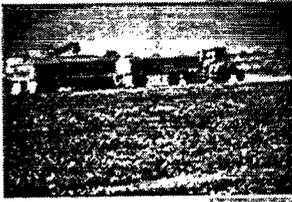


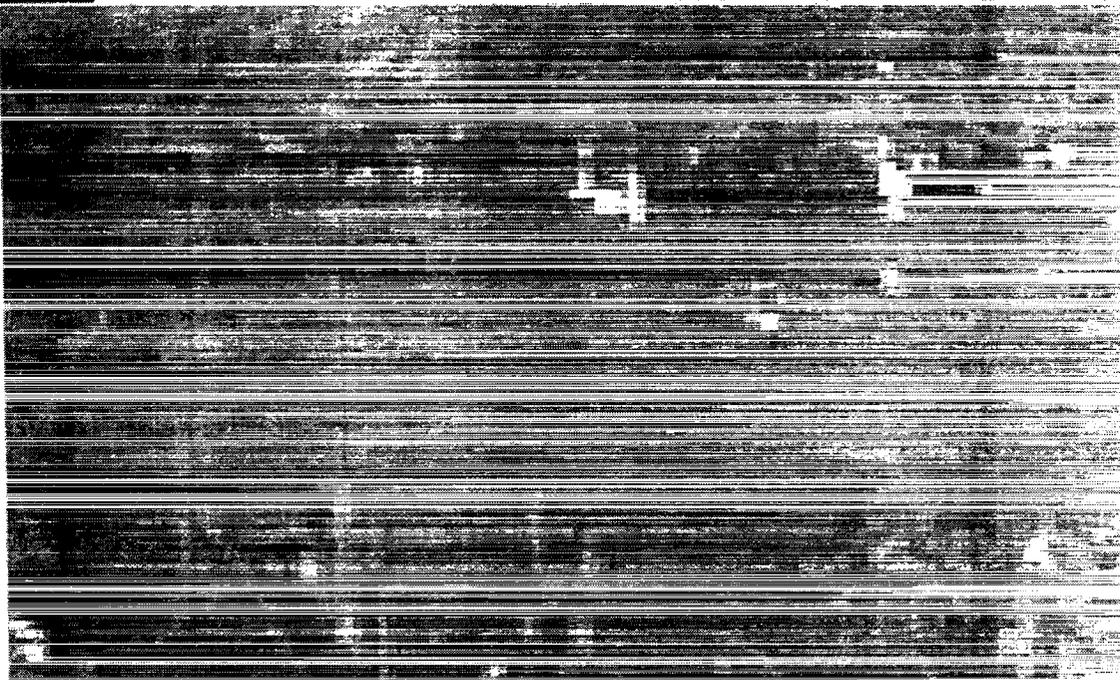
PHASE I PROGRESS REPORT



CALFED
BAY-DELTA
PROGRAM



April, 1996



I. Perspective

This report summarizes Phase I of the CALFED Bay-Delta Program, a three-phase effort to develop a long-term solution to problems affecting the San Francisco Bay/Sacramento-San Joaquin Delta estuary (the Bay-Delta) in Northern California.

The report defines four general categories of critical problems facing the Bay-Delta--ecosystem quality, water quality, water supply reliability, and system vulnerability--and describes 10 draft alternative solutions to these problems.

These draft alternatives represent combinations of actions that to varying degrees address each of the problems in the Bay-Delta's four critical areas. None are final products; all are subject to significant change based on further public input and technical analysis.

Moreover, these alternatives represent concepts, not project-level proposals. That is, they focus on identifying a range of balanced actions that *might* be undertaken to address Bay-Delta problems--actions that are technically realistic and have broad public support--not *when, where, and how* specific actions should be taken to address these problems.

Both the problems and draft solutions were identified in the Program's first phase, to be completed in late spring or summer of this year. At this time, the 10 alternatives discussed here will have been refined to three to five. Phase II investigations will lead to identification of one preferred alternative. In Phase III, elements of the preferred alternative will be implemented. Phase III will begin in mid-1998 and continue in a staged fashion over several years.

