

CALFED
BAY-DELTA
PROGRAM

Water Transfer Program Plan

Draft Programmatic EIS/EIR Technical Appendix
June 1999

FOREWORD

This Water Transfer Program Plan describes the water transfer component of the CALFED Bay Delta Program (CALFED or Program). It is a revision and expansion of material contained in Chapter 7 of the Draft Water Use Efficiency Component, Programmatic Environmental Impact Statement/Environmental Impact Report (EIS/EIR) Technical Appendix, dated March 1998, and an expansion of material contained in the December 1998 *Revised Phase II Report*. As a result of comments received during the public review period for the 3/16/98 Draft Programmatic EIS/EIR, which underscored the importance of water transfer policy to the CALFED Program, the water transfer component is now addressed on the same level as the other CALFED program components. Compared to the March 1998 draft, this document provides much greater detail on CALFED's recommendations to improve the function of the water transfer market in California.

The Water Transfer Program, like all components of the CALFED Program, is being developed and evaluated at a programmatic level. The Water Transfer Program does **not propose or analyze** any specific transfers or level of transfer activity. The Program is currently in what is referred to as Phase II, in which the CALFED agencies are developing a Preferred Program Alternative that will be subject to a comprehensive programmatic environmental review. This report describes both the long-term programmatic actions that are assessed in the Draft Programmatic EIS/EIR, as well as certain more specific actions that may be carried out during implementation of the Program. The programmatic actions in a long-term program of this scope necessarily are described generally and without detailed site-specific information. More detailed information will be analyzed as the Program is refined in its next phase.

Implementation of Phase III is expected to begin in 2000, after the Programmatic EIS/EIR is finalized and adopted. Because of its size and complexity, the Program likely will be implemented over a period of 20-30 years. Program actions will be refined as implementation proceeds, initially focusing on the first 7 years (Stage 1). Subsequent site-specific proposals that involve potentially significant environmental impacts will require site-specific environmental review that tiers off the Programmatic EIS/EIR.

The Water Transfer Program Plan describes a strategic plan of actions, policies, and processes to facilitate the further development of the water transfer market in California, while protecting water rights and area of origin priorities and providing safeguards against source area environmental and economic impacts. Generally, the water transfer element relies on the existing legal and regulatory framework, and does not recommend any major changes to California water law or the water rights system.

The program does include a proposal to create the Water Transfer Information Clearinghouse, which will require enabling legislation.

Before adopting the Record of Decision for the final Programmatic FIS/EIR, CALFED will finalize this strategic plan for implementation of the Water Transfer Program. The plan will address implementation of recommendations that are still undergoing refinement through continuing stakeholder and agency interactions and will propose implementation of more specific action or policy-based recommendations. The Water Transfer Program will be further refined prior to release of a Final Programmatic EIS/EIR as resolution is reached on some of these issues through the processes CALFED has recommended. To the extent a few issues are still unresolved, which is likely, the recommended processes will continue into the implementation stage of the CALFED Program.



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LIST OF ACRONYMS

AB	Assembly Bill
BDAC	Bay-Delta Advisory Council
CALFED	CALFED Bay-Delta Program
Ops Group	CALFED Operations Group
CEQA	California Environmental Quality Act
CMARP	Comprehensive Monitoring, Assessment, and Research Program
CVP	Central Valley Project
CVPIA	Central Valley Project Improvement Act
DWR	California Department of Water Resources
EI	export/inflow
ESA	Endangered Species Act
ET	evapotranspiration
NEPA	National Environmental Policy Act
Program	CALFED Bay-Delta Program
Reclamation	U.S. Bureau of Reclamation
SB	Senate Bill
SWP	State Water Project
SWRCB	State Water Resources Control Board
WQCP	Water Quality Control Plan
USBR	U.S. Bureau of Reclamation



1. Introduction

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1. Introduction

The CALFED Bay-Delta Program (CALFED or Program) is an open, collaborative, state-federal-stakeholder effort seeking to develop a comprehensive long-term plan to restore ecosystem health and improve water management for beneficial uses of the Bay-Delta system. Water transfers can play an important role in achieving that goal. As one of eight specific programs of the Preferred Program Alternative, the Water Transfer Program is part of an integrated solution designed to address the co-equal Program purposes of ecosystem restoration, water quality, water supply reliability, and levee and channel integrity.

The Program's Water Transfer Program proposes a framework of actions, policies, and processes that, collectively, will facilitate water transfers and the further development of a state-wide water transfer market. Because water transfers can affect third parties (those not directly involved in the transaction) and local groundwater, environmental, or other resource conditions, the framework also includes mechanisms to provide protection from such impacts.

PURPOSE: To provide a framework of actions, policies, and processes to facilitate, encourage, and streamline a properly regulated and protective water market which will allow water to move between users, including environmental uses, on a voluntary and compensated basis.

The rest of this document describes the Water Transfer Program in more detail, including:

- A description of the relationship of water transfers to other water management actions and programs,
- A discussion of existing laws and statutes that govern water transfers,
- Identification of issues related to water transfers,
- A plan to resolve these issues, and
- Strategies to implement the plan.



1.1 WHY CALFED HAS INCLUDED WATER TRANSFERS IN THE PREFERRED PROGRAM ALTERNATIVE

As one of eight Program components developed during CALFED's Phase II process, the Water Transfer Program is, by definition, common to all alternatives. Thus, it is part of the Preferred Program Alternative.

During the CALFED Program's public process, it was apparent that the issue of "water transfers" needed to be addressed. Many stakeholders share the opinion that an improved water market could help "reduce the mismatch between Bay-Delta water supplies and current and projected beneficial uses dependent on the Bay-Delta system," a stated objective of the Program. Others are skeptical, concerned that water transfers are a "water grab" by those searching for new water supplies. Opinions about water transfers and a statewide water market vary widely, even within agricultural and urban water users, environmental groups, and local, source area interest groups.

The question of how the CALFED Program should approach water transfer issues was presented to the Bay-Delta Advisory Council (BDAC) for policy advice. BDAC concurred that water transfers are an appropriate and useful part of the CALFED water management strategy. BDAC members expressed the need for the CALFED Program to 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.

1.2 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 in-stream flows for fish to water for agriculture and urban communities. Many tools are available to help manage our water, such as dams, reservoirs, canals, and pumps. Other important water management tools, such as water conservation, water recycling, and

ROLE AND FUNCTION OF THE BDAC WATER TRANSFER WORK GROUP

At the May 22, 1997 meeting, Chairman Madigan announced the appointment of a Bay-Delta Advisory Council (BDAC) Water Transfer Work Group to consider the policy issues related to transfers and the appropriate role of CALFED in developing a water transfer 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 provide guidance to CALFED staff in the development of policy recommendations for BDAC and CALFED agencies.

ROLE AND FUNCTION OF THE TRANSFER AGENCY GROUP

A group of CALFED agency staff members has worked together to identify and discuss solutions for issues identified by the Work Group that are more technical or operational in nature. This group worked with the BDAC work group to ensure agency and stakeholder participation in developing viable solution options.

conjunctive use, also play ever-growing roles. Less obvious is the utility in the management of this resource of such tools as the CALFED Ecosystem Restoration Program and the Levee System Integrity Program. Water transfers round out this array of water management tools by working in conjunction with the other tools. It is important to note, however, that water transfers are simply **mechanisms to move water and not sources** of water.

Whether water is saved by conservation of losses to a salt sink, released from a reservoir, or made available through land fallowing, it is the "transfer" that allows the water to move between uses. The transfer does not generate the water. For example, a water conservation program may make water available for another's use, but it is the transfer that actually allows the conserved water to move to the other use. Water transfers are not efficiency improvements, but they may encourage more efficient use of water and produce revenue to be used for investing in improvements.

While 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, a more efficient water transfer market probably will result in some degree of increased economic efficiency. As some water gravitates by market force to uses of greater economic value, increased economic efficiency automatically will occur. However, this increase will depend totally on the willingness of buyers and sellers to reach agreements in a "market" atmosphere.

Water transfers serve two major water management functions (both of which involve moving water made available through a number of methods, including but not limited to, reduction in consumptive use, conservation of losses, conjunctive use, land fallowing, and reservoir reoperation). These functions are:

- ***Providing a mechanism to obtain 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 receiving interest. Typically, such water transfers are for short periods of time, not occurring every year (short-term).
- ***Providing a mechanism 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 receiving interest while reducing the long-term quantity available to the seller. Typically, a water transfer of this type is a long-term reallocation of water, either permanent or for a period of years (long-term).

These functions apply regardless of the type of water user: agriculture, urban, or the ecosystem. In addition to these primary functions, transfers can provide benefits such as:

- Helping to relieve the mismatch between water supply and demand by moving water available in one area to satisfy a need in another area.
- Providing a mechanism to move water assets into and out of a proposed Environmental Water Account (EWA).
- Providing a short-term method to move existing supplies from one location to another while other facilities are being constructed (new conveyance, surface storage, or conjunctive use), during temporary reductions in water supply due to

outages of conveyance facilities, or while other technologies or land use policies take effect (desalination or growth control).

- Moving water from storage facilities (surface and subsurface) to various users throughout the state, including in-basin needs, in-stream flows for the environment, and exports.
- Providing water quality benefits as a result of actions taken to make water available for transfer (reducing agricultural return flows and reducing urban wastewater flows—although, in some cases, degradation of water quality also can occur).
- Providing water for in-stream flow augmentation through actions such as fallowing, conservation, and conjunctive use.

1.2.1 RELATIONSHIP TO OTHER PROGRAMS

As previously stated, the water transfer framework is one of several water management tools included in the Preferred Program Alternative. Each of these tools is linked to the other, resulting in overall management improvements. The following provides a basic description of these relationships.

Linkage to Storage, Conveyance, and Conjunctive Use

One potential source of transferrable water is water stored in surface or subsurface storage facilities. The CALFED 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 that all other legal requirements for transferrable water are satisfied).

However, water transfers cannot substitute for potential increases in new water supply in the Bay-Delta system. Current storage capacity may not be sufficient to solve water supply and reliability problems, particularly with respect to transfers of water across the Delta. Furthermore, increasing demand in source areas may limit the amount of water made available for transfer. Since available storage space is critically linked to conveyance capacity, a lack of storage may negatively affect the amount of water that can be transferred. For instance, water conserved over the course of an irrigation season that is to be transferred may need to be held in surface or groundwater storage until a window of opportunity exists to convey the water. Traditionally, these windows occur late in the water delivery season (i.e., August through November).

Operational constraints on Delta export facilities, coupled with the present levels of storage, will continue to limit cross-Delta water transfer opportunities. Thus, transfers will function optimally only when the amount of storage available in the system is substantially increased, the Delta export conveyance mechanisms are changed, or both. Without increased storage upstream of the Delta or in export areas and relief from current pumping constraints, water transfers will play only a modest role in state-wide water management.

Additional conjunctive use and groundwater banking opportunities are one method to increase available storage. These projects most likely would be implemented by local entities. Transfers of water developed under new conjunctive use or banking programs would be subject to the actions, policies, and processes recommended in this framework.

Linkage to Conservation and Recycling

In addition to the linkage between storage and water transfers, there is a linkage between water use efficiency and transfers. One of the assurance mechanisms proposed for the agricultural and urban water use efficiency programs is that local water agencies have approved or certified water management plans in place as a condition of obtaining transferred water through new facilities, or possibly as a condition of obtaining approval from CALFED agencies for transfers using existing federal or state storage and conveyance facilities. The premise of this assurance mechanism is that a water agency should be required to demonstrate that it is efficiently using its existing water supply before buying or selling supplemental water in what is generally considered to be a water-scarce environment.

A corollary to this premise is that the revenue produced by the sale of transferrable water can be used for additional water use efficiency improvements. Thus, while transfers are not *per se* an efficiency mechanism, water transfers can provide financial incentives for efficiency improvements, which can generate transferrable water in some instances. For example, a water transfer based on the temporary fallowing of a particular field will produce revenue that could be used to improve the irrigation systems on that same field for when it is brought back into production.

The linkage between water transfers and water conservation is further complicated by issues of defining when conserved water is transferrable. As discussed in Section 3, some stakeholders and CALFED agencies disagree regarding when and how much conserved water is transferrable under what conditions. Resolution of this issue is a key component of the Water Transfer Program.

Linkage to Ecosystem Restoration

The CALFED Preferred Program Alternative will include actions to acquire water for augmenting existing in-stream flows. It is assumed that a portion of these flows will be derived through water transfers from willing sellers. Such transfers will directly help achieve ecosystem restoration goals. However, even water transfers between agricultural interests and from agriculture to urban interests have the potential to provide added in-stream benefits. Details of proposed water acquisitions for in-stream flow purposes are included in the Ecosystem Restoration Program report.

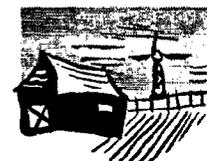
The acquisition of water for in-stream flow purposes generally will occur through purchase by a federal or state agency. Currently, a program to acquire water for environmental uses is being developed by the Ecosystem Roundtable. To assist in this process, the Ecosystem Roundtable has drafted a set of "Water Transfer Principles." These principles were modeled after the recommendations of this Water Transfer Program Plan. All in-stream or environmental water transfers will be subject to the same criteria and conditions as any other water transfer.

1.3 PROGRAMMATIC NATURE OF THE WATER TRANSFER FRAMEWORK

The framework presented here to resolve water transfer issues is programmatic. It describes actions, policies, and processes, but only in sufficient detail to convey the direction and general purpose of each. More detail will need to be developed prior to successful implementation of this framework. Some refinement and detail will be added to the framework between this public report and a Final Programmatic EIS/EIR. Complete development of the framework will continue during the months and years after the Record of Decision on the Programmatic EIS/EIR.

2. Water Transfers Defined

2. Water Transfers Defined 2-1
2.1 WATER TRANSFER LAW AND POLICY: STATE AND FEDERAL 2-2



2. Water Transfers Defined

Water transfers are a daily occurrence in California. We constantly “transfer” water that falls in the form of rain and snow via rivers, 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 temporary or permanent reallocation of water (diverted under water right, contract, or by groundwater extraction) between uses (including environmental uses) on a voluntary and compensated basis.**

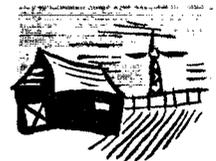
Every year, hundreds of thousands of acre-feet of water are transferred between willing parties. Most of these transfers consist of in-basin exchanges or sales of water among Central Valley Project (CVP) or State Water Project (SWP) contractors. For example, in 1997 nearly 288,000 acre-feet of CVP water was transferred among CVP contractors south of the Delta. Most transfers require that the water physically be moved from one district to another or from one basin to another through conveyance facilities. Since 1993, over 1.57 million acre-feet of CVP water has been transferred north and south of the Delta by contractors within the various divisions of the CVP. In addition, approximately 230,000 acre-feet of non-CVP water has been purchased and transferred by the Interim Water Acquisition Program to meet established in-stream flow purposes.

Generally, these transfers have been successful, but some transfer proposals have raised concerns regarding adverse impacts on other water users, rural community economies, and the environment. The transfers also have highlighted contradictory interpretations of state law, the lack of reliable ways to transport the transferred water across the Delta, and what is often perceived to be a complicated approval process.

The differences of opinion about water transfers demonstrate the difficulty of achieving a balance between “facilitating transfers” and providing adequate environmental and source area protection. 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, several issues need to

CALFED IS NOT IN THE TRANSFER BUSINESS

The CALFED Program does not intend to enter the business of brokering transfers or banking water as a result of this policy framework, but one or more CALFED agencies may purchase water through or for the Ecosystem Restoration Program. The purpose of this water transfer framework is to facilitate and encourage the use of water transfers as a water management tool. The Program recommendations discussed in this document are limited to actions, policies, and processes for implementation by CALFED agencies that will affect the structure and operation of a water market.



be addressed. For purposes of this document, the issues are grouped into three major categories:

- Environmental, socioeconomic, and water resources **protections**,
- Technical, operational, and administrative **rules**, and
- **Access** to state and federal conveyance facilities (wheeling).

The CALFED Program recognizes that 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 result in adverse impacts that need to be avoided or fully mitigated. 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 that will improve the effectiveness of local water management. Transfers also can provide water for environmental purposes in addition to the minimum in-stream flow requirements. Regardless of the purpose, any water transfer may cause adverse impacts (socioeconomic, environmental, or water resource) in the source area of the transfer.

The annual volume of transfers always will depend 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 to ensure that their interests are protected.

2.1 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 several years, important policy on water transfers has been established or reaffirmed at both the state and federal levels.

WATER TRANSFERS AND EXCHANGES

Several stakeholders have suggested that the CALFED Water Transfer Program discuss both "water transfers" and "water exchanges." As defined by these stakeholders, a water transfer is the sale of water with no expectation that any water would be returned to the seller, whereas water exchanges involve "water trading," whereby two or more parties exchange their respective water supplies for mutual benefit. In this sense, exchanges can include banking of water for later withdrawal, "loaning" of water with subsequent replacement, or simultaneous changes in diversion location.

Although "water exchanges" are a legitimate method of water management, from CALFED's perspective they are no different than a series of water transfers. If the "exchange" involves a change in a water right, it will require approval from the State Water Resources Control Board (except pre-1914 water rights). If either of the exchanging parties is a state or federal contractor, approval by the respective project operator is required. Regardless how water is made available, the fact that water under right or contract to one party is allowed to be used by another constitutes a water transfer.

In his water policy speech in April 1992, then Governor Wilson reiterated the State's support for use of water transfers and the water transfer market, and described five criteria that 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.

Though the current Governor (Governor Davis) has not formally announced his policy, California law does recognize transfers as reasonable and beneficial uses of water. California Water Code Section 109 states in part: "It is hereby declared to be the established policy of this state to facilitate the voluntary transfer of water and water rights ...".

There are many California Water Code provisions applicable to water transfers. Not all provisions apply to all types of transfers; for example, some apply only to short-term transfers, or to transfers by local agencies. A summary of certain transfer provisions is included here to illustrate how state policy on transfers is reflected in the law. A more complete text of Cal. Water Code provisions applicable to water transfers is included in Attachment B.

