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WORK-in-PROGRESS

THE CALFED BAY-DELTA PROGRAM WATER TRANSFER ELEMENT — POLICY FRAMEWORK —

Purpose: To provide a policy framework to facilitate and encourage a properly regulated and protected water market to move water between users, including environmental uses, on a voluntary and compensated basis.

1. INTRODUCTION

The policy framework is designed to facilitate the water transfer process and the further development of a statewide water transfer market. Because water transfers can impact third parties (those not directly involved in the transaction) and/or local groundwater or environmental conditions, the policy framework will also be designed to provide protection from such impacts.

Water transfers are a daily occurrence in California. We constantly 'transfer' water that falls in the form of rain and snow via rivers and canals and underground aquifers to urban, environmental, and agricultural water uses throughout the state. However, the term 'water transfers' is generally used to mean the *physical movement of water between users* on a voluntary and compensated basis.

Every year, hundreds of thousands of acre-feet are transferred or exchanged between willing parties. Most of these transfers consist of in-basin exchanges or sales of water among Central Valley Project (CVP) or State Water Project (SWP) contractors. Generally, these transfers have been successful, but they have raised concerns regarding adverse impacts to other water users, to rural community economies and to the environment. They have also highlighted contradictory interpretations of state law, the lack of reliable ways to transport the transferred water, and complicated permitting and approval processes.

As the CALFED program strives to achieve its multiple objectives, there will be an expanded role for transfers as part of the Bay-Delta solution. However, before the value of water transfers as a management tool can be fully realized, these problems need to be addressed. There are three major problems areas:

1. environmental, socio-economic, and water resource protections;
2. technical, operational, and administrative rules; and
3. access to state and federal conveyance facilities (wheeling).

The CALFED Program recognizes that many water transfers already are an important part of the California water management landscape and are valuable in the effort to improve water supply reliability, water use efficiency, water quality and the aquatic ecosystem. CALFED also recognizes that water transfers can have adverse impacts. CALFED actions to reduce conveyance constraints or to facilitate cross-Delta transfers could potentially exacerbate adverse impacts associated with water transfers.

Transfers can provide an effective means of moving water between users on a voluntary and compensated basis, as well as a means of providing incentives for water users to implement management practices which will improve the effectiveness of local water management. Transfers can also provide water for environmental purposes in addition to the minimum instream flow requirements. Though any of these purposes could cause adverse impacts to the areas around the source of the transfers (socio-economic, environmental, or water resource).

However, the annual volume of transfers will still be dependent on locally developed agreements and assurances. Local governments along with a variety of public interests will necessarily be part of the analysis and review of specific transfer proposals.

1.1 The Role of Water Transfers in Water Management

Active management of California's water resources is a necessary part of providing the State's numerous water resource benefits - from flood control to recreation and from instream flows for fish to water for agriculture. Many tools are available to help manage our water, such as dams, reservoirs, canals, and pumps. Water conservation, another important water management tool, also plays an ever-growing role. Less obvious is the utility of such tools as the CALFED Ecosystem Restoration Plan Program and the Levee Integrity common program in the management of this resource. Water transfers also provide a valuable method of water management.

Water transfers primarily have two water management functions (both of which function by moving water made available through a number of methods including but not limited to: conservation of water otherwise lost to beneficial use, conjunctive use, land fallowing, and reservoir re-operation):

- To provide a local entity with a temporary source of water during drought conditions when other sources of water are constrained. In this manner, the transfer helps improve water supply reliability for the buying region. Typically, such water transfers would be for short periods of time, not occurring every year; or,

- To augment existing sources of water to meet existing or projected unmet demands. In this

manner, the transfer provides a new water supply to a local buying entity. Typically, a water transfer of this type would be a long-term, annual reallocation of water.

In addition to these primary functions, transfers provide other benefits to water management. For example they can:

- help relieve the mismatch between water supply and demand;
- provide a short-term method to move existing supplies from one location to another while other facilities are being constructed (i.e., new conveyance, surface storage, conjunctive use) or while other technologies or land use policies take affect (desalination, growth control);
- potentially reduce the level of need for new surface storage;
- aid in moving water from new facilities to various users throughout the state, including in-basin needs, instream flows for the environment, and exports, and
- provide water quality benefits (though degradation of water quality can also occur).

Water transfers are not efficiency measures per se but water transfers may encourage more efficient use of water and produce revenue which can be applied to investments in efficiency improvements. It is not a CALFED objective to increase the economic efficiency of water in the sense of causing water to move from relatively lower value uses to relatively higher value uses per unit of water. However, a more efficient water transfer market will probably result in some level of increased economic efficiency in the use of water as water gravitates by market force to uses of greater economic value.

