
AGRICULTURAL WATER CAUCUS CALFED WHITE PAPER

INTRODUCTION

A solution to the complex problems of the Sacramento-San Joaquin Delta is critical to all California. Much of the state's most productive farmland is irrigated with water flowing to or through the Delta. More than two-thirds of California's urban population depends at least in part on water exported from the Delta. Numerous plant and animal species depend upon the estuary for habitat. In large part, California's economic and ecological health depends upon the management of the Delta and its watersheds to meet the needs outlined above. Background information regarding California agriculture, as well as the position of the Agricultural Water Caucus on specific CALFED proposals, is outlined below.

BACKGROUND

California's emergence as the national leader in agricultural production coincided with the large-scale development of water storage and delivery systems during the first half of the 20th century. The state's Mediterranean climate, fertile soils and agricultural ingenuity allow more than 300 crops to be grown commercially, provided adequate, affordable and reliable water supplies are available. California has led the nation in farm revenues in every year since 1946. Our investment in water development has contributed substantially to this dominance. California agriculture is a national and international resource that cannot be duplicated anywhere else in the world.

Economic Contributions: In 1996, the last year for which data is available, on-farm revenue in California totaled \$24.8 billion. California agriculture and related activities (packaging, transportation, marketing, etc.) combined to produce over \$70 billion in economic activity in 1996. Statewide, agriculture provides roughly 1 in 10 jobs. In the 18 counties that comprise the Central Valley, agriculture accounts for 28 percent of all employment. California is the nation's top dairy state and produces 50 percent of the nation's fruits, nuts and vegetables. In 1995, California exported over \$12 billion in agricultural products, providing one of the few bright spots in the United States' balance of trade.

These economic contributions are made by 82,000 California farms that average 366 acres in size (compared to the national average farm size of 491 acres). Approximately 75 percent of California farms are family operations. (Source: California Department of Food and Agriculture).

Environmental Contributions: Agriculture is one of the premier environmental resources in California, providing numerous environmental and open space benefits while making significant economic contributions. Agricultural production and wildlife habitat often coexist on agricultural land. California agriculture provides a vast habitat resource, both intentionally developed and as an incidental benefit of production activities. Many species depend heavily on cultivated lands as well as rangelands for their continuing existence.

Approximately 30 million acres of privately owned land in California are devoted to agricultural production. Of this farmland, roughly 9.5 million acres are irrigated (4.5 million acres of which are irrigated with Delta water). The economic viability of agriculture allows farmers and ranchers to keep these lands in private ownership and to provide the multiple benefits of food and fiber production, open space and wildlife habitat. Because these lands are in private ownership, the environmental values they provide come at little or no cost to the taxpayer. Specific environmental benefits include:

- Innovative water management techniques allow farmers and ranchers to provide waterfowl and wetlands habitats during critical periods. In addition, agricultural lands provide valuable food resources for a variety of wildlife species. Groundwater recharge basins also provide numerous habitat benefits.
- The photosynthetic process in agricultural crops cleanses the atmosphere. For example, California rice fields produce enough oxygen each year to sustain the entire population of Los Angeles. An acre of rice biologically scrubs about 23,000 pounds of carbon dioxide from the atmosphere per year.

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- Water used in crop production also plays an important role in recharging and managing California's groundwater basins.
- Flood management easements are compatible with certain types of farming operations (especially row and field crops). These lands provide jobs and remain on county tax rolls while providing flood protection and environmental benefits, such as soil conservation and decreased stream bank erosion.

Locally driven voluntary efforts to provide habitat and instream flows reflect the ongoing significant contributions of farmers and ranchers to many of the restoration proposals described by CALFED. Moreover, the reallocation of water by the Central Valley Project Improvement Act, the State Water Resources Control Board's D-1485, the application of the state and federal Endangered Species Acts, and other programs have involuntarily impacted agricultural production in the Central Valley. With respect to urban development in the Central Valley, many agricultural organizations; local, state and federal agencies; and conservation groups are united in efforts to conserve important California farmland.

In 1994, farmers and water users throughout the Central Valley began to initiate unprecedented efforts to screen diversions, refurbish fish ladders, construct siphons, remove dams and implement other habitat improvement projects. Over the past several years, hundreds of millions of dollars have been spent on these projects utilizing funding from the CVPIA Restoration Fund; the Safe, Clean, Reliable Water Supply Act of 1994 (Proposition 204); matching federal funds; and Bay-Delta Accord Category III and local sources. These continued efforts have completed screening projects and other improvements designed to improve fish habitat.

People in agriculture, like most people in California, are concerned about the environment, the economy, and the quality of life for current and future generations. These concerns require all of us to find the proper balance between often competing uses of the same resources. Some insist that this question of balance can be addressed by simply reallocating land and water resources from agriculture to other uses. However, the majority of the state's land and water resources are already publicly controlled.

California's average annual runoff (potentially available surface water supply) is 71 million acre-feet. According to the California State Department of Water Resources (DWR), the quantity of water used by agriculture is less than the quantity used for dedicated environmental purposes. In fact, more than half of the average annual runoff is used for environmental purposes. Agriculture uses approximately 34 million acre-feet of total water in average year, of which 10 million is from groundwater sources and 24 million is from surface sources. This compares to 36 million-acre feet of water used for dedicated environmental purposes (i.e., those flows required by legislation, regulation and other mandated uses, and for managed wildlife areas).