Cal. 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. (Cal. Water Code Section 1706 pertains to persons entitled to the use of water by virtue of an appropriation other than under the Water Commission Act—that is, a pre-1914 water right.)

Cal. Water Code Sections 1725 and 1727 establish that for approval of temporary transfers, which must be submitted to the State Water Resources Control Board (SWRCB), the Board must determine that the transfer will not injure any legal user of water and will not result in an unreasonable effect on fish, wildlife or other in-stream beneficial uses. In addition, for transfers of water under Section 386 (as to water that is surplus to the needs of the agency or the use of which is voluntarily foregone), the Board must find that the transfer will not

unreasonably affect the overall economy of the area from which the water is being transferred.

Cal. Water Code Section 484 says that temporary transfers of water do not prejudice the transferor's future right to the use of the transferred water. This section also defines 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."

Cal. Water Code Section 1011(a) provides that cessation or reduction in water use, as a result of water conservation, is a reasonable and beneficial use of the water to the extent of the reduction or cessation in use. Water conservation is defined as the use of less water to accomplish the same purpose of use permitted by the existing water right.

Cal. 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.

Cal. Water Code Sections 1011(a) and (c) also provide that 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.

Cal. Water Code Section 1725 provides that a permittee or licensee may change the place of use (that is "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 in-stream 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.

Cal. Water Code Section 1745.04 provides that a water supplier may contract to transfer water, or store water as part of a transfer, if the water supplier has allocated to users in 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.

WATER TRANSFER TERMINOLOGY

The application of these statutes, and in particular the interpretation of the "no injury" rule, has led the California Department of Water Resources to develop three concepts that 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 that would not be available absent the transfer.

"Real water" is water that, if transferred, does not diminish the supply available for other beneficial uses and 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."

"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 that are used downstream.

Section 1745.05 provides 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 that 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 a larger percentage, after reasonable notice and a public hearing.

The federal 1992 Central Valley Project Improvement Act (CVPIA) also addressed transfers. Section 3405(a) of the CVPIA authorizes all individuals or districts who receive 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 allow for the use of available capacity in facilities for transfers meeting all legal requirements (Cal. Water Code Section 1810 et seq. and the federal Warren Act). Cal. Water Code Section 1810 provides that the use of a conveyance facility is to be made without injuring any legal user of water and without unreasonably affecting fish, wildlife, or other in-stream beneficial uses and without unreasonably affecting the overall economy or the environment of the county from which the water is being transferred. (Cal. Water Code Section 1814 limits the application of this statute to 70% of the unused capacity of a facility.)

Water Code Section 1813 requires that a public agency "act in a reasonable manner consistent with the requirements of law to facilitate the voluntary sale, lease, or exchange of water and shall support its determinations by written findings."

In additions to the law summarized above, numerous other laws operate to protect the environment and local resources, including for example, the California Environmental Quality Act (CEQA), the National Environmental Policy Act (NEPA), state and federal Endangered Species Acts (ESA), state and federal water quality acts, the Public Trust Doctrine, local government groundwater ordinances, and local government plans.

LEGISLATIVE ACTIVITIES

During the 1999 California legislative session, four bills have been introduced related to water transfer policy. Each of these is undergoing review and revision as they make their way through various Legislative committees and move toward Assembly and Senate votes. The summaries presented here attempt to describe the bill in its form as of May 1999. Any changes that may have occurred since mid-May are not represented.

Senate Bill 506 (Peace) proposes to redefine "fair compensation" in Section 1811 of the Water Code as it relates to the transport of transferred water through another party's conveyance system.

Senate Bill 970 (Costa) proposes several clarifications to current transfer law in order to provide additional protection for water rights to transferred water, to ensure that water acquired for supplemental in-stream flows would be in addition to regulatory flows, and to streamline the State Water Resources Control Board procedures for change petitions.

Assembly Bill 732 (Machado) would require the State Water Commission to appoint a task force to review third-party impacts of water transfers and to investigate the establishment of a water transfer clearinghouse.

Assembly Bill 1196 (Thompson) proposes clarification of the water rights associated with efforts by California water users to conserve Colorado River water.

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3. Identification of Issues and Potential Solution Options

This section of the document provides a summary of the identified issues and an introduction to some potential solution options for each. Details on recommended solution options contained in the framework, or on the process to reach resolution for each of the issues, are presented in Section 4.

3.1 IDENTIFICATION OF ISSUES

The goal of CALFED's Water Transfer Program is to promote beneficial transfers, while ensuring that undesirable transfers do not occur. Many stakeholders believe that the existing water transfer market is flawed. Some believe there is a lack of accountability by transfer proponents to address potential adverse impacts of water transfers and that too much water already can be transferred. Others believe that the market faces barriers and disincentives that limit the potential for greater quantities of water to be transferred and that the current market provides adequate levels of protection to third parties. Regardless of one's viewpoint, several issues tend to constrain the development of the water market. Whether resolution of these issues increases or decreases the amount of water transferred in any given year or on average, these issues must be addressed by the CALFED Program.

Both the BDAC Water Transfer Work Group and the Transfer Agency Group were instrumental in identifying the issues that must be considered in developing a more efficient water transfer market. As previously stated in Section 2, these issues are sorted into three broad categories:

- ***Environmental, socioeconomic, and water resources protections*** - This category includes such issues as third-party socioeconomic impacts, groundwater protection, and local environmental protection.
- ***Technical, operational, and administrative rules*** - This category includes such issues as the rules for defining transferrable water, carriage water, and reservoir refill criteria; and permitting and regulatory process issues.
- ***Wheeling in and access to state/federal facilities (especially for cross-Delta conveyance)*** - These issues concern the desire to improve predictability and reliability of capacity in state or federal conveyance facilities and associated wheeling costs.



3.2 ESTABLISHMENT OF POTENTIAL SOLUTION OPTIONS

For each issue discussed under the three broad categories, a set of potential solution options (actions, policies, or processes) has been provided. These represent ideas developed by both stakeholders and CALFED agency representatives during the numerous meetings held over the past two years. They do not represent every possible solution option, nor have they been subjected to any screening criteria or technical analysis. They are also not mutually exclusive in all instances (i.e., a combination of options may be needed to help resolve a particular issue). Screening of the potential solution options and development of integrated actions, policies, and processes are discussed under the recommended framework in Section 4.

3.3 ENVIRONMENTAL, SOCIOECONOMIC, AND WATER RESOURCES PROTECTIONS

3.3.1 THIRD-PARTY SOCIOECONOMIC IMPACTS

A major set of issues related to water transfers, particularly out-of-basin, long-term (multi-year) transfers, concerns third-party impacts. Generally, water transfers can result in three types of third-party impacts: (1) impacts on other legal users of water (usually downstream users), (2) environmental impacts, and (3) economic effects in the source area. The intent of existing law is to prohibit transfers that adversely affect other legal users of water. Existing law also generally requires that significant adverse environmental impacts of transfers be identified and mitigated. Socioeconomic impacts on a source area are not directly addressed by current law, but Water Code Section 1745.05 does provide for a limit on certain types of fallowing transfers. In some circumstances, CEQA analysis may identify and provide for mitigation of such impacts. Many stakeholders believe that all impacts of a transfer, including those impacts on 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 believe that identification of adverse impacts should be completed by objective independent parties, not the transfer proponents.

It is generally recognized that certain types of transfers can result in adverse impacts on local economic conditions. Fallowing transfers, for example, may result in lower agricultural production in the source area and may affect local employment of farm workers and others. Groundwater transfers or transfers of surface water with groundwater replacement may result in lower groundwater levels, lower groundwater quality, and higher pumping costs for other local groundwater users. In extreme cases, affected groundwater users may lose the use of existing wells due to water quality degradation or lower groundwater levels.

The fundamental policy issue is to what extent should external impacts be internalized as transaction costs of the transfer. How are socioeconomic impacts identified? What level of

documentation is required? Who decides what level of adverse impact is significant or unreasonable? Ultimately, this leads to a debate about who should have the authority to approve, disapprove, or condition a proposed transfer.

Generally, these questions will arise in transfers based on land fallowing or crop shifting, or in transfers involving increased use or pumping of groundwater. True conservation transfers (reductions in irrecoverable losses) or storage transfers (release of stored water from a reservoir) probably do not generate the same level of third-party socioeconomic impacts because they do not affect the level of production or economic activity in the source water area.

Potential Solution Options

The following options are potential protective solutions to issues concerning third-party socioeconomic impacts:

- Develop agreement on the definition of third-party impacts and identify which impacts should be addressed.
- Limits on the number of acres that can be fallowed (in order to produce transferrable water) in a given area (district or county) or the amount of water that can be transferred from a given area (district, service area, or county).
- A fee levied on transfers, that would be administered by local governments, to compensate the local area for increased social service costs incurred by local governments, to provide mitigation funds for compensating losses, or to pay for retraining farm workers.
- A mitigation or compensation fund for those who incur higher groundwater pumping costs as a result of a transfer or restrictions on direct groundwater or groundwater substitution transfers (establish a limit on groundwater level draw-down). This would have to be accompanied by a local groundwater monitoring program.
- A central or state-wide water transfer clearinghouse to collect and disseminate baseline data and information on transfers and transfer impacts, perform research using historical data to understand water transfer impacts, and provide for a public information process if not otherwise provided.
- A policy to require disclosure of potential socioeconomic, groundwater, and cumulative impacts as part of the transfer approval process.

3.3.2 GROUNDWATER RESOURCE PROTECTION

Groundwater transfers involved direct transfers (where groundwater is pumped into a conveyance system and transferred) or groundwater substitution transfers (where surface water is transferred and replaced with pumped groundwater). Transfers of either type can adversely affect the local aquifer and other overlying groundwater users. Under existing

law, CEQA represents the primary mechanism for identification, analysis, and mitigation of these impacts. Many stakeholders do not feel that CEQA is adequate for this purpose.

Generally, only groundwater that is surplus to the needs of the overlying landowners can be directly transferred for use on non-overlying lands. There are also some statutory restrictions on transfer of groundwater from certain overdrafted basins (Salinas Valley, Sacramento, and Delta-Central Sierra basins). Common law also may allow existing users of groundwater in an overdrafted basin to prevent the transfer of groundwater from that basin. [Note that these rules apply to direct groundwater transfers but do not apply to groundwater substitution transfers where the groundwater is used on overlying lands.]

There is no state-wide groundwater regulation in California, unlike other western states. Rather, there is a patchwork system of local groundwater management, ordinances, adjudicated basins, and statutes. For example, California Water Code Section 1220 restricts direct export of groundwater within the combined Sacramento and Delta-Central Sierra basins unless pumping is in compliance with a groundwater management plan adopted by a county board of supervisors but pursuant to Water Code Section 1215, this restriction does not apply to CVP or SWP operations. Water Code Section 1220 does not define what constitutes a groundwater management plan. For groundwater substitution transfers subject to Water Code Sections 1011.5 and 1745.10, "replacement pumping" is not permitted unless it is consistent with a groundwater management plan for that area or the water supplier determines that no long-term overdraft impact will result.

The SWRCB has no jurisdiction over groundwater transfers but does have authority to prohibit "waste or unreasonable use" of groundwater. Furthermore, the Board asserts that it has the authority to consider impacts on groundwater in its review of water rights change petitions. Any long-term transfer requiring CEQA documentation also would include an analysis of impacts on groundwater.

Several Sacramento Valley counties have passed ordinances regulating the export of groundwater. Similar ordinances have been adopted or considered by some San Joaquin Valley counties. Many counties and water districts also have developed or are developing groundwater management programs.

To date, most transfers involving groundwater involved groundwater substitution transfers. In the San Joaquin Valley, some groundwater exchanges have occurred, where groundwater is pumped into a conveyance system in exchange for use of surface water elsewhere on the system either concurrently or at a later time.

Groundwater transfers, or surface water transfers based on groundwater substitution, without proper scrutiny and appropriate mitigation measures, could result in adverse impacts on groundwater resources, with significant adverse environmental and economic effects, in the source water area. Such impacts might include land subsidence, lower groundwater levels and higher pumping costs, degradation of groundwater quality, reduced property values, impacts on vegetation dependent on groundwater, or in extreme cases, losses of existing wells. The potential for adverse impacts on groundwater resources makes transfers politically sensitive in source water areas, such as the Sacramento Valley.

Groundwater transfers involve several specific issues. First, when and subject to what conditions can groundwater be directly transferred and exported out of the basin? (A corollary question is "Are or should the rules be different for in-basin groundwater transfers?") What impacts should be considered—water quality, pumping levels, short-term

overdraft, long-term overdraft, impact on surface flows, or others? Are there circumstances in which transferred groundwater can be replaced with surface water that becomes available later in the year and used for irrigation or recharge?

Second, when can transferred surface water be replaced with groundwater? Can replacement be done concurrently with the period of the transfer or can the water be pumped later in the year? Most groundwater substitution transfers result in no change in the cropping or irrigation patterns that would have occurred with the use of surface water. In some cases, a water user may want to transfer surface water in spring or summer, and then pump groundwater to replace some or all of the surface water later in the year for a different crop than would have been grown with the surface water. Should there be limits on these types of transfers to protect the local groundwater resource from overdraft and to protect other overlying users of the groundwater from the increased costs of pumping groundwater from deeper levels than would have occurred in the absence of the transfer?

Third, does the "no injury" rule apply to groundwater substitution transfers? If so, the reviewing or approving agency would need to consider whether the water to be pumped meets certain criteria, such as (1) Is it truly groundwater, as opposed to subsurface flow? and (2) Will the pumping affect depletions from or accretions to a stream in such a way that the pumping will not produce any new or "real" water? Also, the potential for injury to a downstream user must be analyzed (see the discussion on the "no injury" rule under Section 3.4)

Potential Solution Options

The following options could protect groundwater resources:

- Local water management plans (Assembly Bill [AB] 3030) incorporating rules on groundwater transfers.
- Local ordinances to regulate groundwater transfers.
- Adjudication of groundwater basins.
- Development of additional data regarding the Sacramento Valley groundwater basin to enable a better understanding of the relationships between surface water and groundwater and of the recharge capacity of the aquifer (or aquifers).
- State legislation to more clearly define the limitations on transfers of groundwater or groundwater replacement or to require broader application of local groundwater management plans.
- A central or state-wide water transfer clearinghouse to collect and disseminate baseline data and information on transfers and transfer impacts, perform research using baseline data to understand correlations between different parameters, and provide for a public information process if not otherwise provided.
- A policy to require disclosure of potential socioeconomic, groundwater, and cumulative impacts as part of the transfer approval process.
- Locally managed conjunctive use programs.

- Comprehensive regional groundwater modeling.
- State/federal assistance program to aid local entities in developing and implementing groundwater management programs in water transfer source areas.

3.3.3 AREA OF ORIGIN AND 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. Some stakeholders also believe that in-basin transfers should be given a priority over out-of-basin transfers.

Potential Solution Options

The following options could protect area of origin and watershed priorities:

- Modify transferrable water rules to facilitate in-basin, source area transfers.
- Streamline the permit process for in-basin or sub-basin transfers.
- Additional statutory provisions on watershed protection.
- Additional legislation to protect water rights, including area of origin priorities.

3.3.4 ENVIRONMENTAL PROTECTION IN SOURCE AREAS

Some stakeholders are concerned that the analyses of environmental impacts associated with water transfers have been inadequate. While current law (CEQA) generally requires an environmental analysis of the potential impacts of proposed water transfers, 1-year transfers have been exempted from CEQA analysis. Although the SWRCB must still make a finding of no adverse impact, there is a concern that a series of 1-year transfers may result in cumulative adverse impacts that are not subject to environmental analysis or mitigation requirements. However, CEQA specifically prohibits an agency from "piecemealing" a project to avoid environmental analysis (i.e., separating a large project into smaller pieces to expedite permits). Transfers proposed by CVP contractors pursuant to the CVPIA do not have such exemptions. These transfers, including short-term transfers of 1 year or less, are subject to NEPA analysis. However, some stakeholders are concerned that the use of an environmental assessment under NEPA that leads to a Finding of No Significant Impact, or FONSI, limits public review of proposed federal water transfer actions and that some of these actions have resulted in unmitigated adverse impacts.

Potential Solution Options

The following options could provide environmental protection in source areas.

- Limited or no use of programmatic environmental impact reports, more use of project-specific and local impact analysis, and greater emphasis on cumulative impacts analysis pursuant to CEQA.
- Guidebook of feasible mitigation measures to assist decision makers when adverse impacts are identified.
- A central or state-wide water transfer clearinghouse to collect and disseminate baseline data and information on transfers and transfer impacts, perform research using baseline data to understand correlations between different parameters, and provide for a public information process if not otherwise provided.

3.3.5 IN-STREAM FLOW (SECTION 1707) TRANSFERS

California Water Code Section 1707 states: "Any person entitled to the use of water, whether based upon an appropriative, riparian, or other right, may petition the board ... for a change for purposes of preserving or enhancing wetlands, fish and wildlife resources, or recreation in, or on, the water."

Other than transfers under Water Code Section 1707, current law does not recognize in-stream or environmental water rights. Furthermore, there is no uniformly agreed on method of tracking and accounting for in-stream transfers over and above a given regulatory baseline flow. Some stakeholders recommend a more formal legal status for in-stream and environmental transfers.

In-stream flow transfers, or Section 1707 transfers, refer to the transfer of water from a consumptive use to a non-consumptive use (with an identified need), which results in a reduced diversion from the system and increased in-stream flow or Delta outflow. California water law does not provide for the appropriation of water for in-stream fish and wildlife uses. Leaving water in the stream for fish or wildlife purposes has not been considered to meet the test of "taking control" of the water, which is the hallmark of appropriation for domestic, municipal and industrial, or irrigation purposes. In 1991, however, Water Code Section 1707 was enacted to allow water right holders to dedicate all or part of their rights for in-stream purposes.

The transfer, or change in place of use, under Section 1707 may be temporary or permanent. The SWRCB has received a few requests for Section 1707 changes, but only two such transfers have been approved.

