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Financing Water Infrastructure

LEGISLATIVE ANALYST'S OFFICE

Presented to:
Senate Select Committee on
Delta Stewardship and Sustainability
Hon. Lois Wolk, Chair

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Funding Water Infrastructure—Choice of Financing Mechanism

☑ **Choice of Financing Mechanism—Two Key Issues Are:**

- The basic ***financial approach*** to use.
- The ***source of funds*** to ultimately pay for the acquisition or use of facilities, regardless of the financial approach used. These can include both general and selective taxes, user fees, the sale of other physical assets or income streams, and a variety of other alternatives.

☑ ***Three Financing Approaches.*** Generally speaking, there are three main approaches available for public agencies to finance the acquisition and/or use of capital infrastructure. These approaches include:

- ***Pay-as-You-Go.*** With this approach, infrastructure projects are paid for directly from current revenues. Typically, a portion of a local water project is financed using a pay-as-you-go financing mechanism. The state has also used a pay-as-you-go approach for capital investment in some flood control projects.
- ***Renting and Leasing.*** This can sometimes be feasible where privately owned infrastructure (such as a privately owned desalination or wastewater treatment plant) is available for public use. In these cases, the governmental entity makes rent or lease payments to the private owner of the particular infrastructure. Somewhat rare in the water world, this approach may be increasingly used by public agencies as private investment in water infrastructure increases.
- ***Bond Financing.*** By far the most common form of infrastructure financing, this approach typically involves the governmental entity borrowing money to be paid off over time to build or acquire long-lived capital facilities that generate services over many years.

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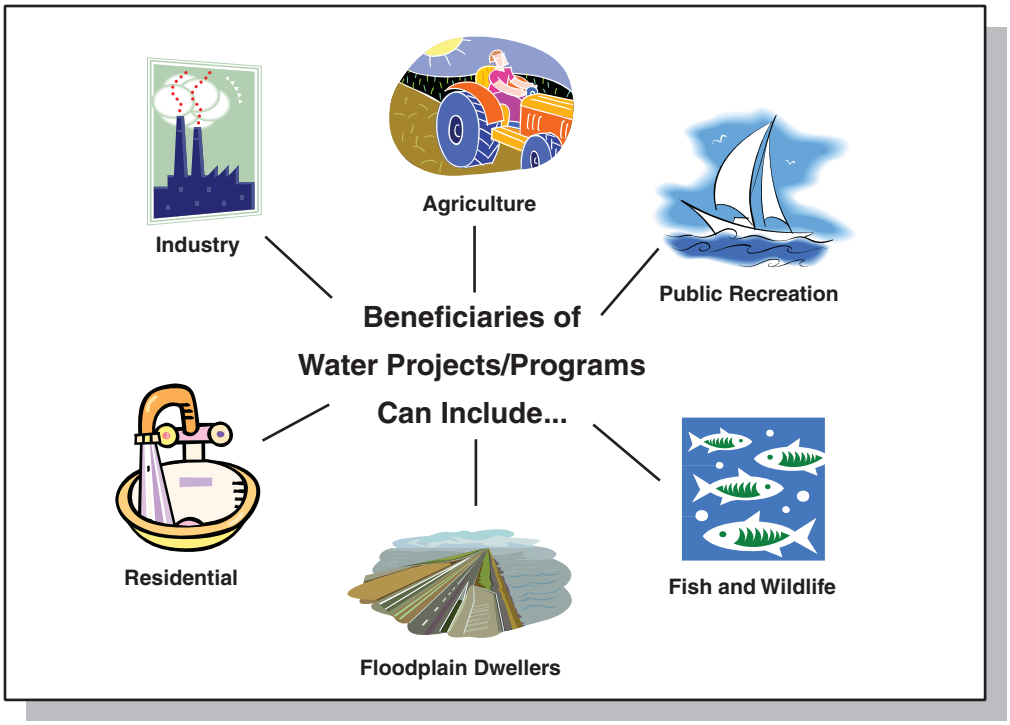
"Beneficiary Pays"— A Reasonable Funding Policy



☑ ***Beneficiary Pays Principle.*** On a number of occasions, the Legislature and state water program administrators have stated their intent that the costs of state water programs and projects should be paid by those who benefit from them. This is referred to as the beneficiary pays funding principle. A water program or project may benefit a clearly defined subset of the state's population (for example, individual water users receiving deliveries from a water project), the public as a whole (for example, from fish and wildlife enhancements), or reflect a combination of public and private benefits.