The allocation of land is similar. Data from DWR indicates that irrigated agriculture in California uses 9.5 million acres. Total agricultural land use (excluding forestry) is 30 million acres. California's total land area is 100 million acres, of which approximately 51 million acres are owned by the state and federal governments (according to the California Department of Fish and Game).

The conversion of more land or water away from agriculture simply is not in California's best interest. Such a reallocation would negatively impact the California economy as the availability and quality of food decreases, agricultural service industries are affected and jobs are lost.

Water Management and Conservation Planning: California farmers and agricultural water districts are recognized as world leaders in water conservation and irrigation technology. Farmers and districts have made significant investments to improve water conservation and irrigation technology. Because water costs are a significant business consideration, most advances in water conservation and irrigation technology have been economically driven. At the on-farm level, innovative practices adopted by growers include: 1) planting improved crop varieties; 2) laser-guided land leveling technology; 3) designing irrigation techniques and delivery systems to ensure optimum efficiency for specific crops, soils and applications; and 4) adopting and improving water recycling programs.

Overall, plants must consume a fixed amount of water to produce a crop. Restrictions of water applications below plant requirements reduce crop yields.

AGRICULTURE'S ROLE IN CALIFORNIA'S FUTURE

While California agriculture is not constrained by access to markets, the industry is and will be constrained by the **accessibility, affordability and reliability** of land and water resources. California farmers and ranchers now produce food and fiber for most Californians, as well as 25 percent of the food supply for the entire U.S. population and much of the world. Today, this important resource is threatened by these constraints. Agricultural jobs throughout the state also are threatened, as is the economic sustainability of California's rural communities.

As California's population continues to grow, the urbanization of farmland will affect agricultural production. **In less than 30 years**, there will be 20 million more Californians to feed, 90 million more U.S. citizens to feed, and two billion more people competing for food and fiber on the world market. From a national policy perspective, the nation should clearly maintain its agricultural independence. To continue supplying food for an ever-increasing population, California's agricultural sector must have an adequate and reliable supply of water, and every effort must be made to minimize the loss of productive agricultural lands.

Water demand in California will not decrease over the 30-year CALFED planning and implementation period. In fact, as 20 million more people inhabit the state by 2030, water demand will increase commensurately. It is often cited that one acre-foot of water (326,000 gallons) is the average annual water consumption for a family of five living in a suburban house. However, the demand embodied in the food and fiber consumed each year by this family, or the 20 million additional family members anticipated by 2030 is not considered when forecasting increased water demand. It is estimated that to feed a family of five for a year requires about four acre-feet of water to grow the necessary crops and produce the necessary meat and poultry (0.8 ac-ft/person/yr.). It should be noted that only about one percent of the water needed to grow crops or produce meat actually ends up in the food we eat. Thus, the equivalent of an additional 16 million acre-feet of water will be needed to feed 20 million more people in California by 2030.

To meet this demand, new sources of water (and land) must be identified and developed. These new sources include recycling, reuse, reclamation, groundwater storage and surface water storage. All strategies will be needed. According to DWR Bulletin 160-98, the greatest potential lies in urban reclamation and new surface storage.

Because agriculture provides the vast majority of privately owned open space in California, such population growth could cause severe impacts on our environment. New integrated policies designed to focus growth around current urban areas, to conserve important farmland, and to provide adequate, affordable and reliable water supplies will be critical to the state's future.

THE AG WATER CAUCUS POSITION ON THE CALFED BAY-DELTA PROGRAM

The CALFED Bay-Delta Program must recognize existing agricultural surface and ground water rights and area of origin rights, as well as existing contractual obligations of the state and federal governments. New water demands (for urban growth and environmental uses) must look to newly developed water supplies. The Ag Water Caucus strongly objects to any effort to require agricultural water users to pay any additional costs to replace water taken for environmental uses through regulatory actions, or for replacing water dedicated to environmental protection by legislative actions and the Bay-Delta Accord.

A primary benefit of the CALFED Program for agriculture is development of an adequate, affordable and reliable water supply. Water supply reliability must be defined as the timely delivery of water adequate to sustain crops. The Ag Water Caucus does not accept the position of certain stakeholders that "less water delivered more often" is consistent with the CALFED solution principles.

The Ag Water Caucus strongly supports near-term incremental implementation of the CALFED program, with early investments in system capacity where there is a potential for significant benefit to both water users and the environment.

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1. **ISSUE – WATER SUPPLY AND STORAGE:** CALFED’s alternatives include surface and groundwater storage options ranging from no new storage up to a total of 6.45 million acre feet of additional storage. Specifically, CALFED has proposed the following storage options:

Region/Storage Type	Proposed Storage Capacity
Sacramento Valley	
Surface storage	0 to 3,000,000 acre-feet
Groundwater storage	0 to 250,000 acre-feet
San Joaquin Valley	
Surface storage	0 to 500,000 acre-feet
Groundwater storage	0 to 500,000 acre-feet
Off-aqueduct Storage	
Surface storage	0 to 2,000,000 acre-feet
In-Delta Storage	
Surface storage	0 to 200,000 acre-feet

POSITION: The Ag Water Caucus strongly asserts that additional water storage capacity must be part of CALFED’s common programs rather than variable options.

