

CALFED
BAY-DELTA
PROGRAM



Briefing Packet





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BAY-DELTA
PROGRAM

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October 1997

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THE ALTERNATIVES

The three alternatives represent a broad range of potential solutions to problems in the Bay-Delta system. The three Alternatives have a total of 12 variations (five were eliminated during initial Phase II evaluation). Each remaining variation is being further evaluated. Through the Program's alternative evaluation process, the number of these variations will continue to decline, and the selected preferred alternative may not be one of the unique variations described herein.

The reader should keep several considerations in mind while reviewing the alternatives:

- Each alternative is structured around a set of four common programs, including ecosystem quality, water quality, levee system vulnerability and water supply reliability.
- Physical differences between the alternatives lie mainly in the method of transporting water through or around the Delta and the amount of additional water storage included within each alternative. Each of the three alternatives includes a variety of potential combinations, or variations, of conveyance and storage (i.e., 1C, 3A).

Physical differences between the alternatives lie mainly in the method of transporting water through or around the Delta and the amount of additional water storage included within each alternative
- These alternative descriptions define the range of actions that could be implemented; beneficial and detrimental consequences will be left for later Phase II impact analysis.
- While the basic composition of the common programs remains relatively constant in each alternative, they may perform somewhat differently depending on the storage and conveyance components included within a specific alternative formulation.
- The final preferred alternative resulting from the Phase II process will include a set of institutional assurances to complete the package.
- The alternatives will also include a range of reasonable operational policies and strategies (an initial description to provide context for analysis is included with each alternative).

COMMON ELEMENTS OF ECOSYSTEM RESTORATION PROGRAM PLAN

- Restore 75,000 to 120,000 acres of freshwater and brackish tidal marsh and shallow riverine habitat
- Provide new or improved fish screens at selected diversions totaling 4,000- 8,000 cfs
- Develop floodway on the San Joaquin and Cosumnes Rivers
- Manage undesirable introduced species
- Restore 100 to 200 miles of riparian woodland and shaded riverine areas
- Restore 300,000-500,000 acre feet annually of increased critical period flows
- Add 40-100 tons of gravel replacement annually to enhance spawning
- Provide improved fish passage over barriers that limit access to habitat
- Manage water quality that degrades



COMMON ELEMENTS OF WATER QUALITY PROGRAM

- Implement source or treatment control at mines
- Implement agriculture source control (BMPs, IPM)
- Control timing of discharges
- Convert land use on lands with selenium problems
- Treat San Joaquin Valley subsurface agriculture drainage
- Implement urban stormwater source control (BMPs)
- Treat Delta Island drainage
- Evaluate adequacy of treatment at WWTPs, including pretreatment requirements
- Improve drinking water treatment
- Relocate intakes for better quality source water
- Construct Delta barriers to manage flow and salinity
- Reduce boat discharge through public education and improved enforcement
- Acquire dilution water for salinity control (willing sellers)



COMMON ELEMENTS OF WATER USE EFFICIENCY PROGRAM

- Agricultural Water Use Efficiency
- Urban Water Use Efficiency
- Effective Use of Diverted Environmental Water
- Water Recycling
- Water Transfers



COMMON ELEMENTS OF LEEVE SYSTEM INTEGRITY PROGRAM

- Distribute funding for PL-99 Standards equitably
- Set island priorities for special projects
- Link levee and habitat improvement projects with ERPP and Water Quality
- Subsidence control, including shallow flooding
- Construct habitat improvement elements such as landside and waterside berms
- Construct sediment traps in the Delta
- Establish dredged material management office
- Establish emergency response command structure
- Establish multi-agency response team
- Establish emergency response fund
- Stockpile emergency flood fight materials
- Conduct research to define risk of seismicity
- Perform levee improvements to reduce seismic susceptibility
- Restore and rehabilitate in-channel islands (ERPP)
- Establish new recreational areas and facilities



ALTERNATIVE 1

EXISTING SYSTEM CONVEYANCE

This alternative essentially relies on the common programs to meet Program goals, using only existing Delta channels for water conveyance, preserving the Delta common pool as currently in place in that it provides a common source of water for all users. Three configurations with various south Delta modifications differentiate the variations in this alternative. One variation includes new surface and groundwater storage.

Common Programs				Delta Configuration	Water Storage
Ecosystem Restoration	Water Quality	Water Use Efficiency	Levee System Integrity	Varies from existing Delta channels with no conveyance modifications to select south Delta modifications	Varies from no new storage to: 3.0 MAF Upstream (Sac) 2.0 MAF Off-Aqueduct 200 TAF In-Delta 500 TAF Sac. Valley GW 500 TAF San Joaquin GW

Alternative 1A

Alternative 1A combines and integrates the four common programs without adding new storage and conveyance facilities to supplement the status quo. The main elements of the common programs are summarized below.

Alternative 1B

Alternative 1B combines and integrates the four common programs with select south Delta improvements. Alternative 1B builds upon Alternative 1A by adding fish screens at the Banks and Tracy pumping plants and an intertie between the Tracy pumping plant and Clifton Court Forebay. All common programs fit together as they did in Alternative 1A.

Alternative 1C

Alternative 1C builds on Alternative 1B by adding new conveyance to provide for increases in the permitted south Delta pumping capacity to the full physical capacity. Alternative 1C is the same as Alternative 1B except that it includes new surface and groundwater storage facilities throughout the watershed.

ALTERNATIVE 2

MODIFIED THROUGH-DELTA CONVEYANCE

This alternative combines the common programs with significant modifications of through-Delta channels to improve water conveyance across the Delta. This alternative preserves the Delta common pool in that it provides a common source of water for all users dependent on Delta water supplies. Combinations of four potential conveyance configurations and three new storage configurations differentiate the five variations of this alternative.

Common Programs				Delta Configuration	Water Storage
Ecosystem Restoration	Water Quality	Water Use Efficiency	Levee System Integrity	Varies from channel modifications primarily for water conveyance to extensive modifications for water conveyance and habitat restoration	Varies from no new storage to: 3.0 MAF Upstream (Sac) 500 TAF Upstream (SJ) 2.0 MAF Off-Aqueduct 200 TAF In-Delta 500 TAF Sac. Valley GW 500 TAF San Joaquin GW

Alternative 2A

Alternative 2A combines and integrates the four common programs with North and South Delta channel modifications designed to improve water conveyance. Alternative 2A is the "minimal" alternative to achieve improved through-Delta conveyance. It provides for more efficient water conveyance from the Sacramento River through Snodgrass Slough, North Fork Mokelumne River and Old River near Clifton Court Forebay. It also includes new fish screens at the Tracy and Banks pumping plants, an intertie between the pumping plants, and operable barriers or equivalent in the south Delta. The alternative does not provide additional water storage.

Alternative 2B

Alternative 2B combines and integrates the four common programs with north and south Delta channel modifications designed for water conveyance and new surface and groundwater storage. The alternative is the same as Alternative 2A except it adds new water storage facilities.

Alternative 2D

Alternative 2D combines and integrates the four common programs with system modifications in the north and south Delta designed to improve water conveyance, provide habitat restoration integrated with the conveyance improvements and provide new aqueduct storage south and downstream of the Delta. The alternative provides for more efficient water conveyance from the Sacramento River through Snodgrass Slough, South Fork Mokelumne River and Old River near Clifton Court Forebay. It also includes new fish screens at the Tracy and Banks pumping plants an intertie between the pumping plants, and an operable barrier or equivalent at the head of Old River.

Alternative 2E

Alternative 2E combines and integrates the four common programs with modifications in the north and south Delta designed to improve for water conveyance, provide significant habitat restoration and provide additional surface and groundwater storage. The conveyance and habitat portions of this alternative are the similar to Alternative 2D with the exception of additional conveyance and habitat on Tyler Island and the elimination of the 10,000 cfs intake at Hood.

ALTERNATIVE 3

DUAL DELTA CONVEYANCE

This alternative adds an isolated facility to the through-Delta modifications of Alternative 2, which together combine with the common programs to move water through and around the Delta. Combinations of seven potential conveyance configurations and two new storage configurations differentiate the nine variations of this alternative.