The CALFED Bay-Delta Program is a joint effort among state and federal agencies with management and regulatory responsibilities in the Bay-Delta, and involves significant public and "stakeholder" involvement. In this manner, the Program seeks resolution of Bay-Delta problems by building consensus rather than fostering conflict.

II. Program Overview

The Bay-Delta is the largest estuary on the West Coast, a beautiful, lush, and varied ecosystem including a maze of tributaries, sloughs, and islands encompassing approximately 700 square-miles. Lying at the confluence of California's two largest rivers, the Sacramento and San Joaquin, it is a haven for plants and wildlife, including 70,000 acres of wetlands and supporting 120 fish species.

In addition to its ecological importance, the Bay-Delta is critical to California's economy, supplying two thirds of the state's water--drinking water for 20 million people, and irrigation water for 200 crops, including 45 percent of the nation's fruits and vegetables.

Given this importance, the area has for decades been the focus of competing interests--economic and ecological, urban and agricultural. And, it has suffered from this. Numerous efforts have been made to address Bay-Delta problems. But the issues are complex and interrelated, and many continue unresolved.

Program Organization

The CALFED Bay-Delta Program has two fundamental organizational characteristics that distinguish it from other government programs.

First, it is a cooperative, interagency effort involving a number of state and federal agencies with management and regulatory responsibilities in the Bay-Delta. These agencies are listed in Box 1--an overview of the Program's organizational history and structure. A Program Coordination Team (PCT) made up of individuals from each participating agency provides liaison between the Bay-Delta Program and policy and technical experts within these agencies. The PCT provides direction in Program design and activities, and acts to ensure that Program decisions and direction are consistent with the goals and objectives of the participating agencies.

Second, it is 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 in the problem-solving/decision-making process. Public participation and input have been essential throughout the process to date, and have come principally through the Bay Delta Advisory Council (BDAC) and public participation in workshops and meetings. The BDAC is chartered under the Federal Advisory Committee Act, and includes representatives of stakeholder groups appointed by the

secretaries of the U.S. Department of the Interior and California Resources Agency.

The Program is managed by CALFED staff, with assistance from consulting organizations, and is structured in three-phases. Phase I began in May 1995, and is the subject of this report.

Phase II is a programmatic environmental review, reconnaissance-level analysis, and pre-feasibility-level planning effort to identify one preferred solution alternative. Programmatic environmental reviews focus on broad policy and resource allocation decisions required to implement a program, and are designed to inform decision makers about the interrelated and cumulative consequences of the alternatives. Reconnaissance-level analysis and pre-feasibility-level planning focus on the general impacts of the alternatives. Foundational work for Phase II began in January 1996. However, the majority of this effort will begin in June 1996 and conclude in June 1997.

Phase III will include site-specific environmental review of individual components of the preferred alternative selected at the conclusion of Phase II. Implementation of elements of this alternative will begin in July 1998 and continue in a staged fashion over several years.

Other efforts are under way outside the CALFED Bay-Delta Program to address some of the problems and solutions being explored by the Program, particularly in upstream areas. Opportunities to aid or draw from these separate efforts have been and will continue to be assessed.

Phase I Goal and Objectives

Phase I will identify a short list of three to five alternative solutions to Bay-Delta problems that will undergo assessment in Phase II of the Program. The 10 alternatives presented and discussed in this report represent an interim step in this refinement process.

Initial focus in Phase I was to define Bay-Delta problems and Program objectives, and to identify actions that could be taken to resolve these problems and meet these objectives. In addition, strategies were developed to identify, assemble, and refine the alternatives.

A six-step process was used to accomplish these goals, and Program workshops were convened or are planned to gather public comment at each step. Workshop 1 was held in August 1995 and focused on problem identification; workshop 2 was held in September 1995 and focused on defining Program objectives; workshop 3 was held in October 1995 to identify actions to resolve problems and meet objectives; workshop 4 focused on

developing solution strategies and was held in December 1995; and workshop 5 was held in February 1996 to assess initial draft alternatives. Workshop 6, scheduled this month (April 1996), will focus on refining the 10 alternatives described in this report.