RECOMMENDED CALFED ACTION: Additional storage should be moved from variable options to the suite of CALFED common programs. CALFED’s storage proposals should directly address the effect of such storage options on water yield, power consumption versus power production, flood control benefits, and opportunity for multiple benefits in the use of increased yield. Most existing reservoirs were justified in part for flood control and financed in part by increased power production. CALFED has focused on off-stream reservoirs that would be filled only after peak flood flows (in order to accommodate environmental flows), and which even then could fill only at a limited rate. These reservoirs would also typically be large power consumers rather than power producers, increasing the unit cost of the yield. While off-stream reservoirs may have some benefits, new reservoir planning should not focus on the particular type of reservoir to be built. Any new reservoirs must provide multiple benefits and must be cost effective.

The CALFED solution must provide for substantial new water yield to meet the water quality and supply needs of agricultural, urban and environmental water uses upstream of the Delta, in the Delta and in Delta export regions. Water supplies generated by new storage should provide multiple benefits, meeting those needs identified in the CALFED Ecosystem Restoration Program Plan, and for flood control, power generation and water supply in the region where the storage site is located, as well as in other upstream areas, the Delta, and export areas. The only effective way to protect agricultural and area of origin water rights is to require new water demands to be met with new supplies. New water yield, rather than new storage capacity, must be the criterion against which storage options are evaluated. Increased water yield should be developed in the regions in which it is needed (i.e., north and south of the Delta, as well as adjacent to the Delta).

New Surface Storage in the Sacramento Valley: We support the construction of new surface storage capacity in the Sacramento Valley. New storage should provide benefits to water users and the environment comparable to or better than the proposed storage project at Sites Reservoir. Other sites, including an expanded Shasta Reservoir, must be equally evaluated.

New Surface Storage Adjacent to the Delta: The ability to store additional water adjacent to the Delta during high flow periods for later use also is critical to meeting water supply, water quality and environmental objectives. The Ag Water Caucus supports the construction of new surface storage adjacent to the Delta. New

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storage should provide benefits for the environment and water users comparable to or better than enlarging the Contra Costa Water District's Los Vaqueros Reservoir project.

New Surface Storage South of the Delta: We support the construction of new surface storage south of the Delta. New storage should provide multiple benefits for flood control, fisheries, power generation, and water quality in the south Delta. Both on-stream and off-stream sites, including on San Joaquin River and Tulare Lake Basin tributaries, as well as on the west side of the San Joaquin Valley, should be evaluated.

Groundwater Storage and Conjunctive Use: We believe that CALFED's groundwater storage and conjunctive use options alone will not resolve California's need for increased water storage. The Ag Water Caucus strongly believes that any groundwater storage or conjunctive use strategy must be locally initiated and supported by the local groundwater users and communities involved. Although there is a tendency to think of groundwater in terms of a homogeneous underground reservoir that fluctuates gradually with wet and dry cycles, the reality is more complex. While many groundwater basins are interconnected, aquifer structure is far from uniform and horizontal movement of groundwater is slow. Even within a small sub-area, groundwater resources can range from abundance to scarcity within a few miles. Groundwater management programs, therefore, must be developed on the local level and supported by local affected groundwater users and communities. A "one-size-fits-all" approach will not work in all basins or sub-basins. These locally supported programs must assure the agricultural groundwater users in basins or sub-basins not currently managed by groundwater storage and conjunctive use programs that groundwater levels will be protected to prevent overdraft and the subsequent increases to water costs.

Groundwater users will not "get better together" if CALFED does not acknowledge the importance of maintaining groundwater levels for agricultural uses as well as the surface water rights and contracts of agencies and individuals. In all cases, conjunctive use programs must recognize the paramount groundwater rights of farmers, ranchers, local water agencies and other landowners. Any effort to manage groundwater conjunctively with surface water supplies must recognize impacts to third parties and mitigate for these. Finally, CALFED must recognize the geologic and hydrologic limitations to groundwater storage.

Farmers and agricultural water entities have been managing groundwater and surface water conjunctively for decades, which must be recognized by CALFED. We support CALFED's proposal to assist local entities with local conjunctive management programs. The Ag Water Caucus encourages CALFED to support voluntary agricultural practices that enhance groundwater recharge where capacity exists.

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2. ISSUE - AGRICULTURAL LAND/WATER CONVERSION AND RETIREMENT: CALFED's common programs and alternatives include proposals to fallow and/or convert agricultural land and water to other uses. Some stakeholders, as well as some CALFED agencies, continue to support large-scale land retirement in the San Joaquin Valley as a method for reducing export water demands.

POSITION: The Ag Water Caucus opposes the widespread conversion of agricultural land and its associated water resources to other uses. While some locally driven, voluntary programs that address specific issues may have merit, widespread land retirement and/or conversion is unacceptable. Land and water conversion in most cases violates CALFED's solution principles. Land conversion does not allow agriculture to move forward with other stakeholders. Specifically, land retirement does not **reduce conflicts** because demands on California's water delivery and storage system will continue to exceed capacity. Conversion does not meet the test of **equitability** when the devastation of Central Valley agricultural production and rural economic activity are compared to uncertain and unquantified environmental benefits. Land and water conversion is not **affordable** when viewed in the context of impacts on economic activity, employment, local infrastructure and our balance of payments. Finally, conversion clearly violates the principle of **no significant redirected impacts**.