1.2 Relationship to Conjunctive Management and Surface Storage

One potential source for transferrable water is water stored in surface or subsurface storage facilities. The CALFED Bay-Delta Program views appropriate and effective integration of groundwater and surface water as an essential component of water management. Local development of conjunctive use facilities and modified operations of existing reservoirs can generate water that can be transferred to other beneficial uses (assuming they satisfy all other legal requirements for transferrable water).

However, water transfers will not substantially substitute for needed increases in new water supply within the Bay-Delta system. There is currently insufficient storage capacity to solve water supply and reliability problems, particularly with respect to transfers of water across the Delta, especially when considering the increasing demand in source areas (area of origin). Thus, water transfers will function optimally only when there is a substantial increase in the amount of storage available in the system. Without increased storage, water transfers will only play a modest role in statewide water management.

1.3 Water Transfer Law and Policy, State and Federal

Both State and federal law contain provisions that authorize, acknowledge, or support water

transfers. In the past five years, important policy on water transfers has been established or reaffirmed at both the State and federal levels.

In his water policy speech in April of 1992, Governor Wilson reiterated the State's support for use of water transfers and the water transfer market, and described five criteria which transfers must meet:

> First: Water transfers must be voluntary. And they must result in transfers that are real, not just paper, water. Above all, water rights of sellers must not be impaired.
>
> Second: Water transfers must not harm fish and wildlife resources and their habitats.
>
> Third: We need to assure that transfers will not cause overdraft or degradation of groundwater basins.
>
> Fourth: Entities receiving transferred water should be required to show that they are making efficient use of existing water supplies, including carrying out urban Best Management Plans or Agricultural Water Efficiency Practices.
>
> Fifth and finally: Water districts and agencies that hold water rights or contracts to transferred water must have a strong role in determining what is done. The impact on the fiscal integrity of the districts and on the economy of small agricultural communities in the San Joaquin Valley can't be ignored . . . any more than can the needs of high value-added, high tech industries in the Silicon Valley.

In addition to the Governor's policy, both California law and federal law include provisions that authorize and acknowledge transfers as reasonable and beneficial uses of water. California Water Code section 109 says in part: "It is hereby declared to be the established policy of this state to facilitate the voluntary transfers of water and water rights ...".

Water Code sections 386, 1702 and 1706 codify what is commonly referred to as the "no injury" rule on water transfers. While the practical application of these provisions is not always clear, they do establish the principle that water transfers may not injure other legal users of water or the environment.

Water Code sections 386 and 1725 establish that, at least as to transfers which must be submitted to the State Water Resources Control Board, the Board must make a finding, as part of an approval of a transfer, that the transfer will not injure any legal user of water, will not have an unreasonable affect on fish, wildlife or other instream beneficial uses, and will not unreasonably affect the overall economy of the area from which the water is being transferred.

Water Code sections 484 and 1725 define transferable water as water that would have been consumptively used or stored by the transferor in the absence of the transfer, the transfer of which

will not injure any legal user of water, and which will not unreasonably affect fish, wildlife, or other instream beneficial uses.

Water Code section 484 also says that temporary transfers of water (as defined) do not prejudice the transferor's future right to the use of the transferred water. This section and section 1725 define consumptively used water as water "which has been consumed by use through evapotranspiration (ET), has percolated underground, or has been otherwise removed from use in the downstream water supply as a result of direct diversion."

Water Code section 1011(a) allows for the transfer of water produced by water conservation efforts. Water conservation is defined as the use of less water to accomplish the same purpose of use permitted by the existing water right. This section provides that when water appropriated for irrigation is not used because of land fallowing or crop rotation, the reduced usage shall be deemed water conservation for purposes of this section.

Water Code section 1011(b) provides that water, or the right to the use of water, the use of which has ceased or been reduced as the result of conservation may be sold, leased, exchanged or otherwise transferred, pursuant to any provision of law relating to water transfers.

Water Code sections 1011(a) and (c) also provide that any cessation or reduction in the use of appropriated water, as a result of water conservation efforts, is deemed equivalent to a reasonable and beneficial use of water; and upon completion of any transfer of water based on conservation efforts, the right to the use of the water shall revert to the transferor as if the transfer had not been undertaken.