The rights to Section 1707 water left in the stream are based on the priority date of the water right. Therefore, a user with a relatively recent water right may forego his direct diversion in order to protect in-stream uses under Section 1707 only to find that during water-short periods more senior water right holders can legally divert this water downstream, thus nullifying his efforts. If the Section 1707 transferor has senior rights or the water involved is stored or otherwise foreign to the stream system, then it must be protected from illegal diversion by downstream water users with junior rights. Once the Section 1707 water

reaches the Delta, accounting for the water depends on the desired use of the water. If the ultimate desired use of the water is to increase Delta outflow or other enhanced environmental protection beyond the existing standards, it must be accounted for differently than if the transfer is intended to satisfy existing demands or regulatory standards.

Potential Solution Options

The following options could provide environmental and water resource protection for in-stream flow (Section 1707) transfers:

- A procedure to track and account for allowable depletions that will accrue to Section 1707 transfers which are intended to reach the Delta.
- An environmental water transfer registry.
- Establishment of in-stream and environmental water rights.

3.3.6 RULES AND GUIDELINES FOR ENVIRONMENTAL WATER TRANSFERS

As the volume of water transfers for environmental purposes has increased over the past few years, several questions have arisen. Should the rules for environmental or in-stream 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 that will provide multiple benefits (can a transfer for consumptive use purposes be modified to provide in-stream benefits when it is routed through the system)? A few answers have come to light as these types of transfers become more common. However, standardizing these answers or developing other practical answers is warranted.

Potential Solution Options

The following options could provide rules and guidelines for environmental water transfers:

- Rules to ensure that environmental transfers satisfy the same legal requirements as consumptive use transfers under state and federal law.
- Outreach and education to transfer proponents of the multiple benefits that can be achieved by specific transfer proposals. Can an environmental entity provide incentives for water transfer during particular time periods? Is water transferred via Section 1707 available for redirection at a point downstream from its intended use?
- Adoption of the Ecosystem Roundtable's water transfer principles that state, among other things, that all instream transfers will be subject to the same criteria as other water transfers.

3.4 TECHNICAL, OPERATIONAL, AND ADMINISTRATIVE RULES

3.4.1 TRANSFERRABLE WATER AND THE "NO INJURY" RULE

Generally, transferrable water must be "real water," and transfers that would injure another legal user of water or the environment may be prohibited or conditioned, as a result of Board findings or legal action. Some stakeholders are concerned that these rules are not always interpreted and applied uniformly by agencies with jurisdiction over transfers.

The amount of water that can be transferred based on fallowing or crop shifting is determined by the reduction in consumptive use and irrecoverable losses. However, there is not always agreement on what is meant by, or how to quantify, "consumptive use." In addition, even when the amount of water produced by a reduction in "consumptive use" can be agreed on, the extent to which downstream users may be affected or injured by a transfer of this water may be disputed.

Various Water Code sections define "consumptive use" 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." Some stakeholders (potential buyers or sellers of transferred water) are concerned that the interpretation of this definition, which limits fallowing or crop-shift transfers only to the reduction in ET and irrecoverable losses, is overly restrictive. Others believe that the determination of consumptive use values and the application of the "no injury" rule is not sufficiently rigorous and results in permitted transfers that injure other downstream legal water users, particularly in terms of flow timing and water quality.

There is no disagreement that water consumed by the crop (ET of applied water) is part of the consumptive use measure and, if foregone, is transferrable. There is, however, some dispute about the transfer of surface water runoff (tailwater) that is not recaptured and reused, and that would otherwise be available to a downstream user. In other words, if it is permissible for the water user to recapture tailwater for his own use, thereby depriving the downstream user of its benefit, can the user reduce tailwater production by irrigation system improvements and transfer the saved water? Under most interpretations of current law, the "no injury" rule does not apply in the first case, but it does apply to water transfers when a water right change in place or purpose of use is required.

There is no dispute that water that otherwise would have percolated to unusable groundwater is transferrable. However, some disagree regarding the circumstances under which water that would otherwise percolate to **usable** groundwater may be transferrable. One view argues that all such water remains available to the system and is not "real" water and, therefore, not transferrable. The other view argues that this water could be transferred on a short-term basis, when no short-term impact on the groundwater basin results.

Water percolating below the crop root zone as a result of over application of irrigation water (which is necessary to some extent for leaching of salts) enters the "vadose zone." This is the portion of the soil column below the root zone but above the aquifer. Water movement through this zone is known as vadose zone transport. Transport is affected by several variables but most significantly by gravity and soil type (permeability).

The rate at which water moves through the vadose zone affects the rate of recharge to the aquifer. The recharge rate is not always known; therefore, the consequence of changing the rate of transport through the vadose zone cannot always be determined. The extent to which other legal users of water may be affected by changing this transport rate (as a result of a groundwater substitution transfer or irrigation efficiency improvements, for example) also depends on other variables that result in a recharge or drawdown of the aquifer, including subsurface lateral flow, precipitation, streamflow accretions and depletions, and rates of withdrawal by other overlying users. Therefore, it is not clear whether reducing percolation below the root zone (by an irrigation improvement or water conservation measure), that would otherwise eventually move through the vadose zone to a usable aquifer (or affect the rate of recharge to the aquifer), will necessarily injure another legal user of water.

Potential Solution Options

The following option is a potential administrative solution to issues concerning transferrable water and the "no injury" rule:

- A standardized set of policies, guidelines, or formal rules on transferrable water, agreed to by the U.S. Bureau of Reclamation (USBR), California Department of Water Resources (DWR), SWRCB, and other interested parties, which would clarify the agencies' interpretations of the requirements for quantification of transferred water.

3.4.2 SAVED OR CONSERVED WATER

Section 1011 of the Water Code authorizes the transfer of saved or conserved water pursuant to any applicable provisions of law relating to the transfer of water or water rights. Agencies and stakeholders disagree about the application of this provision, in particular when water saved can be considered as "real water" eligible for transfer.

DWR's 1993 publication "Water Transfers in California, Translating Concept into Reality," discusses conserved water transfers in the Sacramento Valley. The publication states that:

... New water can be created only by reducing losses to unusable water bodies (rare in the Sacramento Valley), reducing surface outflow during periods of excess Delta outflow, reducing consumptive use of crops, or environmentally acceptable reductions in consumptive use of non-agricultural vegetation. Reducing percolation to groundwater depletes another part of the system and can penalize other users by direct reduction of groundwater supplies, decreasing groundwater discharge to surface streams or increasing percolation from surface supplies to groundwater. Reducing drainage outflow during the irrigation season merely reduces the supply available downstream.

Over the past several years, water suppliers generally have been encouraged by state law to adopt and implement water conservation plans (i.e., AB 3616). CVP contractors are required by federal law to adopt and implement such plans. The public policy intent behind these laws is to encourage the highest level of reasonable and beneficial use of water. An illustration of the benefit of conservation is that if the same crop production can be achieved

with 20% less water than was historically required, in dry years (when 20% less water is available), the same production value can be realized. Other incentives, such as operational savings, sustained crop production during drier periods, endangered species protections, and water quality benefits, also exist. Some believe that reductions in applied water and improvements in application efficiency can or should result in saved or conserved water being available for transfer to other beneficial uses. However, if saved or conserved water is not transferrable (because it is not "real water"), these same interests believe there is little financial incentive to adopt and implement conservation practices encouraged by the public policy if the conserved water cannot be sold in a transfer market.

In addition, in spite of law to the contrary, there is a concern that conservation measures actually may create a risk to water rights or contract rights to water, if the saved or conserved water is not continually and regularly put to beneficial use.

Potential Solution Options

The following option is a potential administrative solution to concerns about saved or conserved water:

- A standardized set of policies, guidelines, or formal rules on transferability of saved or conserved water, agreed to by Reclamation, DWR, the SWRCB, and other interested parties, which would clarify the agencies' interpretations of the requirements for quantification of saved or conserved water.

3.4.3 OPERATIONS CRITERIA AND CARRIAGE WATER REQUIREMENTS

Carriage water is defined as the additional water that may be necessary to accompany a cross-Delta water transfer to maintain water quality or other standards imposed on Delta water export operations.

Historically, water transferred across the Delta has been subject to a carriage water requirement imposed by the state and federal water projects (SWP and CVP) as a condition of exporting water in their Delta export facilities. In some cases, this has amounted to as much as 20-30% of the quantity being transferred. More recently, the Bay-Delta Water Quality Control Plan (WQCP) limits project exports to 35% or 65% of Delta inflow (depending on the time of year). It is generally agreed that transfers should be subject to this requirement, referred to as the export/inflow (E/I) ratio, if the ratio is controlling in the Delta. In other circumstances, some disagree on how carriage water requirements should be calculated and applied. When the E/I ratio is not controlling, the carriage water ratios have historically been much less than the 35% or 65%.

Carriage water requirements add significant cost to a transfer and sometimes make a transfer economically infeasible. On the other hand, low or no carriage water requirements may require the CVP and SWP to in effect "subsidize" a transfer, if outflow requirements other than the E/I ratio are controlling. This "subsidy" would occur if the CVP or SWP needed to release additional water to meet operating criteria (i.e., outflow or X2) as a result of the conveyance of a transfer. The conveyance of transferred water may reduce Delta outflows,

thereby requiring additional releases from storage to maintain compliance with operating criteria.

All interests seem to agree that under the current WQCP carriage water requirements should not apply so long as the water quality standards and outflow objectives are being met without reservoir releases from the CVP and the SWP, the E/I ratio is not controlling, and the Delta is not in "balanced" conditions (i.e., when the Delta is in excess conditions).

In other words, so long as the outflow and water quality standards are being met and the transfer does not increase the burden of these obligations on the projects, the transfer water should "ride on top" of project water as it comes across the Delta. (As a practical matter, however, under these conditions pumping capacity may not be available for transfers, since the projects probably would be pumping at maximum capacity to move project water.)

Project operators take the position that transfers should be subject to carriage water requirements but the requirements may vary, depending on outflow conditions, pumping levels, and residual effects in the Delta. If the Delta is in balanced conditions and the projects are making storage releases to meet outflow or water quality requirements, the project operators will want to assess carriage water requirements. If the E/I ratio is controlling, the project operators will want the transfer to be subject to the same export limitation.

The foregoing discussion applies to transfers from the Sacramento River to the export service area. For transfers on the San Joaquin River system, Reclamation and DWR have assessed a 5-10% conveyance surcharge on transfers to account for losses, including illegal diversions, from the point of release to Vernalis. Some stakeholders believe that this requirement should be based on actual losses, if the losses can be measured. Project operators agree with this view and point out that the actual losses may in fact be much higher than 10%, but measurement of such losses is difficult.

Potential Solution Options

The following options may provide solutions to disagreements about operations criteria and carriage water requirements:

- Agency/stakeholder process to develop carriage water criteria, including use of a technical team to review current science and make improvements in the understanding of carriage water requirements.
- Formulation of the through-Delta alternative to reduce or eliminate the need for carriage water.

3.4.4 RESERVOIR REFILL CRITERIA

The transfer of water that has been stored or would have been stored absent the transfer is a very common method of transferring water. These transfers typically have limited direct effects on water users because the water either has been or would have been removed from the system in the absence of the water transfer. However, there are indirect effects of these types of transfers that are a point of controversy between the selling party and potentially impacted legal users of water regarding application of the "no injury rule."

A transfer of stored water creates vacated storage behind the transferor's reservoir that would not have been present absent the water transfer. This vacated storage will be refilled sometime during the wet period of the year. Typically, this refill is considered to occur late in the refill/storage season after the vacated storage from normal operations has already been refilled. When this additional refill occurs (as a result of an emptier reservoir from the previous season's transfer), it can have impacts on legal users of water who have in the past relied on this water to meet their own demands. The no injury rule requires an evaluation to determine if the refill of vacated storage caused by a stored water transfer has effects on legal users of water. In the Bay/Delta watershed both the Central Valley Project (CVP) operated by the USBR and the State Water Project (SWP) operated by the DWR have in the past claimed injury due to stored water transfers. They have required that specific refill criteria be applied to ensure that they are not deprived of water that they would normally have been able to appropriate. Transferors of stored water contend that their actions do not cause harm to other legal users of water.

DWR and USBR argue that in the absence of the transfer, more water would be in the system in the subsequent year or years to meet project obligations (contract deliveries, Delta outflow, or water quality requirements). The transfer also might cause the reservoir refill to be delayed, with a possible impact on conditions in the Delta—causing the CVP/SWP operators to release additional flows to maintain Delta standards.

Potential Solution Options

The following options are potential solutions to issues concerning reservoir release transfers:

- Negotiated agreement on refill percentage and assumption of risk/liability; incorporation of percentage or risk into sales price of water.
- Policy to require reservoir refill impact analysis and identify appropriate mitigation measures.
- Agreement on applicability of refill criteria and method to determine amount of refill or monitor actual refill impacts.

3.4.5 STREAMLINING THE TRANSFER APPROVAL PROCESS

Because of conveyance and pumping capacity limitations, parties to a water transfer often have a narrow window of time in which a transfer can be physically accomplished. Some consider that the permitting and regulatory process requirements restrict and impair the

ability to accomplish transfers in a timely manner to meet these narrow windows. Agencies tasked with reviewing and approving a proposed water transfer, however, contend that the proponents often provide inadequate data to make necessary findings required by state or federal law and that the quantity of available excess capacity cannot be guaranteed (see Section 3.5.1). Consequently, the state and federal agencies are required to perform their own analysis or collect additional data and information, adversely affecting the time schedule. A primary purpose of the state and federal transfer provisions is to protect other legal users of water from being adversely affected by a water transfer. Efforts to further streamline the approval process must not undermine this objective.

Potential Solution Options

The following options are potential solutions to issues related to the transfer approval process:

- Development of a standardized checklist for the transfer approval process.
- Encouragement of potential “buyers” and “sellers” to improve water supply planning during non-emergency conditions so that proposed transfers can be approved prior to a water supply emergency.
- Development of an expedited approval process for certain types of transfers that have not caused appreciable concerns for legally protected interests so that some categories of transfers can be “pre-approved” (i.e., certain intra-basin transfers).

3.5 WHEELING AND ACCESS TO FEDERAL AND STATE CONVEYANCE FACILITIES

3.5.1 PREDICTABILITY OF ACCESS FOR TRANSFERRED WATER IN EXISTING FACILITIES

Water transferred across the Delta must be pumped and conveyed by CVP or SWP facilities. Given the complexity of Delta operations and the level of demand for water from the state and federal projects, it is difficult to reliably provide access to project facilities for conveyance of cross-Delta water transfers. Generally, the capacity for cross-Delta transfers in CVP and SWP export pumping facilities is not predictable. In dry years, because of reductions in project water deliveries, the likelihood for excess capacity does increase, making available capacity slightly more predictable.

As a practical matter, the availability of project pumping capacity for project water and transfers alike has been reduced in recent years by required pumping reductions in February through June and additional “make-up” pumping, which must then occur in fall. Other fishery protection and water quality requirements that may occur throughout the year also reduce the available capacity. The effect of these actions is to further narrow the window for pumping and conveyance of cross-Delta water transfers.

Under current policy, pumping and conveyance of project water has priority over non-project transfers. This, coupled with operational restrictions based on unpredictable conditions such as water quality levels and environmental constraints that vary continually, makes it difficult for project operators to make firm commitments regarding the conveyance of non-project water. The pumping of project water is subject to these same unpredictable variables.

This lack of predictability in the timing or availability of project facilities for pumping, conveyance, and storage of transferred water discourages cross-Delta transfers. Buyers are reluctant to purchase water, for short- or long-term transfers, not knowing whether it will be delivered when needed. However, given the current limitations in the Delta and the legal and contractual obligations of the projects to move project water before moving transferred water, it is nearly impossible for project operators to provide the same degree of reliability for transferred water, even in the short term, as they provide for project water deliveries.

A related concern that limits state and federal project operators from agreeing to move non-project water is the potential for the additional water being pumped to result in a "take" of a fish listed under the ESA that may not have otherwise occurred. This limit could adversely affect regular project pumping. DWR and USBR are concerned that a transferor would not have additional water to mitigate for such impacts; thus, the project would be subsidizing the transfer.

Potential Solution Options

The following options are potential solutions to the lack of predictable access for transferred water in existing facilities:

- More flexible operating criteria would provide for optimized pumping of project water at certain times of the year, thereby creating a larger transfer window at other times of the year.
- Implementation of mechanisms to reduce diversion impacts on fish would decrease the probability of export limitations resulting from such fishery impacts (i.e., new fish screens, modified intake facilities).
- Additional capacity for storage and delivery of project water would create an additional benefit of more and larger transfer windows, even with the current priority requirements.
- Increased Delta export pumping capacity would generate more windows of opportunity for conveyance of non-project transfers.
- Wider distribution of information on access to facilities, including how requests are processed and how unused capacity is determined.
- Modify policies and procedures governing access to facilities, including how to determine priorities, how to process requests, and how to determine unused capacity.
- Assemble and distribute information regarding transfer windows and risk factors.

3.5.2 PRIORITY OF TRANSFERRED WATER IN NEW FACILITIES

A new conveyance facility would not necessarily be subject to the same access priority rules as existing facilities. This raises the question of how new conveyance capacity should be allocated between project water and transferred water. Some capacity in a new cross-Delta conveyance facility, or increased through-Delta conveyance capacity, could be dedicated to water transfers. How much capacity would be reserved for transfers and on what basis would it be made available among transfer proposals (first come, first serve)?

Potential Solution Options

The following option is a potential solution to issues concerning the priority of transferred water in new facilities:

- Dedicated priority for a portion of the capacity in new facilities.

3.5.3 WHEELING COSTS

State and federal law require CVP and SWP operators to charge for the use of project facilities to convey transferred water. Some stakeholders contend that the interpretation of these laws by the CVP and SWP result in higher wheeling costs than should be charged. Determining consistent and agreeable methods and justification for costs associated with wheeling transfers through state and federal conveyance facilities is necessary for transfer proponents to factor these costs into their planning.

Potential Solution Options

The following option is a potential solution to the issue of wheeling costs:

- CALFED agencies work with stakeholders and the Legislature to formulate agreement on recovery of capital and operations and maintenance costs of facilities, pursuant to existing law.

