. The Watershed Workgroup and the ERP, water quality and other related program workgroups may be combined or integrated to increase the integration of program elements.

Implementing Entities. In the interim, agencies with existing programs, funding and authorities would continue those programs but would coordinate with CALFED on activities most related to CALFED objectives. Final program and funding decisions during the interim would continue to rest with the lead agency but would be coordinated and reviewed by CALFED Policy Group.

Long-Term Governance

Long-term governing options to be considered involve changes in communication and interaction among the various watershed constituencies: formally establishing a connection between the functions and roles of IWAT and the Watershed Workgroup so that one body formally advises the overall CALFED entity; expanding membership of the IWAT and the Watershed Workgroup to include representation from other CALFED programs; appointing watershed representatives to other CALFED advisory groups to serve as liaison between them; consolidating the Watershed advisory group with advisory groups from other CALFED programs; consolidating the state and federal watershed application process for prospective recipient and grant funds. Additional changes would likely include a more consistent interface with existing Bay-Delta watershed tributary groups and other ongoing entities and programs such as the California Biodiversity Council.

4.4.5 Water Use Efficiency Program

Existing Programs and Authorities

Most water use efficiency actions and programs are currently implemented and managed at the local agency or farm level. Technical and financial assistance programs have been provided by DWR and USBR; and the SWRCB and NRCS have provided grants and low-interest loans for water recycling and conservation programs of local agencies respectively. CDFG has funded programs to support the Agricultural Water Management Council. USFWS and DFG are currently responsible for developing and implementing efficient water use programs for wetlands and refuges. Water recycling programs have generally been developed and implemented at the local agency level.

Description of Water Use Efficiency Program

The CALFED Program proposes to expand existing agency efforts to provide financial and technical support for water use efficiency programs generally carried out by local agricultural and urban water supply or water management agencies, a water recycling program, and the development of management practices for managed wetlands and refuges.

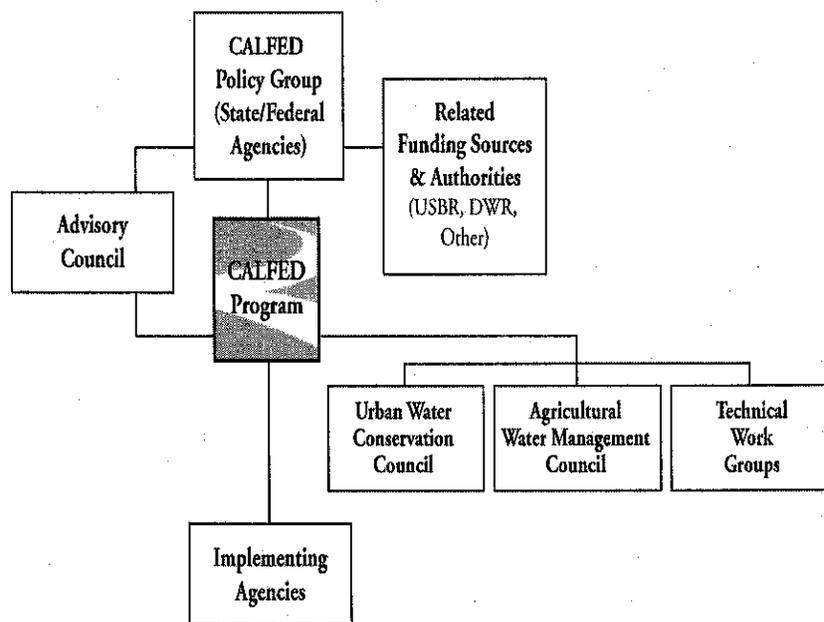
The Water Use Efficiency Program would augment or enhance existing water conservation and water management programs, including technical and financial programs. The agricultural technical and financial assistance programs would be directed toward achieving quantifiable water management objectives. Success of these projects would be determined by monitoring performance indicators. Assistance would be provided based on the ability of local entities to achieve these objectives. The urban assistance programs would be directed toward implementing Best Management Practices (BMPs) listed in the California Urban Water Conservation Council (CUWCC) certification process. Water recycling incentives would be awarded based on the ability of local agencies to achieve recycling in the most cost-effective manner.

Interim Water Use Efficiency Governance

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below.