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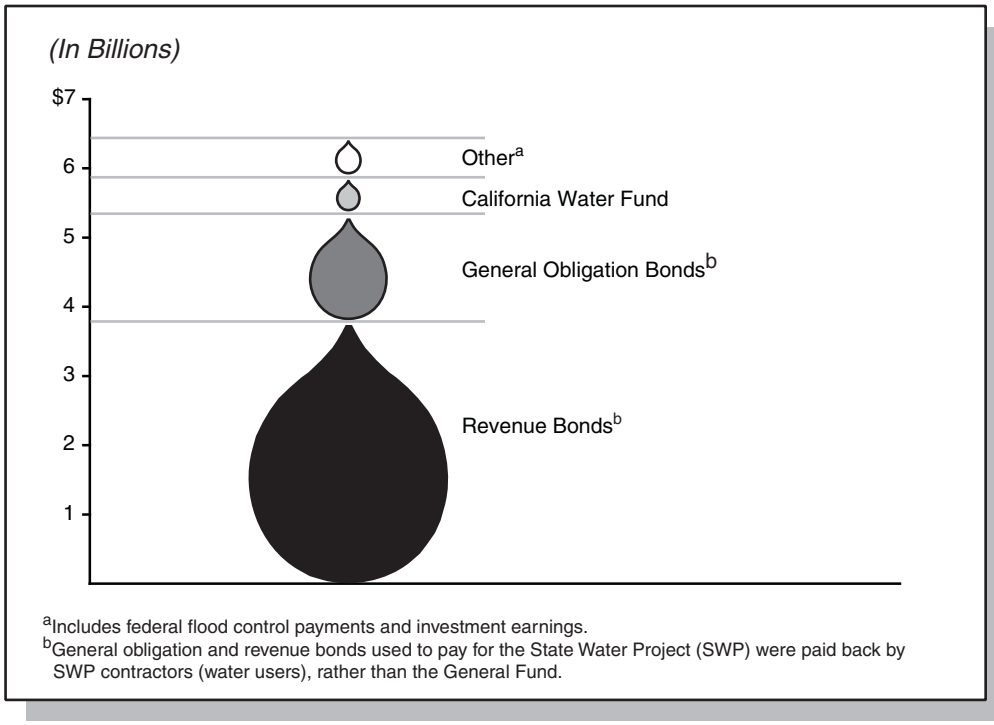
Beneficiary Pays—
State Application of Principle

☑ At the state level, current examples of the application of the beneficiary pays principle are found in most water programs, including the financing of the State Water Project (SWP), flood control projects, and water quality and water rights regulation. For example:

- ***Flood Control Projects.*** The nonfederal share of costs for a federally authorized flood control project are split between the state and the local government that benefit directly from the project.
- ***The SWP.*** Capital and operation costs of the SWP are generally paid for by water agencies receiving SWP water deliveries. However, fish, wildlife, and public recreation enhancements benefitting the general public are paid from the state's general-purpose funds.
- ***Surface Storage Water Projects.*** Beneficiaries of surface water storage projects that proceed to construction are required to reimburse all prior planning expenditures made from the state's General Fund.