4. Program Framework

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4. Program Framework

This section describes the planned solution options to facilitate development of a more functional water transfer market. Each solution option is intended to address one or more issues.

CALFED has developed the Water Transfer Program Plan through a strategic planning process during the last few years that involved the BDAC Water Transfer Work Group, TAG, and other stakeholders. Since the CALFED Program is by definition *programmatic*, the attributes of the plan are not detailed, but are intended to convey a general direction and purpose. This plan provides direction and prioritization for implementation of CALFED's Water Transfer Program. The attributes of the plan are presented under the same three categories used to describe issues in Section 3.

4.1 OBJECTIVES GOVERNING THE DEVELOPMENT OF SOLUTION OPTIONS

The Water Transfer Program presents a framework of actions, policies, and processes to resolve the issues contained in the broad categories described in Section 3. Efforts over the past several months to resolve the issues and develop a workable framework have been guided by a set of general objectives. These objectives also will govern efforts over the next several years to implement the recommendations. The objectives of the Water Transfer Program are to:

1. Facilitate water transfers in a manner consistent with existing law.
2. Address the institutional, regulatory, and assurance issues that need to be resolved to provide for a more effective water transfer system.
3. Address the physical constraints that need to be resolved to provide for a more effective water transfer system, particularly cross-Delta transfers.
4. Encourage transfers that result in overall improvements in CALFED objectives for water supply reliability, ecosystem health, and water quality (that is, no significant re-directed impacts).



5. Develop a water transfer framework that seeks to avoid injury to other legal users of water, avoids or adequately mitigates adverse impacts that may occur, and publically disseminates information on general transfer rules as well as specific water transfer proposals.

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 or impair the correlative rights of overlying users and historical groundwater levels are sustained or improved.

WATER TRANSFER CRITERIA

1. Water transfers must be voluntary.
 2. Transfers must result in the transfer of water that truly increases the utility of the supply, not the transfer of "paper water," such as water that a transferor has never used or water that would have been legally 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) must play a strong role in determining whether water to which they have a right is transferred.
 8. The beneficial and adverse impacts on the fiscal integrity of the districts and on the economy of agricultural communities in source and receiving areas cannot be ignored.
-

The policy-level recommendations of the CALFED Program will be guided by these objectives and the criteria highlighted in the box. The criteria will continue to be used by CALFED agencies during their review and approval, or other authorized functions, of any future water transfer proposals.

4.2 INTEGRATION OF SOLUTION OPTIONS

In Section 3, issues were individually described. This would tend to imply that solutions have to be individually developed to match each issue. However, several of the issues, especially the "resource protection" issues, are closely related. Thus, developing discrete solutions for related issues did not seem appropriate in all instances. CALFED chose to focus on an integrated solution where it seemed appropriate to help resolve several related issues rather than develop several independent solutions.

This integration worked especially well for the resource protection-related issues such as third-party socioeconomic impacts or area of origin protection. A couple of the CALFED recommendations cut across several of these issues by comprehensively addressing their underlying concerns. Others, especially the technically oriented issues such as carriage

water or process streamlining, required a more individually tailored solution because of their unique qualities. These issues did not lend themselves to an integrated solution.

4.3 **FORMAT OF RECOMMENDATIONS TO RESOLVE ISSUES**

The recommended solutions are presented in three broad categories. For each category, information regarding the issue(s) being addressed and the solution "type" is included. The solution type informs the reader that the solution is either:

- a discrete **action** to be taken (for example, pass legislation or improve the disclosure of available excess conveyance capacity),
- a **policy** to be formulated by a CALFED agency, or
- a **process** necessary to achieve final resolution. Processes can be
 - a. short-term - between now and when the Final Programmatic EIS/EIR is expected, or
 - b. long-term - during Stage 1 implementation of the Preferred Program Alternative.

Since many issues are complex and require substantial investments in time and extensive stakeholder and agency interaction, the processes are a common type of solution, especially for the technically oriented issues. As described in the following subsections, it is anticipated that facilitated stakeholder and CALFED agency meetings or technical teams will continue to work on resolving issues between now and the final Programmatic EIR/EIS.

4.4 **ENVIRONMENTAL, SOCIOECONOMIC, AND WATER RESOURCE PROTECTION SOLUTIONS**

This portion of the framework has two primary solutions: (1) the formation of a water transfers information clearinghouse to disclose information and ensure 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 SWRCB), with appropriate stakeholder input, to require, consistent with existing authorities, the preparation and composition of water transfer impact analyses for specific water transfers. These solutions are the foundation of the mechanisms intended to address the resource protection issues. Other recommendations also are provided for issues not fully addressed by these solutions, including in-stream flow transfers and protection of area of origin and watershed priorities.

4.4.1 WATER TRANSFERS INFORMATION CLEARINGHOUSE

Addresses: All Section 3.3 issues (except 3.3.5)
Recommendation Type: Action

As part of the CALFED legislative package, CALFED would recommend state legislation to create a **non-regulatory** California Water Transfers Information Clearinghouse. The Clearinghouse would facilitate or perform some of the functions described below and would aid in resolving many of the economic, environmental, and resource protection issues discussed in Section 3.3, and would:

1. Facilitate or perform data collection, technical baseline analysis, research and methodology development:
 - 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 (developed in coordination with CALFED's Comprehensive Monitoring, Assessment, and Research Program [CMARP]).
 - Improve technical baseline analysis on the 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.
 - Through on-going analysis of baseline data, develop broadly accepted methods for impact analysis of transfers that meet agreed upon criteria (for example different types of transfers may require different analysis).
 - Collect information on transfers of all types (except intra-district transfers) for purposes of developing baseline data.
 - As an informational function, develop guidebooks to aid transfer proponents in performing impact analysis and develop a "toolbox" of potential mitigation strategies to help proponents and decision makers address impacts, if necessary.
 - Facilitate the resolution of disputes and elimination of conflicts in differing methods and models used to analyze water transfers.
2. Ensure public disclosure:
 - Make all collected data (baseline and proposal specific) and technical baseline analysis available to the public and decision makers.
 - Provide public notice on all proposed water transfers (that meet specified criteria) and provide a forum (if not otherwise provided) for public discussion and comment on proposed transfers.

3. Provide other possible services (*these activities could be funded by the interested party or provided as a service, separate from the other informational disclosure functions*):

- Assist local decision makers with technical analysis, and instruct them on appropriate methodology and data necessary to determine environmental and economic impacts of a proposed transfer. For example, for groundwater transfers this could include modeling data on impacts on groundwater or groundwater quality, effects 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 function would be purely informational, provided on a contractual basis to 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 guidance 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, and environmental conditions.
- Provide, by request of 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 in the clearinghouse may be available to local interests to provide assistance with understanding the analysis results.

The clearinghouse could be located in the SWRCB, separate from the Division of Water Rights and would operate in conjunction with staff from DWR and USBR. The primary clearinghouse function would be disclosing information; ensuring public participation; and performing or facilitating broad-based technical work, such as baseline data collection and analysis and coordinating regional groundwater/surface water modeling, so that decisions could be made with all parties in possession of complete and accurate information. Other functions listed would be secondary.

For performance or facilitation of the broad-based technical work, contracts could be established with the several entities such as the University of California, the Natural Resources Conservation Service, the U.S. Geological Survey, DWR, USBR, or another neutral party with appropriate expertise. The clearinghouse would provide these baseline data and analyses to the transfer proponents, responsible decision-making agencies, and to the public for use in the review of a proposed transfer.

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 water supply contractors. While some have expressed reluctance at the idea of increasing the scope of the SWRCB jurisdiction, it seems logical for the SWRCB to assume the responsibility for these functions. This would **not** require any expansion of the SWRCB's water rights permitting authority but would require legislating additional SWRCB authority for budget and staffing purposes. The SWRCB could collect, analyze, and disseminate

information and advice regarding transfers of all types, without assuming any new regulatory jurisdiction over water rights as they pertain to transfer proposals.

The enabling legislation also could either require the proponents of specified water transfers to give notice of the transfer to the clearinghouse at a specified time, or require the reviewing agency that has received a transfer request (i.e., SWRCB, USBR, DWR) to submit the information to the clearinghouse. The notice would include the specific information about the proposed transfer so that the clearinghouse could make the information broadly available. The clearinghouse then would 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 or water bank. In other words, the clearinghouse would not directly participate in water transfer transactions. Discussions thus far in the Work Group appear to support the idea that the clearinghouse function would apply at least to the Central Valley and possibly statewide.

4.4.2 ANALYSIS DISCLOSURE REQUIREMENTS

Addresses: All Section 3.3 issues
Recommendation Type: Policy

CALFED member agencies (USBR, DWR, and the SWRCB), through a CALFED coordinated process, with input from stakeholder interests, will review and revise, if necessary, current policies and procedures to request additional analysis from water transfer project proponents. To the extent permitted under existing law, the agencies will require transfer proponents to provide analysis of the impacts of a proposed transfer in three areas, in addition to CEQA or other required environmental analysis. These would be in addition to current requirements and would include:

- Local groundwater impacts, including pumping levels, water quality, and recharge conditions;
- Cumulative impacts of specific transfers when viewed in the context of other transfers from the same source area; and
- Third-party socioeconomic impacts (i.e., lost employment opportunities, reduced county tax revenue).

These analyses will be for information and disclosure purposes only and would be used as the basis to approve, condition or deny a transfer only as otherwise permissible under current rules and procedures.

The level of detail in the analysis will vary with each type of transfer proposed. Some transfers have the potential for greater socioeconomic impacts and should emphasize this type of analysis, while others may result in more impact on groundwater resources.

Once developed and approved by the CALFED Policy Group and the CALFED member agencies (USBR, DWR, SWRCB), these additional analysis requirements will be

incorporated into the Water Transfer Guidebook developed as part of the permit process streamlining activities described in Section 4.5.4.

The most likely application of these additional analysis requirements would arise in connection with transfers for which access to and use of USBR and DWR facilities are needed for storage 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 in-stream 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 require that a transfer proponent requesting use of SWP facilities provide analysis of the environmental, groundwater, and socioeconomic impacts of the proposed transfer for public disclosure purposes.

Under the federal Warren Act of 1911 (as modified by the drought relief legislation of 1989), the USBR (acting for the Secretary of Interior) is authorized to make federal facilities available for conveyance or storage of non-project water. This authority is limited to excess capacity not needed for project purposes. The language of Section 1 of the Warren Act of 1911 is not explicit as to the authority of the USBR to impose conditions on the use of excess capacity. When read broadly and in the context of the CVPIA and other applicable federal law, USBR probably has the authority to impose reasonable conditions on the use of its facilities. Arguably, it is within the range of reasonableness for USBR to require transfer proponents to provide analysis of the impacts of a proposed transfer on environmental, groundwater, and socioeconomic conditions in the source water area, similar to requirements of Water Code Section 1810. From a practical standpoint, permission to use either the state or federal facilities should be conditioned by the same analysis requirements.

Furthermore, Water Code Sections 1725 provides, as to temporary 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 and will not result in an unreasonable effect on fish, wildlife, or other in-stream beneficial uses. For a transfer of water which is surplus to the needs of the water users or the transferring agency or the use of which is voluntarily foregone by a water user, Section 386 also requires a finding that such a transfer will not unreasonably affect the overall economy of the area from which the water is being transferred. This language also would appear to give the SWRCB the authority to impose, as a condition of approval, that a proponent of this type of transfer provide analysis of the environmental, groundwater, and socioeconomic impacts of the proposed transfer.

Since many proposed transfers would need access to state or federal facilities, these requirements for additional analysis probably would be incorporated into the DWR or USBR review process. For water transfers that do not use state or federal facilities but require SWRCB approval, this condition still would be applicable.

4.4.3 SOLUTION PROCESS FOR ENVIRONMENTAL PROTECTION ISSUES

Addresses: Section 3.3.4 and 3.3.5
Recommendation Type: Process

During the months prior to a Record of Decision on the Program's Programmatic EIR/EIS, stakeholder representatives and CALFED agency representatives will continue to meet and discuss solution options directed at protecting in-stream flows and implementing environmental water transfers. The scope of this discussion will include (1) developing methodology for monitoring in-stream transfers and associated tracking measures, (2) developing appropriate implementation procedures or regulations for California Water Code Section 1707 transfers, and (3) evaluating whether additional statutory or regulatory protection of water transfers for in-stream purposes is necessary.

This process is designed to ensure that water transferred to the environment is available to meet its stated in-stream purpose throughout its designated reach. This process should provide mechanisms for assuring that water transferred for in-stream use be supplementary to water used to meet regulatory requirements, unless otherwise explicitly provided by the terms of the transfer. The intended provisions should clarify the circumstances under which water transferred for in-stream use may be subsequently diverted for other purposes.

4.4.4 ADDITIONAL WATER RIGHTS LEGISLATION

Addresses: Section 3.3.3
Recommendation Type: Process

Prior to release of a final Programmatic EIR/EIS, CALFED agencies will facilitate a process to determine whether additional legislation to protect water rights, including area of origin priorities, is necessary. If additional legislation is deemed appropriate, the process will continue to develop recommended changes or additions to existing water rights statutes. This effort is intended to assure water rights holders and source area communities that water rights are not impaired or prejudiced as a result of water transferred away from the source.

4.4.5 LOCAL ASSISTANCE FOR GROUNDWATER MANAGEMENT

Addresses: Section 3.3.2
Recommendation Type: Action

In coordination with the CALFED storage component (briefly described in the June 1999 *Revised Phase II Report*), a groundwater assistance program will be established to fund studies to gather groundwater data and to enable local entities with the development and implementation of local groundwater management/monitoring programs. The data generated by these studies will be used to help evaluate an area's potential for implementing conjunctive use projects designed to help meet CALFED objectives. The groundwater management programs will help ensure that conjunctive use projects will protect the local groundwater resources and local correlative rights.

The primary objectives of this action are to: 1) provide support to local sponsors to evaluate groundwater quality and quantity through real-time monitoring and modeling, 2) provide support to local entities for development of local groundwater management programs, and 3) identify potential impacts of conjunctive use operations on local groundwater basins so that appropriate mitigation measures can be developed.

Though this assistance program is described here as part of the Water Transfer Program, it is actually included as part of the storage component. More details of the administration and governance of the program, including a proposed method to distribute funds, is described as part of the conjunctive use activities in the *Implementation Plan*, an appendix to the June 1999 Draft Programmatic EIR/EIS.

4.5 TECHNICAL, OPERATIONAL, AND ADMINISTRATIVE RULES

Much of the focus over the past year has been on resolving resources protection issues. Limited discussions on the technical issues have occurred in the BDAC Water Transfer Work Group and the Transfer Agency Group. As a result, the recommended solutions are less developed. The potential solution options listed in Section 3.4 need to be discussed in more detail in order to develop agreed upon resolutions, whether they be actions, policies adopted by a CALFED agency, or establishment of processes to work through these very complex and controversial issues. The information presented below represents the consensus reached to date on the technically oriented issues that will guide discussion during the next several months.

4.5.1 SOLUTION PROCESS TO RESOLVE TRANSFERRABLE WATER DEFINITIONS

Addresses: Section 3.4.1 and 3.4.2
Recommendation Type: Process

The Guidebook discussed in Section 4.5.4, once complete, will explain current laws and statutes governing water transfers as well as describe the agencies' current policies and procedures regarding definition and quantification of transferrable water. It will also identify the areas of technical agreement on issues related to transferrable and saved or conserved water. For those issues where technical agreement cannot be reached and/or where changes in policy may be required, a technical team or working group of stakeholders, CALFED agency representatives, and objective experts will be convened and facilitated by CALFED. (This inability, in the short-term, to gain consensus does not preclude any transfer proposal from moving forward, especially for transfer types where agreement exists. Rather, in the interim, disagreements over transferability would continue to be resolved as they are now, on a case-by-case basis.)

This CALFED facilitated process would allow the agencies and the stakeholders to present their positions and views on a particular technical issue related to transferrable water. If the issue could not be resolved directly, the participants could take the question to a facilitated process for further discussion. This process may not be complete by the time of the Record of Decision. One possible outcome would be a recommendation that, during Stage 1, the SWRCB adopt water rights orders or formal rules for the definitions of transferable water.

This technical process will identify the variety of water transfer proposal scenarios with different definitions of transferrable water. For instance, potential variations in the accepted interpretation of transferrable water could be based on differences in time or locations (for example, 1-year transfers versus multi-year and in-basin versus out-of-basin transfers). The technical team would report its findings to CALFED, which would facilitate further discussion among CALFED agencies. Discussions then would focus on possible policy changes needed to clarify how transferrable water would be defined under each scenario.

4.5.2 CLARIFICATION OF CARRIAGE WATER REQUIREMENTS

Addresses: Section 3.4.3
Recommendation Type: Process

There are two specific questions to be addressed regarding carriage water. First: when is a carriage water requirement properly imposed on a cross-Delta water transfer? Second: when carriage water is required, what is the best method for calculating or quantifying the amount of carriage water? The answers to these questions will focus on ensuring that the transport of water across the Delta will not cause adverse impacts to other legal users of water, including the CVP and SWP.

During the remainder of 1999 and continuing as needed into 2000, CALFED will facilitate a technical review using CALFED agencies and key stakeholders to discuss these questions. This technical team approach will develop criteria for applying carriage water requirements to cross-Delta water transfers and will develop methodologies for quantifying carriage water when it is required. For example, it is possible that when there is excess Delta outflow, a cross-Delta transfer may be able to be implemented without carriage water (though, during these conditions, the state and federal water projects normally operate at full capacity, see Section 4.6). During other hydrologic conditions, however, carriage water could be a necessity. With CALFED facilitation, technical experts from the stakeholder community and from CALFED agencies will develop a set of recommendations for CALFED agencies to adopt. The recommendations will include answers to the questions posed above.

Recommendations from the technical team will be presented to the CALFED Transfer Agency Group (TAG - a group of CALFED agency representatives that have been working on CALFED transfer issues; see page 1-2). Given the close relationship between carriage water requirements and CVP/SWP operations criteria for Delta export pumping, these recommendations may also be presented to the CALFED Operations Group (Ops Group) at the appropriate time. After consideration by TAG, the recommendations will be forwarded to the CALFED Policy Group for final approval.