CALFED Program. CALFED program staff would coordinate state and federal agencies which have program management responsibility for WUE programs and funding. CALFED would also coordinate with the CUWCC, AWMC, other stakeholder groups and program management/funding agencies (USBR, DWR, others). The CALFED program would work with program management/funding agencies on developing and implementing the necessary monitoring in order for CALFED Policy Group to be able make the finding whether measurable objectives are achieved. This is especially important where achievement of the agreed upon performance objective is linked to, or is a condition of, implementing other parts of the program.

CALFED Water Use Efficiency Program
Interim Governing Structure



California Urban Water Conservation Council. The CUWCC is a non-profit corporation consisting of urban water suppliers and environmental representatives. It was formed to provide a self-regulated and standardized approach to urban water conservation. The Council would be responsible for administering the urban MOU for Best Management Practices. It would also

provide a means of stakeholder review and input to the program management/funding agencies and CALFED on issues related to the implementation of the WUE element.

The CUWCC would also include an elected certification subcommittee to implement CALFED's proposed urban certification process. (See the Water Use Efficiency Program Plan for more details.) The certification process would require either minimum implementation of BMPs, documentation of equivalent practices, or suitable documentation of exemption.

Agricultural Water Management Council. The AWMC is a non-profit corporation that was formed pursuant to AB 3616 to facilitate adoption of locally cost effective Efficient Water Management Practices (EWMPs) by agricultural water suppliers. The AWMC is governed by agricultural water suppliers and three environmental organizations. The council would be responsible for administering the agricultural MOU on implementation of EWMPs. The council would also provide a means of stakeholder review and input to the program management and funding agencies and CALFED on issues related to the implementation of the WUE program, and would provide critical information to CALFED on which conservation practices are cost effective at the local level.

Technical Work Groups. CALFED staff would convene technical work groups to conduct and review directed studies, to address technical issues, and to respond to problems associated with public acceptance of water use efficiency actions.

Implementing Agencies. In the interim, agencies with existing programs, funding and authorities would continue those programs but would coordinate with CALFED on certain activities most related to CALFED objectives. For example, coordination on program priorities and implementation would be needed with: USBR, DWR, and NRCS regarding the technical and financial assistance aspects of the agricultural and urban elements of Water Use Efficiency Program; USFWS and DFG regarding the BMPs (or the functional equivalent) for managed wetlands and refuges; and DWR on its recycling program. Final program and funding decisions during the interim would continue to rest with the lead agency but would be coordinated and reviewed by CALFED Policy Group.

Long-Term Water Use Efficiency Governance

A long-term governance structure is not being proposed at this time.

4.4.6 Water Transfer Program

Existing Programs and Authorities

Most transfers are carried out by agreement among two or more local agencies, without regulatory action by the state. Transfers which involve changes in place or purpose of use of

permitted or licensed water rights require the approval of the SWRCB. Transfers which require the use of state or federal facilities or which may affect project operations require the concurrence or approval of DWR and/or USBR. Additionally, DWR has operated a water bank in drought years and more recently USBR and USFWS have carried out an interim water acquisition program under CVPIA to obtain supplemental fish and water quality flows.

Description of Water Transfer Program

The CALFED Bay-Delta Program plan is to develop a water transfer policy framework which would facilitate a more efficient water transfer market, while protecting significant third party interests, such as local economies, groundwater resources, and environmental conditions. The CALFED plan does not significantly change the current market structure, but would create a water transfer information clearinghouse, located within and administered by the SWRCB. The CALFED Program plan also proposes that the agencies with water transfer jurisdiction (SWRCB, DWR and USBR) work together to make the rules and guidelines for water transfers consistent and uniform, where possible, and to provide a streamlined transfer review and approval process. Also, the program calls for continued discussion processes between the agencies and stakeholders to resolve various water transfer technical and policy issues.

The CALFED Water Transfer Program Plan does not propose that implementing agencies be required to perform any functions (except establishment of a clearinghouse) beyond those which they currently perform, nor would their duties and responsibilities with respect to water transfers significantly change.

Most of the Water Transfer Program recommendations can be characterized as changes or refinements in agency policy or procedure, which once accomplished, become part of an agency's operations. For example, streamlining the approval process would require the agencies to clarify their existing procedures and resolve some outstanding technical issues. They would also have the ongoing responsibility to achieve the transfer objectives of the CALFED Program. Most, if not all, of the water transfer program recommendations should be implemented in the first few years following the ROD, prior to the end of Stage 1.

Interim Water Transfer Program Governance

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below.