Bay-Delta problems and Program objectives defined in this manner are shown in Table 1. The Program's mission statement reads:

The mission of the CALFED Bay-Delta Program is to develop a long-term comprehensive plan that will restore ecological health and improve water management for beneficial uses of the Bay-Delta System.

Another focus in early Program development was definition of a set of six "solution principles"--fundamental guides for evaluating alternative solutions. They are:

- *Reduce Conflicts in the System* - Solutions will reduce major conflicts among beneficial users of water.
- *Be Equitable* - Solutions will focus on solving problems in all problem areas. Improvements for some problems will not be made without corresponding improvements for other problems.
- *Be Affordable* - Solutions will be implementable and maintainable within the foreseeable resources of the Program and stakeholders.
- *Be Durable* - Solutions will have political and economic staying power, and will sustain the resources they were designed to protect and enhance.
- *Be Implementable* - Solutions will have broad public acceptance, legal feasibility, and will be timely and relatively simple to implement compared with other alternatives.
- *Have No Significant Redirected Impacts* - Solutions will not solve problems in the Bay-Delta system by redirecting significant negative impacts, when viewed in their entirety, in the Bay-Delta or other regions of California.

Actions to Resolve Bay-Delta Problems

Fifty categories of potential actions to resolve Bay-Delta problems and achieve Program goals were identified by reviewing existing literature and soliciting input from PCT and BDAC members, stakeholders, and the general public. Within these categories, hundreds of individual actions were defined. Box 2 lists the 50 action categories.

From among this list, a number of "core actions" were identified --actions that Program participants felt should be included as part of all program alternatives to the degree possible. Core actions enjoy broad acceptance among stakeholders; provide a benefit to the entire Bay-Delta system; are cost-effective; meet one or more Program objective(s); and provide some progress toward a solution but do not represent a satisfactory solution by themselves.

Moreover, core actions do not preclude or conflict with other actions; do not increase conflicts between beneficial uses or stakeholders; do not represent a major program activity or major facility structure; and do not create significant adverse, site-specific impacts or redistribute costs. Core actions are shown in Box 3.

Establishing an appropriate geographic scope within which to identify Bay-Delta problems and develop solution alternatives was an important aspect of this action identification process. To address this concern, separate problem and solution scopes were defined.

- *Problem Scope:* The program addresses problems that exist within the legally defined Delta (i.e., Suisun Bay, extending to Carquinez Strait, and Suisun Marsh) or are closely linked to this area. Examples would include toxic inflows and outflows, in-migrating fish, and water diversion patterns.
- *Solution Scope:* Because the Bay-Delta solution is part of a larger water and biological resource system, a much broader solution scope has been defined--one including at least the Central Valley watershed, the Southern California water system service area, and the portions of the Pacific Ocean out to the Farallone Islands. This is necessary because many problems related to the Bay-Delta are caused by factors outside the Bay-Delta. For example, salmon population problems are linked to the Bay-Delta due to high mortality rates during salmon migrations. While one solution would be to reduce mortality during salmon migration through the Bay-Delta, it might be less expensive or ecologically preferable to promote greater salmon production upstream. An expanded solution scope is also desirable from a planning perspective because more benefits may be generated at lower cost if solutions are not limited to the geographic Bay-Delta.

Alternative Identification

Action categories represent the building blocks of solution alternatives--that is, each solution alternative is a combination of action categories reflecting differing approaches to achieving program objectives and solution principles.

Given the large number of these categories, and the range of perspectives on solutions to Bay-Delta problems among stakeholders and CALFED agencies, thousands of potential alternatives could have been identified. In response to this, a first step for the Program was to devise a methodology that would keep the number of alternatives to a manageable level while still representing the full range of approaches to resolving the problems.

