

PRELIMINARY ASSURANCE ALTERNATIVES

I. INTRODUCTION

The CALFED Bay-Delta Program, working with the Bay Delta Advisory Council (BDAC) Assurances Workgroup, is developing a preliminary package of assurances for the implementation of the long-term CALFED Bay-Delta solution. A package of assurances, together with the financing plan, will constitute a substantial portion of the CALFED implementation strategy. This paper describes alternative means to assure the implementation of the components of the long-term Bay-Delta Program.

Discussion papers previously distributed to the workgroup identified a number of assurance issues and stakeholder concerns. Generally, the stakeholders want assurances that the long-term Bay-Delta Program will be implemented, and that the implementation of the Program will not adversely impact them. The discussion papers also described a list of tools which could be used to assure implementation of the Program and a set of guidelines which could be used as screening criteria for analysis of the effectiveness of assurance alternatives.

Because a preferred alternative has not yet been developed for the Programmatic Environmental Impact Report/Statement (EIR/S), the workgroup decided to develop assurance alternatives for a hypothetical case study, consisting of a set of programmatic and specific actions, based on Alternative 3(b). The case study, the list of tools, the Program assurance issues and stakeholder concerns provided the basis for the preliminary assurance alternatives discussed at the April 1997 workgroup meeting and at the May 1997 Assurances workshop.

Once a preferred alternative has been identified for the Draft EIR/S, the workgroup will consider what adjustments or refinements should be made to the package of assurances, and whether any changes should be made to the preferred alternative due to the inability to provide adequate assurances of implementation. A draft assurance package will accompany the draft EIR/S. Ultimately, a final package of assurances will be described and proposed when the Final EIR/S is released.

This paper is organized as a discussion of management structures, followed by a description of complementary sets of assurance tools, such as agreements, regulations and legislation, for each of the Program components. The conceptual approach of the paper is shown on Table A (attached).

For the April workgroup meeting and the May workshop, CALFED staff crafted several preliminary assurance alternatives based upon a management structure and specific types of

tools. At the workshop, participants were asked to compare one alternative to another and to assess how well each alternative assured implementation of the long-term Bay-Delta Program.

There has been no attempt in this paper to organize the assurance tools into complete alternatives, as was done in the materials used for the workshop. In this paper, rather than describing independent alternatives for assurances, it may be more realistic to think about different types of assurances for each component. Assurance tools for components can be examined to determine if they provide a sufficient level of assurance. If they do not, then another level or set of assurances may be added, until the assurance is adequate.

The management alternatives and assurance options are presented in this paper to stimulate discussion among the workgroup members; they do not represent any consensus among the CALFED agencies.

In reviewing this paper, the workgroup should consider whether and to what extent any combinations of management structure and assurance options:

- are consistent with the CALFED solution principles and the guidelines previously identified by the workgroup;
- adequately provide for implementation of all Program components and elements; and
- adequately address the issues and concerns raised by the stakeholders.

II. MANAGEMENT STRUCTURE ALTERNATIVES

A. Informal Coordination Among Existing Agencies

This alternative is based on the continuation of a CALFED type management structure. It follows the existing pattern of decision-making for water and ecosystem management. Existing state and federal agencies carry out the long-term Bay-Delta Program and exercise their responsibilities and authorities in a cooperative manner, through the CALFED process. In this alternative, CALFED or its successor is a permanent part of the management landscape for implementation of the CALFED Bay-Delta Program.

Thus, specific responsibilities and authorities for implementation are distributed among the individual agencies. CALFED or its successor acts as the forum in which agency actions and programs are orchestrated and consensus based decisions are reached. The CALFED or CALFED successor arrangement is documented by a Memorandum of Understanding (MOU) among the participating agencies. This is similar to the June 1994 Framework Agreement which provided for the formation of CALFED.

The CALFED consensus based decision making and cooperation process includes both long-term (planning) and short-term (operations) decision making. Individual agencies attempt to make their own programs compatible with the CALFED Program. For example, the Department of Water Resources (DWR) and US Bureau of Reclamation (USBR) cooperate with the environmental restoration agencies, Department of Fish and Game (DFG) and US Fish and Wildlife Service (USFWS), to assure that State Water Project (SWP) and Central Valley Project (CVP) operations are compatible with habitat restoration actions. Similarly, these agencies cooperate to minimize impacts caused by project diversions while still providing for such diversions (much like the CALFED Operations Group does now).