Funding Water Infrastructure—A State Case Study

State Water Project: Mainly Bond-Financed, Paid Back by Users



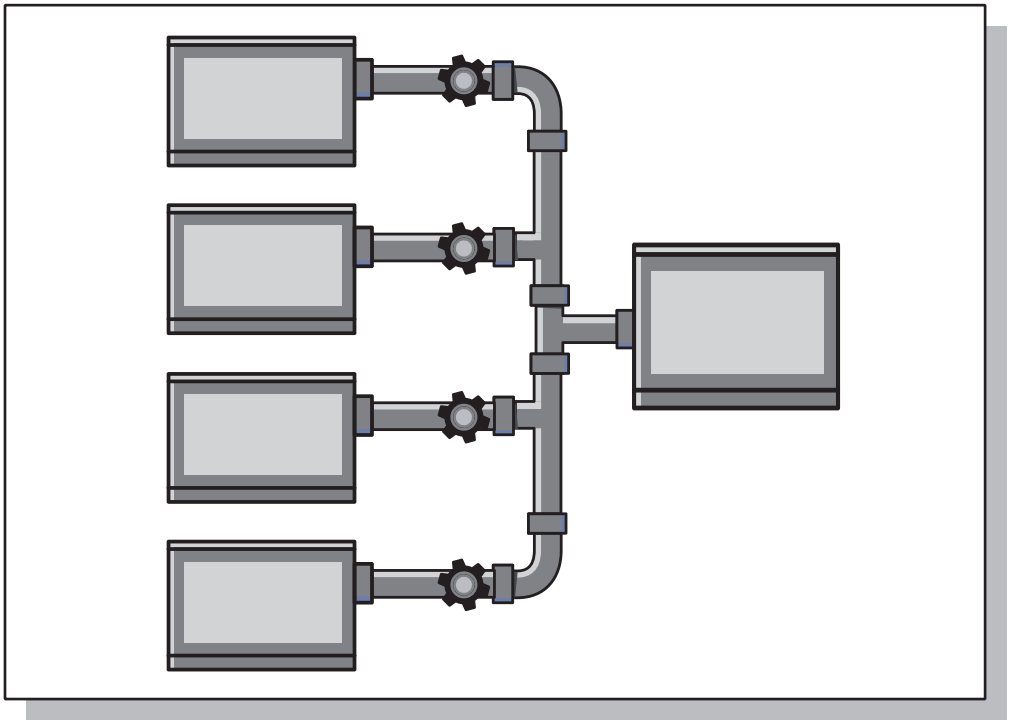
[a]Includes federal flood control payments and investment earnings.
[b]General obligation and revenue bonds used to pay for the State Water Project (SWP) were paid back by SWP contractors (water users), rather than the General Fund.

☑ ***From 1952 to 2007, funding to build the SWP*** totaled about $6.4 billion, mainly from revenue bonds and general obligation (GO) bonds.

☑ ***When the revenue and GO bonds are paid off,*** it is estimated that those entities who receive the water from SWP ("contractors") will have paid for about 96 percent of the cost of building the project. The remainder is paid by the state, to cover fish, wildlife, and recreation enhancements associated with SWP, and the federal government, primarily for flood control benefits.

Funding Water Infrastructure—Local Projects

Local Water Projects Use Multiple Funding Sources



☑ ***Revenue Bonds Mainly Used.*** While local agencies generally have funding sources similar to the state and federal governments, they mainly use revenue bonds supported by fees paid back by local water users. Private investment funding and GO bonds backed by property taxes have also been used by local governments.

☑ ***State Funds for Local Projects.*** Local agencies are able to access state revolving loan programs mainly for water quality infrastructure (such as wastewater treatment plant improvements or to meet safe drinking water standards), as well as state-local assistance grants from statewide bond funds. In many cases, these state programs require a local match or share of cost.

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Bonds as a Financing Approach

☑ ***Bonds Are the Major State Financing Approach for Water Infrastructure.*** The state has traditionally used two major types of bonds to finance water infrastructure. The key difference between the two types of bonds is the source of funds to pay back this debt.

General Fund-Supported Bonds	Revenue Bonds
• These are paid off from the state's General Fund, which is largely supported by tax revenues. The majority of these are General Obligation (GO) bonds. These bonds must be approved by the voters and their repayment is guaranteed by state's general taxing power. In the case of the State Water Project (SWP), however, GO bonds were paid back mainly by user fees, while remaining guaranteed by the state's general taxing power. • The second types are lease-revenue bonds, which are authorized by the Legislature. These are paid off from lease payments (primarily financed from the General Fund) made by state agencies using the facilities they finance. These bonds do not require voter approval and are not guaranteed. As a result, they have somewhat higher interest costs than GO bonds.	• These also finance capital projects but are not supported by the General Fund. Rather, they are paid off from a designated revenue stream—usually generated by the projects they finance—such as water user assessments. These bonds also do not require voter approval.