The technical team will consist of experts already engaged on this issue as currently facilitated by the Bay-Delta Modeling Forum (an organization established to resolve state/federal/stakeholder modeling issues). Additional participants, such as USBR, the SWRCB and other interested parties or experts, may also be included. (DWR, working with several independent experts, recently released a report detailing a method to estimate carriage water using Artificial Neural Networks¹). CALFED will coordinate this effort to further develop the use and acceptance of this methodology and to make improvements in

¹Department of Water Resources, Office of SWP Planning. "Modeling Flow-Salinity Relationships in the Sacramento-San Joaquin Delta Using Artificial Neural Networks." February 1999.

this methodology. Late in 1999, a public information workshop will be held to discuss new methods and models and the recommendations of the technical team.

4.5.3 RESOLUTION OF RESERVOIR REFILL CRITERIA

Addresses: Section 3.4.4
Recommendation Type: Process

As with carriage water, there are two specific questions to be addressed regarding refill criteria. First: when are refill criteria properly imposed on a transfer based on the release of stored water? Second: when refill criteria are imposed, what is the best method for calculating or quantifying the amount of refill? The answers to these questions will focus on ensuring that the transfer of water from a storage facility will not cause adverse impacts to other legal users of water, especially the CVP and SWP².

CALFED will work with the SWRCB, DWR, USBR, and stakeholder interests to establish a consistent approach to be used by the agencies in the application of reservoir refill criteria for transfers based on the release of stored water. Generally, the SWRCB has the authority to determine whether refill criteria apply to a particular transfer. As a condition of the conveyance of transferred water through project facilities, DWR and USBR often request the application of refill criteria.

Through the process described here, CALFED intends to achieve consistency in the application of

SWRCB REFILL CRITERIA PROPOSAL

The SWRCB proposal being considered by CALFED relates primarily to the question of refill criteria applicability. The following is the current SWRCB proposal:

The watershed protection statutes (Water Code 11460 ET seq.) establish a priority for in-basin water uses over those of the CVP and SWP for export. Therefore, if a transfer of stored water is for in-basin uses, the refill criteria would only apply when the CVP or SWP were augmenting natural stream flows with their own stored water to meet Delta outflow or other flow related requirements.

This is determined through the SWRCB's standard water right Term 91. Term 91 tracks the storage releases and exports made by the CVP and SWP, and is triggered when, during the operations of the CVP and SWP, the only water exported involves stored water and additional storage is released to meet Delta outflow requirements. When this happens, new in-basin water diverters are required to stop their diversions of water because there is no longer enough natural flow in the system to meet the prior rights of other in-basin diverters and Delta standards. Continued diversion would require additional releases of stored water by the CVP and SWP thus creating a recognized injury under the water code. This same concept would be applied to refill criteria for in-basin water transfers.

For transfers of stored water to users outside the watershed of origin, a different test is used to determine the application of refill criteria. In these cases, the transferor cannot use the watershed protection statutes because the use of water no longer involves the satisfaction of in-basin water demands. Therefore, any injury to the capacities of DWR and USBR to divert natural flow would not be allowed and refill criteria would apply any time the flows in the Delta were in "balanced" conditions.

In summary, application of DWR and USBR refill criteria is determined by when the refill occurs and whether the transfer involves in-basin uses or out-of-basin uses. For in-basin transfers, refill criteria only applies if the refill occurs when standard Term 91 is in effect. For out-of-basin transfers, refill criteria applies if the refill occurs when flows in the Delta are in "balanced" conditions.

²There are other users of water that can be affected by stored water transfers besides the SWP and CVP. In some cases downstream appropriators might be injured by a change in historic releases of stored water. If they are affected, these affects should be mitigated to non-injury or the transfer would not be approved under the water code.

refill criteria across the different types of storage water transfers. As part of the water transfer guidebook currently under development (see Section 4.5.4), the SWRCB is proposing a revision regarding refill criteria (see sidebar discussion). During the next several months, CALFED staff will facilitate discussions on this proposal. When an agreement is reached, any future reassessment of this issue would no longer be a CALFED action, but would instead be a SWRCB activity.

4.5.4 STREAMLINED APPROVAL PROCESS FOR ALL TRANSFERS

Addresses: Section 3.4.5
Recommendation Type: Action

Some streamlining of the water transfer permit approval process should result from resolving other water transfer issues as described in this Section. However, even with streamlining that automatically results from better information made more broadly available, there is room for further improvement. One of the suggested solution options in Section 3.4 is development of a standardized guidebook. Such a document would include a description of the analysis required, procedures to be followed, a "checklist" of necessary information to be provided by a transfer applicant for each proposed transfer, and detailed information regarding the jurisdictional requirements for approving a specific transfer proposal (i.e., who has the authority to approve, disapprove or condition a proposed transfer). Information regarding an agency's approval criteria, such as how the amount of water deemed transferrable is likely to be determined, would also be provided (see the associated recommendation in Section 4.5.1).

A guidebook would take transfer proponents through a series of questions and checklists, requesting specific information regarding the proposed transfer as well as providing detailed information to the proponent regarding jurisdictional requirements and review criteria. The intent of this would be to ensure that all pertinent details are provided for a proposed transfer that must undergo a review and approval process. To aid in providing detailed information to assist proponents, the checklist would ask for a wide range of necessary information, such as:

- What is the type of water proposed for the transfer?
- What is the underlying water right?
- What is the method proposed to make the water available to transfer?
- What is the destination of the water proposed for transfer?
- What is the duration of the transfer?

In addition to CEQA or NEPA compliance, and depending on the type of transfer (land fallowing, storage release, groundwater pumping, etc.), additional specific analysis concerning potential impacts on various conditions would be requested, pursuant to the policy requirement under Section 4.4.2.

Staff of the State Water Resources Control Board, Department of Water Resources, and the Bureau of Reclamation, in coordination with CALFED, have prepared a draft overview water transfer processes, tentatively titled, "A Guide to Water Transfers in California". This is the beginning of a more comprehensive guidebook. The most recent version of this document is available for viewing at the SWRCB web site (www.waterrights.ca.gov).

One desired outcome of a guidebook effort is publication of a unified set of rules, guidelines and procedures used by the agencies. Eventually, these would be published at a site on the Web for electronic access, possibly maintained by the Clearinghouse. Ultimately, this information will be fully integrated into an electronic navigational tool that will guide transfer proponents through questions such as those above and also provide direct access to application forms, agency review criteria, data sources, and broadly accepted analysis tools. All of this is intended to make the application and review/approval processes as quick and seamless as possible.

During the remainder of 1999 and during the initial years of Stage 1, CALFED staff will continue to work with DWR, USBR, and the SWRCB on this guidebook and the development of a fully integrated electronic tool. Information will be continually updated as transfer policies, rules and procedures change, so that it will become a primary source of information and direction for proponents wanting to transfer water.

4.5.5 EXPEDITED APPROVAL PROCESS FOR SOME TRANSFERS

Addresses: Section 3.4.5
Recommendation Type: Process

Certain types of water transfer proposals can already be expedited through the State Water Resources Control Board approval process. It is possible that new mechanisms could be adopted by the SWRCB to improve the current process or to allow other types of transfers to be expedited. A solution option that has been offered would establish such a process for specific types of water transfers that still would satisfy the informational needs of decision makers. Transfers that may be suitable for an expedited approval process could include in-basin transfers, transfers that have occurred in the past with no impact, instream flow transfers, and transfers within the export area for the same purpose of use.

During the months prior to a Record of Decision on the Program's Programmatic EIR/EIS, CALFED agencies, working with stakeholders, will facilitate a process to evaluate what other types of transfers might be appropriate for expedited review and approval. This process will include determining which categories of transfers have not caused appreciable concerns from the standpoint of protected legal interests (including the environment) and which categories of transfer may be eligible for expedited approvals, including categorical exemptions from CEQA. The process will include determining what kind of environmental documentation is required, what public review process is necessary, what the protest opportunities will be, and how to allocate burdens of proof.

Because the Water Transfer Program is also designed to ensure protection for third-party interests, this action will not jeopardize necessary review and comment periods when and where they are appropriate. In addition, expedited process mechanisms will only be applicable to short-term transfers. A series of CALFED facilitated meetings between interested stakeholders and key CALFED agency representatives will explore this issue and provide recommendations back to CALFED.

4.6 WHEELING AND ACCESS TO FEDERAL AND STATE CONVEYANCE FACILITIES

As previously stated, early efforts focused on resolving resources protection issues. However, discussions of the "wheeling and access" issues has resulted in proposed actions to be taken by CALFED agencies. Access to conveyance capacity in a new facility has not been discussed because the Preferred Program Alternative (see the *Revised Phase II Report*) does not contain an isolated facility. As such, discussing the merits of allowing some capacity of a new isolated conveyance facility to have a "priority" for water being transferred is unnecessary.

4.6.1 FORECASTING AND DISCLOSURE OF AVAILABLE CAPACITY IN EXISTING PROJECT FACILITIES

Addresses: Section 3.5.1
Recommendation Type: Action

With assistance from other CALFED agencies, DWR and Reclamation staff will more widely disclose forecasts of potential pumping and conveyance capacity in project facilities, including limiting factors and inherent risks. The intent is to provide transfer proponents with forecasts regarding the potential availability of conveyance capacity for cross-Delta water transfers and the probabilities of its availability. Forecasts also could be provided for other portions of project conveyance facilities, as needed. Forecasts would occur on a monthly basis (in conjunction with water supply forecasts) and would be based on the best information available to project operators.

A forecast would not guarantee that the capacity will be available at the time forecasts because of the variability of operating criteria. These include but are not limited to: hydrologic conditions, ESA requirements, Delta water quality standards, discretionary actions, and physical capacity limitations. Forecasts would be developed in conjunction with, or as part of, the deliberations of the CALFED Ops Group (a forum for inter-agency discussion and decision making regarding state and federal water project operations), and would probably be disclosed through or in conjunction with the Clearinghouse (see Section 4.4.1).

4.6.2 EVALUATE POLICIES FOR TRANSPORTING WATER IN EXISTING PROJECT FACILITIES

Addresses: Section 3.5.1
Recommendation Type: Process

During 1999 and continuing into 2000, CALFED will facilitate a process to review and consider modifications to existing policies and procedures for the use of available conveyance capacity in the existing SWP and CVP project facilities. Such policies and

procedures include setting priorities for use of available capacity, how to process requests, and how to estimate the capacity available for transporting water transfers.

CALFED will work with the Dept. of Water Resources, the U.S. Bureau of Reclamation and stakeholders to identify ways to increase the availability and predictability of conveyance capacity for transferred water in state/federal facilities. CALFED will initiate discussions with the agencies to develop a set of options and assessments of each option. Then, the discussion will be expanded to include stakeholder interests. Recommended policy changes will be brought to CALFED's Policy Group for concurrence.

The storage and conveyance components of the CALFED Program include several action which may increase the quantity or reliability of water exported from the Delta in existing project facilities (e.g., improved fish screens, in-Delta flow barriers, increase in the permitted pumping capacity). If additional Delta export capacity is developed as part of such actions, the issue of who benefits from the increase will need to be discussed. One option is to give priority for a percentage of the incremental increase to water users or private market interests for conveyance of non-project transfers. Such policy decisions will only be made in close coordination with CVP and SWP project operations and with the proposed operations of an Environmental Water Account (see the *Revised Phase II Report* for additional information on the Environmental Water Account).

4.6.3 ESTABLISHING PRIORITY FOR TRANSFERS IN A NEW CONVEYANCE FACILITY

Addresses: Section 3.5.2
Recommendation Type: Process

As noted previously, discussion on solutions to this issue are unnecessary given the Preferred Program Alternative (see the *Revised Phase II Report* for more information on the Preferred Program Alternative).

4.6.4 COSTS ASSOCIATED WITH CONVEYANCE OF TRANSFERRED WATER IN A STATE OR FEDERAL PROJECT FACILITY

Addresses: Section 3.5.3
Recommendation Type: Process

This issue is currently the subject of draft legislation which is being negotiated outside the CALFED process. If legislation is enacted which establishes new rules for cost allocations associated with wheeling transferred water, the new rules will be incorporated into the agencies' procedures. If the legislative effort does not resolve this issue, CALFED may facilitate further discussion among agencies and stakeholders in an effort to agree upon a set of criteria governing the determination of transport costs such that transfer proponents can factor such costs into proposals early in the development phase of a potential water transfer.

5. Implementation, Governance and Finance Issues

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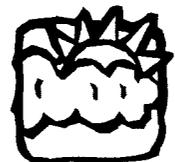
5. Implementation, Governance and Finance Issues

The Water Transfer Program consists of recommendations for actions, policies, and processes that provide a framework for solutions to the problems associated with a water transfer market. Before adopting the Record of Decision for the final Programmatic EIS/EIR, CALFED will finalize this strategic plan for implementation of the Water Transfer Program. The plan will address implementation of recommendations that are still undergoing refinement through continuing stakeholder and agency discussion on unresolved issues, as well as implementation of more specific action- or policy-based recommendations. The Water Transfer Program will be further refined, prior to release of a Final Programmatic EIS/EIR, as resolution is reached on some of these issues through the processes CALFED has recommended. To the extent a few issues are still unresolved, which is likely, the recommended processes will continue into the implementation stage of the CALFED Program. This section describes the anticipated implementation program, associated governance needs, and a financing plan to make it all work.

Assurances that solutions for water transfer issues can be implemented as agreed upon, are in many cases contained in the recommendations themselves, rather than through an external device. For example, the recommendation to establish a water transfer clearinghouse is both a partial solution to the problem of third-party impacts and an assurance that third parties and others interested in water transfers will gain access to the information they need to be informed about the beneficial and adverse impacts of a proposed transfer. Other parts of the Water Transfer Program also function the same way—they serve as both a substantive component of the program and an assurance that solutions will be implemented as agreed upon.

5.1 STAGE 1 IMPLEMENTATION

Stage 1 is defined as the 7-year period commencing with the final decision on the Programmatic EIS/EIR. The Stage 1 actions are only part of the Preferred Program Alternative but are an important part of the effort to balance overall program benefits (the water transfer framework is but one of eight programs) and lay a solid foundation for successful implementation of the entire CALFED Program. The first stage implements the recommended changes which, once implemented, will continue to function in subsequent stages. The prioritization of these and other water transfer actions are discussed in the



accompanying Implementation Plan Appendix (one of several appendices supporting the CALFED Bay-Delta Program's Draft Programmatic EIS/EIR).

These actions will be implemented after the Programmatic EIS/EIR is finalized and any subsequent environmental documentation, if necessary, is completed. The Stage 1 actions are:

5.1.1 ENVIRONMENTAL, SOCIOECONOMIC, AND WATER RESOURCE PROTECTION ACTIONS

1. Establish the California Water Transfers Information Clearinghouse to collect and disseminate data and information relating to water transfers and potential transfer impacts, and perform research using historic data to understand water transfer impacts (yr 1).
2. Coordinate with CALFED agencies to formulate policy, under their existing authorities, for disclosure of additional required water transfer analysis (yr 1).
3. CALFED agencies work with the Legislature and stakeholders to determine whether additional legislation to protect water rights, including area of origin priorities, is necessary (yr 1-2).
4. CALFED agencies identify, arrange, fund, and carry out a specific number of targeted water transfers for instream environmental purposes, with a goal of using these transfers to evaluate the effectiveness of California Water Code Section 1707 procedures. CALFED agencies will work with stakeholders to develop and issue appropriate rules, regulations, or procedures to make these environmental water transfers effective (yr 1-3).
5. CALFED agencies will work with stakeholders, the Legislature, and local agencies to identify appropriate assistance to enable local agencies to develop and implement groundwater management programs to protect groundwater basins in water transfer source areas (yr 1-2).

5.1.2 TECHNICAL, OPERATIONAL, AND ADMINISTRATIVE ACTIONS

1. Development by CALFED agencies of a streamlined water transfer approval process including preparation of a Guidebook (yr 1-2).
2. Develop a process for expedited approval of short-term and other appropriate transfers (DWR, USBR, and SWRCB) (yr 1-3).
3. CALFED agencies work with stakeholder representatives to clarify and define what water is deemed transferrable under what conditions (yr 1-3).
4. CALFED agencies continue work with stakeholder representatives to resolve conflicts over carriage water criteria (yr 1).
5. Establish a refill criteria policy for reservoir storage based water transfers (yr 1).

5.1.3 WHEELING AND ACCESS TO STATE/FEDERAL FACILITY ACTIONS

1. Begin forecasting and disclosure of potential conveyance capacity in existing export facilities (DWR and USBR). This would be an on-going activity, occurring in conjunction with hydrologic forecasts (yr 1).
2. CALFED agencies will work with stakeholders to develop an agreed upon set of policies and procedures governing the determination of transport system availability and costs, including the procedures to determine the fair reimbursement to the water conveyance facility operator (yr 1-3).

5.2 GOVERNANCE MECHANISMS

The following describes the governance mechanism being proposed by CALFED to oversee the implementation of the Water Transfer Program Plan. More detailed information can be found in the Implementation Plan Appendix (one of several appendices supporting the CALFED Bay-Delta Program's Draft Programmatic EIR/EIS).

5.2.1 EXISTING WATER TRANSFER GOVERNANCE

Most transfers are carried out by agreement among two or more local agencies, without regulatory action by the State. Transfers which involve changes in place or purpose of use of permitted or licensed water rights require the approval of the State Board. Transfers which require the use of state or federal facilities or which may affect project operations require the concurrence or approval of DWR and/or USBR. Additionally, DWR has operated a water bank in drought years and more recently USBR and USFWS have carried out an interim water acquisition program under CVPIA to obtain supplemental fish and water quality flows.