Other key implementation functions associated with this management alternative are:

- DWR and USBR jointly construct the new storage and conveyance facilities, and operate them according to new SWRCB flow and export standards. The Coordinated Operating Agreement (COA) is amended or renegotiated to reflect these changes.
- SWRCB modifies the Bay-Delta Water Quality Control Plan (WQCP) to conform to agreed flow and diversion patterns. This results in new flow, diversion, and other operational controls on the projects.
- DFG, USFWS and National Marine Fisheries Service (NMFS) carry out specific actions and elements of the ecosystem restoration program. They use the existing Interagency Ecological Program (IEP), or possibly a new scientific review panel, as the research and monitoring arm for the adaptive management program. The restoration program is carried out using market mechanisms (land purchases, water purchases, etc.), not regulatory means.
- USFWS and NMFS continue to administer the Endangered Species Act (ESA). Existing Biological Opinions (BO's) for Delta Smelt and Winter Run Salmon issued by USFWS and NMFS respectively remain in place but are modified to reflect the Ecosystem Restoration Component and changes in CVP and SWP operations.
- The Central Valley Project Improvement Act (CVPIA) water and CVPIA Restoration Fund remain under the control of the Department of Interior (DOI).

One significant new aspect of the management structure would be a higher level of stakeholder involvement and public oversight. Forums which are already in place, such as the Operations Group and the BDAC, a federally chartered advisory committee, would continue. Additionally, there would be a more formal oversight process whereby CALFED would periodically report on the progress of program implementation. This

might be done at the Legislative or Congressional level, or in public forums where stakeholders could review the CALFED program and provide advice and comment.

The source of funding for these new activities has yet to be determined. In light of the need for various activities to proceed whether or not consensus is generated within CALFED or its successor, funds are appropriated directly to the implementing agencies and are not funneled through CALFED.

B. New Arrangements Among Existing Agencies - An Ecosystem Restoration Joint Authority

A unified agency, referred to here as the CALFED Ecosystem Restoration Joint Authority (ERJA), is formed to implement the Ecosystem Restoration Component of the CALFED Program.

The CALFED ERJA, consisting of all the CALFED agencies, implements the ecosystem restoration component. New facilities are constructed, owned and operated by USBR and/or DWR. Responsibility for implementation of other Program components is distributed among individual CALFED agencies, consistent with their current jurisdiction and authority. CALFED or its successor acts as the forum in which individual agency actions can be coordinated and consensus decisions reached where possible.

The structure of ERJA, and its mission, powers and purposes, are set forth in federal and state authorizing legislation. The federal legislation incorporates portions of CVPIA into the CALFED Program (i.e., ERJA assumes responsibility for implementation of the ecosystem restoration provisions of the CVPIA and administration of the CVPIA Restoration Fund).

ERJA implements the ecosystem restoration component; it acquires and holds the necessary permits for specific elements and actions. Ecosystem restoration funds are appropriated to ERJA.

Each member of ERJA delegates its Program implementation authority to ERJA or commits to operating those programs in accordance with the central direction provided by ERJA.

ERJA controls CVPIA restoration funds, Prop. 204 and Category III money and any other money allocated for Delta ecosystem restoration. It also controls the allocation and scheduling of the 800,000 acre-feet of fish and wildlife water provided by Section 3406(b)(2) of the CVPIA.

ERJA is governed by a Board of Directors consisting of representatives from the member agencies. The Board appoints an Executive Director. Voting rules for ERJA are structured to provide a balance between state and federal agency members and environmental agencies and project operators. Fundamental policy issues which cannot be resolved by the ERJA Board are resolved by the Secretary of Resources and the Secretary of Interior.

ERJA coordinates with DWR/USBR through CALFED on water projects and new facilities operations, but does not have direct operational authority over facilities.

ERJA uses the IEP, or possibly a new scientific review panel, as the research and monitoring arm for the adaptive management program.

ERJA may acquire land, water and other interests in property for environmental purposes through market transactions. It is not a regulatory body.