CALFED Program. CALFED Program staff would provide program coordination among CALFED program elements and among agencies with jurisdiction over water transfers and use of project facilities. CALFED would also, for the short term, continue to coordinate various processes for resolving water transfer issues among the agencies and stakeholder groups. The

CALFED Policy Group in its oversight capacity would be responsible for ensuring that the water transfer program plan is implemented in a manner that is consistent with other program elements, for conflict resolution and for assuring that linkages to other program elements are maintained.

Existing Agencies. Existing agencies with jurisdiction over water transfers would directly implement any changes in their own policies or procedures. As CALFED member agencies, these agencies would coordinate with CALFED to implement program recommendations. The Bureau of Reclamation and the Department of Water Resources would continue to have jurisdiction over the use of and access to their respective project facilities. These agencies would work in close coordination with the SWRCB to provide a consistent set of rules and guidelines for water transfers and a streamlined transfer review and approval process.

Long-Term Governance

CALFED proposes that the Water Transfer Information Clearinghouse be located within the State Water Resources Control Board, as a division separate from the Division of Water Rights. SWRCB regulatory jurisdiction over changes in place of use and purpose of use would be unchanged.

At the program oversight level, the long-term functions associated with the water transfer program plan would be primarily to ensure that linkages are maintained and performance objectives are being met. This may entail monitoring the implementation of certain recommendations to make sure that they would not jeopardize other important program actions. For example, if establishment of a functional clearinghouse is a prerequisite for building new storage, but the clearinghouse is never funded by the Legislature, new storage could be jeopardized. The oversight entity would be responsible for responding to this type of contingency. CALFED staff could continue to provide interagency coordination and act as conduit to the Policy Group (or the oversight entity) for oversight matters.

4.4.7 Integrated Storage Investigation

Existing Programs and Authorities

Central Valley Project reservoirs are owned by the United States and operated by the Bureau of Reclamation. State Water Project storage facilities are owned by the State of California and operated by the Department of Water Resources. San Luis Reservoir is a joint federal/state facility. Many other reservoirs are owned by local agencies and investor owned utilities. Groundwater storage projects are owned and operated by local agencies.

Description of ISI

New groundwater and/or surface storage will developed and constructed, together with aggressive implementation of water conservation, recycling, and a protective water transfer market, as appropriate, to meet CALFED Program goals. The CALFED Program decision and actions related to storage and reoperation would be based on the results of the Integrated Storage Investigation (ISI) which is a component of CALFED's Water Management Strategy. The ISI will provide the comprehensive framework for evaluation of storage implementation and management opportunities through Stage 1 and beyond. This broad mix would determine the appropriate mix of surface and groundwater storage, and identify acceptable projects. It would include evaluations of north of Delta off-stream storage, in-Delta and adjacent to Delta storage, on-stream storage enlargement, groundwater and conjunctive use power facilities reoperation, and fish migration barrier removal evaluations. Detailed environmental documentation, feasibility studies, permitting, and construction activities would be initiated as appropriate based on the outcome of the integrated storage investigation.

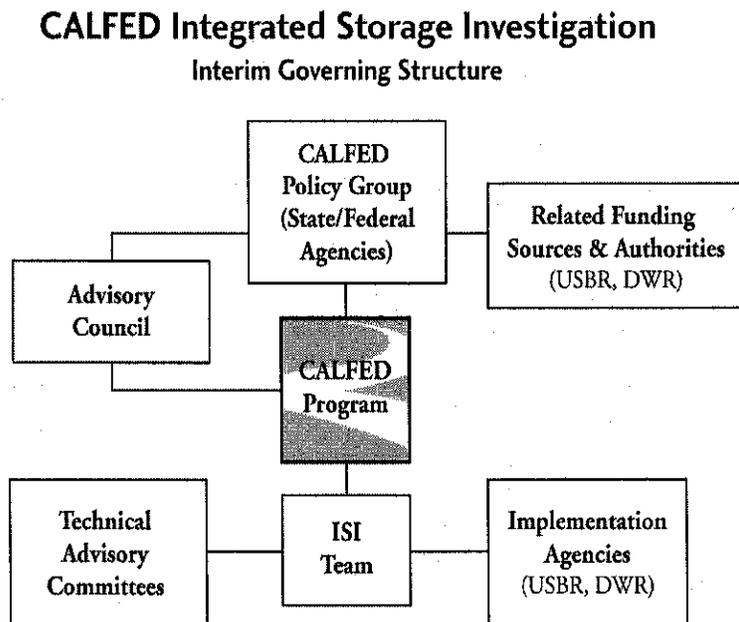
Interim ISI Governance

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below.