Water Code section 1725 provides that a permittee or licensee may change the place of use (i.e., transfer) water "if the transfer would only involve the amount of water that would have been consumptively used or stored by the permittee or licensee in the absence of [the transfer], would not injure any legal user of the water, and would not unreasonably affect fish, wildlife or other instream beneficial uses. For purposes of this article, 'consumptively used' means the amount of water which has been consumed through use by evapotranspiration, has percolated underground, or has been otherwise removed from use in the downstream water supply as a result of direct diversion."

Water Code section 1745.04 provides that a water supplier may contract to transfer, or store as part of a transfer, water, if the water supplier has allocated to users within its service area the water available for the water year and no other user receives less than the amount provided by that allocation or is otherwise unreasonably adversely affected without that water user's consent.

Section 1745.05 provide that a water supplier may transfer water stored by the water supplier, water made available by crop shifting or fallowing, or water made available by "conservation or alternative water supply measures ...". Fallowing transfers are limited to 20% of the water which would have been applied or stored by the water supplier in the absence of a transfer contract entered into in any

given hydrological year, unless the agency approves, after reasonable notice and a public hearing, a larger percentage.

The 1992 Central Valley Project Improvement Act also addressed transfers. Section 3405(a) of the CVPIA authorizes all individuals or districts who receive Central Valley Project (CVP) water under water service, repayment, water rights settlement or exchange contracts to transfer all or a portion of the CVP water they receive to any other California water user.

Both state law and federal law have provisions allowing for the use of available capacity in facilities for transfers meeting all legal requirements (Water Code section 1810 et seq and federal Warren Act).

The application of these statutes and, in particular the interpretation of the "no injury rule", has led the Department of Water Resources (DWR) to develop three concepts which are instrumental in evaluating proposed water transfers and determining the quantity of water available for transfer.

> "New water" is water not previously available in the system, created, for example, by reducing irrecoverable losses or flow to unusable water bodies. "New water" results from some action by a seller that provides water to the system which would not be available absent the transfer.
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> "Real water" is water which, if transferred, does not diminish the supply available for other beneficial uses and which is not derived at the expense of another legal user. "Real water" is not necessarily "new water", but all "new water" must be "real water".
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> "Paper" water is water that does not create any increase in the water supply, such as water under right but not historically used, or tailwater or return flows which are used downstream.

2. CALFED PROGRAM APPROACH TO WATER TRANSFERS

The CALFED Program is not intending to enter into the business of brokering transfers or banking water as a result of this policy framework, but may purchase water Ecosystem Restoration Program. The purpose is to facilitate and encourage the use of water transfers as a water management tool. The recommendations discussed later in this document will, however, include policies for implementation by CALFED agencies.

2.1 Objectives of the Water Transfer Policy Framework

The CALFED water transfer element proposes a policy framework for water transfer rules, baseline data collection, public disclosure, and analysis and monitoring of water transfers, both short and

long-term. The element also identifies areas where additional regulation or statutory changes may be desirable. Such modifications to existing policy are expected to facilitate the water transfer market, although the annual volume of transfers will still be dependent on locally developed agreements and assurances. Development of the policy framework is guided by the following objectives:

1. Promote, encourage and facilitate water transfers, within the framework of the Governor's water policy and in compliance with existing law.

2. Address the institutional, regulatory and assurance issues which need to be resolved to provide for a more effective water transfer system.

3. Address the physical issues which need to be resolved to provide for a more effective water transfer system, and particularly cross-Delta transfers.

4. Encourage transfers that result in overall improvements for water supply reliability, ecosystem health, and water quality (i.e., no significant re-directed impacts).

5. Develop a water transfer system that seeks to avoid injury to other legal users of water and to avoid or adequately mitigate adverse impacts that may occur.

6. Promote and encourage uniform rules for transfers using state and federal project facilities and cross Delta conveyance capacity.

7. Promote and encourage the development of standardized rules for transfers based on replacement with groundwater and other conjunctive use type transfers, so that water transfers do not cause degradation of groundwater basins and historic groundwater levels are sustained or improved.

8. Identify and resolve Delta carriage water and reservoir refill criteria issues.

2.2 Criteria for Policy Development

In addition to the objectives, there are several criteria that apply to the CALFED water transfer policy:

1. Water transfers must be voluntary.
2. Transfers must result in the transfer of water that truly increases supply, not the transfer of "paper water" such as water that a transferor has never used, or water that would been available for downstream use in the absence of the transfer.
3. Water rights of sellers must not be impaired.
4. Transfers must not harm fish and wildlife resources and their habitats.
5. Transfers must not cause overdraft or degradation of groundwater basins, or impair

correlative rights of overlying users.