Other key implementation functions associated with this management structure alternative are:

- DWR and USBR jointly construct any new storage and conveyance facilities, and operate them according to new SWRCB flow and export standards. The COA will be amended or renegotiated.
- SWRCB modifies the WQCP to conform to agreed flow and diversion patterns, resulting in revised flow, diversion, and other operational controls on the projects and new facilities.
- USFWS and NMFS administer the federal Endangered Species Act (ESA). The existing BO's for Delta Smelt and Winter Run Salmon remain in place but are amended to reflect the ecosystem restoration component and change in CVP and SWP operations.
- Public processes, such as BDAC or other advisory groups, would provide a means of continued public oversight and accountability.

C. Ecosystem Restoration JA and an Operations JA

Two new Joint Authorities (JAs) are formed, one to implement the Ecosystem Restoration Component, the second to operate the CVP and SWP Delta facilities and new storage and conveyance facilities constructed pursuant to the CALFED Program. state and federal legislation is required to create both new JAs. The legislation describes the mission and charter of each JA.

The Ecosystem Restoration JA (ERJA) consists of USFWS, DFG and NMFS and implements the ecosystem restoration component. New facilities are jointly constructed, owned and operated by an Operations JA (OJA) formed by USBR and DWR. (A further alternative here would be for all CALFED agencies to be member agencies of both JAs.) OJA also operates the existing CVP and SWP Delta facilities.

Responsibility for implementation of other Program components is distributed among individual CALFED agencies, consistent with their current jurisdiction and authority. CALFED or its successor acts as the forum in which individual agency actions can be coordinated and consensus decisions reached where possible. CALFED might also act as the dispute resolution process for the two JA's.

ERJA implements the ecosystem restoration component; it acquires and holds the necessary permits for specific elements and actions. Ecosystem restoration funds are appropriated to ERJA. ERJA controls CVPIA restoration funds, Prop. 204 and Category III money and any other money allocated for Delta ecosystem restoration.

Each member agency of ERJA delegates existing Program implementation authority to ERJA or commits to operating those programs in accordance with the central direction provided by ERJA.

ERJA also implements the ecosystem restoration provisions of the CVPIA and manages the 800,000 acre feet of fish and wildlife water [Section 3406(b)(2)].

ERJA is governed by a Board of Directors consisting of representatives from DFG, USFWS and NMFS. The Board appoints an Executive Director.

ERJA coordinates with the DWR/USBR OJA through CALFED on water projects and new facilities operations.

ERJA uses the IEP as the research and monitoring arm for the adaptive management program.

ERJA may acquire land, water and other interests in property for environmental purposes through market transactions. It is not a regulatory body.

USFWS and NMFS administer the ESA. Existing BO's for Delta Smelt and Winter Run Salmon remain in place but are amended to reflect the ecosystem restoration component and changes in CVP and SWP operations.

OJA is formed by DWR and USBR to: (1) construct, own and operate new storage facilities; (2) construct, own and operate new Delta conveyance facilities; (3) operate

the CVP and SWP South Delta pumping plants; (4) operate the export canals as far as San Luis Reservoir; and (5) operate San Luis Reservoir.

In a sense, this is a formalization of the kind of cooperation that already takes place between USBR and DWR over operations. However, OJA improves the ability of the project operators to cooperate and reduces the likelihood of working at cross purposes.

Each project continues to service its existing contracts and each project has certain rights for service from OJA. The CVP and SWP water rights permits will be modified by SWRCB to allow OJA to operate all project storage and conveyance facilities in common. Thus, each project can use either the Tracy or Banks pumping plants and can borrow storage space in each other's reservoirs.

Decisions are made in both JAs by consensus of the member agencies. In the event agencies cannot reach agreement on specific issues, there will be an agreed upon set of default rules or a dispute resolution process, which attempts to resolve issues at the lowest possible level. This might involve referring issues to CALFED for resolution, with fundamental policy issues being resolved by the Secretary of Resources and the Secretary of the Interior.

SWRCB modifies the Bay-Delta WQCP to conform to agreed flow and diversion patterns. This leads to revised flow, diversion, and other operational controls on the projects and new facilities.

The COA is modified to reflect the change in operating rules and the new facilities.