Agriculture is a significant resource that provides multiple benefits to all Californians. To the extent that agricultural land and water are taken out of production for any reason, CALFED must mitigate or avoid any impacts, as required by the California Environmental Quality Act (CEQA).

The Ag Water Caucus' positions on specific land and water conversion proposals in the CALFED draft programmatic environmental impact statement/report (PEIS/R) are outlined below:

Ecosystem Restoration Program: CALFED's Ecosystem Restoration Program Plan includes the following conversion of agricultural land and water to habitat:

Program/Region	Acreage	Water (acre-feet)
Ecosystem Restoration	127,300 to 152,000 acres	Up to 500,000 AF
Sacramento Valley	20,000 to 26,000 acres	
In-Delta	98,000 to 115,000 acres	
San Joaquin Valley	9,300 to 11,000 acres	

POSITION: The Ag Water Caucus opposes the conversion of the above agricultural land and water to ecosystem restoration. Alternative approaches that do not rely on agricultural land conversion should be developed. The Ag Water Caucus is concerned that CALFED's proposal to acquire Delta agricultural lands and riparian water rights for ecosystem restoration could result in the converted lands diverting more water for habitat use than is currently being diverted for agricultural use, resulting in a net reduction of the overall agricultural supply.

RECOMMENDED CALFED ACTION: CALFED must evaluate ecosystem restoration alternatives that maintain land in private ownership and that recognize locally designed programs. To date, CALFED has largely ignored the potential for voluntary partnership actions on the part of farmers and ranchers to manage private lands in a manner beneficial to wildlife species while maintaining agricultural economic viability. Recent amendments to the California Endangered Species Act authorize voluntary local programs under which farmers and ranchers may incorporate habitat and species friendly actions into their operations. In return, these producers are protected from the threat of liability for accidental or incidental "take" of state-listed species. Similar authorization and protection incorporated into federal law could open the door to a substantial increase in habitat on agricultural lands statewide, making it unnecessary to convert agricultural acreage for ecosystem restoration.

CALFED also must ensure that neighboring landowners will not be negatively affected by habitat restoration activities. Project sponsors must initiate National Environmental Policy Act (NEPA) and CEQA processes as soon as possible, with involvement from all affected landowners and related stakeholders. In cases where CEQA

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compliance is not required, a representative public process should be developed to determine how specific actions are prioritized and selected – and to work with local interests to effectively implement these programs. Finally, the Ag Water Caucus insists that CALFED evaluate and disclose the cumulative impacts of this and other actions (including the Central Valley Project Improvement Act, the state and federal Endangered Species Acts, and others).

The implementation of projects to improve and expand existing habitat must not subject existing landowners and stakeholders to associated environmental restrictions.

- A comprehensive regional flood control assessment must accompany each ecosystem restoration project involving riparian land acquisition.
- Restoration projects must not limit local agencies' abilities to conduct activities that are necessary to properly operate and maintain existing flood control facilities and protect public safety.
- Contingency funding should be available for each project to compensate for reasonable foreseen and unforeseen circumstances resulting from project implementation.
- Landowners who currently hold riparian water rights must not have their historic rights severed or reduced by habitat restoration efforts.

CALFED should restructure the Ecosystem Restoration Program Plan to avoid, reduce or mitigate potential impacts to agricultural water and land resources. The program should develop an approach that emphasizes collaborative local projects with local landowners. Its conceptual approach of focusing on ecological processes supported by flow augmentation and habitat development must be scientifically verified before broad implementation occurs. Other stressors, such as food web alterations resulting from introduced species, predation, commercial and sport harvest, and unknown toxicity, must be evaluated and addressed.

Water Quality Program: CALFED's Water Quality Common Program includes proposals to retire the following amount of land:

Program/Region	Acreage	Water (acre-feet)
Water Quality Sacramento Valley In-Delta San Joaquin Valley	35,000 to 45,000 acres	

POSITION: The Ag Water Caucus believes that local efforts to address water quality should take precedence over land retirement to achieve water quality objectives. Even the San Joaquin Valley Drainage Report (the 1990 "Rainbow Report") supports local programs addressing water quality and indicates that land retirement is the alternative of last resort. Land retirement should not be viewed as a substitute for developing a drainage system to maintain valley-wide salt balances.

RECOMMENDED CALFED ACTION: CALFED should focus on water quality program improvements that are locally supported and administered as an alternative to land retirement. CALFED's efforts should support programs developed by local water users and contractors to address water quality issues.

Long-Term Levee Protection Program: CALFED proposes to acquire the following acreage as part of its Levee Protection Common Program:

Program/Region	Acreage	Water (acre-feet)
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Long-Term Levee Protection	34,000 to 35,000 acres	
Sacramento Valley		
In-Delta	34,000 to 35,000 acres	
San Joaquin Valley		

POSITION: Setback levees and flood control easements are not substitutes for ongoing channel maintenance. Neighboring landowners should not be impacted.

RECOMMENDED CALFED ACTION: CALFED should evaluate flood control and flood protection measures that maintain private ownership and agricultural operations.

Storage and Conveyance Options: Storage and conveyance facilities are projected to remove the following amount of farmland from production and private ownership:

Program/Region	Acreage	Water (acre-feet)
Storage and Conveyance	0 to 82,100 acres	
Sacramento Valley	0 to 32,000 acres	
In-Delta	0 to 33,500 acres	
San Joaquin Valley	0 to 16,600 acres	

POSITION: The Ag Water Caucus recognizes that some agricultural lands will be converted because of facilities construction.