6. Entities receiving transferred water should be required to show that they are making efficient use of existing water supplies.
7. Water rights holders (whether districts or individuals) have the legal authority to determine whether and how transfers occur.
8. The impact on the fiscal integrity of the districts and on the economy of small agricultural communities in source and receiving areas cannot be ignored.

The policy-level actions recommended by the CALFED Bay-Delta Program will be guided by these criteria. In addition, these will also continue to be used by CALFED agencies during their review, approval, or other role in relation to any future water transfer proposals.

3. PROCESS HISTORY OF THE DEVELOPMENT OF A CALFED WATER TRANSFER POLICY

The following information provides a brief history of the development of a water transfer component as a integral part of a Bay-Delta solution.

3.1 BDAC Policy Direction on Water Transfers

The question of how the CALFED Program should approach water transfer issues was presented to BDAC for policy advice. BDAC concurred that water transfers are an appropriate and useful part of the CALFED water management strategy. BDAC members also expressed the view that the CALFED program should consider several transfer issues, including third party impacts, protection of water rights, and the roles of water rights holders and water users in the review and approval process for transfers.

3.2 Role and Function of BDAC Water Transfer Work Group

At the May 22, 1997, BDAC Meeting, Chairman Madigan announced the appointment of a BDAC Water Transfer Work Group to consider the policy issues related to transfers and the appropriate role of CALFED in developing a water policy/water market framework. The Work Group is co-chaired by Tib Belza and Roger Strelow.

The Work Group has held a series of meetings to identify issues, consider case studies, develop solution options and to provide guidance to CALFED staff in the development of policy recommendations for BDAC and CALFED agencies.

3.3 Role and Function of the Transfer Agency Group

A group of CALFED agency staff members have met several times to discuss ways of dealing with those issues which are technical or operational in nature, and to consider the best way to present these issues to the Work Group for public discussion.

3.4 Summary of Identified Issues

Both the BDAC Water Transfer Work Group and the Transfer Agency Group were instrumental in identifying constraints to the existing water transfer market. Each is seen as an impediment to having a more effective water transfer market. The constraints can be generally sorted into three types:

1. Protection from the adverse impacts of transfers - this category includes such issues as third party impacts, groundwater protection, and environmental protection.
2. Obstacles to a more efficient market - This category includes such issues as the rules for defining transferable water, carriage water and reservoir refill criteria, and permitting and regulatory process issues.
3. Wheeling and access to facilities - These issues deal with the problems of capacity and reliability in conveyance facilities and wheeling costs and charges.

Resolution of the constraints in each of these categories should result in a more effective water transfer market. Brief descriptions of the identified constraints are included in Section 4 of this paper.

3.5 Process of Development of Solution Options

As indicated, the process has identified a number of constraints in each of the above broader categories. For each, CALFED staff, through discussion and consultations with CALFED agency staff, members of the Water Transfer Work Group and discussions during Bay-Delta Advisory Council meetings, and with input from many members of the public, has attempted to identify at least one solution option or method for resolving the constraint.

4. SUMMARY OF ISSUES AND SOLUTION OPTIONS

Following is a set of brief descriptions of the issues identified by the Water Transfer Work Group and the Transfer Agency Group. The issues are characterized in one of three broader categories. The solution options identified are proposed or possible; they do not reflect any CALFED policy decisions.

4.1 Environmental, Economic and Water Resources Protection

1. Issue: Third Party Socio Economic Impacts

Existing law prohibits transfers which adversely affect other legal users of water.

Existing law also generally requires that adverse environmental impacts of transfers be identified and mitigated. However, some impacts, such as those socio-economic impacts to the local economy are not clearly addressed by current law. Many stakeholders believe that all impacts to a transfer, including those impacts to parties other than the buyer or seller (generally referred to as "third parties") should be identified so that they can be avoided or mitigated. In addition, source area stakeholders do not agree that identification of adverse impacts should be left exclusively to transfer proponents.

Proposed Solution Options: Clearinghouse Process; Development of baseline data on water available for transfer from specific source area; Mitigation measures

2. Issue: Groundwater Resource Protection

Transfers of surface water which is replaced by additional pumping of groundwater can have adverse impacts on the local aquifer and other overlying groundwater users. Existing law does not always provide a clear and accessible process for identification, analysis and mitigation of these impacts.

Proposed Solution Options: Clearinghouse Process; Conjunctive Use Programs; Comprehensive Regional Groundwater Modeling; Local Control (Ordinances)

3. Issue: Instream Flow (1707) Transfers

Current law does not recognize instream or environmental water rights, other than changes to an existing water right under Water Code section 1707. Nor is there a uniformly agreed upon method of tracking and accounting for instream transfers over and above a given regulatory baseline flow. Some stakeholders would like to see a more formalized legal status for instream and environmental transfers.