Public processes, such as BDAC or other advisory groups, would provide continued public oversight and accountability.

D. New Entity - The Delta Ecosystem Restoration Agency

The ecosystem restoration component is implemented by a new legal entity, referred to here as the Delta Ecosystem Restoration Agency (DERA). This is a new institution or agency, legally distinct from existing agencies, with its own management and governance. It is probably a public agency but could be a private non-profit or publicly chartered corporation.

DERA is created by state and federal legislation. It is governed by a Board of Directors. The Board is appointed by the Governor and Secretary of the Interior. However, nominations to the Board are made by state and federal environmental agencies, specified environmental organizations, and local governments likely to be affected by habitat restoration programs.

The primary mission of DERA is the implementation of the ecosystem restoration program. This agency has all the powers and duties necessary to accomplish its mission. It can acquire land by lease or purchase, easements, water, water rights and other property by market transaction. It may provide financial incentives to local water agencies for changes in water management practices; it could pay for fish screens or provide grants or loans to other agencies. It is not a regulatory body, but it may have the power of eminent domain.

All existing and future restoration funds are channeled through DERA. The 800,000 acre feet of CVPIA b(2) water is controlled by DERA. Any Habitat Conservation Plan (HCP) or similar agreement would include DERA as a participant, as well as other individual CALFED agencies.

DERA will act as lead agency for and hold the 404 permit and other permits necessary to implement the Ecosystem Restoration Program, whether at the programmatic, project or site specific level.

DERA will establish the annual funding priorities for ecosystem restoration actions and projects.

DERA will conduct or coordinate necessary monitoring, data collection and analysis to measure performance of the program.

DERA could acquire transfer water and enter into conjunctive use and other types of water management agreements.

E. New Entity - The Delta Ecosystem Restoration and Management Agency

This alternative features a new legal entity for ecosystem restoration and facilities operations.

A new agency, the Delta Ecosystem Restoration and Management Agency (DERMA) is created to implement the ecosystem restoration component of the CALFED Program and to construct, own and operate new storage and conveyance facilities. DERMA has all the powers and duties necessary to carry out its mission and is legally distinct from existing agencies, with its own management and governance.

DERMA is created by state and federal legislation. It is governed by a Board of Directors appointed by the Governor and Secretary of Interior. Nominations for the Board are made by: (1) state and federal environmental agencies; (2) state and federal water management agencies; (3) specified environmental groups; (4) state and federal water contractors; and (5) local governments likely to be affected by habitat restoration programs and project operations. Each of these categories is granted a certain number

of seats on the Board in order to assure balance.

DERMA acquires and holds the necessary permits for specific ecosystem restoration elements and actions, as well as for construction and operation of new facilities, whether at the program or project level. All ecosystem restoration assets, including the CVPIA Restoration Fund, CVPIA environmental water (800,000 acre feet) and Proposition 204 fund are assigned to DERMA.

DERMA would contract with DWR and USBR for delivery of water from the new facilities to satisfy some portion of the projects' water supply demands and for some portion of the yield from the new facilities.

III. ASSURANCE OPTIONS

The discussion which follows attempts to describe assurance options on a component by component basis, but the fact is that assurances for one component will overlap assurances for another component. Assurances must in some cases be designed to maintain and support the linkage between two or more components in order that the Program as a whole operates within the boundaries of the CALFED Bay-Delta Program solution principles.

The tension between assurance issues and the linkage between components exists regardless of the management structure. The exact form of the management structure may influence the final content of the assurance package or it may affect a stakeholder perception of the level of assurance needed. In other words, assurance needs may vary in degree but will not vary in kind.

A multi-party agreement modeled on the December 1994 Bay-Delta Accord will provide the foundational level of assurance. This Accord style agreement, among any new entity or entities, the CALFED agencies, local agencies and other participating private stakeholder groups provides the vehicle for the parties to support the long-term implementation of the CALFED Program. It addresses program linkages, and incorporates specific agreements about ecosystem restoration, construction and operation of new facilities, funding for facilities and ecosystem restoration, and allocation of new water supplies generated by the CALFED program.