CALFED Program. The ISI would be coordinated and managed by the CALFED program in the interim with oversight by the CALFED Policy Group. CALFED would convene an inter-agency team to develop reports and recommendations and advise the CALFED program on program implementation.

Advisory Groups. A stakeholder advisory group would also be established to provide public review and comment on ISI studies and reports. Technical advisory committees may be set up to work with ISI staff on specific project studies (such as the existing TAC on Sites Reservoir).

Existing Agencies. The implementing agencies for the different storage studies include the Friant Dam study conducted by USBR and the Corps of Engineers; the Shasta Dam study by



USBR; the Sites study by DWR; and in-Delta and adjacent-to-the-Delta storage by DWR and USBR. The power facilities reoperations study would be a multi-agency effort coordinated by CALFED staff. Groundwater project studies would be carried out by local agency project proponents with funding assistance provided by state and/or federal funds, administered by DWR and/or USBR, subject to review and recommendation of the CALFED conjunctive use advisory committee and the CALFED Policy Group. Groundwater conjunctive use projects proposed by local interests would be reviewed by the CALFED conjunctive use advisory committee which would make recommendations to the CALFED Policy Group.

Long-Term Governance

A long-term governance proposal would be developed for each specific project, if any are identified for construction through the ISI. It is expected, but not determined at this time, that surface storage projects would be owned and operated by the federal and/or state government, or possibly by a partnership of federal, state and local agencies. Groundwater conjunctive use projects would be owned and operated by local agencies.

4.4.8 Conveyance

Existing Programs and Authorities

The two major water conveyance systems (canals and pumping plants) that export water from the Delta are part of the CVP and the SWP systems. Projects operations are coordinated through the CALFED Operations Group. Where issues cannot be resolved by the Operations Group, they are referred to the CALFED Policy Group.

Description of Conveyance Program

The conveyance element of the CALFED program describes the changes to Delta channels and project operations which are intended to improve movement of water through the Delta and to the CVP and SWP export facilities. The CALFED strategy is to develop a through Delta conveyance alternative based on the existing Delta configuration with some modifications, to evaluate the effectiveness of the modifications, and to add additional conveyance or other water management actions as necessary to meet CALFED goals and objectives. The major features of the conveyance element for Stage 1 are expected to include the South Delta actions (increase pumping limit at Banks, new screened intake at CCF, Joint Point of Diversion for CVP and SWP, barrier at head of Old River, at Middle River, and at Old River at Tracy); North Delta improvements (modified operational criteria for the Delta Cross Channel, study of a screened diversion structure on the Sacramento River, setback levees and channel improvements on the lower Mokelumne). (See Revised Phase II Report for additional detail of conveyance program proposal.)

Interim Governance

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below.

CALFED Program. CALFED would coordinate and manage the implementation of Stage 1 conveyance actions. Conveyance actions are closely linked with levee, water quality and ecosystem restoration actions and CALFED's role would be to maintain and ensure linkages between these program objectives and to evaluate the impact of conveyance actions on the achievement of water quality and ecosystem objectives.

Existing Agencies. Implementation of specific conveyance improvements would be carried out primarily by USBR or DWR, in coordination with other agencies as appropriate.

CALFED Policy Group and Operations Group. Operational and resource management issues would continue to be discussed and resolved when possible by the Operations Group, with major issues referred to the CALFED Policy Group. Also, the CALFED Policy Group would be the primary deliberative body for decisions related to the contingent strategy for new conveyance facilities, based on the reports of the Delta Drinking Water Council and the ERP Science Review Panel.

Long-Term Governance

There is no proposal for long-term governance related to conveyance at this time.

4.4.9 Environmental Water Account (EWA)

Existing Programs and Authorities

Currently, environmental water purchases for instream flows and refuges are made by the USBR and/or USFWS under the Department of Interior's Interim Water Acquisition Program, using CVPIA Restoration Funds and Federal Bay-Delta Act Funds. Environmental water for instream flows and refuges has also been acquired at times by the Department of Fish and Game.

Description of the EWA

The EWA is a mechanism for acquisition and management of water supplies to provide benefits to fish and the environment, above the regulatory baseline and to provide additional operational flexibility for project operations. It is intended to provide assurances that listed species be recovered under the CALFED Program while achieving other program objectives for water supply and water quality.

EWA assets may be obtained through a share of water supply from new or existing facilities; variation in regulatory standards that would otherwise limit exports; by purchase of water, or by borrowing storage in new or existing project facilities. EWA assets may be in the form of water stored in surface reservoirs or groundwater storage projects, export reduction credits, or options to purchase water in the future.