Common Programs				Delta Configuration	Water Storage
Ecosystem Restoration	Water Quality	Water Use Efficiency	Levee System Integrity	Through Delta channel modifications vary from those primarily for water conveyance to those for water conveyance with extensive habitat restoration. Isolated facility varies from small (5000 cfs) to large (15,000 cfs).	Varies from no new storage to: 3.0 MAF Upstream (Sac) 500 TAF Upstream (SJ) 2.0 MAF Off-Aqueduct 200 TAF In-Delta 500 TAF Sac. Valley GW 500 TAF San Joaquin GW

Alternative 3A

Alternative 3A combines and integrates the four common programs with north and south Delta channel modifications designed to improve water conveyance and a small (5,000 cfs) isolated facility constructed as an open channel or pipeline. This alternative is considered the "minimal" option for the dual Delta conveyance alternative. It also includes new fish screens at the Tracy and Banks pumping plants, an intertie between the pumping plants, and operable barriers or equivalent in the south Delta. The alternative provides no new water storage.

Alternative 3B

Alternative 3B combines and integrates the four common programs with north and south Delta channel modifications designed for water conveyance, a small (5,000 cfs) isolated facility constructed as an open channel or pipeline, and surface and groundwater storage. The alternative is the same as Alternative 3A except for the new water storage.

Alternative 3E

Alternative 3E combines and integrates the four common programs with north Delta channel modifications designed to improve water conveyance, a large (15,000 cfs) isolated facility constructed as an open channel, and surface and groundwater storage. The alternative is similar to Alternative 3B except for the size of the isolated facility and the elimination of Old River enlargement and barrier at the head of Old River.

Alternative 3H

Alternative 3H combines and integrates the four common programs with modified conveyance in the north and south Delta designed for water conveyance and significant habitat restoration, a small (5,000 cfs) isolated facility constructed as an open channel or pipeline, and surface and groundwater storage.

Alternative 3I

Alternative 3I combines and integrates the four common programs with three new diversion locations for Tracy and Banks pumping plants and surface and groundwater storage. The new diversions could be used separately or in combination to provide increased operational flexibility. One new in-Delta water storage would receive water from one of these new diversions. The alternative also includes new fish screens at the Tracy and Banks pumping plants and an intertie between the pumping plants. This alternative is similar to Alternative 2C with one diversion extended to Hood, and new surface and groundwater storage.

NARROWING THE ALTERNATIVES

CALFED staff, with input from BDAC and other stakeholders, has developed a set of 18 distinguishing characteristics that could be used in detailed evaluation of Program alternatives. They are:

1. In-Delta water quality
2. Export water quality
3. Diversion effects on fisheries
4. Delta flow circulation
5. Storage and release of water
6. Water supply opportunities
7. Water transfer opportunities
8. Operations flexibility
9. South Delta access to water
10. Risk to export water supplies
11. Total cost
12. Assurances difficulty
13. Habitat impacts
14. Land use changes
15. Socio-economic impacts
16. Consistency with solution principles
17. Ability to phase facilities
18. Brackish water habitat

These characteristics are intended to help distinguish how the alternatives differ. The characteristics focus on the major differences in alternatives; differences that will be used in the selection of a draft preferred alternative. All other parts of the alternatives are important, but evaluation of their performance will not help select a draft preferred alternative. However, information on the performance of these other parts will also be available to the decision makers.

PREFERRED ALTERNATIVE INTERAGENCY DEVELOPMENT TEAM

The IDT is composed of a CALFED staff core group and an agency team. Collectively, the IDT is charged with developing the draft Preferred Alternative(s) for Policy Group decisions. IDT members will be expected to fully represent the positions of their respective agencies. Each IDT member should fully coordinate with their Management Team, Policy Group, and Program Coordination Team representatives. The full IDT will meet frequently, and members will dedicate very significant effort to this process, perhaps up to a half time effort.

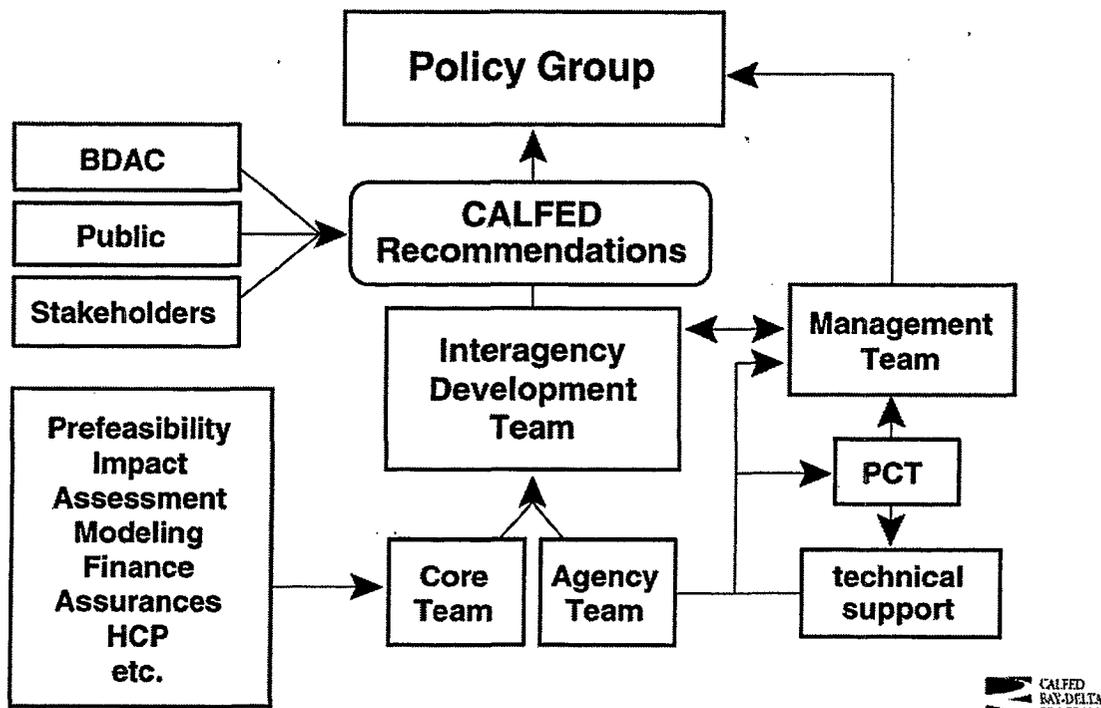
The following flow chart entitled "Preferred Alternative Development and Screening Process" depicts the process as envisioned. Together, the Core Team, composed of CALFED staff and the Agency Team, the CALFED agency representatives form the IDT. The Core Team (CALFED staff) have responsibility for helping to array and analyze alternatives, to clarify differences and tradeoffs, and to prepare draft materials for action by the IDT. The purpose of dedicating CALFED staff resources through the Core Team is to enable steady momentum to be maintained toward a decision, and to enable the IDT to work efficiently and effectively in this process.

The IDT is composed of a CALFED staff core group and an agency team. Collectively, the IDT is charged with developing the draft Preferred Alternative(s) for Policy Group decisions.

Agency Team members will receive support from technical experts in their organizations and bring the products of this expertise to the deliberations of the IDT. Coordination with the Program Coordination Team participants will also be accomplished through the Agency Team. The work of the IDT will be coordinated with other CALFED activities, such as prefeasibility studies, finance, and assurances, through the Core Team.

The IDT will provide decision support to the Management Team which, in turn, provides decision support to the Policy Group. The IDT will also provide decision support to CALFED management and incorporate input from BDAC, stakeholders and the public, as necessary to assist CALFED management in formulating recommendations for Policy Group action.

Preferred Alternative Development & Screening Process



TIMELINE

September 23 - Policy Group

Present the proposed structure and function of the Preferred Alternative Interagency Development Team (Team)

October 16 - Management Team

Present initial results of Team deliberations. Identify resolved and unresolved issues.

October 21 - Policy Group

Present initial results of Team deliberations. Identify resolved and unresolved issues.

November 4 - BDAC

Present initial results of Team deliberations. Identify resolved and unresolved issues.

November 13&14 - Management Team

Present potentially viable alternatives, as recommended by the Team for deliberation by the Management Team.

November 24&25 - Policy Group

Present potentially viable alternatives, as recommended by the Management Team.

December 2&3 - Management Team

Present proposed Draft Preferred Alternative as recommended by the Team.

December 12 - BDAC

Present proposed Draft Preferred Alternative recommended by the Team, as modified pursuant to recommendations of the Management Team.

December 18&19 - Policy Group

Present proposed Draft Preferred Alternative recommended by the Team, as modified pursuant to recommendations of the Management Team and BDAC.

RESTORATION COORDINATION UPDATE

The CALFED Bay-Delta Program's Restoration Coordination Program will identify and prioritize ecosystem restoration projects suitable for early implementation and coordinate other ongoing restoration efforts to ensure consistency with the CALFED Bay-Delta Program's long-term ecosystem restoration strategy, the Ecosystem Restoration Program Plan (ERPP).