This agreement will provide the blueprint for the implementation of the Program. In form, it could be a single document, which functions as an umbrella agreement or memorandum of understanding among all interested agencies and parties, or it might be a set of agreements or contracts, each dealing with a specific issue or set of issues. A set of agreements could range in form from informal, in the nature of a memorandum of understanding, to formal, legally enforceable contract.

Some of the key terms or provisions that this agreement or these agreements might include:

- Support for the preferred alternative for the long term Bay-Delta Program;
- Description of the facilities to be included in the Program;
- Support for revisions to the WQCP, EPA approval of the revised WQCP, amendments to the BO's, changes to the CVP and SWP water rights, and other necessary permits;
- Description of the programmatic permitting process and how to expedite project specific permits;
- Description of the operating rules and criteria for the new CALFED storage and conveyance facilities and any necessary changes to the operating rules and criteria for existing CVP and SWP facilities;
- Description of how water from the new facilities will be allocated among the environment and the participating water users;
- Description of the fundamental principles of adaptive management for the ecosystem restoration component, including the goals and objectives and performance measures for the ecosystem restoration component;
- Description of the indemnity or insurance or regulatory certainty to be provided to participating water users;
- Detail on funding, including revenue sources and cost allocations;
- Explanation of response to contingencies and failures of conditions; description of remedies; a dispute resolution process.

A. Ecosystem Restoration

1. Agreements

Several aspects of the ecosystem restoration component, such as funding, the scope of adaptive management, program goals and objectives, program manager powers and authorities, etc., will be the subject of various agreements among the CALFED agencies, the ecosystem manager and stakeholders, as discussed above.

Some of these agreements may be in the nature of informal agreements such as Memoranda of Agreement or Understanding. These types of agreements would express the signatories' intent but would not be legally enforceable. For some aspects of the ecosystem program, it may be desirable to have specifically enforceable contracts, subject to judicial relief, in order to provide an adequate level of assurance that the program will be implemented.

2. Funding

Some capital funding might be provided by federal or state appropriations as a way of providing an "endowment" of the ecosystem restoration component. These funds could be used to purchase land, water, water rights or other property interests for the benefit of the Bay-Delta ecosystem.

At least a portion of the annual operational funding for the ecosystem restoration component will be provided independent of the annual state and federal appropriation process. This could be accomplished by the use of state general obligation bonds and/or water user fees.

For example, long term operational funding for the ecosystem restoration program could be linked to the completion of the storage and conveyance facilities and/or future regulatory stability. The funding instruments, legislation and/or agreements might provide that if facilities cannot be built or operated as agreed, restoration funding is reduced or ended. In other words, continued funding for ecosystem restoration, whether by bonds, water user fees, or other sources, would be dependent on construction and operation of new facilities.

Another approach to assured funding for ecosystem restoration is some type of water user fee to provide operational funding. This fee would be imposed and collected by a regulatory authority, presumably the SWRCB. Additional assurances of continued funding could be provided by making this water user fee enforceable by legal action brought by third parties in the event the regulatory agency failed to enforce the fee requirements. Other penalties or sanctions, such as loss of CALFED benefits, might also be imposed in the event that ecosystem funding is stopped or disrupted.

Language in the bond instruments used to fund the construction of the storage and conveyance facilities could also include operational rules for the new facilities. These operational rules could provide an additional level of assurance for the ecosystem restoration goals and objectives. For example, the bond authorization for new facilities might provide that the isolated system or the through-Delta system may not be operated at a higher capacity than specified in the CALFED Program (e.g., either 5,000 or 15,000 cfs).

3. Regulations/Standards

Environmental water quality and outflow requirements would be assured in part by a revised WQCP adopted by the SWRCB. The WQCP would also include

operational rules for the new facilities.

4. Legislation

Federal or state legislation could be used to provide an assurance that the ecosystem restoration component will be implemented. For example, legislation might provide that:

- a. New facilities may not be operated at a higher capacity than specified in the CALFED Program or in violation of SWRCB standards. Citizen suits could be authorized to enforce this provision;
- b. The CVP and SWP would be required to provide storage and conveyance capacity for environmental enhancement water at a reasonable cost, if space were available. The projects would be required to bypass flows acquired for environmental purposes;
- c. Purchasers of environmental water would be permitted to schedule enhanced flows in addition to all regulatory requirements. USBR and DWR would be required to allow the ecosystem manager to reduce export pumping rates below permitted levels by purchase of replacement water or demand reduction in the export service areas.