RECOMMENDED CALFED ACTION: None.

Land Retirement for Demand Reduction: While this is not an official CALFED proposal, some stakeholders and CALFED agencies continue to press for large-scale land retirement to reduce export water demands.

Program/Region	Acreage	Water (acre-feet)
Demand Reduction	400,000 to 600,000 acres	
Sacramento Valley		
In-Delta		
San Joaquin Valley	400,00 to 600,000 acres	1.4 MAF

POSITION: Land retirement for demand reduction was eliminated from further discussion at the end of Phase 1, and should remain "off the table." The increasing demand for food and fiber in California and the world dictates that we must maximize the land area available for crop production in this state. Large-scale farmland retirement would devastate California's economy and force the state and nation to rely more heavily on imported food supplies. California farmers produce the safest, highest quality food and fiber in the world, yet this productivity would be jeopardized by large-scale land retirement.

Total Agricultural Land Fallowing/Conversion

Program/Region	Acreage	Water (acre-feet)
TOTALS		
Common Programs	196,300 to 314,100 acres	
Demand Reduction	400,000 to 600,000 acres	
Grand Total	596,300 to 914,100 acres	>1.9 MAF

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RECOMMENDED CALFED ACTION: CALFED must eliminate the concept of land retirement from further discussion or analysis. Furthermore, CALFED must analyze the potential effects of its common programs on agricultural resources via the NEPA and CEQA processes. California's agricultural resources, including land and water, are of global significance and thus a significant part of the existing environment as defined by NEPA and CEQA. Accordingly, impacts of redirecting agricultural land and water to other uses must be critically analyzed in the PEIS/R. Both NEPA and CEQA require CALFED to seriously consider alternatives that will not impact agricultural resources, such as using available non-agricultural and/or public lands to satisfy the needs of the Ecosystem Restoration Program Plan. Measures to fully mitigate any impacts on agricultural resources must be developed to internalize the true costs of a project. Unless full mitigation is included in the PEIS/R, it will not fully disclose the costs of the CALFED Program to the public and decision-makers. An informed decision, therefore, will be impossible without such disclosure.

3. ISSUE – CALFED WATER CONVEYANCE ALTERNATIVES: CALFED's Alternative 1 would make minor modifications to Delta channels to improve conveyance. Alternative 2 would make substantial modifications to Delta channels. Alternative 3 combines modified Delta channels with an isolated facility that would be capable of moving water through the Delta as well as around the Delta under certain conditions.

POSITION: The Ag Water Caucus strongly asserts that improved conveyance is essential to meet the CALFED water supply reliability, water quality, flood control and fishery objectives. The Ag Water Caucus maintains that the minor improvements identified in Alternative 1 are inadequate to meet these objectives. Further refinement and optimization of Alternatives 2 and 3 are necessary to determine if each can accomplish an acceptable level of improvement. The Ag Water Caucus also believes that such improvements are only effective if linked with additional storage.

Alternative 2 appears to provide conveyance improvements at a cost less than Alternative 3. However, as currently designed, Alternative 2 is significantly less adequate than Alternative 3 with respect to fishery protection, export water quality and earthquake protection. Alternative 3, as presently designed, is less adequate in protecting in-Delta water quality, presents additional challenges in flood protection, creates problems of seepage on adjacent lands, involves land severance problems, and has higher costs. It also does not include the inherent assurances provided by a Delta "common pool."

A final decision regarding conveyance systems cannot be made until the issues outlined above are addressed and until operating criteria, contractual and institutional assurances, and a mitigation package for adverse impacts including impacts on fishery and water quality (both in-Delta and for export uses) are developed.

RECOMMENDED CALFED ACTION: CALFED must perform additional analyses to address the relative weaknesses associated with Alternatives 2 and 3, and try to optimize each of these alternatives to determine if each can accomplish acceptable levels of improvement in all solution areas. The analysis of Alternative 2 must improve its design related to fisheries, export water quality and seismic risk. The analysis of Alternative 3 must protect in-Delta water quality, flood control benefits, seepage and other impacts.

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4. ISSUE – CALFED COMMON PROGRAMS: CALFED has developed six programs to be implemented regardless of the water conveyance and storage alternatives selected. These programs include the following:

- Ecosystem Restoration,
- Water Quality,
- Water Use Efficiency,
- Levee System Integrity,
- Water Transfers, and
- Coordinated Resource Management.

As discussed throughout this white paper, many of these common programs propose to convert agricultural land and/or water to other uses.

POSITION: The Ag Water Caucus believes the common programs should be revised to maintain land in private ownership and agricultural production and to provide incentives for landowners to participate in program objectives. Furthermore, we believe that increased surface storage must be added to the list of common programs. Storage and conveyance enhancements must be implemented in concert with the common programs to ensure their success. For example, increased storage capacity is needed to successfully operate the Ecosystem Restoration Program.

RECOMMENDED CALFED ACTION: CALFED should add storage as a common program rather than a variable component. Also, CALFED should revise its common program proposals to reduce, avoid, or mitigate impacts on agricultural resources. This must be incorporated into the PEIS/R. Programmatically, CALFED should develop opportunities for farmers, ranchers, and other landowners to achieve CALFED objectives while maintaining the economic productivity and private ownership of agricultural land and water. CALFED's common programs must be compatible with flood management objectives.