5.2.2 INTERIM WATER TRANSFER GOVERNANCE

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

There are four governance functions involved in implementing the water transfer program recommendations during the interim period (Stage 1):

- existing agencies with jurisdiction over water transfers would directly implement any changes in their own policies or procedures;
- as CALFED member agencies, these agencies would be accountable to CALFED for implementation of the program recommendations;

- CALFED Program staff will continue to provide coordination among CALFED program elements and among agencies with jurisdiction over water transfers and use of project facilities including the facilitation of processes for resolving water transfer issues; and
- the CALFED Policy Group in its oversight capacity would be responsible for ensuring that the water transfer program plan is implemented in a manner that is consistent with other program elements, for conflict resolution and for assuring that linkages to other program elements are maintained.

5.2.3 LONG TERM GOVERNANCE

The Bureau of Reclamation and the Department of Water Resources would continue to have jurisdiction over the use of and access to their respective project facilities. These agencies would work in close coordination with the SWRCB to provide a consistent set of rules and guidelines for water transfers and a streamlined transfer review and approval process.

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

5.3 FINANCING PLAN

With the signing of the Record of Decision, scheduled for June 2000, CALFED will need to have a financing plan in place to begin implementation of all aspects of the Preferred Program Alternative. In fact, early implementation of portions of the program will begin in 1999 with existing funding sources. A finance plan will guide State and federal administration and legislative discussions regarding new bonds, new fees, and proposed budget appropriations.

The Draft Finance Plan contained in the Implementation Plan Appendix outlines the initial framework. The Plan provides background, definitions, description of program benefits, description of possible funding sources, financing options, and issues to resolve to finalize a Finance Plan. A brief summary of finance plans for the Water Transfer Program is described below.

5.3.1 PROGRAM BENEFICIARIES

A fundamental philosophy of the CALFED program is that costs should, to the extent possible, be paid by the beneficiaries of the program actions. Such a policy, among other things, encourages examination of a fuller range of alternatives, including locally funded measures, in order to assure that public funds are spent in the most cost-effective way to meet program goals.

The primary purpose of the Water Transfer Program is to facilitate the development of a water transfer market which benefits buyers and sellers and protects environmental values and the public interest. More specifically, beneficiaries of the Water Transfer Program can be described as follows:

- Agricultural, M&I, or environmental users who purchase water would benefit from increased water supplies and increased water supply reliability;
- Water users who willingly sell water would benefit from the additional revenues generated from a transfer which would allow investment in local water management, environmental or economic improvements (most water will be purchased from existing agricultural users, but some may also be derived from M&I users);
- All agricultural and M&I water suppliers and users would benefit from environmental water transfers because, as environmental conditions improve, regulatory conditions on water diversions should relax;
- The general public would benefit from water transfers between consumptive uses that, to some extent, offset or defer the need for new facilities or other potentially environmentally degrading water supply sources, or sources that would be built at public expense. Benefit would also be derived from legally protected environmental transfers (i.e., under Water Code Section 1707) to augment instream flows above regulatory baseline conditions resulting in improved environmental conditions.

5.3.2 EXISTING WATER TRANSFER PROGRAM FINANCING

CALFED's finance strategy must be considered within the current and historical context of state and federal water resources financing. Currently, agencies which have jurisdictional authorities to administer transfers (USB, DWR, SWRCB) use a combination of application fees and public funds included in their budgets to administer and facilitate transfers.

5.3.3 PROGRAM FUNDING OPTIONS

Generally, the Water Transfer Program relies on the existing legal and regulatory framework of water rights and jurisdictional authorities and does not recommend any major changes to California water law. Thus, the changes resulting from the Water Transfer Program would not significantly broaden existing administrative functions. Since most of the actions in the Water Transfer program involve policy and procedural changes, their cost would be absorbed into existing agencies' budgets (USB, DWR, and SWRCB) within the first few years. Note that the principal costs of specific water transfers (water, application process, legal, and engineering costs) would be paid for by buyers and sellers in the transaction, not through any of these options. Financing specific transfers falls outside the scope of the program.

The proposed Clearinghouse, however, may be an exception. Several funding options for the Clearinghouse, are possible, including:

- buyers or sellers pay a transfer surcharge,
- combination of public funds and a transfer surcharge,
- use all public funding.

Attachment A. Priority Issues and Solution Options



Priority Issues and Solution Options

[Note: The following summary is attached to provide the reader background of previous Water Transfer Work Group developments. The text originally was agreed to by the Work Group to help CALFED record important Program direction, as well as minority opinions. The resulting information helped guide the Work Group through the development of the Program plan itself.]

At the first BDAC Water Transfer Work Group meeting, in July 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 that provided "real world" illustrations of transfer projects, third-party impacts, and groundwater issues.

At the November and December (1997) 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 with 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 aspects 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.



BROADLY SUPPORTED SOLUTION OPTIONS FOR PRIORITY ISSUES

The broadly supported solution options revolved around the need for:

- Baseline data collection
- Neutral party analysis and monitoring of transfers for informational purposes (non regulatory)
- Cumulative impact analysis
- Public disclosure of data and analysis
- 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 involve 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 (for example, intra-basin, inter-district, change in purpose of use, in-stream 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 water 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, and an explanation of anticipated impacts and mitigation strategies;
 - c. disclosure and explanation of the 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; and
- e. educational programs for the public regarding water transfer terminology, process, and technical information.

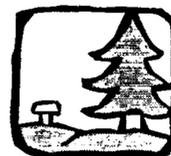
OTHER SOLUTION OPTIONS

In addition to the solution options that 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 CALFED Program. These options 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. Transfers that rely on groundwater substitution should not be approved on the basis of a 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 California 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 that should **not** be part of a CALFED water transfer policy framework—the idea that a physical limit should be imposed on the amount of water that 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.

Attachment B. Excerpted Text from California Water Code



Excerpted Text from California Water Code

[Note: This attachment is provided for the convenience of the reader. It includes several provisions found in the California Water code on the subject of water transfers. While the complete text of each section has been included, this document does not show the entire article or chapter of the Water Code in which the specific section is found. In some cases, an individual section may be limited or otherwise affected by other sections from the article or chapter which are not included here. For a complete understanding of the context of these water transfer sections, the reader should refer to the California Water Code. (Available through the internet at: <http://www.leginfo.ca.gov/cgi-bin/calawquery?codesection=wat&codebody=&hits=20>)

§109. Efficient use of water; encouragement of voluntary transfer of water and water rights

(a) The Legislature hereby finds and declares that the growing water needs of the state require the use of water in an efficient manner and that the efficient use of water requires certainty in the definition of property rights to the use of water and transferability of such rights. It is hereby declared to be the established policy of this state to facilitate the voluntary transfer of water and water rights where consistent with the public welfare of the place of export and the place of import.

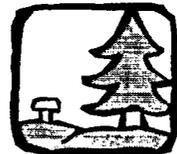
(b) The Legislature hereby directs the Department of Water Resources, the State Water Resources Control Board, and all other appropriate state agencies to encourage voluntary transfers of water and water rights, including, but not limited to, providing technical assistance to persons to identify and implement water conservation measures which will make additional water available for transfer.

§380. Legislative findings and declarations

The Legislature hereby finds and declares as follows:

(a) The various regions of the state differ widely in the availability of water supplies and in the need for water to meet beneficial uses.

(b) Decisions regarding operations to meet water needs can depend in part upon regional differences.



(c) Many water management decisions can best be made at a local or regional level, to the end that local and regional operational flexibility will maximize efficient statewide use of water supplies.

(d) The authority granted by this chapter to local and regional public agencies, as defined in subdivision (a) of Section 65930 of the Government Code and not including federal agencies, is in furtherance of the policy declared in Section 2 of Article X of the California Constitution and in Section 109.

§381. Local or regional public authority; supremacy

The authority of local or regional public agencies pursuant to this chapter shall control over any other provision of law which contains more stringent limitations on the authority of a particular public agency to serve water for use outside the agency, to the extent those other laws are inconsistent with the authority granted herein.

§382. Transfer of surplus water or water rights; authority of agency

(a) Notwithstanding any other provision of law, every local or regional public agency authorized by law to serve water to the persons or entities within the service area of the agency may sell, lease, exchange, or otherwise transfer, for use outside the agency, either or both of the following: (1) Water that is surplus to the needs of the water users of the agency. (2) Water, the use of which is voluntarily foregone, during the period of the transfer, by a water user of the agency.

(b) This chapter does not prohibit or restrict the transfer of water or water rights by local or regional public agencies pursuant to other provisions of law.

§383. Surplus water defined

For the purposes of this chapter, water that is surplus to the needs of the agency's water users shall mean any of the following:

(a) Water, to which the right is held by the agency pursuant to an appropriation made under the Water Commission Act or Division 2 (commencing with Section 1000), which the agency finds will be in excess of the needs of water users within the agency for the duration of the transfer.

(b) Water, to which the right is held by the agency pursuant to an appropriation made under the Water Commission Act or Division 2 (commencing with Section 1000), of which any water user agrees with the agency, upon mutually satisfactory terms, to forego use for the duration of the transfer.

(c) Water, to which the right is held by a water user within the agency pursuant to an appropriation made under the Water Commission Act or Division 2 (commencing with Section 1000) where the water user and the agency agree, upon mutually satisfactory terms, that the water user will forego use for the period of time specified in the agreement and that the agency shall act as agent for the water user to effect the transfer.

§384. *Compliance with state law prior to transfer*

Prior to serving water to any person for use outside the agency, the agency shall comply with all provisions of the general laws of this state relating to the transfer of water or water rights, including, but not limited to, procedural and substantive requirements governing any change in point of diversion, place of use, or purpose of use due to such transfer.

§385. *Consent to transfer by other agencies*

No water may be transferred pursuant to this chapter for use within the boundaries of a local or regional public agency that furnishes the same water service to the transferee without the prior consent of that agency.

§386. *Findings prior to transfer; fees of petitioner for transfer*

The board may approve any change associated with a transfer pursuant to this chapter only if it finds that the change may be made without injuring any legal user of the water and without unreasonably affecting fish, wildlife, or other instream beneficial uses and does not unreasonably affect the overall economy of the area from which the water is being transferred. A petitioner requesting a change which is subject to this section shall pay to the board a fee which shall be in an amount determined by the board to cover the reasonable costs of the board in evaluating and processing the petition.

§387. *Duration of transfer*

Any agreement for the transfer of water under the provisions of this chapter shall be for a period not to exceed seven years unless a longer period of time is mutually agreed upon by the agency and the transferee.

§470. *Costa-Isenberg Water Transfer Act*

This chapter shall be known as and may be cited as the Costa-Isenberg Water Transfer Act of 1986.

§475. *Legislative findings and declarations*

The Legislature hereby finds and declares that voluntary water transfers between water users can result in a more efficient use of water, benefitting both the buyer and the seller. The Legislature further finds and declares that transfers of surplus water on an intermittent basis can help alleviate water shortages, save capital outlay development costs, and conserve water and energy. The Legislature further finds and declares that it is in the public interest to conserve all available water resources, and that this interest requires the coordinated assistance of state agencies for voluntary water transfers to allow more intensive use of developed water resources in a manner that fully protects the interests of other entities which have rights to, or rely on, the water covered by a proposed transfer.

§480. *Establishment of ongoing program to facilitate voluntary exchange or transfer of water*

The department shall establish an ongoing program to facilitate the voluntary exchange or transfer of water and implement the various state laws that pertain to water transfers. The department shall seek to facilitate these transactions only if the water to be transferred is already developed and being diverted from a stream for beneficial use or has been conserved.

§481. *List of entities seeking to enter water supply transfers; lists of physical facilities*

The department shall create and maintain a list of entities seeking to enter into water supply transfers, leases, exchanges, or other similar arrangements. In addition, the department shall maintain a list of the physical facilities which may be available to carry out water supply transfers.

§482. *Water transfer guide*

The department shall prepare a water transfer guide which shall include, but not be limited to, all of the following:

- (a) A review of existing and appropriate state and federal laws that pertain to water transfers, water markets, or water rights.
- (b) A list of persons or public agencies throughout the state involved in water management who could be helpful to those seeking assistance to transfer water.
- (c) Information and resources which could be used to identify potential third-party impacts and mitigation alternatives, including economic, environmental, and legal issues related to the transfer of water.
- (d) A description of the services available to water users from the department.

§483. *Coordination of activities with other state boards or agencies*

The department shall consult and coordinate its activities with other state boards, departments, agencies, or offices whose assistance may be desirable or necessary in carrying out the purposes of this chapter.

§484. *Temporary transfer of water or water rights*

- (a) The temporary transfer of any water or water right that otherwise would have been consumptively used or stored by the transferor in the absence of the temporary transfer, does not in anyway prejudice the transferor's right to the use of the water in the future.
- (b) "Consumptively used," for purposes of this section, 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.

§1005.1. Ground water; cessation or reduction in extraction; alternative supply; reasonable beneficial use; statement of amount used; definitions

Cessation of or reduction in the extraction of ground water by the owner of a right to extract, as the result of the use of an alternate supply of water from a nontributary source, shall be and is deemed equivalent to, and for purposes of establishing and maintaining any right to extract the ground water shall be construed to constitute, a reasonable beneficial use of the ground water to the extent and in the amount that water from the alternate source is applied to reasonable beneficial use, not exceeding, however, the amount of such reduction. Any such user of water from an alternate nontributary source who seeks the benefit of this section, shall file with the board, on or before December 31st of each calendar year, a statement of the amount of water from such source so applied to reasonable beneficial use pursuant to the provisions of this section during the next preceding water year (November 1st to October 31st), and such user cannot claim the benefit of this section for any water year for which such statement is not so filed.

"Ground water," for the purpose of this section and of Sections 1005.2 and 1005.4, means water beneath the surface of the ground, whether or not flowing through known and definite channels. The term "nontributary source," as used in this section, shall be deemed to include water imported from another watershed, or water conserved and saved in the watershed by a water conservation plan or works without which such water of the same watershed would have wasted, or would not have reached the underground source of supply of the owner relying upon this section.

§1010. Use of recycled, desalinated or polluted water as beneficial use; lapse, reduction or loss of rights; extension of permit; periodic reports; transfer of water or water rights

(a) (1) The cessation of, or reduction in, the use of water under any existing right regardless of the basis of right, as the result of the use of recycled water, desalinated water, or water polluted by waste to a degree which unreasonably affects the water for other beneficial uses, is deemed equivalent to, and for purposes of maintaining any right shall be construed to constitute, a reasonable beneficial use of water to the extent and in the amount that the recycled, desalinated, or polluted water is being used not exceeding, however, the amount of such reduction.

(2) No lapse, reduction, or loss of any existing right shall occur under a cessation of, or reduction in, the use of water pursuant to this subdivision, and, to the extent and in the amount that recycled, desalinated, or polluted water is used in lieu of water appropriated by a permittee pursuant to Chapter 6 (commencing with Section 1375) of Part 2, the board shall not reduce the appropriation authorized in the user's permit.

(3) The use of recycled, desalinated, or polluted water constitutes good cause under Section 1398 to extend the period specified in a permit for application of appropriated water to beneficial use to the extent and in the amount that recycled, desalinated, or polluted water is used. The extension by the board shall be granted upon the same terms as are set forth in the user's permit, and for a period sufficient to enable the permittee to perfect his appropriation, while continuing to use recycled, desalinated, or polluted water.

(4) The board, in issuing a license pursuant to Article 3(commencing with Section 1610) of Chapter 9 of Part 2, shall not reduce the appropriation authorized by permit, to the extent and in the amount that reduction in a permittee's use, during the perfection period, including any extension as provided in this section, has resulted from the use of recycled, desalinated, or polluted water in lieu of the permittee's authorized appropriation.

(5) The board may require any user of water who seeks the benefit of this section to file periodic reports describing the extent and amount of the use of recycled, desalinated, or polluted water. To the maximum extent possible, the reports shall be made a part of other reports required by the board relating to the use of water.

(6) For purposes of this section, the term "recycled water" has the same meaning as in Division 7 (commencing with Section 13000). (b) Water, or the right to the use of water, the use of which has ceased or been reduced as the result of the use of recycled, desalinated, or polluted water as described in subdivision (a), maybe sold, leased, exchanged, or otherwise transferred pursuant to any provision of law relating to the transfer of water or water rights, including, but not limited to, provisions of law governing any change in point of diversion, place of use, and purpose of use due to the transfer.

§1011. Appropriated water rights; cessation or reduction in use; forfeiture; transfer; reversion of rights

(a) When any person entitled to the use of water under an appropriative right fails to use all or any part of the water because of water conservation efforts, any cessation or reduction in the use of the appropriated water shall be deemed equivalent to a reasonable beneficial use of water to the extent of the cessation or reduction in use. No forfeiture of the appropriative right to the water conserved shall occur upon the lapse of the forfeiture period applicable to water appropriated pursuant to the Water Commission Act of this code or the forfeiture period applicable to water appropriated prior to December 19, 1914. The board may require that any user of water who seeks the benefit of this section file periodic reports describing the extent and amount of the reduction in water use due to water conservation efforts. To the maximum extent possible, the reports shall be made apart of other reports required by the board relating to the use of water. Failure to file the reports shall deprive the user of water of the benefits of this section. For purposes of this section, the term "water conservation" shall mean the use of less water to accomplish the same purpose or purposes of use allowed under the existing appropriative right. Where water appropriated for irrigation purposes is not used by reason of land fallowing or crop rotation, the reduced usage shall be deemed water conservation for purposes of this section.

(b) Water, or the right to the use of water, the use of which has ceased or been reduced as the result of water conservation efforts as described in subdivision (a), may be sold, leased, exchanged, or otherwise transferred pursuant to any provision of law relating to the transfer of water or water rights, including, but not limited to, provisions of law governing any change in point of diversion, place of use, and purpose of use due to the transfer.

(c) Notwithstanding any other provision of law, upon the completion of the term of a water transfer agreement, or the right to the use of that water, that is available as a result

of water conservation efforts described in subdivision (a), the right to the use of the water shall revert to the transferor as if the water transfer had not been undertaken.

§1011.5. Conjunctive use of surface water and groundwater

(a) The Legislature hereby finds and declares that the growing water needs of the state require the use of water in an efficient manner and that the efficient use of water requires certainty in the definition of property rights to the use of water. The Legislature further declares that it is the policy of this state to encourage conjunctive use of surface water and groundwater supplies and to make surface water available for other beneficial uses. The Legislature recognizes that the substantial investments that may be necessary to implement and maintain a conjunctive use program require certainty in the continued right to the use of alternate water supplies.