In the near term, legislation could also be used to link the permitting, construction and operation of new facilities to funding and implementation of the ecosystem restoration. Legislation might provide for a series of checkpoints at which findings would be made that both programs (ecosystem restoration and water supply) were moving ahead in more or less equitable increments.

5. Management Structure

To some extent, the ecosystem management entity may provide an assurance of program implementation. Some stakeholders may take the position that the program is more likely to be successfully implemented if it is managed by an agency or entity which has a specific legislative mandate to do so, with specified powers, purposes and authorities.

6. Property Rights

The ability of the ecosystem manager to acquire rights in property, such as land or water, will provide assurances that the ecosystem program will be efficiently implemented. The ability to participate in the marketplace for land and water relieves the ecosystem manager from reliance on regulatory approaches and makes

it more likely that management decisions will be based on an analysis of how best to utilize the resources available to the program.

B. Water Supply Reliability

1. Agreements

As described above, an agreement or set of agreements among the ecosystem manager, the operating entities, other CALFED agencies, and participating water users could provide assurances regarding water supply reliability and ecosystem restoration. Specifically with respect to water supply reliability, these agreements could provide for some level of regulatory certainty, or indemnity, for CVP and SWP Project exporters, and possibly other water users, through the linkage of ecosystem restoration funding to the permitting, construction and operations of new facilities.

a. Habitat Conservation Plan (HCP)

Some of the specific assurances for water supply reliability could be provided by an HCP or similar type of agreement among the ecosystem manager, the resource management agencies (USFWS, DFG, and NMFS), the project operators and perhaps the stakeholders. For purposes of this discussion, an HCP is a plan or agreement which provides the basis for and conditions of an incidental take permit for a program or project.

An HCP could provide a certain level of regulatory stability for the ecosystem manager, the water projects, and the local agency water suppliers. The general scope of the HCP would be to provide a level of protection and restoration for the Bay-Delta sufficient to warrant providing the CVP and SWP (and possible other participating water users) some level of protection from additional ESA regulatory restrictions.

Some of the key terms and provisions of an HCP might include:

- i. A description of the species covered - The CALFED HCP would cover all aquatic species affected or potentially affected by the implementation of the long term Bay-Delta Program.
- ii. A description of the activities covered by the HCP - This would include all actions of the long term Bay-Delta program and any required mitigation actions.
- iii. A summary of Program phasing and monitoring requirements.

- iv. The term of the HCP - The term would be related to the time frame for the ecosystem restoration program; perhaps in the range of 20 to 30 years.
- v. Incidental take permits - Permits would be issued for all species listed at the time of the HCP and the federal agencies would agree to issue incidental take permits for newly listed species, unless the agencies could demonstrate extraordinary circumstances.
- vi. Description of what constitutes extraordinary circumstances or the process for making that determination.
- vii. Description of the "no surprises" or "safe harbor" protection - The CALFED HCP would include provisions which would provide some degree of regulatory certainty and/or relief from liability for the permit holders and for water users and land owners entitled to the benefit of the permit.
- viii. Costs - Project operator and water user costs would be quantified and fixed. The HCP might also include a formula for cost increases, if necessary.

b. HCP (with limited indemnity)

A variation on the basic HCP theme is that the ecosystem manager would assume limited responsibility for protection of covered and listed species, to the extent that if additional money or water is needed to deal with a problem with a specific species, the money or water would come out of the endowment of the ecosystem restoration program. The benefit to the incidental take permit holder and those covered by the permit is that there is no additional cost or net loss of additional water, up to some agreed upon percentage of the endowment. After that point, the water projects or other third parties covered by the permit may become liable for additional water or money.