The December 15, 1994, Bay Delta Accord included a commitment to develop and fund non-flow related ecosystem restoration actions to improve the health of the Bay-Delta ecosystem. This commitment is commonly referred to as Category III.

HOW CAN MONEY BE SPENT BEFORE THE COMPLETION OF THE EIR/EIS?

While the details of the preferred alternative will not be finalized until Fall 1998, the proposed FY 1998 program concentrated on activities that will be beneficial to the long-term Program regardless of which alternative is ultimately chosen.

The FY 1998 program includes only activities that are consistent with each of the three alternatives and also provide early implementation benefits. This implementation will also provide valuable information for use in adaptively managing the system in later years of the Program.

However, projects pursued for early implementation must:

- be justified independently of the Program by the lead agencies for that project;
- be accompanied by an adequate environmental document, the preparation of which includes consultation with responsible and trustee agencies; and
- not prejudice the ultimate decision on the Program.

Early action projects and programs will be those for which there is existing broad support. Many of these center around ecosystem restoration, such as habitat improvements for many specific species of concern, wetland restoration efforts in upstream areas throughout the Sacramento and San Joaquin river systems.

CALFED has received 332 formal Category III proposals totaling \$471 million in requested funding. The evaluation and selection process has begun. CALFED anticipates sending a recommended funding package to the Policy Group in late October for a final decision at the November Policy Group meeting. Comments and recommendations provided by the Ecosystem Roundtable and BDAC will accompany the funding package.

The Category III and CVPIA programs have increased coordination. The Integration Panel, considering the unique mandates of each program, will review both the Category III proposals and selected CVPIA annual work plans to ensure consistency of priorities and coordination of funding.

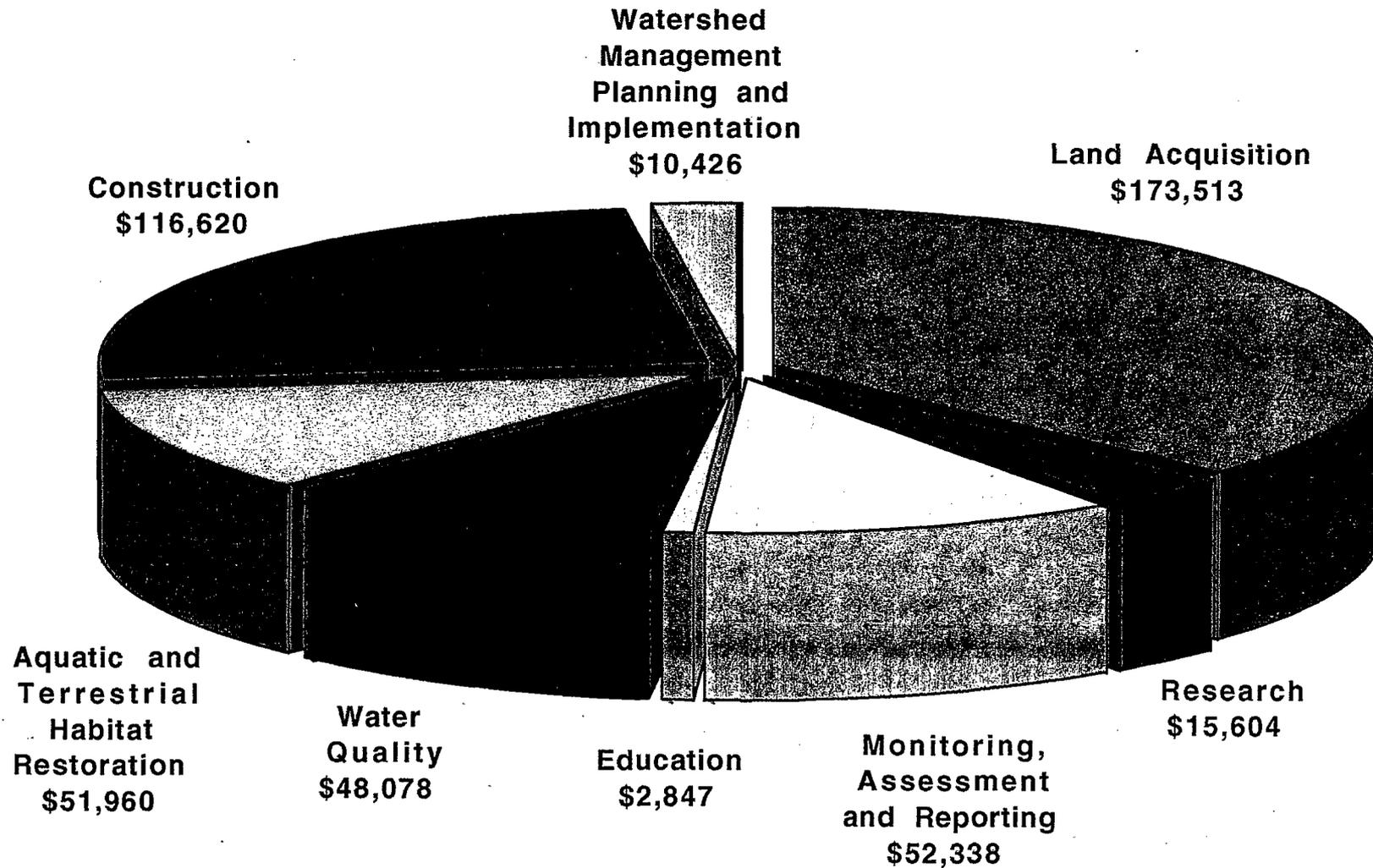
SUMMARY OF CATEGORY III PROPOSALS RECEIVED

CALFED staff have developed an updated summary of the Category III proposals received which is attached. The attached summary describes the distribution of proposals by type of applicant, project type, dollars requested, watershed, habitats, species and stressors. Many proposals address multiple species, stressors, habitats, and even watersheds. Therefore, for those four categories we did not identify a primary single attribute. Consequently, the totals for these four categories exceed the actual dollars requested and proposals submitted.

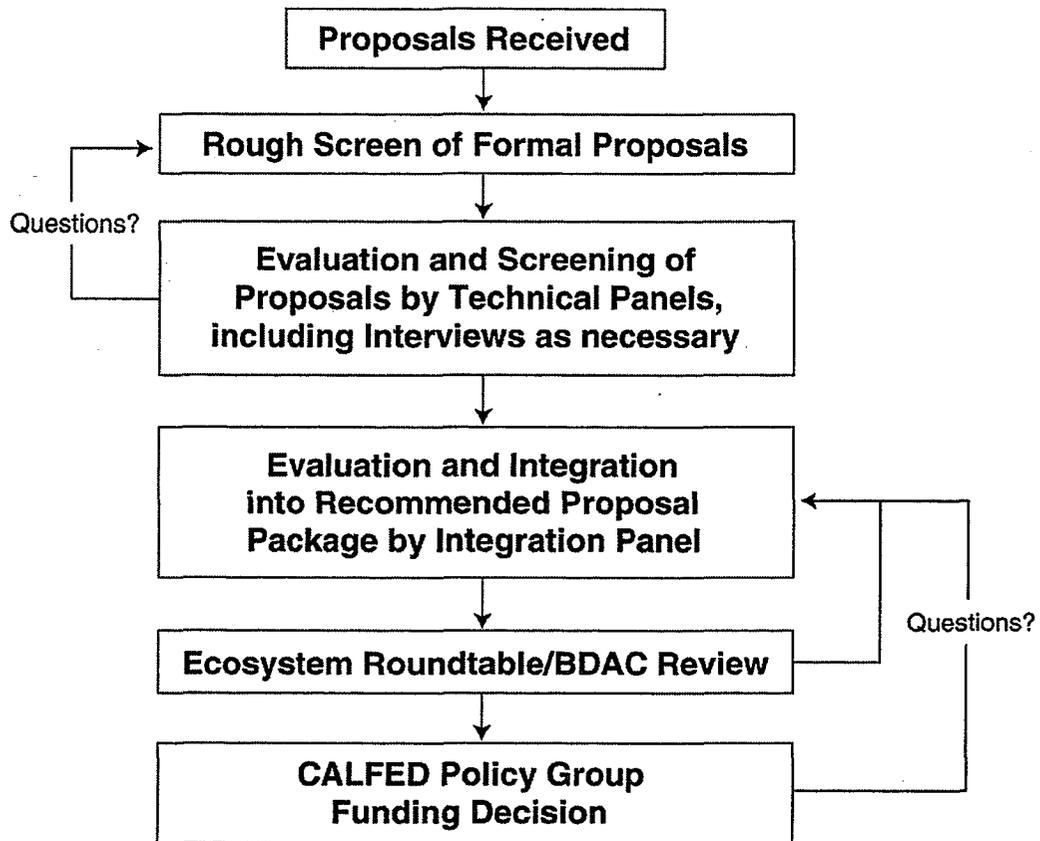
RFP EVALUATION AND SELECTION PROCESS

As described at the August meeting, a two-tiered process has been adopted to score and select proposals – technical review panels are meeting to evaluate and score the proposals and an integration panel will be used to identify priorities and select the proposals. Thirteen technical review panels have been formed and are meeting to evaluate and score the 332 proposals. The integration panel has met to identify guiding principles and priorities for proposal selection (priorities and principles attached). The integration panel has identified priorities for species and project type and will identify priorities for habitats and stressors at their next meeting in September.