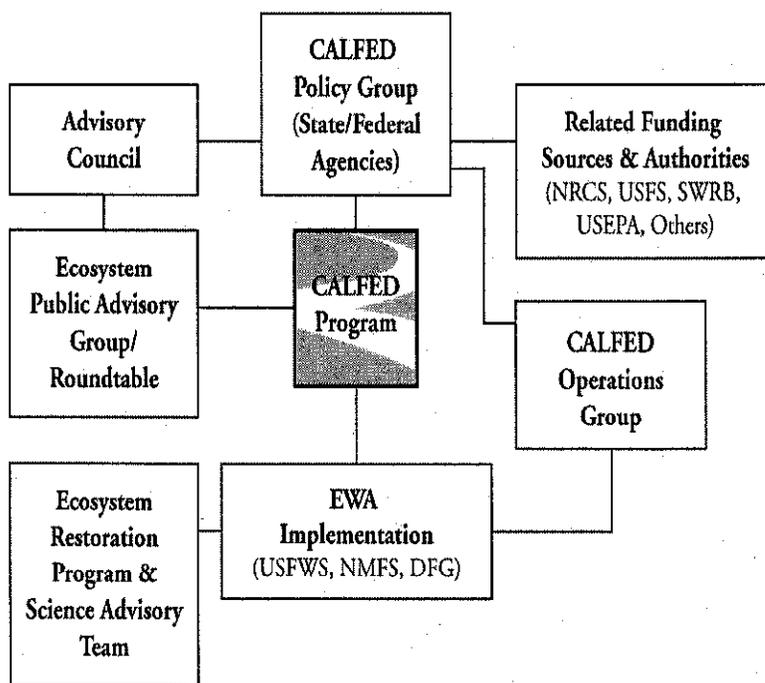
Interim Governance Proposal

The interim governing structure and description of how the program management, program coordination and direct implementation functions will be implemented in the interim are described below.

CALFED Program. For the interim, the CALFED Program would coordinate with the Fish and Wildlife agencies (DFG, USFWS, NMFS) responsible for implementing the EWA to ensure CALFED program objectives are being met and are balanced between ecosystem and water management objectives. Policy and funding decisions regarding the EWA would need to be reviewed by the CALFED Policy Group and the CALFED Operations Group. Coordination and consultation efforts among the CALFED Operations Group, including project operators and ESA management agencies, the CALFED ERP program manager, and stakeholder groups are intended to ensure that the environmental water acquisitions are consistent with CALFED program goals and objectives, and that conflicts with ESA requirements and project operations are minimized or avoided.

CALFED Environmental Water Account

Interim Governing Structure



CALFED Operations Group. Inter-agency coordination, including coordination with ESA agencies, will also occur within the CALFED Operations Group, which includes project operations agencies, resource management and regulatory agencies. (Most CALFED member agencies are represented on the Ops Group.)

EWA Implementation. The EWA would be implemented and managed by the USFWS, NMFS, and DFG in coordination with the ERP. Although policy and funding review and approval for the EWA would be provided by the CALFED Policy Group, day to day management decisions would be made by the three implementation agencies. EWA assets would be held by any one of the implementing agencies. EWA actions would be reviewed over time by the ERP Science Advisory Team as the actions relate to the overall Ecosystem Restoration Strategy.

Long-Term Governance

There is no long-term governance proposal for the EWA at this time.

4.4.10 Comprehensive Monitoring, Assessment, and Research Program (CMARP)

Existing Programs and Authorities

Currently, the two major monitoring, assessment and research entities with ongoing programs in the San Francisco Bay-Delta Estuary are the Interagency Ecological Program (IEP) and the San Francisco Estuary Institute (SFEI). The two projects coordinate and communicate quite extensively and address complementary aspects of monitoring and research.

IEP. IEP is an interagency cooperative program. The IEP mission is to provide information on the factors that affect ecological resources in the Sacramento-San Joaquin Bay-Delta Estuary to allow for more efficient management of the estuary. The IEP consists of ten member agencies: three state (Department of Water Resources, Department of Fish and Game, State Water Resources Control Board), six federal (Fish and Wildlife Service, Bureau of Reclamation, Geological Survey, Army Corps of Engineers, National Marine Fisheries Service, and Environmental Protection Agency) and one non-governmental organization (The San Francisco Estuary Institute). The ten program partners work together to develop a better understanding of the estuary's ecology and the effects of the SWP and CVP operations on the physical, chemical and biological conditions of the Sacramento-San Joaquin Bay-Delta estuary.