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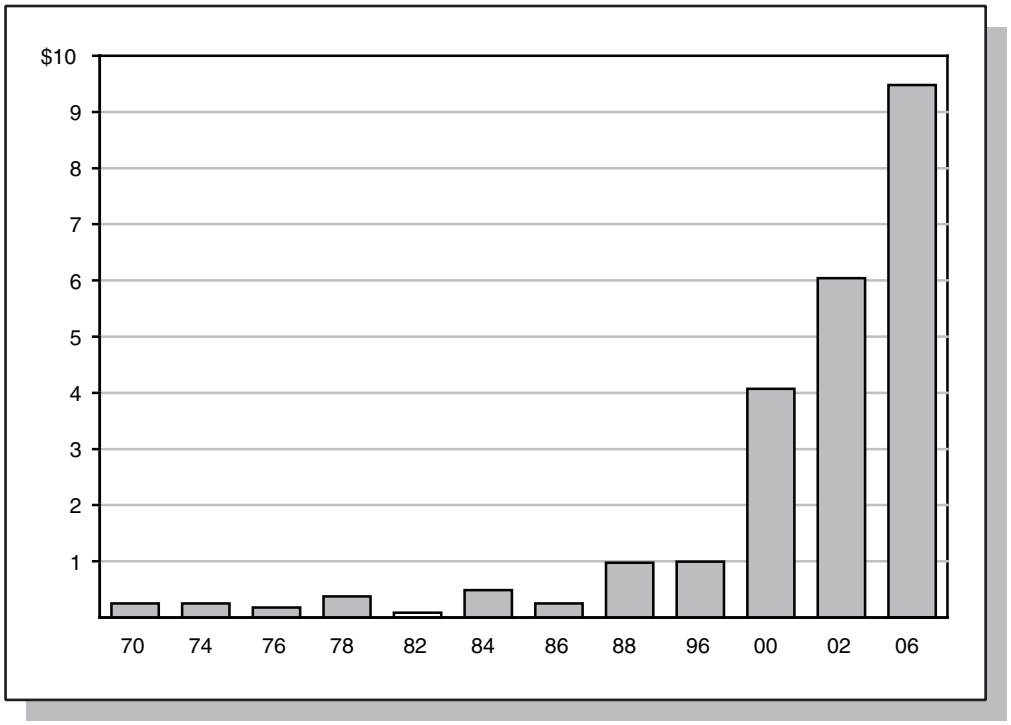
Authorized Amount of Water-Related Bonds

(In Billions)



☑ ***Total Water Bonds Authorized.*** Since 1970, the state's voters have authorized over $23.4 billion in water-related GO bonds, mainly for water quality and drinking water purposes. Typically, these bond measures also include funding for other resource-related purposes as well, such as land conservation and habitat protection.

☑ ***Majority Approved Recently.*** About 84 percent of the total amount authorized in these bonds ($19.6 billion) has been authorized since 2000. This included the single largest water bond ($5.4 billion) in California history in 2006.

Authorized Amount of Water-Related Bonds *(Continued)*

Water-Related Bonds

1970-2006
(In Millions)