The methodology chosen to accomplish this was to define the critical conflicts that exist between beneficial uses and resources in the Bay Delta, and then to define approaches to resolving these conflicts. The conflicts were:

- *Fisheries versus Diversions:* The conflict between fisheries and diversions results primarily from fish mortality attributable to water diversions. This includes direct loss at pumps, reduced survival when young fish are drawn out of river channels into the Delta, and reduced spawning success of adults when migratory cues are altered. The effects of diversions on species of special concern have resulted in regulations that restrict quantities and timing of diversions.
- *Habitat versus Land Use and Flood Protection:* Habitat to support various life stages of aquatic and terrestrial biota in the Bay-Delta has been lost due to the development of land and the construction of flood control facilities to protect developed land. The need for habitat affects land development planning as well as levee maintenance and planning. Efforts to restore the balance often require that land used for agricultural production be dedicated to habitat.
- *Water Supply Availability versus Beneficial Uses:* As water use and competition for water have increased during the past several decades, conflict too has increased among users. A major part of this conflict is between the volume of instream water needs and out-of-stream water needs, and the timing of those needs within the hydrologic cycle.
- *Water Quality versus Land Use:* Water quality can be negatively impacted by land use, and ecosystem water quality needs are not always compatible with urban and agricultural water quality needs.

In assessing these conflicts, alternate approaches to conflict resolution, and alternative levels of resolution, were defined. Approaches for resolving the fisheries and diversions conflict included (1) a fish productivity approach and (2) a diversion modification approach. Approaches for resolving the habitat and

land use/flood protection conflict included (1) an existing land-use pattern approach and (2) a modified land-use pattern approach

Approaches for resolving the water supply availability and beneficial uses conflict included a (1) demand reduction approach and (2) a supply enhancement approach. Approaches for resolving the water quality and land-use conflict included (1) managing quality of Delta inflow approach and (2) post-discharge management approach.

Within each of these approaches, levels of conflict resolution ranging from less intensive to more intensive were identified.

This process produced 32 approaches to resolving the four conflicts. At this point, four teams of consultants representing a variety of technical disciplines were formed--one for each conflict area. These teams were then assigned an equal number of the 32 approaches (i.e., eight apiece), and directed to develop three preliminary solution alternatives--sets of actions and action categories--for each of the eight approaches in their conflict areas.

This procedure identified 96 preliminary solution alternatives (24 by each team) which have subsequently served as the foundation for the refinement process that will ultimately define the short list of three to five alternatives to go into Phase II analysis. An infinite number of preliminary alternatives could have been identified. But in the Program's judgment, these 96 were representative of the larger number of possible combinations and sufficed to bracket the range of possible solutions to the four conflicts and, therefore, to the key problems facing the Bay-Delta.

Alternative Refinement

The 96 preliminary alternatives were very broad by design. Moreover, because they were crafted by teams representing the four conflict areas, they tended to address the four conflicts in varying degrees--that is, they were not balanced in addressing program objectives, core actions, and solution principles.

In response, the teams were instructed to begin balancing their alternatives, and to refine the initial 24 per area to 10 per area by combining those with similar characteristics. This produced a refined list of 40 alternatives.

At this point in the process, leadership responsibility for the four teams was moved from the technical consultants to Program staff. This change was made to take advantage of staff's specific expertise on Bay-Delta issues, and to more systematically include PCT members in the process so as to ensure maximum sensitivity to

the policies and positions of their agencies and stakeholder groups.

Continued consolidation and balancing of the alternatives brought the number to five per team--20 in total--and these 20 were subsequently presented to stakeholders, BDAC members, and the public at workshop 5. Refinement based on input from that workshop produced the 10 alternatives described in this report.

This process will continue in coming weeks to refine these 10 alternatives to the three to five most promising for Phase II evaluation. During this process, the relative characteristics of the alternatives will be assessed and displayed in terms of their attainment of Program objectives, cost performance, and satisfaction of solution principles. These displays will then be presented at workshops, scoping meetings, and in discussions with the BDAC and PCT to solicit guidance and build support in crafting the preferred alternative.

In addition, the Program will at this point begin identifying strategies to stage or sequence implementation of the alternatives over time. Staging facilitates benefit assessment and financing, and allows for "adaptive management" (i.e., the capability to adjust strategies and schedules based on benefit assessments, public input, and financing considerations) in guiding future implementation.