Proposal Characteristics- Project Type



RFP Evaluation and Selection Process



SCHEDULE FOR FUNDING DECISIONS

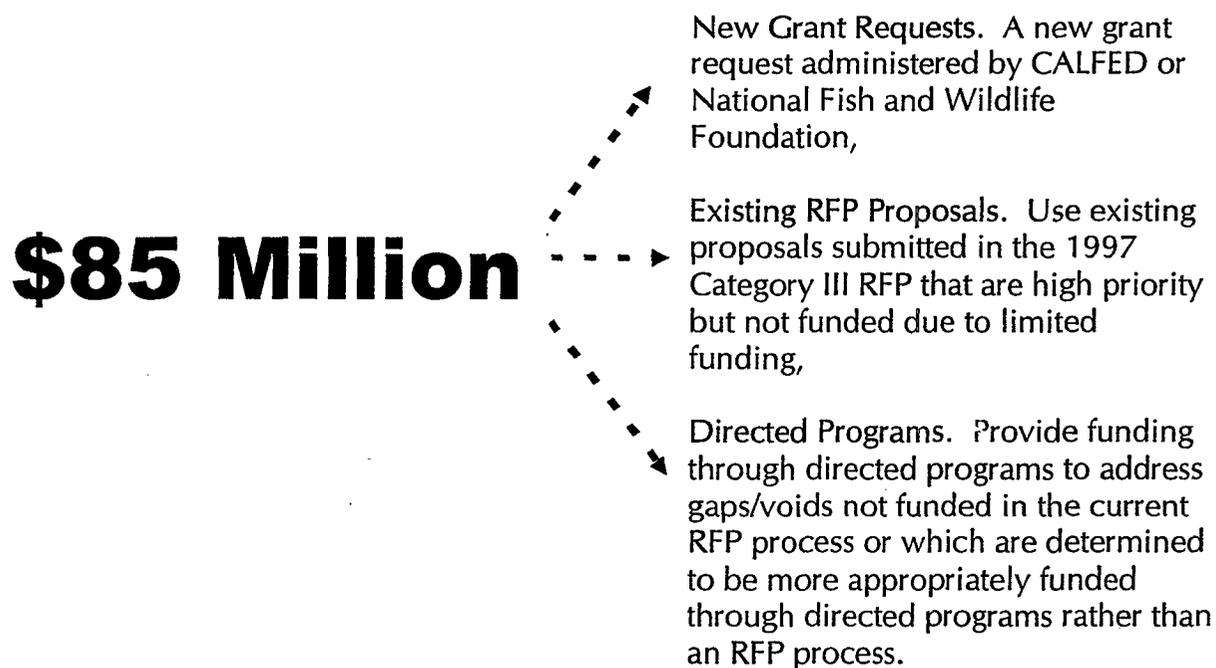
The technical review panels and integration panel are expected to complete their work in mid-October. The recommended funding package will be provided to the Ecosystem Roundtable for review and comment at their October 28th meeting and to BDAC for review and comment at their November 4th meeting. The integration panel recommendations and the comments from the Roundtable and BDAC will be provided to the Policy Group for a recommended decision at their November 29th meeting and then forwarded to Secretary Wheeler for a final decision on the Proposition 204 funds.

RESTORATION COORDINATION

Progress has been made to increase coordination between the Category III and CVPIA programs. The integration panel will review both the Category III proposals and on selected CVPIA annual work plans for FY 98. Considering the unique mandates of each program, the integration panel will review both programs using a common set of priorities for those species which are common to both programs. In addition, CALFED staff are meeting with CVPIA and other closely related funding programs to increase coordination regarding project implementation.

NEXT FUNDING CYCLE

Discussion has begun regarding methods of allocating the federal funds anticipated in FY 98 for ecosystem restoration. The following three options, which are not mutually exclusive, are being considered:



HABITAT CONSERVATION PLAN

CALFED is expanding the scope of its programmatic Environmental Impact Statement/Report (EIR/EIS) to include preparation of a Habitat Conservation Plan (HCP) and/or Natural Community Conservation Plan (NCCP). The original Notice of Intent/Preparation (NOI/NOP) for the CALFED EIR/EIS was issued in March 1996. A supplemental NOI reflecting the expanded scope of the EIR/EIS was published in the Federal Register at 62 FR 97-22895, August 28, 1997.

WHAT IS A HABITAT CONSERVATION PLAN?

A Habitat Conservation Plan or HCP is a tool that can be used to promote long-term habitat protection, and recovery of threatened and endangered species.

The Federal Endangered Species Act (FESA) and the California Endangered Species Act (CESA) require permits or authorizations for any activity which could result in "take" of threatened and endangered species. ("Take" is defined by FESA as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" an endangered or threatened species, and could include actions that destroy or impact habitat.) "Incidental take" is defined as take that "is incidental to, and not the purpose of, the carrying out of an otherwise lawful activity."

A Habitat Conservation Plan or HCP is a tool that can be used to promote long-term habitat protection, and recovery of threatened and endangered species.

The process requires applicants for incidental take permits to prepare and submit a plan, or HCP, to the U.S. Fish and Wildlife Service and the National Marine Fisheries Service describing impacts of the "take" and how they will be mitigated.

WHY IS AN HCP NEEDED?

If an HCP is approved and an incidental take permit issued, non-Federal members of CALFED could receive assurances, pursuant to the Department of the Interior's No Surprises Policy. The CALFED HCP will also provide comprehensive, long-term conservation strategies that will allow for the recovery of any listed species and not contribute to the need to list any currently unlisted species. Under such a plan, participants would be assured that, in the event of unforeseen circumstances affecting those species, no additional land, funds, or restrictions on covered Program actions will be required.

HCP OPTIONS

The CALFED agencies are considering several options for the structure of an HCP.

1. Standard HCP: Develop a comprehensive HCP that would address all reasonable and foreseeable activities and associated impacts under consideration for the program. Assurances to appropriate entities would be commensurate with the level of specificity and detail provided in the HCP.
2. Phased HCP with Conditioned Permit: Develop an initial HCP for the Bay-Delta Program which addresses all known actions; supplemental HCPs (and appropriate CEQA and NEPA compliance) would be developed in the future as unknown/undefined program components became defined. Upon determination by the Services that issuance criteria have been met, an incidental take permit for the whole Bay-Delta Program would be issued; the permit would be conditioned to become effective in stages corresponding to approval of supplemental HCPs. Assurances to appropriate entities would also become effective in stages.
3. Phased HCP with Permit Amendments: Develop an initial HCP for the Bay-Delta Program which covers all known actions; subsequent supplemental HCPs (and appropriate CEQA and NEPA compliance) would be developed in the future as unknown/undefined program components became defined. An incidental take permit, covering only those actions included in the initial HCP, would be issued upon approval of the initial HCP. Permit amendments would be processed as supplemental HCP's were approved. Assurances would be provided to appropriate entities only for that portion of the overall Program as covered by each permit or permit amendment.

SCOPING

A draft Notice of Intent/Preparation was prepared and distributed to the general public on September 5 outlining HCP scoping meetings.

- Tuesday, September 16, 7-9 p.m., Red Lion Hotel, Redding
- Tuesday, September 23, 7-9 p.m., Convention Center, 1400 "J" Street, Sacramento
- Wednesday, September 24, 7-9 p.m., Orange County Airport Hilton
- Tuesday, September 30, 7-9 p.m., Los Banos Fairgrounds, Los Banos
- Tuesday, October 14, 7-9 p.m., Marina Marriott, Berkeley

ASSURANCES

Program staff working with the BDAC Assurances Workgroup have developed three preliminary approaches to implementing the Ecosystem Restoration Component of the long-term program. The Workgroup is analyzing the costs and merits of each proposal and examining assurance options for the other CALFED Bay-Delta Program components. In addition, the Workgroup is discussing a plan for the phased implementation of the program and its role in helping craft the Habitat Conservation Plan and Natural Community Conservation Plan process.