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5. ISSUE – WATER USE EFFICIENCY: CALFED has established a target of 5.5 to 6 million acres of irrigated farmland throughout the CALFED solution area that must be covered by a water conservation management plan endorsed by the Agricultural Water Management Council. Furthermore, CALFED has stated that lack of progress on voluntary efforts to achieve the target acreage could result in regulation or legislation mandating agricultural water conservation measures. Finally, CALFED has indicated that water users will not receive benefits, including new water, from CALFED programs or facilities unless they are participating in the water use efficiency program, including some form of mandatory water measurement and volumetric pricing (These EWMPs are only implemented under the AB 3616 Memorandum of Understanding (MOU) after a detailed net benefit analysis indicates the practices are appropriate for a signatory).

In addition to the efforts of the Agricultural Water Management Council (which is moving forward independent of CALFED's water use efficiency efforts), many agricultural water suppliers and users are engaged in ongoing efforts to conserve water. While CALFED does address urban water use efficiency, the draft PEIS/R fails to hold in-stream and off-stream environmental uses to similar standards of accountability.

POSITION: The Ag Water Caucus supports continued voluntary implementation of efficient water management practices endorsed by the AB 3616 Agricultural Water Management Council. We oppose any mandatory requirements for agricultural water use efficiency. Increased application efficiency does not typically increase water supplies for other beneficial uses. The Caucus supports water conservation plans certified by the Council or approved by the Bureau of Reclamation. Further, until the AB 3616 criteria and the U.S. Bureau of Reclamation-approved water conservation criteria are merged, CALFED should explicitly accept USBR-approved water conservation plans as equivalent to a plan endorsed by the AB 3616 Council. The Caucus also is opposed to CALFED's inclusion of mandatory water measurement and pricing criteria in its water use efficiency program. These practices are not consistent with the current AB 3616 MOU. If CALFED proposes to accept the AB 3616 process, then it is inappropriate for CALFED to propose unilateral changes to any aspect of the MOU. This "one size fits all" approach fails to account for the tremendous diversity in agriculture throughout the state.

The Ag Water Caucus believes that the CALFED target of 5.5 to 6 million acres of irrigated farmland to be covered by an endorsed water management plan by January 1999 is both an unrealistically short timeframe, and an unsupported target. The AB 3616 MOU allows two years from the date of admittance into the Agricultural Water Management Council for a water supplier to prepare a water management plan and submit it to the Council for endorsement. Therefore, the CALFED timeframe contradicts the AB 3616 MOU. Again, if CALFED intends to embrace the AB 3616 MOU as satisfying its water management requirements, then CALFED should not unilaterally alter conditions of the MOU.

Furthermore, while CALFED has identified 8-9 million acres of irrigated acreage within its solution area, a substantial amount of this acreage is not within any organized water district. Consequently, CALFED's acreage targets are unrealistically high. Over 4 million acres are already signatory to the AB 3616 MOU or subject to U.S. Bureau of Reclamation water conservation criteria, or both. Both the AB 3616 MOU process and the U.S. Bureau of Reclamation water conservation criteria are intended for implementation by water suppliers. Rather than focus on a specific acreage target, CALFED should focus on providing sufficient support for water management programs to elicit additional implementation.

In the future, technological improvements in irrigation systems will likely increase the overall efficiency of agricultural water use. However, such technology improvements will not reduce demands for Delta water supplies sufficiently to impact the need for expanded Delta conveyance facilities or the operation of project storage facilities.

Specific water application efficiency targets must not be linked to access to CALFED benefits (i.e., new water or use of CALFED facilities). The Ag Water Caucus believes that CALFED's stated goal of achieving 85 percent application efficiency throughout California agriculture is unsupported scientifically and unachievable practically. We also believe that "new" water created by CALFED is water over and above quantities taken from water users for environmental uses through regulation, and above quantities dedicated to ecosystem protection by

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legislative actions and the Bay-Delta Accord. Finally, the Caucus believes that locally driven approaches to water conservation are necessary to avoid negative impacts to land, groundwater storage and water quality.

RECOMMENDED CALFED ACTION: CALFED should modify its Water Use Efficiency Technical Appendix to accurately reflect that California agriculture is already highly efficient in its use of water, and that more efficient water application does not necessarily increase water supply. To maximize profits, agricultural producers must hold down all costs, including water costs, which provides additional incentive to use water as efficiently as possible. The CALFED preferred alternative must focus on water use management through region-specific plans that take into consideration such factors as surface and groundwater quality and quantity, soil quality and type, cultural practices, economic and environmental benefits. Furthermore, CALFED must recognize and disclose that increasing application efficiency often reduces the incidental environmental benefits that are associated with agricultural practices, and can actually increase overall agricultural water use rather than decrease it.

CALFED should support the AB 3616 MOU and its timeframe for endorsement. CALFED also should assume a leadership role in developing and supporting a program of education, outreach and technical assistance for water suppliers and users to develop water conservation and management plans under the AB 3616 MOU.