Table 1

ECOSYSTEM QUALITY	
<u>Problems</u>	<u>Objectives</u>
<ul style="list-style-type: none"> • Important aquatic habitats are inadequate to support production and survival of native and other desirable estuarine and anadromous fish in the Bay-Delta system. Examples of fishes that have experienced declines related to changes in Delta habitat include delta smelt, longfin smelt, Sacramento splittail, chinook salmon, striped bass, and American shad. 	<ul style="list-style-type: none"> • Improve and increase aquatic habitats so they can support the sustainable production and survival of native and other desirable estuarine and anadromous fish in the estuary.
<ul style="list-style-type: none"> • Important wetland habitats are inadequate to support production and survival of wildlife species in the Bay-Delta system. 	<ul style="list-style-type: none"> • Improve and increase important wetland habitats so they can support the sustainable production and survival of wildlife species.
<ul style="list-style-type: none"> • Populations of some species of plants and animals dependent on the Delta have declined. 	<ul style="list-style-type: none"> • Increase population health and population size of Delta species to levels that assure sustained survival.

WATER QUALITY	
<u>Problems</u>	<u>Objectives</u>
<ul style="list-style-type: none"> • Water quality is often inadequate or is perceived as inadequate for drinking water needs. 	<ul style="list-style-type: none"> • Provide good water quality in Delta water exported for drinking water needs.
<ul style="list-style-type: none"> • Delta water quality is often inadequate for agricultural needs. 	<ul style="list-style-type: none"> • Provide good Delta water quality for agricultural use.
<ul style="list-style-type: none"> • Delta water quality is often inadequate for industrial needs. 	<ul style="list-style-type: none"> • Provide good Delta water quality for industrial use.
<ul style="list-style-type: none"> • Delta water quality is often inadequate for recreational needs. 	<ul style="list-style-type: none"> • Provide good Delta water quality for recreational use within the Delta.
<ul style="list-style-type: none"> • Water quality is often inadequate for environmental needs for the Bay-Delta system. 	<ul style="list-style-type: none"> • Provide improved Delta water quality for environmental needs.

WATER SUPPLY RELIABILITY	
<u>Problems</u>	<u>Objectives</u>
<ul style="list-style-type: none"> • Water supplies of the Bay-Delta system do not meet needs because of conflict among beneficial uses and because of system inadequacies. 	<ul style="list-style-type: none"> • Reduce the conflict between beneficial uses and improve the ability to transport water through the Bay-Delta system.
<ul style="list-style-type: none"> • Bay-Delta system water supplies are uncertain with respect to short-term and long-term needs. 	<ul style="list-style-type: none"> • Reduce the uncertainty of Bay-Delta system water supplies to help meet short- and long-term needs.

BAY-DELTA SYSTEM VULNERABILITY	
<u>Problems</u>	<u>Objectives</u>
<ul style="list-style-type: none"> • Existing agricultural land use, economic activities, and infrastructure in the Delta are at risk from gradual deterioration of delta conveyance and flood control facilities as well as sudden catastrophic inundation of Delta islands. 	<ul style="list-style-type: none"> • Manage the risk to existing land use, associated economic activities and infrastructure from gradual deterioration of Delta conveyance and flood control facilities and catastrophic inundation of Delta islands.
<ul style="list-style-type: none"> • Water supply facilities and operations in the Delta are at risk from increased salinity intrusion which can result from sudden catastrophic inundation of Delta islands. 	<ul style="list-style-type: none"> • Manage the risk to water supply facilities and operations in the Delta from catastrophic inundation of Delta islands.
<ul style="list-style-type: none"> • Water quality in the Delta is at risk from increased salinity intrusion which can result from sudden catastrophic inundation of Delta islands. 	<ul style="list-style-type: none"> • Manage the risk to water quality in the Delta from catastrophic inundation of Delta islands.
<ul style="list-style-type: none"> • The existing Delta ecosystem is at risk from gradual deterioration of Delta conveyance and flood control facilities as well as catastrophic inundation of Delta islands. 	<ul style="list-style-type: none"> • Manage the risk to existing Delta ecosystem from gradual deterioration of Delta conveyance and flood control facilities and catastrophic inundation of Delta islands.