SFEI. The mission of the SFEI, a 501c3 nonprofit organization, is to foster development of the scientific understanding needed to protect and enhance the estuary through research, monitoring and communication. SFEI is governed by a Board of Directors whose members are selected to assure a balance of environmental, business and user groups, regulatory and management and scientific interests. There is also a panel of Scientific Advisors that serves the Board of Directors.

These two programs provide much of the support for the Bay-Delta monitoring programs. However, program objectives developed for IEP and SFEI differ sufficiently from the CALFED

objectives. Modifications and additions to these existing programs would need to be made if the monitoring, assessment and research needs of CALFED were also to be met.

CMARP Planning. In April 1998, the CALFED Policy Group approved a joint IEP, SFEI and U.S. Geological Survey proposal to develop a Comprehensive Monitoring, Assessment and Research Program (CMARP). The three entities formed an 18 member steering committee made up of CALFED agency and non-agency scientists to help define the program. The steering committee, with the help of 30 technical teams developed a set of recommendations for implementing and refining CMARP. Those recommendations are included in the May 15, 1999 report which is included in the Draft EIS/R as a Technical Appendix. The report includes a chapter on an institutional structure to implement CMARP. The information in the report was used and revised to develop the current governance recommendations in this chapter.

CMARP Program Description

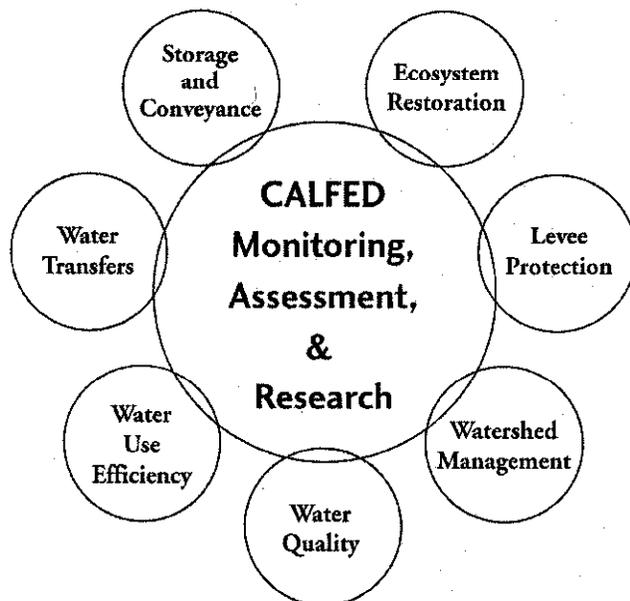
The primary purpose of CMARP is to provide new facts and scientific interpretations necessary for CALFED to fully implement the preferred alternative and related programs using an adaptive management approach, and to enable CALFED to evaluate the success of its actions. Therefore it is important that CMARP be an integral component of the CALFED Program and maintain scientific objectivity. CMARP will provide the monitoring, assessment and research framework for all CALFED Programs, and will oversee the adaptive management program for the CALFED Program in coordination with each of the CALFED program elements. Additional detail on CMARP is provided below.

Principles of a CMARP Governing Structure

Certain principles apply to consideration of a governing structure for CMARP.

1. **Responsiveness to Management Needs** -- The ability of the program to provide the kind of information needed by managers as they move forward through the decision process is paramount. The types of management needs to which the CMARP must respond include:

- documenting compliance with regulatory standards,
- detecting and reporting trends in environmental condition,
- measuring CALFED program performance,



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- providing timely information for decisions, and
 - collaborating with management to execute active adaptive management.

2. **Scientific Quality** -- The importance and cost of the decisions to be made in the CALFED process and the demands of adaptive management require that the program utilize the best scientific information that can be made available. Quality would be enhanced by:

- Scientific competence and credibility achieved through publication of results in peer-reviewed scientific journals.
- Scientific breadth and depth resulting from a broad mixture of disciplines and expertise.
- Independence such that scientists have the ability to determine how best to do their work and be free of attempts to influence their findings, achieved at least in part by extensive use of external scientific review.
- Commitment to long-term monitoring, assessment and research to reduce uncertainty.

3. **Accountability** -- Accountability encompasses responsiveness and quality, but also includes the concepts of cost-effectiveness, transparency of process, and participation.