Year	General Obligation Bond	Amount Authorized
1970	Clean Water Bond Law of 1970	$250
1974	Clean Water Bond Law of 1974	250
1976	California Safe Drinking Water Bond Law of 1976	175
1978	Clean Water and Water Conservation Bond Law of 1978	375
1982	Lake Tahoe Acquisitions Bond Act	85
1984	California Safe Drinking Water Bond Law of 1984	75
1984	Clean Water Bond Law of 1984	325
1984	Fish and Wildlife Habitat Enhancement Act of 1984	85
1986	California Safe Drinking Water Bond Law of 1986	100
1986	Water Conservation and Water Quality Bond Law of 1986	150
1988	California Safe Drinking Water Bond Law of 1986	75
1988	California Wildlife, Coastal, and Park Land Conservation Act	776
1988	Clean Water and Water Reclamation Bond Law of 1988	65
1988	Water Conservation Bond Law of 1988	60
1996	Safe, Clean, Reliable Water Supply Act	995
2000	Safe Drinking Water, Clean Water, Watershed Protection, and Flood Protection Act	1,970
2000	Safe Neighborhood Parks, Clean Water, Clean Air, and Coastal Protection Bond Act of 2000	2,100
2002	California Clean Water, Clean Air, Safe Neighborhood Parks, and Coastal Protection Act of 2002	2,600
2002	Water Security, Clean Drinking Water, Coastal and Beach Protection Act of 2002	3,440
2006	Disaster Preparedness and Flood Protection Bond Act of 2006	4,090
2006	Safe Drinking Water, Water Quality and Supply, Flood Control, River and Coastal Protection Bond Act of 2006	5,388
	Total	**$23,429**

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Resources Bond Status Report

Resources General Obligation Bonds, 1996 to Present

(In Millions)

Bond	Year	Total Authorization	Previous Appropriations[a]	Proposed Appropriations[b]	Balance (July 2010)
Proposition 204[c]	1996	$870	$827	$22	$21
Proposition 12	2000	2,100	2,072	10	18
Proposition 13[c]	2000	2,095	1,892	87	116
Proposition 40	2002	2,600	2,574	14	12
Proposition 50	2002	3,440	3,381	10	49
Proposition 1B[d]	2006	1,200	735	254	212
Proposition 1C[e]	2006	200	7	11	182
Proposition 1E	2006	4,090	1,514	563	2,013
Proposition 84	2006	5,388	2,949	795	1,644
Totals		**$21,983**	**$15,953**	**$1,764[f]**	**$4,266**

a Includes funds previously appropriated, statewide bond costs, future-year obligations, and reversions.

b As proposed in the *2009-10 Governor's Budget*.

c $125 million was transferred from Proposition 204 to Proposition 13 accounts.

d Primarily a transportation bond, this includes sections that have funds for air quality.

e Primarily a housing bond, this includes funds dedicated for housing-related parks.

f The *enacted* 2009-10 budget reflects somewhat higher total resources bond expenditures—about $2.1 billion. The difference from the Governor's January proposal mainly reflects reappropriations of previous appropriations that were unspent.

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Resources Bond Status Report *(Continued)*

Resources General Obligation Bonds, 1996 to Present[a] by Program Area

(In Millions)

	Allocation	Previous Appropriations[b]	Proposed Appropriations[c]	Balance (July 2010)
Parks and recreation				
State parks	$1,094	$913	$71	$110
Local parks	2,412	1,838	206	369
Historic and cultural resources	240	236	1	3
Nature education	100	6	94	—
Subtotals	($3,846)	($2,993)	($371)	($481)
Water quality	$3,647	$2,582	$138	$927
Water management	6,843	4,063	638	2,142
Conservation, restoration, and land acquisition	4,711	3,972	312	427
CalFed/Delta related	1,686	1,557	52	77
Air quality	1,250	784	254	212
Totals	**$21,983**	**$15,953**	**$1,764[d]**	**$4,266**

a Includes Propositions 204, 12, 13, 40, 50, 1B, 1C, 1E, and 84.

b Includes funds previously appropriated, statewide bond costs, future-year obligations, and reversions.

c As proposed in the *2009-10 Governor's Budget*.

d The *enacted* 2009-10 budget reflects somewhat higher total resources bond expenditures—about $2.1 billion. The difference from the Governor's January proposal mainly reflects reappropriations of previous appropriations that were unspent.

Note: Highlighted areas reflect water programs.

2009-10 Enacted Budget: Resources Bond Expenditures

☑ ***2009-10 Enacted Budget—Bond Expenditure Summary.*** The 2009-10 enacted budget includes about $2.1 billion from a number of bond funds (mainly Propositions 50, 84, 1B, and 1E) for various resources and environmental protection programs. Selected highlights of these bond expenditures are shown in the figure below. As shown in the figure, the budget includes $766 million from bond funds for water-related programs. Bond funds are the major source of funding for the CALFED Bay-Delta Program, providing $168 million (57 percent) of the program's $297 million state-funded budget.