This variation of the HCP agreement would also include a series of requirements for the water projects. If these requirements are not met, the limited indemnity ends. The requirements include:

- i. some agreed upon level of funding for the restoration program;
- ii. compliance with SWRCB standards;
- iii. no increase of the physical capacity of the isolated system or the through-Delta system or operating at a higher capacity than specified in the CALFED solution (i.e., 5,000 cfs or 15,000 cfs);

- iv. no use of the isolated system to convey water purchased on the market if the transfer has been vetoed by the county from which the water is being moved;
- v. no use of the conveyance and storage facilities which does not comply with SWRCB WQCP standards and water rights conditions;
- vi. no use of the facilities to convey either project or purchased water for any urban or agricultural agency which is not certified as efficient.

c. Agreements (with tiered indemnity)

Another variation on the idea of linked assurances for ecosystem restoration and water supply reliability is to have a set of agreements or contracts, including possibly an HCP, to provide phased or tiered levels of indemnity for water users who contribute funds to the ecosystem restoration program. In this scheme, the first level of water supply protection would be that if additional water is needed for ecosystem restoration, above the agreed upon baseline amount, the ecosystem manager reallocates some portion of the existing environmental water or acquires additional water through voluntary transfer agreements.

The second level is that if additional environmental water is needed, the ecosystem manager may require the project operators to provide the water, but only on the condition that the water be restored later in the year (no net loss principle).

The third level of protection is that if additional water is needed, the ecosystem manager may require the project operators to supply the water, but the ecosystem manager must pay for such water at the current market rate.

The fourth and final level is that under extraordinary circumstances, which would be defined and agreed upon, the ecosystem manager would recommend to the appropriate regulatory agency that additional water be acquired by the exercise of a regulatory or legal mechanism, without compensation.

d. Other agreements

Additional assurances for the linked issues of ecosystem restoration and water supply reliability could be provided by stakeholder and agency agreements, providing that if water supply facilities cannot be built, restoration funding is reduced, ended or suspended until construction of facilities has resumed.

Agreements among the operating entities (USBR, DWR, any new operating entity) and stakeholders (including water users and environmental groups) could provide for access to Delta conveyance facilities, including the new isolated facility, for market transfers when space is available, subject to fees based upon the actual cost of the wheeling plus a reasonable share of the cost of construction and operations of any new facilities.

2. Regulations/Standards

The new facilities would be controlled by a revised Water Quality Control Plan (WQCP), which incorporates a complete set of operational requirements.

3. Legislation

State or federal legislation could also be used to provide water supply reliability assurances. Legislation might provide that all necessary permits for construction and operation of new facilities would be granted so long as the proposed facilities and their operation were consistent with the CALFED Program.

Legislation could provide that if the ecosystem restoration goals are met, the CVP and SWP (or other participating water users) would be indemnified against any loss of water as a result of new ESA listings. (See agreements discussion above.)

Legislation might also provide for the allocation of the yield from new storage and conveyance facilities.

State or federal legislation may be used to further link implementation of the ecosystem restoration component construction of water supply facilities. For example, in Proposition 204, a substantial portion of the ecosystem restoration money is held in abeyance until there is a final EIR/EIS describing a preferred alternative. In the longer term, legislation might provide that ecosystem restoration funds are phased in, corresponding to the level of progress made in permitting and constructing facilities. As facilities progress and eventually come on line, more money is released for ecosystem restoration. Such an assurance could work in the other direction as well, by providing that construction of facilities was tied to the progress of the ecosystem restoration program, as measured by expenditure of funds, acquisition of habitat or some other objective criteria.

C. Water Quality

Generally, water quality elements and actions will be implemented by the SWRCB, the Regional Boards and the Environmental Protection Agency (EPA). In some instances, the ecosystem manager may provide funding for actions which have water quality benefits.

1. Agreements

Additional assurances of urban water quality might also be provided by contractual arrangements between USBR/DWR and their urban water contractors, providing financial incentives (or penalties) related to the delivery of raw water of a specified target quality.

DWR, USBR and the export contractors might also enter into agreements to assure that Delta export facilities are operated to preferentially channel water from the isolated conveyance facility to urban areas.

2. Regulations

SWRCB, the Regional Board and EPA will provide assurances for the implementation of this component by the enforcement of existing regulatory controls.

3. Incentive/Market Programs

Additional assurances of water quality might be provided by a program designed to encourage waste dischargers (agricultural and urban) to meet water quality targets, or by creating market programs allowing for the transferability of discharge or pollution credits.