Proposed Solution Options: Agreement on uniform tracking and accounting methods; Transfer Registry; Instream and Environmental Water Rights

4. Issue: Environmental Protection in Source Area

While current law (CEQA) generally requires environmental analysis of the impacts of water transfers, one year transfers of previously consumptively used or stored water are exempt from

CEQA analysis. The SWRCB still is required to make a finding that no injury to other legal users of water and no unreasonable affect on fish and wildlife will occur, though. However, a situation can occur where a series of one year transfers may have adverse impacts but not be subject to environmental analysis or mitigation requirements under CEQA.

Proposed Solution Option: Agreement on limited or no use of programmatic EIR's and more project specific analysis;

5. Issue: Area of Origin/Watershed Priorities

Many of the primary source areas for water transfers are protected by county of origin or watershed protection priorities. Some stakeholders believe that these protections need to be further strengthened prior to implementation of long term transfers out of the source area. Alternatively, some believe that in-basin transfers should be given a priority over out of basin transfers.

Proposed Solution Option: "Modification" of transferable water rules; permit streamlining for in-basin or sub-basin transfers; additional statutory or constitutional provisions on watershed protection.

6. Issue: Rules/Guidelines for Environmental Water Transfers

Should the rules of environmental or instream water transfers be the same as transfers for other purposes? Under what circumstances should environmental water be available for export from the Delta? How can transfers be developed which will provide multiple benefits?

Proposed Solution Option: Consistency with transfers for consumptive uses; multiple benefit mechanisms, Ecosystem Roundtable Principles

4.2 Technical, Operational and Administrative Rules

1. Issue: Transferable Water and the "no injury rule"

Generally, transferable water must be "real water" and transfers which would injure another legal user of water or the environment are prohibited. However, some stakeholders are concerned that these rules are not always interpreted and applied uniformly by agencies with jurisdiction over transfers.

Proposed Solution Options: Agreement on application of rules; interagency process for development of uniform criteria; modified criteria based on the type of transfer (place and purpose of use).

2. Issue: Saved or Conserved Water

Section 1011 of the Water Code authorizes the transfer of saved or conserved water. There is some disagreement among agencies and stakeholders about the scope and application of this provision, in particular whether water saved in the past can now be consdiered as "real water" eligible for transfer, or whether saved water is trasnferable only on a prospective basis.

Proposed Solution Options: Same as Issue No. 4.2.1 above.

3. Issue: Operations Criteria and/or Carriage Water Requirements

Historically, water transferred across the Delta has been subject to a carriage water requirement, in some cases as much as 20% to 30% of the transferred quantity, imposed by the State Board at the direction of the SWP or CVP. More recently, the State's Water Quality Control Plan limits project exports to 35% or 65% of Delta inflow. It is generally agreed that transfers should be subject to the same ratio if the ratio is controlling in the Delta. In other circumstances, there may be some disagreement on how carriage water requirements should be calculated and when they should be applied.

Proposed Solution Options: Isolated conveyance facility

4. Issue: Reservoir Refill Criteria

This issue relates to reservoir release transfers. SWP and CVP operators are concerned that, without specific reservoir refill criteria, vacated storage space will be filled with water which would otherwise be available to the project. In the absence of the transfer, there would be more water in the system in the subsequent year to meet project obligations (contract deliveries, Delta outflow or water quality requirements). The transfer might also cause the reservoir refill to be delayed, with a possible impact on conditions in the Delta. (Reservoir release transfers can also impact other legal users of water and raise "no injury rule" issues.)

Proposed Solution Option: Negotiated agreement on refill percentage; agreement on general methodology to be used for specific transfer proposals to determine criteria.

5. Issue: Permitting Process

Parties to a water transfer often have a very narrow window of time in which a transfer can be physically accomplished. Some have suggested that permitting and regulatory process requirements restrict and impair the ability to accomplish transfers in a timely manner.

Proposed Solution Options: Permit streamlining; "pre-approval" of certain types of transfers

4.3 Wheeling and Access to Federal and State Facilities

1. Issue: Priority of transferred water in existing project facilities

Generally there is no reliable capacity in CVP and SWP conveyance or pumping facilities for water transfers, in other than dry years.

Proposed Solution Option: Disclosure of transfer windows and risk factors

2. Issue: Priority of transferred water in new facilities

How should new conveyance capacity be allocated as between project water and transferred water?