Once the CALFED agencies select a long-term solution, they will need to assure that the solution will be implemented and operated as agreed. In addition, the CALFED Agencies will need to design a process to address a situation where a key component of the solution cannot be implemented. The BDAC Assurances Workgroup is trying to assure that the program is implemented; it is not trying to assure any specific outcome of the program.

*Once the CALFED agencies
select a long-term solution,
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agreed*

Program staff in working with the workgroup have developed three differing entities to implement the Ecosystem Restoration Component of the Program.

- The first uses the existing CALFED agencies to implement the Program with CALFED coordinating the agencies' efforts and mediating disputes. A citizens advisory committee would provide public comment on implementation. All of these elements would be laid out in an Implementation Plan to be included in the Programmatic EIR/EIS.
- The second approach uses a joint powers authority to implement the Ecosystem Restoration component and CALFED to coordinate implementation of the other Program components. This option also includes a citizens advisory committee and an Implementation Plan.
- The third approach creates an ecosystem restoration authority to implement the Ecosystem Restoration component. This entity would include citizens on its governing board. It is currently designed to have a CALFED-like entity provide oversight and coordination with implementing other Program components. In addition, this option includes an Implementation Agreement that would set out the schedule and tools for assuring implementation. This Agreement would be signed by CALFED Agencies and stakeholders. (This Agreement is sometimes referred to as the Accordo Grande.)

Regardless of which program alternative or management entity is selected, the CALFED agencies must also decide in what order to implement actions, and how to tie the actions together in logical phases. The challenge in implementing a program in phases is to allow actions that can be taken immediately to occur, while assuring that each interest group has a stake in the successful implementation of the entire program. Staff is preparing a plan for the phased implementation of the program. The general phases include actions to be taken:

- between the present and the completion of the programmatic EIR/EIS;
- during the transition period from the certification and Record of Decision for the EIR/EIS to the time when all necessary entities, authority and adequate funding are available;
- during near-term implementation; and
- in long-term implementation.

The Workgroup is very interested in the assurances that can be provided in a Habitat Conservation Plan and/or Natural Community Conservation Planning effort. An HCP/NCCP would provide assurances that restoration actions for endangered species as described in the ERPP would be implemented. It likewise would identify specific avoidance, mitigation and minimization strategies for addressing Program actions that could effect listed, candidate and species of concern. In exchange, the permittee would receive some level of regulatory certainty that if the HCP/NCCP were being implemented appropriately that additional regulatory requirements would not be applied to the permittee except under certain pre-defined circumstances.

Because an endangered species planning process addresses fundamental ecological questions, the BDAC Ecosystem Workgroup will also be helping craft the HCP/NCCP.



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Appendices

October 1997

CALFED BAY-DELTA PROGRAM BACKGROUND

The agreement to join in the CALFED Program
"is good for economic growth, good for the
environment, and good for California and the
nation."

President Bill Clinton

"California history is replete with accounts
of...water wars...But too often they have been
wars without winners. There is too much at
stake for us to risk losing again."

Governor Pete Wilson

"We can pay for the fix now, or we can pay
later in ways too costly to be calculated: jobs,
farmland, natural habitat and lifestyle."

Editorial, The Contra Costa Times



MISSION

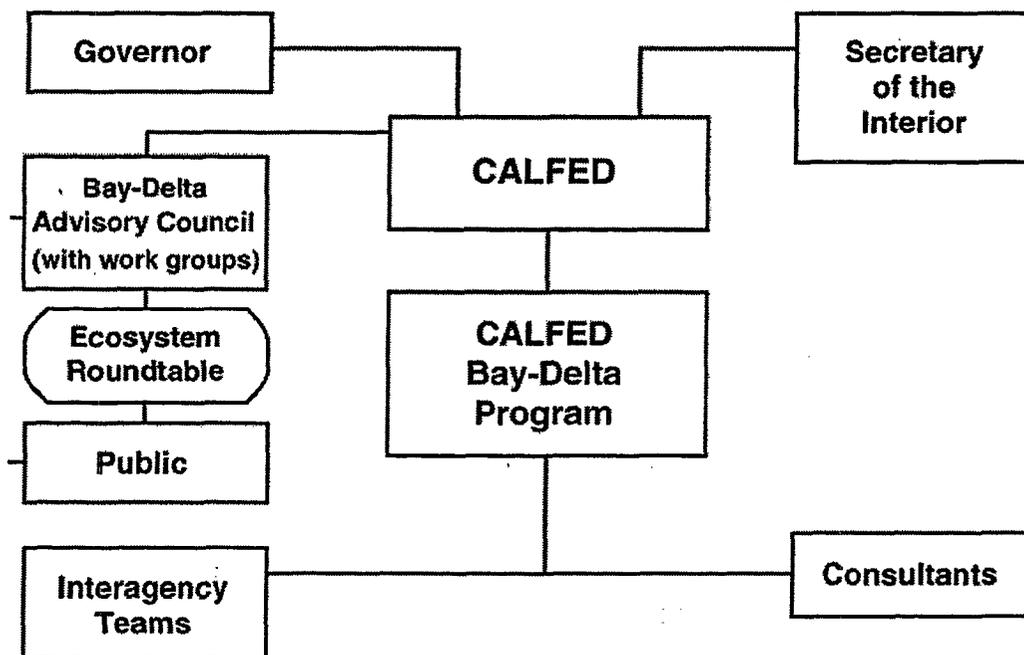
*To develop a long-term comprehensive
plan that will restore ecological health and improve water
management for
beneficial uses of the Bay-Delta system.*



WHAT IS THE CALFED BAY-DELTA PROGRAM?

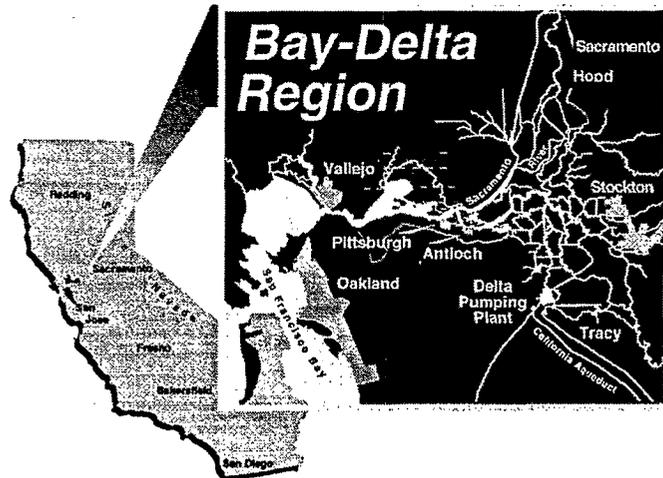
- A state and federal partnership charged with developing a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta system.
- Established by California Governor Pete Wilson and Secretary of the Interior Bruce Babbitt.
- Builds upon the historic 1994 Bay-Delta Accord in which environmental, agricultural and urban interests agreed to work together to solve problems in the Delta.
- Action categories include ecosystem restoration, water quality improvement, levee stability, water use efficiency, and water storage and conveyance.
- A federally chartered Bay-Delta Advisory Council, comprised of 34 water leaders from throughout California, provides regular guidance and is one of many avenues for public input to the Program.
- A collaborative effort with Bay-Delta "stakeholders" — urban and agricultural water users, fishing interests, environmental organizations, businesses, and others — who contribute to Program design and to the problem solving/ decision-making process.

Program Structure



ABOUT THE BAY-DELTA

- The capacity of the Bay-Delta to meet the varied demands placed upon it is significantly impaired today.
- The CALFED Bay-Delta Program manages the open planning process charged with resolving that weakness.
- In addition to being a source of drinking water for 22 million Californians, the Bay-Delta supports jobs, habitat, food supply, recreation, wildlife, and industry in the world's 7th largest economy.
- The CALFED Bay-Delta Program is a unique collaboration among state and federal agencies, and the state's leading urban, agricultural, and environmental interests, to address and resolve challenges in the Bay-Delta system.
- The "stakeholder" community, the State Legislature, the Governor and the people of California, all agree that the Bay-Delta is in serious peril and that solutions for saving it must be developed immediately, as evidenced by the passage of Proposition 204 late last year, investing over a half-billion dollars in the CALFED Program.
- Good progress has been made to date. In less than 18 months, three proposed solution alternatives have been developed. A draft preferred alternative will be released in early 1998, and the final preferred alternative will be selected by fall 1998.