4. Legislation

Legislation could set water quality targets and provide for various regulatory enforcement mechanisms or incentive programs. Another possibility is to provide for "citizen suits" in the event of non-compliance with water quality objectives.

D. Water Use Efficiency

Most of the implementation of the Efficient Water Use Component will be at the local agency level. DWR and USBR will provide technical support and financial assistance for locally implemented water conservation and efficiency improvement programs.

1. Voluntary Compliance and Certification

Assurance of compliance with urban and agricultural water conservation and efficiency programs is provided by a certification process administered by the urban and agricultural conservation/ efficiency councils. Local agencies which do not have certified plans are not eligible for benefits from the CALFED Program. This

would include access to and use of new facilities, the water transfer market or water bank, or financial incentive and technical assistance programs.

2. Bond language

Additional assurances on water use efficiency are provided by bond language which prohibits the use of new facilities to convey either project or purchased water for any urban or agricultural agency which is not certified as efficient.

3. Regulations

Assurances for water use efficiency might also be provided by the promulgation by the SWRCB of rules and regulations on water management/water use efficiency as a condition of water rights. This might also include sanctions or penalties for those water users who were not certified or failed to satisfy implementation criteria.

4. Legislation

As an additional assurance to the basic approach of voluntary or conditions based compliance, state legislation could make water management planning mandatory for all water suppliers which meet certain criteria.

E. Levee System Integrity

DWR will continue to implement the levee programs.

1. Funding

Assurance that the levee programs will be implemented is provided by securing funding not dependent on the annual appropriation process. Thus, funds are provided by bonds, fees imposed upon water users, or other revenue sources.

2. Legislation

Legislation could also provide additional assurances that the funding stream for levee maintenance and restoration will continue.

F. Other Program Assurance Issues

Most of the assurance options discussed above deal with assuring the implementation of the long term CALFED Bay-Delta Program. However, assurances must also be provided to protect stakeholder interests from the potential adverse impacts of the CALFED program. These types of issues arise primarily in three areas: water rights protection, water transfer and local groundwater issues, and protection of the Delta as a

"common pool".

1. Agreements

Assurances for protection of the Delta as a "common pool" are provided by the agreements discussed in the sections on ecosystem restoration and water supply reliability.

2. Bond language

Water rights assurances are provided by provisions in the facilities construction bond instruments that preclude use of the isolated system to convey water purchased on the market if the transfer has been vetoed by the county from which the water is being moved.

3. Water transfer rules

Water rights and groundwater protection assurances can be provided by water transfer rules that permit counties of origin to impose conditions (such as restrictions on quantities or timing) on water transfers out of their counties, based upon criteria designed to protect local economies, environmental conditions and groundwater resources without unduly restricting the water market.

4. Regulations and standards

Agricultural water quality in the Delta can be assured by quality standards and operating rules for export facilities.

5. Legislation

Assurances for protection of water rights can be provided by legislation which would codify the conditions under which an upstream county could disapprove or veto a water transfer.

6. Physical limits

The physical capacity or size of new conveyance facilities may also provide some assurance that the Delta as a "common pool" will be protected. For example, a 5,000 cfs isolated facility alternative assures that there will continue to be a need to move water through the Delta for export, since export needs cannot be fully met with an isolated facility of that size.

IV. ISSUES NOT ADDRESSED

A number of issues and concerns raised in prior Workgroup discussions or at the assurances workshop are not specifically addressed in this paper. The Workgroup should consider whether and/or how these issues should be dealt with in the preliminary package of assurances. Some of the issues are:

- The need for a process to deal with emergencies and natural catastrophes;
- The function and role of "prelisting" agreements as a water supply reliability assurance;
- The need to assure acceptance of or compliance with the CALFED program by those agencies and stakeholders which are not participants in the process;
- The impact of an overcommitted water supply system on the ability to provide assurances of program implementation;
- Recovery mechanisms (need to define this issue more clearly and identify available tools).

V. NEXT STEPS

After the Workgroup has reviewed and provided comment on this paper, staff will begin to integrate the assurances issues work product into a draft assurances report. This draft report will be brought to the Workgroup for review and comment later this summer. This report will provide the basis for the assurances portion of the draft implementation strategy document which will accompany the CALFED draft programmatic EIR/EIS to be issued later this year.