Accountability requires:

- Easy access to all of the data and information upon which decisions are based.
- Collaboration among scientists, stakeholders and resource managers.
- An open, consistently applied and transparent process for setting program priorities and making funding decisions.
- Cost-effectiveness achieved by building upon existing programs and by employing competitive solicitation processes.

The greatest challenge in the implementation of CMARP would be to achieve the appropriate balance among these sometimes competing principles.

CMARP Functions

The principal function of a CMARP structure is to manage the direction of the monitoring, assessment and research program and assist in the design of the adaptive management program. In addition to analyzing trends, CMARP must be prepared to initiate scientific research, including monitoring, modeling, and data analysis, to determine whether things are changing and what effect the CALFED actions have had. Although this would not always be possible, it should be the idea behind the performance assessment. The CMARP functions include:

- Coordinating monitoring, assessment and research with the other CALFED programs.
- Designing and directing the CALFED Comprehensive Monitoring Assessment and Research Program,

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- Collecting, managing and distributing the data,
 - Analyzing and interpreting data, and reporting the findings,
 - Orchestrating external scientific review of projects and programs, and
 - Collaborating with managers on adaptive management.

CMARP Responsibilities

Described below are general CMARP responsibilities needed to fulfill the CMARP functions.

1. **Fund Management** -- CMARP would serve the program management function of identifying priorities, selection actions and distributing funds allocated for research and monitoring and accounting for the funds and the work done.
2. **External Scientific Review** -- Such review is required at three points in the development and implementation of the program: review of the overall direction and quality of CMARP; selection of research proposals and monitoring program elements, and review of CMARP products.
3. **Encouraging Partnerships between Internal and External Scientists.** These partnerships are based upon collaborative working relationships between and among the Chief Scientist, the Science Coordination Team and the agencies and organizations conducting CALFED funded and non-CALFED funded environmental monitoring, assessment and research. A big challenge of implementing CMARP would be knitting together disparate programs and determining where the most value added would result from an expenditure of CALFED funding.
4. **Coordinating a Science-Management Partnership to Carry Out Adaptive Management.** Active adaptive management, if employed by CALFED, would require a partnership among decision makers, stakeholders, managers of the natural resources, and scientists.
5. **Resolving Technical Conflicts.** Technical conflicts threaten to prevent or hamper progress in reaching consensus on priority actions. Using outside experts is one option for focusing debate clearly on policy issues.
6. **Data Collection, Data Management, and Information Handling.** Many agencies, organizations, and individual research scientists would be collecting data and providing these data and their interpretation to CMARP. CMARP would set quality assurance guidelines, metadata standards, reporting requirements, and guidelines for making data available to interested parties.

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7. **Annual Science Conference.** All individuals and organizations that received funding through the CALFED process would be expected to participate in the conference and present their work. In addition, the Chief Scientist and others could discuss general direction of the science program, management implications of the findings coming out of the work and what is being learned about the condition of the system and the way it functions. This conference could be an annual opportunity to publicly present and explain how indicators are being used to assess "Bay-Delta Health" and what the indicators are telling us about trends in environmental condition. Such a conference might incorporate components of two existing successful and popular events--the IEP Annual Meeting and the SFEI State of the Estuary Conference.

Interim CMARP Governance

The interim governing structure is described below. Given the functions described above, certain elements of an interim (and long-term) governance structure are needed:

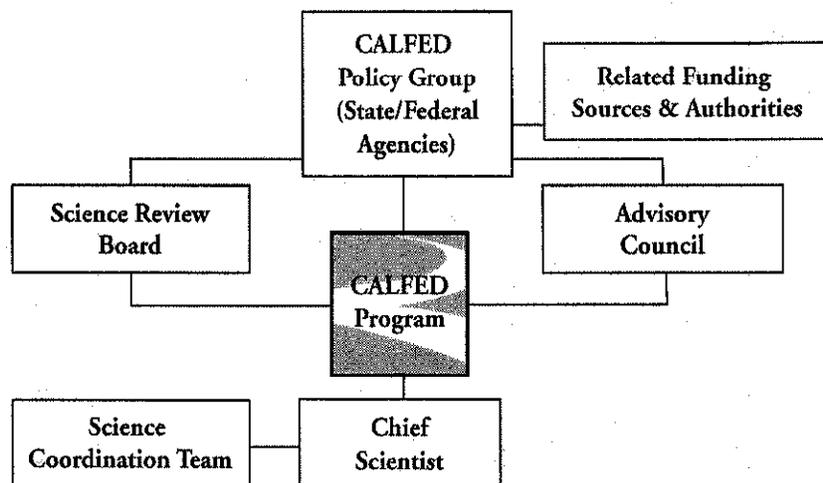
- **Science Review Board:** advisory to the Policy Group and CALFED Program
- **Chief Scientist:** reporting to the CALFED Executive Director. The Chief Scientist would have a qualified team of scientists to manage implementation of CMARP and to coordinate with all the CALFED programs
- **Science Coordination Team:** agency and stakeholder representatives to advise on major elements of the monitoring, assessment and research program.