----- Box-1 -----

**Organizational History and Structure
of the CALFED Bay-Delta Program**

The CALFED Bay-Delta Program was established in May 1995, and is one element of CALFED, a consortium of five state agencies and five federal agencies with management and regulatory responsibilities in the Bay-Delta.

At the state level, these agencies include the Resources Agency, Department of Water Resources, Department of Fish and Game, California Environmental Protection Agency, and State Water Resources Control Board. At the federal level, participating agencies include the Department of Interior, Bureau of Reclamation, Fish and Wildlife Service, Environmental Protection Agency, and National Marine Fisheries Service. The U.S. Army Corps of Engineers also participates as a cooperating agency.

CALFED provides policy direction to the Program, and was formed as part of a Framework Agreement signed in June 1994 by California Governor Pete Wilson, and Bruce Babbitt, Secretary of the U.S. Department of the Interior. As part of this Framework Agreement, the state and federal governments pledged to work together to formulate water quality standards to protect the Bay-Delta, coordinate State Water Project (SWP) and Central Valley Project (CVP) operations in the Bay-Delta, and develop a long-term Bay-Delta solution.

In December 1994, an agreement--the Bay-Delta Accord--was signed by state and federal regulatory agencies, with the cooperation of diverse interest groups, to address these issues. This accord set out integrated, water quality standards, and created a state/federal coordination group to better integrate the SWP and CVP. The Bay-Delta Program is charged with responsibility for the third issue: development of a long-term Bay-Delta solution.

Impetus to forge this long-term solution came at the state level in California in December 1992 with formation of the Water Policy Council and the Bay Delta Oversight Council, an advisory group to the Water Council. The following year, in September 1993, the Federal Ecosystem Directorate was created at the federal level to coordinate federal resource protection and management decisions for the Bay-Delta.

----- End Box-1 -----

**Categories of Actions That Could be Taken To
Resolve Bay-Delta Problems and
Meet Program Objectives**

Action Categories to Restore Bay-Delta System Habitats

- Restoration of Bay-Delta System Shallow Water (Tidal) Habitat
- Restoration of Bay-Delta System Riverine Habitat
- Restoration of Bay-Delta System Riparian Habitat
- Restoration of Bay-Delta System Wetland Habitat
- Restoration of Bay-Delta System Terrestrial Habitat
- Implementation of Integrated Habitat Management Programs
- Establishment of Floodways and Meander Belts
- Control of Introduced Species
- Delta Waterfowl Habitat Management

Action Categories to Restore Upstream Habitat

- Restoration of Upstream Anadromous Fish Habitat
- Improvements for Upstream Fish Passage
- Restoration of Upstream Riparian Habitat
- Restoration of Upstream Wetland Habitat

Action Categories to Reduce Effects of Diversions

- Delta Inflow/Outflow/Export Management
- Modification of Diversion Timing Patterns
- Increased Rates of Diversion Capacity
- Acquisition of Long-Term Water Supplies for Fish and Wildlife
- Installation and Improvement of Fish Screens
- Improvement of Bay-Delta System Fish Migration
- Improvement of Fish Salvage Operations
- Removal and Control of Aquatic Predators

Action Categories to Manage the Enhancement of Anadromous Fish Populations

- Fish Hatchery Operations
- Fish Harvest Management

Action Categories for Reducing Reliance on Delta Exports

- Desalination
- Water Conservation
- Water Reclamation
- Land Retirement and Fallowing
- Water Pricing

Action Categories to Enhance Water Supplies

- Watershed Management
- New or Expanded Onstream Storage
- New or Expanded Offstream Storage

- Groundwater Banking and Conjunctive Use
- Improvement of Through-Delta Conveyance
- Construction and Improvement of Conveyance Facilities
- Changes in Locations of Diversions

Action Categories to Increase Supply Predictability

- Water Transfers
- Long-Term Planning for Drought Contingencies
- Water Resources Data and Information Management
- Establishment of Institution for Integrated Long-Term Water Management
- Establishment of Export Capacity Market
- Integration of Land Use and Water Supply Planning