Proposed Solution Option: Dedicated capacity in new facilities

3. Issue: Wheeling Costs

How should conveyance and pumping costs for transferred water be calculated?

Proposed Solution Option: Agreement on recovery of capital costs of facilities

5. PRIORITY ISSUES AND SOLUTION OPTIONS

At the first BDAC Water Transfer Work Group meeting, in July of 1997, BDAC members and invited participants identified third party impacts and groundwater resources protection as priority issues for consideration. CALFED Staff proposed that the Work Group focus its efforts on developing solution options and, if possible, policy recommendations to BDAC and CALFED regarding these issues.

BDAC Water Transfer Work Group meetings subsequent to the first meeting centered on presentations of case studies which provided "real world" illustrations of transfer projects, third party impacts and groundwater issues.

At the November and December Work Group meetings, participants "brainstormed" solution options and produced a rough list of ideas to be considered in developing policy recommendations for addressing third party impacts and groundwater resource protection. These solution options were sorted, and based on the discussion among Work Group meeting participants, staff attempted to refine and prioritize the solution options which had some general measure of support as part of a water transfer policy framework.

Support for these solution options was not unanimous, and in some cases was (and is) tentative or conditional, depending on other aspects of the policy framework, how the policy is implemented, or other components of the CALFED program. Nevertheless, it is the opinion of CALFED staff and consultants that these solution options will be supported by a significant number of stakeholders from the Work Group and the public.

5.1 Broadly Supported Solution Options for Priority Issues

The broadly supported solution options revolved around the need for:

1. Baseline data collection;
2. Neutral party analysis and monitoring of transfers for informational purposes (non regulatory);
3. Cumulative impact analysis;
4. Public disclosure of data and analysis; and
5. Public participation in the transfer review and approval process.

Specifically, the solution options discussed and supported by the Work Group can be described as a set of functions to be performed by an institution or entity as yet undefined that would satisfy the list of needs presented above. This could mean a new entity of some type or existing entities and agencies. Generally, the functions identified are:

1. Research and development as necessary to establish credible and adequate baseline information on groundwater conditions and groundwater/surface water interaction.

2. Extensive groundwater monitoring programs before, during and after specific water transfer projects.

3. Development of analytic requirements for specific water transfer projects based on the type of water transfer (e.g., intra- basin, inter-district, change in purpose of use, instream or environmental use or out of basin transfer).

4. Adequate, project-specific environmental review and analysis of each water transfer proposal.

5. Basin wide planning goals for surface and groundwater resources.

6. Public disclosure of all pertinent information on each water transfer proposal, through a process funded by transfer proponents, and public participation in the review and approval process, including:

   a. public notice of proposed water transfer projects;
   b. public disclosure of water transfer proposals and plans, explanation of anticipated impacts and mitigation strategies;

c. disclosure and explanation of claims process for parties seeking compensation for damages resulting from water transfers;
d. decision making by the parties to the transfer and other legally responsible authorities in and through the public process;
e. educational programs for the public regarding water transfer terminology, process and technical information.

5.2 Other Solution Options

In addition to the solution options which were broadly supported by the Work Group, a number of other solution options received support from a significant *subset* of the Work Group, primarily stakeholders focused on source area interests. Again, support for these solution options was often tentative or conditional depending on other factors or aspects of the program. These include:

1. Evaluation of water transfers should include analysis of growth inducement in areas receiving transferred water.

2. Evaluation of water transfers should include analysis of local economic benefits and impacts of transfers. This might include fund tracking or establishing accountability for funds received for transferred water.

3. Entities purchasing or receiving transferred water should be required to meet certain efficiency criteria as a condition of obtaining transferred water.

4. Transfer which rely on groundwater substitution should not be approved on the basis of programmatic level environmental impact analysis.

5. Groundwater substitution pumping should be restricted to times when overlying groundwater users (not participating in the transfer) are not pumping for their own use.

6. CALFED should support the separation of the management of the State Water Project from the Department of Water Resources.

7. CALFED should support the levy of a tax on every transfer of water to be used for transfer mitigation projects.

The Work Group also expressed a view on a concept which should <u>not</u> be part of a CALFED water transfer policy framework - the idea that a physical limit should be imposed on the amount of water which a region or political entity may transfer. The sense of the Work Group was that this decision should be made at the local level, provided that the review and approval process is adequate to protect local interests from adverse impacts of the transfer.