Science Review Board. The Science Review Board would play an important role in guiding the Policy Group with regard to its use of science in adaptive management and decision-making. Because science inherently produces uncertain results, often complicated by contentious debate among conflicting interpretations, the Policy Group may need assistance in understanding the quality and usefulness of the information upon which they are asked to make decisions. The Science Review Board would help the Policy Group make these judgments. The Science Review Board would also assist in using scientific information to evaluate whether the CALFED program is reaching its dual goals of improving water supply and restoring the Bay-Delta ecosystem. This level of review addresses not the quality of the scientific program per se, but the use of science in the management program.

The Science Review Board needs both to be allowed the highest degree of independence, yet be able to work closely and hold the trust and respect of the CALFED Policy Group. The Board would have staggered terms of 3-5 years to provide for some stability and for turnover and fresh ideas and viewpoints. The Board should include a combination of prominent scientists who have expertise in CALFED-type programs and issues (but do not work in the area) and prominent scientists with local experience and expertise who are independent of CALFED agencies and stakeholders.

The original Board would be selected by National Academy of Sciences or another well respected and neutral group of eminent scientists. Professional societies such as the American Fisheries Society, the Estuarine Research Federation, the National Science Foundation, or the Wetlands Society would nominate the initial members. In the future, the Board would select new members, based also on nominations from professional societies. The Policy Group would have veto authority over proposed nominations but would not have the final decision over selected members.

CALFED Monitoring, Assessment and Research Program Interim Governing Structure



Since the primary source of information for the Science Review Board would be CMARP, judgments on the quality, breadth, and applicability of the work done by CMARP would, to some extent, be a necessary by-product of the Science Review Board's principal role. The Policy Group may also look to the Science Review Board for assistance in evaluating the quality and effectiveness of CMARP. Since this exercise

would, to a degree, involve evaluation of the talents and judgment of the Chief Scientist and the Science Coordination Team that reports to the Chief Scientist, an arm's length relationship between the Board and the Chief Scientist should be maintained.

Chief Scientist. Scientific leadership is key to the success of CMARP, and is more important than any other aspect of the organizational structure set up to operate or govern the program. An endeavor of the magnitude and importance of CMARP must have strong leadership. Providing a position of Chief Scientist would help ensure high levels of credibility and accountability.

The Chief Scientist would report to the CALFED Executive Director. Duties of the Chief Scientist would include the following:

- be responsible for the overall direction and quality of the monitoring, assessment and research program;
- assemble and direct a Core Technical Staff that can provide analysis and interpretation of monitoring information;
- work with all of the CALFED programs on monitoring, research, and assessment
- chair the Science Coordination Team designed to keep all of the agencies and

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- organizations that implement elements of the program working collaboratively; identify (through the Policy Group, Science Review Board, Stakeholder Advisory Committee, etc.) the management issues that need to be addressed through CMARP;
 - identify and help resolve technical controversies, through consensus building, where possible;
 - produce an annual work plan of monitoring, assessment and research;
 - ensure that the external review functions are carried out, supported, and heeded;
 - convene an Annual Science Conference;
 - interact with the regulatory agencies.

Science Coordination Team. The agencies and organizations (including stakeholder organizations) that currently conduct major monitoring, assessment and research programs would play an important role managing and implementing the comprehensive program proposed by CALFED. These are the programs upon which CMARP would be built. The comprehensive program would result from the combination of these programs and the new efforts initiated in directed response to CALFED needs. In some cases, especially where expansion or redirection of existing efforts is required to make the CMARP program work, these same agencies and organizations would need to be involved in helping to craft the changes and would need to be conducting additional work. This team would be the mechanism by which the Chief Scientist keeps all of these efforts moving in a coordinated fashion, and ensures cooperative working relationships among all of the partner organizations. The team would be responsible for advising CALFED on the annual work program for CMARP.

Long-Term CMARP Governance

The proposed functions, principles, and interim structure is expected to be much the same in the long-term governance structure. The primary changes would be in response to changes in the final oversight governing structure.