BAY-DELTA PROBLEMS

The problems facing the Bay-Delta are complex and offer a challenge to government, business and citizens to protect resources of the system while meeting the needs we place upon it.

The problems in the Bay-Delta are grouped into four, intrinsically linked areas:

- Ecosystem quality
- Water supply
- Water quality
- System vulnerability

Problem Area: Ecosystem Quality

The Bay-Delta system no longer provides the habitat necessary to support healthy populations of plants and animals. The decrease in habitat can be traced back as early as the 1800s when the conversion of Delta marshland began. Since the 1850s, 700,000 acres of overflow and seasonally inundated land in the Delta have been converted for agricultural or urban use. Hydraulic mining techniques also contributed to habitat loss and decline. Because mining sediments filled channels and increased flooding, levees were constructed for flood control purposes. Levees eliminated important shallow water habitat for fish, while dredging operations conducted to build levees eliminated natural habitat along river channels.

The quantity and timing of water flow into the Bay-Delta are important aspects of ecosystem functions, and they have been altered significantly, particularly since the 1960s. Pollutants and introduced species have also contributed to decline in ecosystem health.

The primary program objective for ecosystem quality is to improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta system to support sustainable populations of diverse and valuable plant and animal species.

Problem Area: Water Supply

The Bay-Delta system provides the water supply for a wide range of uses. As water use and competition among uses has increased during the past several decades, conflicts have increased among users of Delta water. In addition, water flow and timing requirements have been established to protect certain fish and wildlife species with critical life stages dependent on freshwater flows. These requirements have reduced operational flexibility to meet water demands. Decreased water supply reliability increases economic uncertainty in the service areas and intensifies conflict over allocation of supplies.

The question of water availability has created economic uncertainty in the water services areas and increased

potential conflict over supplies. The primary objective for water supply reliability is to reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system. This can be accomplished by reducing the conflict among beneficial water uses, improving the ability to transport water through the Bay-Delta system and reducing the uncertainty of Bay-Delta water supplies.

Problem Area: Water Quality

The Bay-Delta system provides water for drinking, agricultural irrigation and to support aquatic and wetland habitat. The quality of water in the system is critically important. Pollution enters the Bay-Delta through a number of sources, including sewage treatment and industrial facilities, forests and farm fields, mines, residential landscaping, urban streets and natural sources, including organics and ocean silt. Natural organics from soil erosion and plant decay are a concern because they react with chemicals used in water treatment, creating byproducts that may be harmful to humans. High salt concentrations impact the use of Delta waters for agriculture and drinking water, and can affect the delicate balance of the ecosystem.

The objective of the Bay-Delta Program for water quality is to provide good quality water for all beneficial uses, including drinking water, agriculture, industrial and recreational use and environmental needs.

Problem Area: System Vulnerability

Much of the recent flooding in Northern California resulted from levee failures. These tragic events highlight the need for continued and improved coordination among state and federal agencies, as well as continued investment in maintenance improvements.

There is a growing concern that Delta levees are vulnerable to failure, especially during earthquakes or periods of high runoff. Failure of Delta levees can result in flooding of Delta island farmland and wildlife habitat. Levee failure on key Delta islands would draw salty water up into the Delta, as water rushed to fill the breached island. Such a failure could result in a long interruption of water supply for in-Delta and export use by both urban and agricultural users, until the salt water could be flushed from the Delta.

In addition, local reclamation districts are concerned with the cost of maintaining and improving the levee and channel system. The complex array of agencies with planning, regulatory and/or permitting authorities over levees makes rehabilitation and maintenance efforts difficult. The primary program objective for addressing Bay-Delta system vulnerability is to reduce the risk to land use and associated economic activities, water supply, infrastructure and the ecosystem from catastrophic breaching of Delta levees. The vulnerability of the levee system to both general failure and sudden catastrophic failure can be reduced by implementing an integrated and comprehensive program for maintenance and rehabilitation of Delta levees and channels.

WHAT'S AT STAKE?

- California's principal source of drinking water — more than 22 million residents get their water from the Bay-Delta system.
- The largest wetland habitat and largest estuary in the West, and a critical nursery ground and migration corridor for more than 120 species of fish and wildlife.
- A key component of the state's \$18-billion agricultural industry, supplying irrigation water to millions of acres for 200 crops, including 45 percent of the nation's fruits and vegetables. One in ten California jobs is dependent upon agriculture.
- Silicon Valley manufacturing, which requires a reliable supply of high quality and dependable quantities of water from the Bay-Delta watershed to drive the San Francisco Bay Area's regional economy.
- Southern California's multi-billion-dollar economy, which is dependent upon a reliable water supply from the Delta for commerce and industry, as well as to mix with more saline Colorado River water to protect the region's groundwater basins.
- The home to one of the most productive natural salmon fisheries on America's west coast, serving to maintain a commercial fishery and significant recreational fishing opportunities supporting tourism and other economic multipliers.
- Ultimately, the continued vitality of California's economy, the world's 7th largest, hinges upon the success of the CALFED Bay-Delta Program to ensure the reliability of current and future water supplies, while protecting the Bay-Delta's unique natural heritage.



MAKING IT WORK

The continuing success of the CALFED Bay-Delta Program is critical, and dependent upon several key factors:

Continued partnerships — Implementation of any solution developed by the CALFED Bay-Delta Program will be a multi-decade effort. Partnerships among agencies and with stakeholders formed during this process must continue for the duration — they are a hallmark of the Program.

Funding support — Cost-sharing by the federal government, the State of California and the “stakeholder” community has been an essential factor in progress and success to date, and will need to continue. The California Legislature’s authorization, and the people’s passage, of Proposition 204 reflects both their commitment and prudent foresight.

Interest and participation — The CALFED Bay-Delta Program has brought together an unprecedented collaborative effort among a broad spectrum of public and private entities — a process which will require continued high levels of interest and participation by all, for the duration of implementation.

Collaboration — The CALFED Bay-Delta Program enjoys widespread support due to its open and collaborative decision-making process. This unique coalition of environmental, urban and agricultural interests working together is the model that offers the best hope for resolving water management and environmental problems associated with the Bay-Delta system.

The Bay-Delta, as the hub of California’s water system, has for decades been the focus of competing interests — economic and environmental, urban and agricultural — and it has suffered from gridlock. The issues are complex, and if they continue unresolved the future vitality of the state will remain at risk.

PROGRESS TO DATE

PHASE I

Phase I of the CALFED Bay-Delta Program's three-phase process was completed in fall 1996. Three conceptual alternatives were developed with the benefit of significant public input at public meetings and technical workshops as part of a public scoping process.

- All three alternative solutions are designed to address Bay-Delta problems comprehensively:
- They share common programs to address water use efficiency measures, ecosystem restoration, water quality protection, and levee improvements.
- They also include a range of water storage options.
- They differ in their method of conveying water from north of the Delta to south of the Delta.

≈ Alternative 1 uses the existing system of Delta channels, and makes only minor modifications.

≈ Alternative 2 uses the existing system but with significant modifications to its configuration and carrying capacity to improve the efficiency of water transfer and reduce environmental impacts.

≈ Alternative 3 uses the existing system, with significant changes, and adds an isolated facility to move water around the Delta.

During Phase I three conceptual alternatives were developed with the benefit of significant public input to address Bay-Delta problems comprehensively. They differ in their method of conveying water from north of the Delta to south of the Delta.

PHASE II

The CALFED Bay-Delta Program worked with stakeholders to create a narrowing process to identify a preferred alternative for addressing problems facing the Bay-Delta. Seventeen configurations of the three conceptual alternatives were first evaluated to identify those that best satisfy the Program's solution principles. The solution principles call for a plan that will reduce conflicts in the system, be equitable, affordable, durable, implementable, and have no significant redirected impacts.

Alternative variations are then ranked according to their ability to meet the Program's objectives. To determine this information, CALFED staff conducted modeling studies, prefeasibility studies and impact analyses. In September 1997, five configurations were eliminated from further consideration, leaving 12 to undergo further consideration.

The final step in the narrowing process, currently underway, is to choose a draft preferred alternative. This choice will be based on technical analysis and public input regarding necessary trade-offs. This solution – or preferred alternative – will represent the best overall balance in achieving Program objectives and consistency with the solution principles.