6. INTEGRATION OF SOLUTION OPTIONS

This section describes the recommended solution options to facilitate development of a more functional water transfer market. The section is divided into several subsections depending on a solution's ability to help resolve one or more issues. The following solution areas are described:

- Source area issues - the solutions include establishment of a clearinghouse entity and formulation of CALFED agency policies to ensure adequate water transfer impact analysis and public participation.
- Operational issues - the solutions include ...
- Wheeling issues - the solutions include ...

6.1 Source Area Issue Solutions

The recommended solution has two parts: 1) the formation of a water transfers information clearinghouse to ensure information disclosure and public participation in the transfer review and approval process and to perform baseline research and monitoring; and 2) coordination among CALFED members agencies (USBR, DWR and State Water Resources Control Board) to formulate policy, under existing authorities, for additional water transfer impact analysis of specific water transfers.

6.1.1 Water Transfers Information Clearinghouse

As part of the CALFED legislative package, CALFED would recommend state legislation to create the California Water Transfers Information Clearinghouse. The Clearinghouse would perform some of the functions described in Section 5.1, and would aid in resolving many of the economic, environmental and resource protection issues discussed in Section 4.1, by providing:

1. Data collection and Technical Baseline Analysis

- Collect, develop and analyze baseline data to provide information on existing conditions, particularly surface water supplies (source, type and usage), groundwater levels and quality, groundwater recharge rates, groundwater - surface water relationships, and streamflow accretion and depletion rates.
- Perform technical baseline analysis on groundwater - surface water interface to broaden the understanding of these resources. Eventually develop a model (or models) on the groundwater - surface relationship in the Central Valley.
- Collect information on proposed transfers of all types (except intra-District transfers)when a specific water transfer is proposed.

2. Public disclosure

- Make all collected data (baseline and proposal specific) and technical baseline analysis available to the public and to decision makers.
- Provide public notice on all proposed water transfers and provide a forum (if not otherwise provided) for public discussion and comment on proposed transfers.

3. Other possible functions (these functions could be funded by the interested party and provided as a service, separate from the other informational disclosure functions)

- Provide advice and assistance to local decision makers on technical analysis and appropriate methodology and data necessary to determine environmental and economic impacts of a proposed transfers. For groundwater transfers, this could include, for example, modeling data on impacts to groundwater or groundwater quality, affects on streamflow accretions and depletion, and estimates of recharge times. For surface water transfers, it might include analysis of water quality impacts and third party economic impacts. This would purely be an informational function and may need to be contracted by the entity wanting the information.
- Provide cumulative impact analysis of transfers on a stream or watershed basis for use by the SWRCB in considering approval of a proposed water transfer.
- Provide recommendations to decision makers on ways to avoid, minimize or mitigate environmental or economic impacts.
- Develop and administer monitoring programs to determine impacts of transfers on groundwater conditions, water quality, agricultural production, environmental conditions, etc.
- Provide, upon request by the local agency or decision makers, advice or recommendations on the level of analysis desirable or useful for different types or priorities of transfers. Expertise housed within the clearinghouse may be available to local interests (perhaps on a contract basis) to provide assistance with understanding the analysis results.

The Clearinghouse would be located in the State Water Resources Control Board, but separate from the Division of Water Rights. The primary clearinghouse function would be information disclosure, ensuring public participation, and performing broad-based technical work, such as baseline data collection and analysis and regional groundwater-surface water modeling so that decisions could be made with all parties in possession of complete and accurate information. Other functions listed under #3 would be a secondary priority, if necessary.

For performance of the broad-based technical work, contracts could be established with the University of California and/or the Natural Resources Conservation Service and/or the U.S. Geological Survey and/or another neutral party with appropriate expertise. The Clearinghouse would provide this baseline data and analysis to the transfer proponents, responsible decision making agencies and to the public, for use in the review of a proposed transfer when initiated by the transfer proponents.

One of the concerns repeatedly expressed by some stakeholders is that DWR and USBR could not

function effectively as a clearinghouse due to their obligations to their contractors. While some have expressed reluctance at the idea of increasing the scope of the State Water Resources Control Board jurisdiction, it seems logical for the State Board to assume the responsibility for these functions. This would NOT require any expansion of the Boards' water rights permitting authority. The State Board could collect, analyze and disseminate information and advice regarding transfers of all types, without assuming any new regulatory jurisdiction over transfers.

The creating legislation would also require the proponents of specified water transfers would give notice of the transfer to the Clearinghouse at a specified time. The notice would include the specific information about the proposed transfer so that the Clearinghouse could make the information broadly available. The Clearinghouse would then be responsible for ensuring that the notice of a proposed transfer was provided to all interested parties and that public process requirements were satisfied.