CALFED should review the California Department of Water Resources' Bulletin 160-98, which documents that the environment is the largest consumer of water in California. Accordingly, CALFED should develop efficiency standards for all current and new environmental uses of water within the CALFED solution area, both in-stream and off-stream, which hold environmental water uses to standards of accountability similar to those demanded for urban and agricultural users. CALFED must insist on bringing these standards to parity. Additionally, CALFED must quantify specific environmental needs, such as the following:

- How much water is or will be needed, where, when, and for what purposes;
- How environmental water needs will be met; and
- How CALFED will hold environmental water uses to standards of accountability as is currently being done to assess agricultural and urban standards of accountability.

The Ag Water Caucus suggests setting an upper limit on environmental flows with criteria and procedures that include stakeholder input before that limit can be raised.

The Ag Water Caucus strongly supports the current CALFED policy that agricultural land retirement for demand reduction purposes is not equitable, is too costly and has unacceptable redirected impacts, and therefore is not a part of the Water Use Efficiency program.

6. ISSUE – WATER QUALITY AND WATERSHED MANAGEMENT: In addition to addressing salinity and selenium issues, CALFED's water quality common program addresses pesticides and non-point source pollution issues. Certain pesticides have been identified in surface waters of the Bay/Delta estuary and its watersheds at levels that may impair aquatic life beneficial uses. Current scientific knowledge is inadequate to determine the significance or extent of impairment. CALFED's watershed management common program addresses land uses and management in upper watersheds. However, CALFED fails to address the issue of long-term salt balance in areas with no natural outlet.

POSITION: The Ag Water Caucus supports CALFED's proposals to provide financial and technical funding and assistance for development of voluntary actions and best management practices to address non-point source pollution. However, we object to CALFED's efforts to establish target values for specific compounds used in protecting agricultural crops, as included in the Water Quality Technical Appendix. CALFED is not the appropriate arena for addressing this issue. The State Water Resources Control Board and the California Department of Pesticide Regulation have a Management Agency Agreement (MAA) in place to address pesticide issues. The Ag Water Caucus supports this ongoing cooperative process for protecting water quality as well as ensuring the continued public benefit of controlling pests.

Similarly, other local, state and federal agencies currently have jurisdiction over non-point source pollution and water quality protection efforts. The Ag Water Caucus believes that the current non-point source three-tier approach adopted by the State Water Resources Control Board and the basin planning process utilized by the nine Regional Water Quality Control Boards provide an adequate framework for the protection of water quality. Furthermore, the State Water Resources Control Board has entered into MAAs with the Bureau of Land Management and the United States Forest Service to address non-point source pollution issues in the upper watersheds that are the source for much of the water flowing to and through the Delta.

RECOMMENDED CALFED ACTION: To maximize the efficient use of public resources, CALFED should embrace and encourage current and future cooperative efforts to improve water quality. CALFED should assist in the development and funding of water quality monitoring programs and should provide funding for the implementation of best management practices. Furthermore, CALFED's coordinated watershed management efforts should provide assistance for local efforts and should not mandate land use changes in these watersheds.

CALFED must recognize and encourage existing efforts and defer to existing non-point source pollution control programs.

7. **ISSUE - WATER TRANSFERS:** Voluntary water transfers are one means of ensuring that California's most precious resource continues to be put to reasonable beneficial use to the maximum degree practicable. California has a long history of beneficial water sales and exchanges among agricultural water users, primarily within basins and/or among water suppliers. These transfers have typically not harmed third parties and rural social interests because of the sensitivity of the transferring parties to those interests. There have also been some arrangements between agricultural water users and other non-agricultural users that have been beneficial to both parties and have not depleted the long-term agricultural water supply.

POSITION: California's water storage and conveyance capacity must be enhanced before water transfers can play a meaningful role in resolving statewide water management issues. One of the most significant current constraints to transfers through the Delta is reliable conveyance capacity. We believe that CALFED must recognize that water transfers do not create "new" water; rather, transfers simply move water from agriculture to other uses. Without improvements to California's water storage and conveyance facilities, therefore, water transfers potentially violate CALFED's solution principles by redirecting impacts toward agriculture.

We support the inclusion of voluntary transfers and exchanges as a component of an integrated and balanced CALFED package. However, we are concerned about the current lack of analysis regarding the actual capacity and demand for water transfers. This has led to unrealistic conclusions regarding the ability of water transfers and exchanges to meet the CALFED solution principles.

Consideration of the many issues involved with water transfers is complicated. Agricultural interests developed a transfer policy in 1992 that stresses, among other things, protection of water rights, voluntary transfers, local control and minimal third party impacts. Mandatory water transfers, including regulatory reallocations, are unacceptable to agriculture. We oppose permanent reallocations of water through water transfers that reduce the long-term supply of agricultural water. We also oppose short-term transfers that result in the development of long-term demand for agricultural water supplies.

CALFED's water transfer policies also should assure that the burden of proof regarding groundwater impacts of water transfers lies with the parties to the transaction, and not on non-participating groundwater users.

RECOMMENDED CALFED ACTION: The development of water markets should be left to stakeholders. CALFED's involvement in water transfers should be limited to construction of the necessary conveyance and storage facilities that enable transfers to play a meaningful role in California's overall water management. To the extent that CALFED identifies a specific role for water transfers as part of the CALFED solution, reasonable estimates of a range of expected transfers and reliable transfer capacity should be made. However, CALFED should not seek to change existing law regarding water transfers and should not adversely impact existing water rights or transfer programs, either directly or indirectly, through new regulations or controls.