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WHAT'S NEXT?

A draft preferred alternative is expected in January 1998, and a final preferred alternative will be selected in Fall 1998. Continuing extensive public participation will extend throughout this EIR/EIS process.

Phase III, site specific project analysis and implementation, will begin in late 1998 and last for decades.

PROGRAM OBJECTIVES

- Provide good water quality for all beneficial uses.
- Improve and increase aquatic and terrestrial habitats and improve ecological functions in the Bay-Delta to support sustainable populations of diverse and valuable plant and animal species.
- Reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system.
- Reduce the risk to land use and associated economic activities, water supply, infrastructure, and the ecosystem from catastrophic failure of Delta levees.

SOLUTION PRINCIPLES

- Affordable
- Equitable
- Durable
- Implementable
- Reduced conflict among competing interests
- No significant redirected impacts

THE CALFED BAY-DELTA PROGRAM AN EXAMPLE OF "REINVENTING GOVERNMENT"

- Because water touches all Californians, broad public participation and outreach is a critical component of the CALFED Bay-Delta Program, and has been given extraordinary emphasis.
- The CALFED Bay-Delta Program is an historic collaborative effort involving individuals, organizations, businesses and the water community.
- The CALFED Bay-Delta Program proactively solicits and receives significant and meaningful public input — to help shape a viable Bay-Delta solution.
- Numerous public meetings, in communities from Redding to San Diego, and frequent public technical workshops in Sacramento have been a cornerstone of the process, and will continue.

UNIQUE FACETS OF THE CALFED BAY-DELTA PROGRAM

- Exceptional cooperation between state and federal governments, and an example of government "reinventing" itself to solve problems across agency jurisdictions.
- The largest ecosystem restoration project in United States history — pulling together new resources with multiple pre-existing environmental restoration efforts to address the Bay-Delta system in a coordinated and more efficient and effective manner.
- After decades of gridlock, major urban, agricultural and environmental interests have moved beyond past animosities to support, participate in, and contribute to the CALFED Bay-Delta Program.



HISTORY

The CALFED Bay-Delta Program started in June 1995 as a collaborative effort to address a declining ecosystem, uncertain water supplies, imperiled water quality, and unstable levees in California's Bay-Delta, the region where the San Francisco Bay meets the Sacramento/San Joaquin River Delta.

This 738,000-acre area of channels, sloughs, and islands is a critical habitat for 120 fish and wildlife species. It also serves as the hub of California's water distribution system, supplying drinking water to over 22 million people in northern, central, and southern California and irrigation water to over 4 million acres of farmland.

Critical to California's economy and ecology, the Bay-Delta has been the focus of competing interests virtually since the Gold Rush. And it has suffered from this. Habitats are declining, and several native species are endangered. The system no longer serves as a reliable source of high-quality water, and the levees face an unacceptably high risk of breaching.

Impetus to solve these problems came in 1992 with California Governor Pete Wilson's water policy speech and the formation of the

Water Policy Council, which brought together several state agencies with management and regulatory responsibilities in the Bay-Delta. In September 1993, the

Federal Ecosystem Directorate was created to coordinate related federal activities in the region.

In June 1994, the Water Policy Council and the Federal Ecosystem Directorate joined to become CALFED. By the end of that year, CALFED, in cooperation with diverse interest groups, had drafted interim Bay-Delta water quality standards and created a state/federal work group to coordinate operations of the State Water Project and the Federal Central Valley Project.

In June 1995, CALFED launched the CALFED Bay-Delta Program to develop a long-term, comprehensive solution to Bay-Delta problems.

The management efforts of the CALFED Bay-Delta Program have included close cooperation not only among state and federal agencies, but involvement of urban and agricultural water users, fishing interests, environmental organizations, business and others. Such non-governmental groups play a critical role in the collaborative process of developing solutions to Bay-Delta problems.

PROGRAM SCOPE

Geographic Scope

The Bay-Delta Program uses a two-level geographic scope. This approach focuses on the Bay-Delta system in defining problems, yet expands the focus to a broader area for generating solutions.

Problem Scope

Specifically, the geographic problem scope is the legally defined Delta, Suisun Bay (extending to Carquinez Strait) and Suisun Marsh. The Program addresses problems that exist within these boundaries or are closely linked to this area, and related to water management and beneficial economic and environmental use of water.

Solution Scope

The scope of possible solutions to these problems includes any action that can be implemented or influenced by the CALFED agencies, regardless of whether its implementation takes place within the

specified problem area. Thus, the scope for solutions would expand to include at least the Central Valley Watershed, the Southern California water system and the Pacific Ocean.

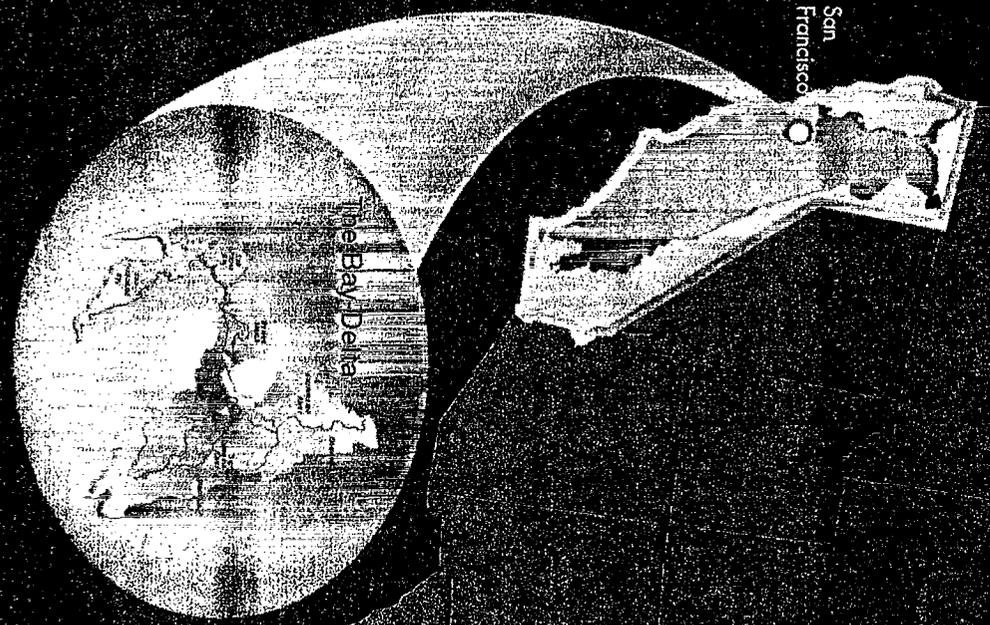
Solution Priorities

The CALFED Bay-Delta Program cannot fully solve every problem that falls within its range of consideration. Therefore, the Program will give highest priority to solving acute problems of broad concern that are closely related to the Bay-Delta system or as an element in a larger water and biological resource system. In addition, the problems must be implementable by the Program or the CALFED agencies. Other problems will receive lower priority.

Integration with Other Processes

The CALFED Bay-Delta Program is not operating in isolation. Many other programs already exist to address some of the problems and solutions being explored by the Program, particularly in upstream areas. The CALFED Bay-Delta Program will provide a framework to coordinate new and existing programs to achieve a comprehensive and lasting solution.

East/West Comparison of Scope of CALFED Solution Area



-  Geographic Scope of CALFED Solution Area
-  Geographic Scope of CALFED Problem Identification
-  CALFED Solution Area Scope Comparison on East Coast



PUBLIC PARTICIPATION

CALFED recognizes that realistic, workable and lasting solutions to the Bay-Delta crisis must reflect input from all stakeholders and the general public. Consequently, the Bay-Delta Program uses several mechanisms to ensure significant public participation and guidance. The public will have a central role in the development of long-term solutions, with opportunities to offer input through a formal citizen advisory council, workshops and other measures.

BDAC

In early 1995, CALFED established the Bay-Delta Advisory Council (BDAC) to help guide the CALFED Bay-Delta Program in development of its long-range plan. BDAC has been chartered under the Federal Advisory Committee Act. Council members were jointly selected by the Secretaries of the U.S. Department of the Interior and the California Resources Agency, and include representatives of the agricultural, environmental and business communities. BDAC assures broad public participation, comments on environmental reports and advises on proposed solutions. The Council meets regularly and is expected to do so until the CEQA/NEPA environmental documentation process is complete.