Selected Bond Expenditures

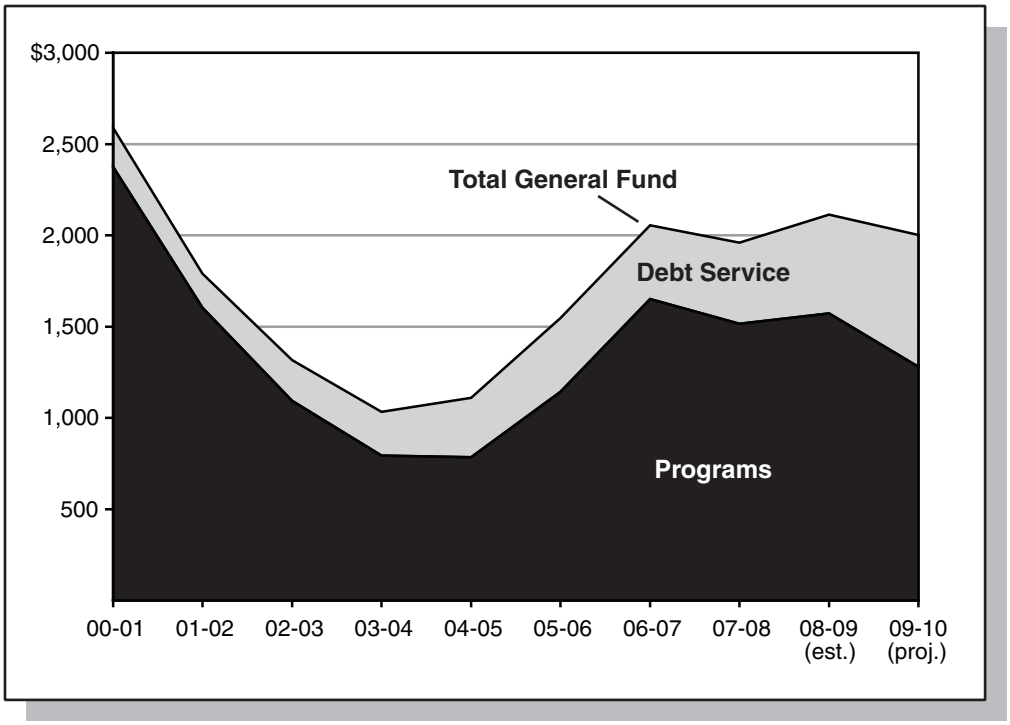
2009-10 Enacted Budget
(In Millions)

Program Area	Budgeted Expenditures
Water management and quality (including flood control projects, CALFED Bay-Delta Program)	$766
Air quality improvements in trade corridors	504
State and local parks	454
Conservation, restoration, and land acquisition	345

General Fund Bond Debt Service Increasing Dramatically

Resources and Environmental Protection—General Fund Expenditures

(In Millions)



☑ ***Debt Service Makes Up Increasingly Larger Portion of Resources and Environmental Protection General Fund Budget.*** In 2000-01, General Fund expenditures for resources-related GO bond debt service were $215 million, or 8 percent of General Fund spending for resources and environmental protection programs. In the 2009-10 proposed Governor's budget, General Fund expenditures for resources-related GO bond debt service were $722 million, or 36 percent of General Fund spending for resources and environmental protection programs. This is second only to wildland fire protection as a use of General Fund in this part of the budget.

LAO Recommendations—Water Project Financing

☑ ***Ensure That Bonds Are Used Primarily for Capital Purposes.*** Current law (Section 16727 of the Government Code) provides that GO bonds are to be used for *capital* purposes. This generally means that, aside from administrative costs reasonably connected with a capital project, bond proceeds should be not be used for the costs of day-to-day program operations. We recommend that the Legislature consider this Government Code provision when developing bond measures and appropriating bond funds.

☑ ***Retain Legislature's Authority to Appropriate Funds.*** We recommend against the Legislature authorizing continuously appropriated fund sources (regardless of fund source), as doing so limits legislative budget oversight over expenditures of the funds. Consistent with this recommendation, we recommend that SWP be brought "on budget" to improve legislative oversight of SWP.