Action Categories for Managing Water Quality

- Installation and Operation of Flow Barriers
- Management of Agricultural Drainage
- Management of Urban/Industrial Drainage and Wastewater Discharge
- Dredged Material Management
- Management of Abandoned-Mine Drainage

Action Categories for Improving System Reliability

- Levee Maintenance and Stabilization
- Improvement of Flood Protection Levels and Seismic Stabilities
- Rerouting and Protection of Infrastructure from Flooding and Seismic Risks
- Establishment of Long-Term Funding Mechanisms

----- End Box-2 -----

**Core Actions To Be Included
In All Solution Alternatives**

Bay-Delta Habitat Restoration

- Protect and Enhance Existing Shallow-Water Habitat
- Protect and Enhance Existing Riverine Habitat on Channel Islands
- Include Riverine Elements at Channel Edges by Modifying Levee Protection Practices
- Protect and Enhance Existing Riparian Habitat
- Improve Riparian Habitat by Modifying Levee Maintenance Practices
- Improve Degraded Riparian Habitats
- Protect and Enhance Existing Wetlands
- Expand Wetland Acquisition Programs
- Protect and Enhance Existing Upland Habitat
- Encourage Wildlife-Friendly Agricultural Practices
- Preserve Agricultural Land Uses Providing Habitat
- Improve Regulations Regarding Ballast-Water Releases
- Improve Border Inspection Practices
- Establish a Rapid Response Program for Introduced Species

Upstream Habitat Restoration

- Improve Flows and Temperatures in Upstream Habitats
- Maintain Adequate Spawning Substrates
- Encourage Gravel-Mining Practices That Protect Fish Habitat
- Modify Fish Passage at Upstream Dams or Through Other Barriers
- Modify Natural Barriers to Improve Fish Passage
- Encourage Appropriate Livestock Management in Riparian Habitats
- Revegetate Degraded Riparian Habitats
- Encourage Wildlife-Friendly Agricultural Practices
- Preserve Agricultural Land Uses Providing Habitat

Reductions in the Effects of Diversions

- Use Real-Time Monitoring and Adaptive Management
- Install Screens on Unscreened In-Delta Diversions
- Install or Upgrade Screens on Upstream Diversions
- Evaluate and Implement Effective Acoustic Barriers to Anadromous Fish Movement
- Operate Fish Barrier on San Joaquin River at Merced River In Fall

Management of Anadromous Fish

- Modify Hatchery Operations to Reduce Effects on Wild Populations

- Improve Data Collection and Analysis Needed to Regulate Commercial Take

Reductions in Export Reliance

- Establish Incentives for Use of Agricultural Water Conservation Practices
- Increase Incentives for Use of Municipal and Industrial Conservation Practices
- Educate Small Agencies about Conservation and Reclamation Feasibility

Water Supply Enhancement

- Establish Incentives for Conjunctive Use
- Ease Institutional Barriers to Encourage Conjunctive Use

Increasing Water Supply Predictability

- Ease Institutional Obstacles to Facilitate Water Transfers
- Improve Procedures for Water Transfer Permitting
- Coordinate Diversion and Conveyance of Water Transfers
- Establish a Water Transfer Brokering Mechanism or Institution
- Manage Water Resources Data and Information for the Bay-Delta System
- Encourage Long-Term Drought Contingency Planning

Management of Water Quality

- Establish Incentives for Retirement of Lands with Drainage Problems
- Provide Incentives for Pollution Source Control on Agricultural Lands
- Encourage Management of Riparian Zones to Protect Water Quality
- Encourage Management of Land Uses to Protect Water Quality

Improvements to System Reliability

- Monitor, Evaluate, Maintain, and Stabilize Existing Levees
- Modify Agricultural Practices to Reduce Subsidence
- Investigate Techniques for Beneficial Reuse of Dredged Materials
- Establish an Emergency Levee Management Plan
- Provide Funding for Maintenance and Stabilization

----- End Box-3 -----