The Clearinghouse would not function as a market broker, nor would the Clearinghouse operate as a water bank. In other words, the Clearinghouse would not directly participate in water transfer transactions. Based on the discussions thus far in the Work Group, there appears to be support for the idea that the Clearinghouse function would apply at least to the Central Valley and possibly statewide.

6.1.2 Policy Formulation by CALFED Agencies

In addition to the legislative package, CALFED would coordinate with its member agencies (USBR, DWR and the State Water Resource Control Board) to formulate policy, under existing authorities, for additional water transfer analysis. To the extent permitted under existing law, these agencies would require transfer proponents to provide analysis of the impacts of a proposed transfer in three area in addition to CEQA or other required environmental analysis. These analyses would include determination of potential:

- local groundwater impacts, including pumping levels, water quality and recharge conditions;
- cumulative impacts of a specific transfers when viewed in the context of other transfers from the same source area; and
- third party socio-economic impacts.

The most likely application of such a CALFED policy decision would arise in connection with transfers for which access to and use of USBR and DWR facilities is needed for storage and/or wheeling of transferred water.

Under Water Code section 1810, the use of a water conveyance facility for transferred water "is to be made without injuring any legal user of water and without unreasonably affecting fish, wildlife or other instream beneficial uses and without unreasonably affecting the overall economy

or the environment of the county from which the water is being transferred." This language would appear to give DWR the authority to impose, as a condition of permission to use SWP facilities, that a transfer proponent provide analysis of the environmental, groundwater and socio-economic impacts of the proposed transfer.

The language of Section 1 of the Warren Act of 1911 is less explicit as to the authority of the USBR (acting for the Secretary of Interior) to impose conditions on the use of excess capacity in federal facilities. However, when read broadly and in the context of the CVPIA and other applicable federal law, the USBR probably has the authority to impose reasonable conditions on the use of its facilities. Arguably, it is within the range of reasonableness for the Bureau to require transfer proponents to provide analysis of the impacts of a proposed transfer on environmental, groundwater and socio-economic conditions in the source water area, the same as DWR. From a practical standpoint, permission to use either the state or federal facilities should be conditioned by the same analysis requirements.

Furthermore, Water Code Section 1725 and 386 establish, at least to proposed transfers which must be submitted to the SWRCB, that the SWRCB must make a finding, as part of a water transfer approval, that the transfer will not injure any legal user of water, will not have an unreasonable affect on fish, wildlife, or other instream beneficial uses, and will not unreasonably affect the overall economy of the area from which the water is being transferred. This language would appear to also give the SWRCB the authority to impose, as a condition of approval, that a transfer proponent provide analysis of the environmental, groundwater and socio-economic impacts of the proposed transfer. Since many proposed transfers would need access to state or federal facilities, this condition would default to the DWR or USBR requirements. For water transfers not needing to use state or federal facilities but still requiring SWRCB approval, this condition would still be applicable.

6.2 Operational Issues

(Still under development)
Some issues involve real or perceived impediments to the efficient operation of the water transfer market: e.g., different interpretations of transferable water; carriage water and reservoir refill; wheeling costs and access to facilities; the regulatory, permitting and approval processes. One aspect of the CALFED policy framework may be that the responsible agencies should provide additional disclosure of their calculations for determination of transferable water, carriage water and reservoir refill criteria. Another might be disclosure of the transfer windows and risk curves for moving transfer water across the Delta.

6.3 Wheeling Issues

(Still under development)
Some issues deal with problems related to water transfers for instream or other environmental

purposes. The CALFED water transfer policy framework may include proposals for accounting and tracking of instream transfers, or possible the creation of instream or environmental water rights.

6.4 (Still under development)

7. IMPLEMENTATION AND ASSURANCE ISSUES

(Still under development)

7.1. Do we need changes in the scope of regulatory authority over transfers? Transfers often require approvals or permits at several levels: the water agency, the county, the federal or state project operator, the State Water Resources Control Board. Some transfers are exempt from CEQA. Others are not. Some transfer are subject to the jurisdiction of the State Board. Others are not.

- Should State Board jurisdiction over water transfers be expanded to include transfer of pre-1914 water?

- What is the appropriate role of DWR and USBR in approving transfers (separate from issue of wheeling and access to project facilities)?

- Should some types of transfers be exempt from CEQA analysis. If so, which ones?

7.2. Who pays for transfer capacity in new facilities and how are costs recovered?

7.3. If legislation is needed, what is the process for negotiation of new laws or regulations?

7.4. What should be done in the first stage of program implementation? What is the appropriate linkage between new facilities and transfers? Is there a linkage between transfers and ERP actions?