☑ ***Rely Less on Bond Funding, Particularly Constrained Bond Funds.*** As the Legislature considers future bond measures, we recommend that only those programmatic activities that will yield long-term benefits should be supported with borrowed money. There may be areas of the budget—for example, programs to increase the efficiency of water use—that can be funded on a pay-as-you-go basis with new or existing funds, thereby reducing the need for borrowed money. Also, we recommend that future bond measures allocate funds to a few general areas—such as water quality or wildlife habitat restoration—rather than narrowly prescribing how funds must be allocated. This would allow future Legislatures the flexibility to appropriate funds to meet evolving state priorities.

☑ ***Apply Beneficiary Pays Principle to Bond Debt Servicing.*** We recommend that future GO bond measures enacted by the Legislature include provisions for a fee-based funding source to pay for the debt service costs of bond expenditures that provide direct private benefits as opposed to broad public benefits.

CALFED Bay-Delta Program Case Study—Past Experience, Lessons Learned, Moving Forward

☑ ***CALFED Reflects a Major Investment of State Funds.*** From 2000-01 (year one of implementation of the CALFED Record of Decision) and 2008-09, roughly $3 billion of state funds have been spent for the CALFED Bay-Delta Program.

☑ ***Little Progress on Implementing Beneficiary Pays Funding Principle.*** Almost all of the state funds supporting CALFED have been taxpayer-supported "general-purpose" funds—primarily bond funds and, to a lesser extent, General Fund monies. Apart from a relatively small contribution from the SWP and Central Valley Project contractor revenues, no user fees have supported the program. This is in spite of legislative direction several years ago that CALFED develop a user fee proposal that is consistent with the beneficiary pays funding principle. The program is currently operating without a long-term financing plan.

☑ ***Independent Management, Fiscal, and Program Reviews of CALFED Raised Various Concerns.*** A number of independent reviews of CALFED were conducted in late 2006 (by the Little Hoover Commission, the Department of Finance, and the KPMG consultancy firm). There was common agreement from these reviews on the following findings, each reflecting circumstances that served to impede the program's effectiveness:

- The then-current CALFED governance structure was not working well and was impeding the program's effectiveness. Responsibilities among CALFED implementing agencies were not clear and no one was in charge. Specifically, the California Bay-Delta Authority (established to oversee CALFED) was found to be an authority without authority.

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CALFED Case Study *(Continued)*

- The state's priorities for CALFED were not clear.
- Meaningful performance measures to track the program's progress and hold the program accountable for outcomes were lacking.

☑ ***CALFED Not Well-Positioned to Meet its Objectives.*** The several work products produced by multiple Delta planning efforts (including Delta Vision, Delta Risk Management Strategy, Bay Delta Conservation Plan) and CALFED program reviews conducted at the end of CALFED's "stage one" in 2007 found a relatively high level of agreement on the following four key points:

- Alternatives to the current "through-Delta" conveyance system must be evaluated.
- CALFED's progress has been limited *inside* the Delta. For example, populations of native Delta species, most notably the Delta smelt, have declined significantly over the life of CALFED. (In contrast, spending on water recycling and groundwater projects *outside* of the Delta has been relatively more effective, in that it has successfully reduced pressures on the Delta to provide water.)
- Past spending has often lacked a sense of priorities. This was found to be the case, for example, with spending in the ecosystem restoration program and in CALFED's competitive grant program to control pollution at drinking water sources.
- "No regrets" actions are recommended for the near term.

☑ ***Recommendations for Moving Forward.*** We recommend the

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CALFED Case Study *(Continued)*

following actions as legislative next steps in an effort to improve CALFED and more generally to improve the state's approach to addressing Delta issues:

- Address the governance problem.
- Set expenditure priorities.
- Establish performance measures that reflect legislative priorities and that are *tied to the budget process*. This is a key way for the Legislature to exercise effectively its oversight role.
- Approve a financing framework, including the adoption of the beneficiary pays funding principle and statutory guidance regarding its application.