For agricultural groundwater users, protections must be clearly defined. Current law states that a transfer must not unreasonably affect the overall economy of the area from which the water is being transferred. Agricultural groundwater users must not be considered an expendable part of local infrastructures and economies. The definition of legal water users must include individual farmers and ranchers dependent solely or partially on groundwater.

8. **ISSUE – COST ALLOCATION:** CALFED and the BDAC Finance Workgroup have developed general principles of cost allocation. These principles include concepts of equity, fairness, and benefits-based allocation.

CALFED has adopted a “beneficiary pays” concept over a punitive cost allocation methodology aimed at recovering from parties who allegedly created environmental damage in the past. In this regard, certain common programs are proposed to be funded with public monies while other common programs that provide “benefits” to water users are proposed to be funded with user fees. In general, CALFED has determined that facilities should be funded by the beneficiaries of those facilities.

POSITION: The Ag Water Caucus believes that a successful CALFED solution will include cost allocation principles that will sustain the state’s vibrant agricultural economy. The Ag Water Caucus supports a “benefits-based” approach over a punitive approach. However, the Ag Water Caucus strongly objects to any effort to require agricultural water users to pay any additional costs to replace water taken for environmental uses through regulatory actions, or dedicated to environmental protections by legislative actions and the Bay-Delta Accord. The costs of the CALFED program must be apportioned in a manner mutually agreeable to the state and federal governments, and stakeholder interests pursuant to long-term cost-sharing agreements to be developed as part of the CALFED package.

RECOMMENDED CALFED ACTION: CALFED should continue to evaluate and develop cost allocation strategies that sustain the agricultural economy and recognize the public benefits derived from water quality, environmental protection, flood control, recreation, and adequate water supplies. These cost allocation strategies must acknowledge that any effort to require additional payments from agricultural water users to replace supplies taken for environmental uses through regulatory actions or dedicated in the interim to environmental protections by federal actions and the Bay-Delta Accord is unacceptable. Since the acceptability and willingness to support a cost allocation methodology is directly linked to the benefits the final alternative provides, it is incumbent upon CALFED to develop the final preferred alternative, with specific identification of benefits and assurances, concurrent with the development of cost allocation strategies.

CALFED should identify how it will develop new water supplies for long-term environmental uses. These environmental water supplies should be developed and paid for at public expense. These costs must be estimated and disclosed in the PEIS/R so that the public and stakeholders can make informed decisions on the CALFED Program.

9. **ISSUE – IMPLEMENTATION AND ASSURANCES:** The implementation of CALFED programs and assurances regarding the implementation of CALFED programs, including construction and operation of facilities, is crucial to CALFED's success.

POSITION: While CALFED solutions focus on the long-term, we strongly support incremental, near-term implementation actions, with early investments in system conveyance capacity and storage where there is a potential for significant benefit for both water users and the environment (e.g., enhanced south Delta pumping flexibility and storage north, adjacent to, and south of the Delta).

RECOMMENDED CALFED ACTION: The proposed programs, facilities, and related actions described in CALFED's draft PEIS/R cannot be completed immediately. Indeed, certain features may require more than 20 years to complete. Therefore, the Ag Water Caucus proposes the following phasing schedule for implementation of various CALFED program elements. To meet the fundamental precepts under which CALFED was formed and Proposition 204 was passed by the voters, the CALFED Program must be designed to ensure that implementation occurs in a balanced manner. Proposition 204, which provides substantial funding for ecosystem restoration elements of the CALFED program, requires that the total CALFED program be carried out in a manner "that ensures that balanced solutions in all identified problem areas ... are achieved...." To meet this mandate, environmental, water supply, water quality, and levee improvements must be implemented in an integrated manner, both for the overall package and for each major step forward. Major elements of any assurance package must include:

1. **Endangered Species Act (ESA) Protections:** water users need assurances under the ESA that there will be "no surprises" and that once a completed assurance package is in place, water users will not face any further takings of water supplies under the federal and state endangered species acts. Landowners and water right holders also need assurances that their land and water will not be targeted by fish and wildlife agencies as mitigation under the endangered species acts.
2. **Implementing Entity:** the Ag Water Caucus will evaluate the need for a new entity to carry out the ecosystem restoration program, along with governance proposals, adaptive management and peer review strategies, financing mechanisms, and assurances.
3. **Area of Origin Protections:** protective measures must be taken to ensure that the water supply needs of the areas of origin will be met adequately and affordably. These protections may take the form of reaffirmation of statutory provisions, facilities and other programs.
4. **Permitting:** the CALFED solution elements must move forward as one integrated package to ensure balanced implementation of all elements. These program linkages are key to ensuring that the environmental, water quality and water supply needs are met in a balanced manner. Procedures for obtaining needed permits in a timely, packaged manner for all elements of the CALFED program must be provided.
5. **Consistency with State and Federal Programs:** the CALFED solution must include procedures to ensure that water rights permits, water quality control plans, and statutes such as the Central Valley Project Improvement Act, are implemented in a manner consistent with the CALFED plan and related agreements.
6. **Assurances:** these must be crafted to provide long-term system operation guidelines that protect the environment as well as water users throughout the Central Valley watershed, including the Delta. Assurances should be developed before a preferred alternative is adopted.

AGRICULTURAL WATER CAUCUS CALFED WHITE PAPER

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