(b) When any holder of an appropriative right fails to use all or any part of the water as a result of conjunctive use of surface water and groundwater involving the substitution of an alternate supply for the unused portion of the surface water, any cessation of, or reduction in, the use of the appropriated water shall be deemed equivalent to a reasonable and beneficial use of water to the extent of the cessation of, or reduction in, use, and to the same extent as the appropriated water was put to reasonable and beneficial use by that person. No forfeiture of the appropriative right to the water for which an alternate supply is substituted shall occur upon the lapse of the forfeiture period applicable to water appropriated pursuant to the Water Commission Act or this code or the forfeiture period applicable to water appropriated prior to December 19, 1914. The state board may require any holder of an appropriative right who seeks the benefit of this section to file periodic reports describing the extent and amount of the reduction in water use due to substitution of an alternate supply. To the maximum extent possible, the reports shall be made a part of other reports required by the state board relating to the use of water. Failure to file the reports shall deprive the user of water of the benefits of this section.

(c) Substitution of an alternate supply may be made only if the extraction of the alternate supply conforms to all requirements imposed pursuant to an adjudication of the groundwater basin, if applicable, and meets one of the following conditions:

(1) Except as specified in paragraph (2), is from a groundwater basin for which the operating safe yield is not exceeded prior to the extraction of the alternate supply and does not cause the operating safe yield of the groundwater basin from which the alternate supply is obtained to be exceeded.

(2) Is from the Eastern San Joaquin County Basin, as described on pages 38 and 39 of the Department of Water Resources Bulletin No. 118-80, for which the operating safe yield is exceeded prior to the extraction of the alternative supply, if all of the following requirements are met:

(A) The conjunctive use program is operated in accordance with a local groundwater management program that complies with the requirements of this section.

(B) The groundwater management program establishes requirements for the extraction of groundwater and is approved by a joint powers authority that meets the requirements of subparagraph (C).

(C) The joint powers authority includes each water agency overlying the contemplated points of groundwater extraction and each water agency that will share in the benefits to be derived from the local groundwater management program.

(D) By either of the following methods, the overdraft of the groundwater basin underlying the point of extraction has been reduced prior to the commencement of extraction: (i) Elimination of a volume of existing groundwater extractions in excess of the proposed new extraction. (ii) Recharge of the groundwater basin with a volume of water in excess of the proposed new extraction.

(E) The operation of that conjunctive use program ensures that the overdraft of the groundwater basin continues to be reduced.

(d) Water, or the right to the use of water, the use of which has ceased or been reduced as the result of conjunctive use of surface water and groundwater involving substitution of an alternate supply, as described in subdivisions (b) and (c), may be sold, leased, exchanged, or otherwise transferred pursuant to any provision of law relating to the transfer of water or water rights, including, but not limited to, provisions of law governing any change in point of diversion, place of use, and purpose of use due to the transfer.

(e) As used in this section, "substitution of an alternate supply" means replacement of water diverted under an appropriative right by the substitution of an equivalent amount of groundwater.

(f) This section does not apply to the Santa Ana River watershed.

(g) This section does not apply in any area where groundwater pumping causes, or threatens to cause, a violation of water quality objectives or an unreasonable effect on beneficial uses established in a water quality control plan adopted or approved by the state board pursuant to, and to the extent authorized by, Section 13170 or 13245, which designates areas where groundwater pumping causes, or threatens to cause, a violation of water quality objectives or an unreasonable effect on beneficial uses.

(h) This section shall not be construed to increase or decrease the jurisdiction of the state board over groundwater resources, or to confer on the state board jurisdiction over groundwater basins over which it does not have jurisdiction pursuant to other provisions of law.

(i) This section shall remain in effect only until January 1, 2007, and as of that date is repealed, unless a later enacted statute, which is enacted before January 1, 2007, deletes or extends that date.

§1011.5. Conjunctive use of surface water and groundwater

(a) The Legislature hereby finds and declares that the growing water needs of the state require the use of water in an efficient manner and that the efficient use of water requires certainty in the definition of property rights to the use of water. The Legislature further declares that it is the policy of this state to encourage conjunctive use of surface water and groundwater supplies and to make surface water available for other beneficial uses. The Legislature recognizes that the substantial investments that may be necessary to implement and maintain a conjunctive use program require certainty in the continued right to the use of alternate water supplies.

(b) When any holder of an appropriative right fails to use all or any part of the water as a result of conjunctive use of surface water and groundwater involving the substitution of an alternate supply for the unused portion of the surface water, any cessation of, or reduction in, the use of the appropriated water shall be deemed equivalent to a reasonable and beneficial use of water to the extent of the cessation of, or reduction in, use, and to the same extent as the appropriated water was put to reasonable and beneficial use by that person. No forfeiture of the appropriative right to the water for which an alternate supply is substituted shall occur upon the lapse of the forfeiture period applicable to water appropriated pursuant to the Water Commission Act or this code or the forfeiture period applicable to water appropriated prior to December 19, 1914. The state board may require any holder of an appropriative right who seeks the benefit of this section to file periodic reports describing the extent and amount of the reduction in water use due to substitution of an alternate supply. To the maximum extent possible, the reports shall be made a part of other reports required by the state board relating to the use of water. Failure to file the reports shall deprive the user of water of the benefits of this section.

(c) Substitution of an alternate supply may be made only if the extraction of the alternate supply meets all of the following conditions: (1) Is from a groundwater basin for which the operating safe yield is not exceeded prior to the extraction of the alternate supply. (2) Does not cause the operating safe yield of the groundwater basin from which the alternate supply is obtained to be exceeded. (3) Conforms to all requirements imposed pursuant to any adjudication of the groundwater basin. (4) Is consistent with any applicable groundwater management plan. (5) Is approved by the water supplier whose service area the water is to be transferred from, if the groundwater basin has not been adjudicated or if a groundwater management plan has not been adopted.

(d) Water, or the right to the use of water, the use of which has ceased or been reduced as the result of conjunctive use of surface water and groundwater involving substitution of an alternate supply, as described in subdivisions (b) and (c), may be sold, leased, exchanged, or otherwise transferred pursuant to any provision of law relating to the transfer of water or water rights, including, but not limited to, provisions of law governing any change in point of diversion, place of use, and purpose of use due to the transfer.

(e) As used in this section, "substitution of an alternate supply" means replacement of water diverted under an appropriative right by the substitution of an equivalent amount of groundwater.

(f) This section does not apply to the Santa Ana River watershed.

(g) This section does not apply in any area where groundwater pumping causes, or threatens to cause, a violation of water quality objectives or an unreasonable effect on beneficial uses established in a water quality control plan adopted or approved by the state board pursuant to, and to the extent authorized by, Section 13170 or 13245, which designates areas where groundwater pumping causes, or threatens to cause, a violation of water quality objectives or an unreasonable effect on beneficial uses.

(h) This section shall not be construed to increase or decrease the jurisdiction of the state board over groundwater resources, or to confer on the state board jurisdiction over groundwater basins over which it does not have jurisdiction pursuant to other provisions of law.

(i) This section shall become operative on January 1, 2007.

§1020. Term of lease; application of chapter

Water may be leased for a period not to exceed five years to assist water conservation efforts pursuant to the terms and conditions of this chapter. The terms and conditions of this chapter are not applicable to water leases or transfers governed by other provisions of law.

§1021. Water subject to lease

(a) The water subject to a water lease agreement shall be water that is subject to a water right of the lessor. The amount of water leased shall not exceed 25 percent of the water that would have been applied or stored by the lessor in the absence of the lease agreement in any given hydrological year.

(b) Each lease agreement shall include enforceable terms which will ensure that the water lease will not injure any legal user of water and will not unreasonably affect fish, wildlife, or other instream beneficial uses.

(c) This chapter applies only to surface water appropriated pursuant to the Water Commission Act (Chapter 586 of the Statutes of 1913, as amended) or this code, or to water appropriated prior to December 19, 1914.

§1022. Water held by water district or water company

If the water subject to the lease is held by a water district, a water company, or a mutual water company, hereafter collectively referred to as the district, the following provisions apply:

(a) The governing body of the district may, by a resolution adopted and entered in its minutes, determine that the district should lease water pursuant to this chapter, or, if otherwise required by law, determine that an election should be held to lease water pursuant to this chapter. The district shall administer any water lease and determine whether water is in excess of the needs of the district and is available for a lease.

(b) Any water lease administered by the district shall include provisions to achieve all of the following: (1) Establish a schedule for district water users to provide written notice of the intention to participate in a water lease. (2) Establish a minimum price for

the water available for leasing to maintain the financial integrity of the district and enter into leases for that water at market values at or above the minimum price.

§1024. Sale of water right or modification of water rights or contract

(a) Nothing in this chapter authorizes the sale of any water right or the modification of any water right or contract.

(b) No right in any water, water contract, or water right shall be acquired by a use permitted under this chapter.

(c) (1) When any person entitled to the use of water under an appropriative right fails to use all or any part of the water because of water conservation efforts and leases that conserved water under this chapter, any such cessation of, or reduction in, the use of the appropriated water that is leased is deemed equivalent to a reasonable beneficial use of water to the extent of that cessation of, or reduction in, use. No forfeiture of the appropriative right to the water conserved shall occur upon the lapse of the forfeiture period applicable to water appropriated pursuant to the Water Commission Act (Chapter 586 of the Statutes of 1913, as amended) or this code, or to water appropriated prior to December 19, 1914. (2) The state board may require any lessor of water who seeks the benefit of this chapter to file periodic reports describing the extent and amount of the reduction in water use due to water conservation efforts. To the maximum extent possible, the reports shall be made a part of other reports required by the state board relating to the use of water. Failure to file the reports shall deprive the user of water of the benefits of this chapter. (3) For purposes of this chapter, "water conservation" means the use of less water to accomplish the same purpose or purposes of use allowed under the existing appropriative right. Where water appropriated for irrigation purposes is not used by reason of land fallowing or crop rotation, the reduced usage shall be deemed water conservation for purposes of this section.

§1024.5. Review of lessee's use of leased water

This chapter does not limit any review of the lessee's use of the leased water.

§1025. Notice by water lessor

If the lessor or lessee is a water district, the water lessor shall file a notice with the state board of the water lease agreement and include in the notice all of the following:

(a) A copy of the lease agreement.

(b) Any water permit or license number.

(c) A description of the environmental conditions in the lease, permit, and license which protect fish and wildlife.

(d) A statement of how the lease will assist water conservation efforts of the lessor.

(e) An agreement undertaken by the lessor and the lessee which specifies how the environmental protection terms and conditions in the permit, license, or lease, and the

applicable conditions established pursuant to Section 1029 for the permit, license, or other water right, will be complied with for the duration of the lease.

§1025.5. Private parties; application by lessor; approval of lease

(a) If both the lessor and lessee are private parties, the lessor shall file an application with the state board for approval of the lease agreement and shall include in the application both of the following: (1) The information and materials described in subdivisions (a) to(e), inclusive, of Section 1025. (2) Other information which the state board determines is necessary to review the application.

(b) The state board, after providing notice and opportunity for a hearing, may approve the lease if, in the judgment of the state board, the lease would not operate to injure the legal users of water or unreasonably affect fish, wildlife, or other instream beneficial uses.

§1025.7. Change of point of diversion

Water leases pursuant to this chapter are not subject to Chapter 10 (commencing with Section 1700) or Chapter 10.5 (commencing with Section 1725) of Part 2.

§1026. Written public notice of approval of water lease

The lead agency shall not approve a water lease until 30 days after the state board provides written public notice, including notice by personal delivery or registered mail to legal users of water which may be affected by the lease, as identified by the state board, the Department of Fish and Game, and any party requesting special notice of water leases pursuant to this chapter. The water lessor shall pay a reasonable fee, in an amount determined by the state board, for the cost of providing the notice.

§1027. Sacramento - San Joaquin Delta

(a) Any water lease agreement entered into pursuant to this chapter involving the transfer of water from the Sacramento-San Joaquin Delta shall provide outflow consistent with the carriage water requirements determined by the department to be necessary for the transfer of the water subject to the lease to maintain the water quality which would exist in the delta without the transfer undertaken in connection with the water lease.

(b) Any water lease agreement providing for the lease of water from a lessor north of the Sacramento/San Joaquin Delta to a lessee south of the Sacramento/San Joaquin Delta shall provide for an amount of water for delta salt water repulsion and environmental purposes as administratively prescribed by the state board in proportion to all similar requirements for delta exports.

§1028. Effects of water transfer pursuant to lease on legal users of water and on fish and wildlife; court determination of issues

In any proceeding pursuant to Section 1029, the court shall determine issues relating to the lease and the effects of the water transfer pursuant to the lease on the legal users of

water and on fish and wildlife, but any request or petition to permanently change the water right which may be subject to the lease shall be heard in a separate proceeding.

§1029. Environmental quality

Division 13 (commencing with Section 21000) of the Public Resources Code applies to water lease agreements authorized by this chapter. For purposes of that division, the lessor is the lead agency, except that if the lessor is a private party and the lessee is a water district, the lessee is the lead agency. If both the lessor and the lessee are private parties, the state board is the lead agency.

§1030. Monitoring lease; enforcement

During the term of the water lease, the state board shall monitor the lease, as appropriate. The state board shall initiate proceedings, if appropriate, to enforce the terms and conditions of water leases, and permits and licenses or water use authority to ensure that the water lease does not operate to injure any legal user of the water or unreasonably affect fish, wildlife, or other instream beneficial uses.

§1215. Application of article; exporters of water from protected area

This article shall only apply to a water supplier exporting or intending to export water for use outside a protected area pursuant to applications to appropriate surface water filed, or groundwater appropriations initiated, after January 1, 1985, that are not subject to Section 11460.

§1215.5. 'Protected area' defined

(a) For the purposes of this article, "protected area" means all of lands which normally drain to the ocean, to a hydraulic sink, or to another state within any of the following, and only the following, river systems:

- (1) The Sacramento River System.
- (2) The Mokelumne River System.
- (3) The Calaveras River System.
- (4) The San Joaquin River System.
- (5) The Mono Lake System.
- (6) The combined Truckee, Walker, and Carson River Systems.
- (7) The combined river systems which drain to the ocean from and including the Russian River System northward to the California-Oregon border.

(b) The confluences of the Sacramento, Mokelumne, Calaveras, and San Joaquin River Systems are within the delta, as defined in Section 12220, and the delta shall be considered to be within each of these protected areas.

§1215.6. 'Water user or users' defined

For the purposes of this article, "water user or users" within a protected area means an appropriator or appropriators, a riparian user or users, or a groundwater user or users of water on land owned or controlled by them within a protected area.

§1216. Depriving protected area of adequate supplies of water prohibited

A protected area shall not be deprived directly or indirectly of the prior right to all the water reasonably required to adequately supply the beneficial needs of the protected area, or any of the inhabitants or property owners therein, by a water supplier exporting or intending to export water for use outside a protected area pursuant to applications to appropriate surface water filed, or groundwater appropriations initiated, after January 1, 1985, that are not subject to Section 11460.

§1217. Water user's right to purchase water from exporters

(a) In addition to the right to obtain a water right which would have priority over the rights of an exporter, water users in a protected area shall have the right to purchase, for adequate compensation, water made available by the construction of any works by a water supplier exporting or intending to export water for use outside the protected area. Nothing in this section shall be construed to authorize export of water from a protected area to which users within the protected area are otherwise entitled, nor to require users within a protected area to pay for water to which they are otherwise entitled.

(b) At the request of a water user or users within a protected area, a water supplier exporting or intending to export water for use outside the protected area who is subject to Section 1216 shall meet and negotiate in good faith for the purpose of entering into contracts for the purchase of water as provided in subdivision (a).

(c) Any water user or users in a protected area may bring an action in the superior court to require compliance with the duty to meet and negotiate in good faith pursuant to this section. The court may issue a temporary restraining order, preliminary injunction, or permanent injunction, as appropriate, to secure compliance with this section.

(d) The meetings and negotiations required by this section may occur between the water supplier exporting water for use outside a protected area and any water user or users in a protected area, as determined appropriate by the parties. The meetings and negotiations shall not be subject to the provisions of Article 9 (commencing with Section 11120) of Chapter 1 of Part 1 of Division 3 of Title 2 of the Government Code or Chapter 9 (commencing with Section 54950) of Part 1 of Division 2 of Title 5 of the Government Code.

(e) Nothing in this section shall be construed as a limitation on the authority of the board to establish water quality standards or to subject water right entitlements to terms and conditions for the protection of reasonable and beneficial uses consistent with the provisions of Section 2 of Article X of the California Constitution.

§1218. Estimate of amount of water to be purchased

Upon the request of an applicant for a permit to appropriate water for use outside a protected area, a county of origin shall cooperate with the applicant in estimating the amount of water that may be purchased within the county pursuant to subdivision (a) of Section 1217 and that may be developed or used within the county impacting the proposed project, including an estimated time schedule. The purpose of this section is to assist the applicant in planning the export project and to assist the counties of origin in their water planning.

§1219. Mediation

A water supplier exporting or intending to export water outside a protected area, or a water user or users within a protected area, may declare that an impasse has been reached between the parties in negotiations over matters within the scope of negotiations specified in Section 1217 and may request the director to appoint a panel of five disinterested persons from whom the parties shall select, by a process of elimination, the mediator. After drawing lots to determine the order, the parties shall each, in turn, eliminate a name from the panel until there is only one person remaining on the panel, who shall be the mediator. The mediator shall meet forthwith with the parties or their representatives, either jointly or separately, and shall take such other steps as the mediator may deem appropriate in order to persuade the parties to resolve their differences and effect a mutually acceptable agreement. The services of the mediator, including any per diem fees, and actual and necessary travel and subsistence expenses, shall be provided by the parties. Nothing in this section shall be construed to prevent the parties from mutually agreeing upon their own mediation procedure, and in the event of such agreement, the director shall not appoint a mediator.