Public Workshops

Public participation is also solicited through public workshops that involve all water interests in the process, from policy experts to farmers and small business owners, from environmental advocates to Delta residents. Through the workshops, stakeholders have an opportunity to work cooperatively toward a long-term solution to managing the Bay-Delta. The workshops to date have focused on defining problems and assembling and refining solution alternatives. Workshops during Phase II will focus on the developed solution alternatives and will include formal public hearings on the Draft Programmatic EIR/EIS.

Public Meetings

The Program conducts public meetings throughout the state. The meetings provide an opportunity for interested publics to learn about the CALFED Bay-Delta Program and to comment on its efforts.

Other Activities

Additional public outreach activities include media relations, legislative briefings, presentations and briefings to interest groups and other organizations and production of educational and informational materials.

FUNDING & SUPPORT

- A federal authorization for \$430 million over a three-year period to contribute to the CALFED Bay-Delta Program effort was secured late in 1996. The President's FY 1998 Budget, released on February 6, 1997, contains \$143 million to be spent specifically in pursuit of CALFED objectives.
- On October 3, 1997, President Bill Clinton received an energy and water development appropriations bill containing \$85 million for the Bay-Delta. It is currently awaiting his signature.
- Through bipartisan efforts in the legislature, the California Governor's office, and a unique coalition of stakeholder groups, the CALFED Bay-Delta Program was given an additional shot in the arm by last year's passage of California's billion dollar Proposition 204.
- By approving Proposition 204, a significant majority of Californians acknowledged that the status quo in the Bay-Delta is unacceptable, and that finding and implementing solutions is worth funding.
- More than \$450 million has been provided for CALFED Bay-Delta Program activities, including \$390 million for implementation of the ecosystem common program upon certification of the Programmatic EIR/EIS, and completion of a cost-sharing agreement with the federal government.

TREMENDOUS PRE-EXISTING INVESTMENT AT STAKE

- The state and federal governments have invested billions of dollars in the Bay-Delta system to provide water supply, environmental and economic security over the last century.
- This joint investment has reaped exceptional benefits for the state and the nation. However, the continued viability of California's water infrastructure and the Bay-Delta ecosystem's health are at risk.
- By addressing these issues now, the threat of losing both the Bay-Delta and the dividends from the pre-existing investment will be averted.
- Through coordination and integration, the CALFED Bay-Delta Program is building upon the resources and strategies of the Central Valley Project Improvement Act (CVPIA) and other state and federal programs, resulting in a whole larger than the sum of its parts.
- California's and the nation's investment in the State Water Project and the Federal Central Valley Project is better protected through increased operational flexibility that will be enhanced by the CALFED Bay-Delta Program.
- Billions of dollars of California's economic output is at risk.

FACTS AT A GLANCE

Size of the Delta: 738,000 acres

Size of the Watershed: More than 40 million acres

Current Wetlands: 70,000 acres

Diversions from the Delta: 2,000

Total Diversions from the Delta and its Tributaries: 7,000

Diversions to the Central Valley Project and State Water Projects (the largest diverters): 6 million acre-feet/year

Primary water source for more than 22 million Californians

Fish and Wildlife Species: 120+

Species Designated by the State or Federal Governments as Threatened or Endangered: 9

Species With Special Status: 40+

Extent of Delta Farmland: 527,309 acres

Extent of Delta Levees: 1,100 miles

Islands Converted since 1850 from Marshland to Agriculture and Other Uses: 57

Level to Which Some Islands Have Sunk Due to Soils Subsidence: 25 feet below the level of adjoining waterways

Delta Recreational Activities: camping, hiking, sightseeing, bicycling, horseback riding, boating, waterskiing, fishing, etc.

CALFED AGENCIES

CALIFORNIA

The Resources Agency
Department of Fish and Game
Department of Water Resources
California Environmental Protection Agency
State Water Resources Control Board

FEDERAL

Environmental Protection Agency
Department of the Interior
Fish and Wildlife Service
Bureau of Reclamation
U.S. Army Corps of Engineers
Department of Agriculture
Natural Resources Conservation Service
Department of Commerce
National Marine Fisheries Service



GLOSSARY OF TERMS

AF	Abbreviation for acre feet; the volume of water that would cover one acre to a depth of one foot, or 325,851 gallons of water. On average, could supply 1-2 households with water for a year.
Alternative	A collection of actions or action categories assembled to provide a comprehensive solution to problems in the Bay-Delta system.
Action	A structure, operating criteria, program, regulation, policy, or restoration activity that is intended to address a problem or resolve a conflict in the Bay-Delta system.
Action Category	A set of similar actions. For example, all new or expanded off-stream storage might be placed into a single action category.
Anadromous Fish	Fish that spend a part of their life cycle in the sea and return to freshwater streams to spawn.
Best Management Practices (BMP)	An urban water conservation measure that the California Urban Water Conservation Council agrees to implement among member agencies.
Central Valley Project (CVP)	Federally operated water management and conveyance system that provides water agricultural, urban, and industrial users in California.
CFS	An abbreviation for cubic feet per second.
Conveyance	A pipeline, canal, natural channel or other similar facility that transports water from one location to another.
Central Valley Project Improvement Act (CVPIA)	This federal legislation, signed into law on October 30, 1992, mandates major changes in the management of the federal Central Valley Project. The CVPIA puts fish and wildlife on an equal footing with agricultural, municipal, industrial, and hydropower users.
Common Delta Pool	The common pool concept suggest that the Delta provides a common resource, including fresh water supply for all Delta water users, and all those whose actions have an impact on the Delta environment share in the obligation to restore, maintain, and protect Delta resources, including water supplies, water quality, and natural habitat.

Conjunctive Use	Integrated management of surface water and groundwater supplies to meet overall water supply and resource management objectives.
Delta Islands	Islands in the Sacramento-San Joaquin Delta protected by levees. Delta Islands provide space for numbers functions including agriculture, communities, and important infrastructure such as power plants, transmission lines, pipelines, and roadways.
Diversions	The action of taking water out of a river system or changing the flow of water in a system for use in another location.
Ecosystem	A recognizable, relatively homogeneous unit that includes organisms, their environment, and all the interactions among them.
Endangered Species Act (ESA)	Federal legislation that provides protection for species that are in danger of extinction.
Exotic Species	Also called introduced species; refers to plants and animals that originate elsewhere and migrate or are brought into a new area, where they may dominate the local species or in some way negatively impact the environment for native species.
Fish Screens	Physical structures placed at water diversion facilities to keep fish from getting pulled into the facility and dying there.
Groundwater Banking	Using available storage capacity within ground water basins to store surface water that is recharged during periods when it is available (e.g. during peak flood flows).
Isolated Conveyance Facility	A canal or pipeline that transports water between two different locations while keeping it separate from Delta water.
MAF	An abbreviation for million acre feet.
Meander Belt	Protecting and preserving land in the vicinity of a river channel in order to allow the river to meander. Meander belts are a way to allow the development of natural habitat around a river.
Real-Time Monitoring	Continuous observation in multiple locations of biological conditions on site in order to adjust water management operations to protect fish species and allow optimal operation of the water supply system.

Riparian	The strip of land adjacent to a natural water course such as a river or stream. Often supports vegetation that provides the best fish habitat values when growing large enough to overhand the bank.
Riverine	Habitat within or alongside a river or channel.
Setback Levee	A constructed embankment to prevent flooding that is positioned some distance from the edge of the river or channel. Setback levees allow wildlife habitat to develop between the levee and the river or stream.
Shallow Water	Water with little enough depth to allow for sunlight penetration, plant growth, and the development of small organisms that function as fish food. Serves as spawning areas for Delta smelt.
Solution Principles	Fundamental principles that guide the development and evaluation of Program Alternative. They provide an overall measure of acceptability of the alternatives.
State Water Project (SWP)	A state operated water management and conveyance system that provides water to agricultural, urban, and industrial users in California.
TAF	An abbreviation for thousand acre feet.
Terrestrial	Types of species of animal and plant wildlife that live on or grow from the land.
Water Conservation	Practices that encourage consumers to reduce the use of water. The extent to which these practices actually create a saving in water depends on the total or basin-wide use of water.
Water Reclamation	Practices that capture, treat and reuse water. The waste water is treated to meet health and safety standards depending on its intended use.
Water Transfers	Voluntary water transactions conducted under state law and in keeping with federal regulations. The agency most involved is the State Water Resources Control Board (SWRCB).
Watershed	An area that drains ultimately to a particular channel or river, usually bounded peripherally by a natural divide of some kind such as a hill, ridge, or mountain.

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REPROGRAPHICS

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