§1219.5. Compensation of exporter of water

The provisions of this article shall not require any water supplier exporting or intending to export water for use outside a protected area to furnish to any water user or users in a protected area claiming rights under this article, without adequate compensation therefor, any water made available for domestic, municipal, industrial, or agricultural uses by the construction of any works by the water exporter.

§1220. Pumping groundwater from combined Sacramento and Delta Central Sierra Basins

(a) No groundwater shall be pumped for export from within the combined Sacramento and Delta-Central Sierra Basins, as defined in Department of Water Resources' Bulletin 160-74, unless the pumping is in compliance with a groundwater management plan that is adopted by ordinance pursuant to subdivision (b) by the county board of supervisors, in full consultation with affected water districts, and that is subsequently approved by a vote in the counties or portions of counties that overlie the groundwater basin, except that water that has seeped into the underground from any reservoir, afterbay, or other facility of an export project may be returned to the water supply of the export project. For the purposes of this section, the county board of supervisors may designate a county water agency to act on its behalf if the directors of the county water agency are publicly elected and the county water agency encompasses the entire county. The county board of supervisors may revoke that designation by resolution at any time.

(b) Notwithstanding any other provision of law, a county board of supervisors whose county contains part of the combined Sacramento and Delta-Central Sierra Basins may adopt groundwater management plans to implement the purposes of this section. (c) A county board of supervisors shall not exercise the powers authorized by this section within the boundaries of another local agency supplying water to that area without the prior agreement of the governing body of that other local agency.

§1221. Groundwater regulation

This article shall not be construed to authorize the board to regulate groundwater in any manner.

§1222. Watersheds

Nothing in this article shall be deemed to diminish the rights and protections to watersheds of origin contained in existing law including, but not limited to, Part 4.5 (commencing with Section 12200) of Division 6.

§1700. Change of purpose

Water appropriated under the Water Commission Act or this code for one specific purpose shall not be deemed to be appropriated for any other or different purpose, but the purpose of the use of such water may be changed as provided in this code.

§1701. Application for change

At any time after notice of an application is given, an applicant, permittee, or licensee may change the point of diversion, place of use, or purpose of use from that specified in the application, permit, or license; but such change may be made only upon permission of the board.

§1702. Injury to legal user of water

Before permission to make such a change is granted the petitioner shall establish, to the satisfaction of the board, and it shall find, that the change will not operate to the injury of any legal user of the water involved.

§1703. Notice of proposed change

After filing a petition for permission to make a change, the petitioner, in case the board so requires, shall cause notice thereof to be given or published in the manner prescribed by the board. In all cases the petitioner shall notify the Department of Fish and Game in writing of the proposed change.

§1704. Protest; hearing

If at any time prior to the granting of permission to make such a change a protest is filed with the board against allowance of the proposed change the board shall fix a time and place for the hearing of the petition and of objections thereto.

§1704.1. Field investigations

The Division of Water Rights shall conduct a field investigation of all minor protested petitions for change. The board shall notify the parties of the field investigation not less than 20 days prior to conducting the field investigation, to enable the parties to attend and present information to the board.

§1704.2. Right to request information in support of positions

The Division of Water Rights may request the parties to submit information in support of their positions. The Division of Water Rights may request information before, during, or after the field investigation. After the field investigation, the Division of Water Rights may conduct additional proceedings in accordance with Article 10 (commencing with Section 11445.10) of Chapter 4.5 of Part 1 of Division 3 of Title 2 of the Government Code.

§1704.3. Order acting on minor petition for change

Based upon the field investigation and any other information obtained under this chapter, the Division of Water Rights shall issue an order acting on the minor petition for change unless the board in its discretion determines that additional proceedings should be conducted under Section 183. An order of the Division of Water Rights is subject to review as provided in Chapter 4 (commencing with Section 1120) of Part 1.

§1704.4. Minor petition for change

For purposes of this chapter, a minor petition for change shall mean any petition which does not involve direct diversions in excess of three cubic-feet per second or storage in excess of 200 acre-feet per year.

§1705. Action by board

After the hearing the board shall grant or refuse, as the facts warrant, permission to change the point of diversion, place of use, or purpose of use.

§1706. Persons entitled to make change

The person entitled to the use of water by virtue of an appropriation other than under the Water Commission Act or this code may change the point of diversion, place of use, or purpose of use if others are not injured by such change, and may extend the ditch, flume, pipe, or aqueduct by which the diversion is made to places beyond that where the first use was made.

§1707. Changes for purpose of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in or on water

(a) Any person entitled to the use of water, whether based upon an appropriative, riparian, or other right, may petition the board pursuant to this chapter, Chapter 6.6 (commencing with Section 1435) or Chapter 10.5 (commencing with Section 1725) for a change for purposes of preserving or enhancing wetlands habitat, fish and wildlife resources, or recreation in, or on, the water.

(b) The board may approve the petition filed pursuant to subdivision (a), subject to any terms and conditions which, in the board's judgment, will best develop, conserve, and utilize, in the public interest, the water proposed to be used as part of the change, whether or not the proposed use involves a diversion of water, if the board determines that the proposed change meets all of the following requirements: (1) Will not increase the amount of water the person is entitled to use. (2) Will not unreasonably affect any legal user of water. (3) Otherwise meets the requirements of this division.

§1725. Changes permitted

A permittee or licensee may temporarily change the point of diversion, place of use, or purpose of use due to a transfer or exchange of water or water rights 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 proposed temporary change, 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.

§1726. Notice

The permittee or licensee shall notify in writing the board and the Department of Fish and Game of a proposed temporary change. The notice shall contain information indicating the amount of water consumptively used by the permittee or licensee, the amount of water proposed for transfer, the parties involved in the transfer, and any other information the board by rule may prescribe.

§1727. Evaluation

(a) Upon receipt by the board of notification of a proposed temporary change, the board shall make an evaluation sufficient to determine both of the following: (1) The proposed temporary change would not injure any legal user of the water, during any potential hydrologic condition, through resulting significant changes in water quantity, water quality, timing of diversion or use, consumptive use of the water, reduction in return flows, or reduction in the availability of water within the watershed of the transferor. (2) The proposed temporary change would not unreasonably affect fish, wildlife, or other instream beneficial uses.

(b) Upon completion of the evaluation under subdivision (a), and finding that no injury or unreasonable effect would result, the board shall so notify the permittee or licensee, and those legal users of water identified pursuant to subdivision (a), of its finding and the order approving the temporary change by personal delivery or registered mail. The temporary change shall be effective five days after the order becomes effective.

(c) If the board cannot satisfy the requirements under subdivision (a) within 60 days following receipt of notification of a proposed temporary change or within any extension of that period approved by the permittee or licensee, or cannot make the finding under subdivision (b), it shall so notify the permittee or licensee and those legal users of water identified pursuant to subdivision (a), by personal delivery or registered

mail, and shall fix a time and place for a hearing on the issues set forth in subdivision (a).

§1728. Temporary change defined

For the purposes of this article, a temporary change means any change of point of diversion, place of use, or purpose of use involving a transfer or exchange of water or water rights for a period of one year or less.

§1729. Exemption

A proposed temporary change under this article shall be exempt from the requirements of Division 13 (commencing with Section 21000) of the Public Resources Code.

§1731. Reversion of rights

Following the expiration of the temporary change period, all rights shall automatically revert to the original holder of the right without any action by the board.

§1732. Diligence in petitioning for changes

The board shall not approve a temporary change if the board, in its judgment, concludes, if applicable, that the petitioner has not exercised due diligence in petitioning for a change pursuant to provisions of this division other than this article.

§1735. Petition for long term changes

The board may consider a petition for a long-term transfer of water or water rights involving a change of point of diversion, place of use, or purpose of use. A long-term transfer shall be for any period in excess of one year.

§1736. Approval of petitions

The board, after providing notice and opportunity for a hearing, including, but not limited to, written notice to, and an opportunity for review and recommendation by, the Department of Fish and Game, may approve such a petition for a long-term transfer where the change would not result in substantial injury to any legal user of water and would not unreasonably affect fish, wildlife, or other instream beneficial uses.

§1737. Reversion of rights

Following the expiration of the long-term transfer period, all rights shall automatically revert to the original holders of the right without any action by the board.

§1740. Rights determined under court decrees

Any water right determined under a court decree issued pursuant to Chapter 3 (commencing with Section 2500) of Part 3, after January 1, 1981, shall be transferable pursuant to this chapter and Chapter 10 (commencing with Section 1700). The court having the appropriate jurisdiction over the decreed rights may enter a supplemental decree modifying any rights involved upon motion of the board or any party with a vested water right.

§1745. Definitions

As used in this article, the following terms have the following meanings:

- (a) "Person" includes a public agency.
- (b) "Water supplier" means a local public agency or private company supplying or storing water, or a mutual water company.

§1745.02. Reduction or elimination of use of water

A water supplier may, for a consideration to be specified in the contract, contract with persons entitled to service within the supplier's service area to reduce or eliminate for a specified period of time their use of water supplied by the water supplier.

§1745.03. Nature of services

Services performed under a contract entered into pursuant to this chapter or Chapter 3.6 (commencing with Section 380) of Division 1 which is offered generally to all persons entitled to water service from the water supplier are public services generally provided by the public agency for purposes of paragraph (3) of subdivision (a) of Section 1091.5 of the Government Code.

§1745.04. Transfer of water

A water supplier may contract with a state drought water bank or with any other state or local water supplier or user inside or outside the service area of the water supplier to transfer, or store as part of a transfer, water if the water supplier has allocated to the water users within its service area the water available for the water year, and no other user will receive less than the amount provided by that allocation or be otherwise unreasonably adversely affected without that user's consent.

§1745.05. Water eligible for transfer

- (a) Water stored by the water supplier and water made available from either of the following sources may be transferred by the water supplier pursuant to Section 1745.04: (1) Conservation or alternate water supply measures taken by individual water users or by the water supplier. (2) Water developed pursuant to a contract by a water user to reduce water use below the user's allocation or to eliminate the use of water during the water year, including a contract to grow crops without the use of water from the water supplier, to fallow land, or to undertake other action to reduce or eliminate water use.
- (b) The amount of water made available by land fallowing may not exceed 20 percent of the water that would have been applied or stored by the water supplier in the absence of any contract entered into pursuant to this article in any given hydrological year, unless the agency approves, following reasonable notice and a public hearing, a larger percentage.

§1745.06. *Transfer of water not surplus to service area needs*

A water supplier may transfer water pursuant to Section 1745.04 whether or not the water proposed to be transferred is surplus to the needs within the service area of the water supplier.

§1745.07. *Effect of transfer on water rights*

No transfer of water pursuant to this article or any other provision of law shall cause a forfeiture, diminution, or impairment of any water rights. A transfer that is approved pursuant to this article or any other provision of law is deemed to be a beneficial use by the transferor under this code.

§1745.08. *Construction of article; additional authority of public agencies*

This article is in addition to, and not a limitation on, the authority of any public agency under any other provision of law, including, but not limited to, Article 1 (commencing with Section 1725).

§1745.09. *Construction of article*

Nothing in this article does any of the following:

- (a) Creates in any person a right to require any water supplier to enter into a contract providing for the reduction or elimination of water use or for the transfer of water.
- (b) Creates in any person reducing water use any interest in the water rights of the water supplier.
- (c) Limits or otherwise affects the jurisdiction of any regulatory public agency over water transfers.
- (d) Makes any change in existing water rights.

§1745.10. *Transferred surface water*

A water user that transfers surface water pursuant to this article may not replace that water with groundwater unless the groundwater use is either of the following:

- (a) Consistent with a groundwater management plan adopted pursuant to state law for the affected area.
- (b) Approved by the water supplier from whose service area the water is to be transferred and that water supplier, if a groundwater management plan has not been adopted, determines that the transfer will not create, or contribute to, conditions of long-term overdraft in the affected groundwater basin.

§1745.11. *Previously recharged groundwater from overdrafted groundwater basin*

Nothing in this article prohibits the transfer of previously recharged groundwater from an overdrafted groundwater basin or the replacement of transferred surface water with

groundwater previously recharged into an overdrafted groundwater basin, if the recharge was part of a groundwater banking operation carried out by direct recharge, by delivery of surface water in lieu of groundwater pumping, or by other means, for storage and extraction.

§1810. Unused capacity

Notwithstanding any other provision of law, neither the state, nor any regional or local public agency may deny a bona fide transferor of water the use of a water conveyance facility which has unused capacity, for the period of time for which that capacity is available, if fair compensation is paid for that use, subject to the following:

(a) Any person or public agency that has a long-term water service contract with or the right to receive water from the owner of the conveyance facility shall have the right to use any unused capacity prior to any bona fide transferor.

(b) The commingling of transferred water does not result in a diminution of the beneficial uses or quality of the water in the facility, except that the transferor may, at the transferor's own expense, provide for treatment to prevent the diminution, and the transferred water is of substantially the same quality as the water in the facility.

(c) Any person or public agency that has a water service contract with or the right to receive water from the owner of the conveyance facility who has an emergency need may utilize the unused capacity that was made available pursuant to this section for the duration of the emergency.

(d) This use of a water conveyance facility 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.

§1811. Definitions

As used in this article, the following terms shall have the following meanings:

(a) "Bona fide transferor" means a person or public agency as defined in Section 20009 of the Government Code with a contract for sale of water which may be conditioned upon the acquisition of conveyance facility capacity to convey the water that is the subject of the contract.

(b) "Emergency" means a sudden occurrence such as a storm, flood, fire, or an unexpected equipment outage impairing the ability of a person or public agency to make water deliveries.

(c) "Fair compensation" means the reasonable charges incurred by the owner of the conveyance system, including capital, operation, maintenance, and replacement costs, increased costs from any necessitated purchase of supplemental power, and including reasonable credit for any offsetting benefits for the use of the conveyance system.

(d) "Replacement costs" mean the reasonable portion of costs associated with material acquisition for the correction of unrepairable wear or other deterioration of conveyance

facility parts which have an anticipated life which is less than the conveyance facility repayment period and which costs are attributable to the proposed use.

(e) "Unused capacity" means space that is available within the operational limits of the conveyance system and which the owner is not using during the period for which the transfer is proposed and which space is sufficient to convey the quantity of water proposed to be transferred.

§1812. Determination of amount and availability of unused capacity

The state, regional, or local public agency owning the water conveyance facility shall in a timely manner determine the following:

- (a) The amount and availability of unused capacity.
- (b) The terms and conditions, including operation and maintenance requirements and scheduling, quality requirements, term or use, priorities, and fair compensation.

§1812.5. Transfer of conserved water using war conveyance facilities of Metropolitan Water District of Southern California

(a) The Legislature finds and declares all of the following:

(1) This section is an extraordinary measure being taken only because the proposed transfer of conserved water from the Imperial Irrigation District to the San Diego County Water Authority is a matter of statewide interest in that it addresses a significant need for water in the southern state through the conservation of water now being consumed there. The Legislature further finds and declares that this section is not to be regarded as setting a precedent for any other legislative action.

(2) California's use of Colorado River water is limited to its basic annual apportionment of 4.4 million acre-feet, plus one-half of any excess or surplus water from the Colorado River. However, California continues to use up to 5.3 million acre-feet by relying on surpluses and apportioned, but unused water within the Colorado River Basin, which is not a reliable water supply. The Secretary of the Interior has strongly urged California to develop a plan to enable it to live within its basic apportionment of 4.4 million acre-feet from the Colorado River.

(3) It is of vital state interest that every effort be made to ensure that the Colorado River Aqueduct continues to operate at its full capacity at fair and reasonable terms in order to minimize statewide disruptions from diminishing Colorado River supplies.

(4) Negotiations assisted by the director are underway in 1997 between the Metropolitan Water District of Southern California and the San Diego County Water Authority for the development of a long-term wheeling agreement whereby the San Diego County Water Authority would use the Colorado River Aqueduct to wheel conserved water from the Imperial Irrigation District.

(b) The director shall assist the Colorado River Board and the six California water agencies that derive water from the Colorado River in developing a plan to ensure that

California can live within its entitlement of 4.4 million acre-feet of water annually and to ensure that the needs of southern California for Colorado River water are met.

(c) (1) Notwithstanding any other provision of law, with regard to the proposed transfer of conserved water from the Imperial Irrigation District to the San Diego County Water Authority, using the Metropolitan Water District of Southern California's water conveyance facilities, including the Colorado River Aqueduct, if the San Diego County Water Authority and the Metropolitan Water District of Southern California have not reached an agreement in principle on the terms and conditions of the transfer of conserved water using the Metropolitan Water District of Southern California's water conveyance facilities on or before August 15, 1997, the director shall issue a formal recommendation within 30 days from that date, with regard to the appropriate terms and conditions of the transfer.

(2) The director, in issuing a recommendation regarding appropriate terms and conditions of the transfer, shall make those determinations prescribed by Section 1812.

(3) If the director's recommendations prescribed by Section 1812 are unacceptable to either the San Diego County Water Authority or the Metropolitan Water District of Southern California, that party may request a formal mediation process. If both parties agree to participate in the formal mediation process, the parties shall commence mediation within one month after the mediation request is made. If the parties cannot agree on a mediator, the director shall appoint a mediator or the director may serve as mediator. The San Diego County Water Authority and the Metropolitan Water District of Southern California shall reimburse the state for any General Fund money used in mediation entered into pursuant to this paragraph.

(d) No action taken pursuant to this section shall injure any legal user of water, and there shall be no shifting of costs for actions taken pursuant to this section to water users in any county in the State of California.

(e) This section shall remain in effect only until January 1, 1999, and as of that date is repealed, unless a later enacted statute, that is enacted before January 1, 1999, deletes or extends that date.

§1813. Findings by public agency

In making the determinations required by this article, the respective public agency shall act in a reasonable manner consistent with the requirements of law to facilitate the voluntary sale, lease, or exchange of water and shall support its determinations by written findings. In any judicial action challenging any determination made under this article the court shall consider all relevant evidence, and the court shall give due consideration to the purposes and policies of this article. In any such case the court shall sustain the determination of the public agency if it finds that the determination is supported by substantial evidence.

§1814. Application of article

This article shall apply to only 70 percent of the unused capacity.





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