

October 4, 2007

Financing Water Projects

LEGISLATIVE ANALYST'S OFFICE

Presented To:

Assembly Special Committee on Water

Hon. Lois Wolk, Chair





Prior Resources/Water Bonds Funding History

Pre-2006 Water/Resources Bond Fund Conditions^a By Programmatic Area			
<i>(In Millions)</i>			
	Total Authorization In Bonds	2007-08 Budget^b	Balances (July 1, 2008)
Water quality	\$1,940	\$175	\$76
Water management ^c	1,888	238	110
CALFED/Delta	1,686	105	155
Parks and recreation	1,412	6	7
State parks	(227)	(-1)	(3)
Local parks	(955)	(5)	(3)
Historic and cultural resources	(230)	(2)	(1)
Land acquisition and restoration	2,030	7	21
Air quality	50	—	—
Totals	\$9,005	\$531	\$370

^a Includes Propositions 204, 13, 40, and 50. Does not include Proposition 12 (the parks bond).
^b Reflects most recent data available.
^c Water management mainly includes flood control, water supply, water conservation, and water recycling.



Prior Resources/Water Bonds Funding History

(Continued)

2006 Water/Resources Bond Fund Conditions^a By Programmatic Area			
<i>(In Millions)</i>			
	Total Authorization In Bonds	2007-08 Budget^b	Balances (July 1, 2008)
Water quality	\$1,705	\$153	\$1,493
Water management ^c	4,955	775	4,150
Parks and recreation	900	50	819
State parks	(400)	(49)	(338)
Local parks	(400)	—	(386)
Historic and cultural resources	(100)	(1)	(95)
Conservation, restoration, and land acquisition	1,918	479	1,313
Totals	\$9,478	\$1,456	\$7,775

^a Includes Propositions 1E and 84. Does not include the air quality-related provisions of Proposition 1B or the parks-related provisions of Proposition 1C.

^b Reflects final enacted budget for 2007-08.

^c Water management mainly includes flood control, water supply, water conservation, and water recycling.



State Infrastructure Debt Servicing

- ☑ **What Does Our State's Infrastructure Debt Cost Us Each Year?**
 - Total debt service in 2007-08: \$4.8 billion
 - Projected to rise to \$7.5 billion in 2011-12, based on current bond authorizations.
 - Currently the fourth largest spending item in the state budget.



Proposed Special Session Water Bonds— Summary of Major Provisions

Senate Bill 2xx (Perata)^a	
Uses of Bond Funds	
<i>(In Millions)</i>	
Delta Sustainability	\$2,400
<ul style="list-style-type: none"> • Projects to protect and enhance sustainability of Delta ecosystem. 1,400 • Protection and improvements to Delta-related levees, drinking water quality, transportation and other vital infrastructure, and fish and wildlife habitat; other projects that support legislatively approved Delta sustainability options. 1,000 	
Regional Water Supply Reliability	\$2,000
<ul style="list-style-type: none"> • Competitive grants for a wide variety of water supply reliability projects, with funding allocated among 12 hydrologic regions and subregions. 2,000 	
Resource Stewardship	\$1,000
<ul style="list-style-type: none"> • Resource stewardship, ecosystem restoration, urban watershed, and stormwater management projects. 1,000 	
Groundwater Protection	\$400
<ul style="list-style-type: none"> • Projects preventing or reducing contamination of groundwater drinking water supplies. 400 	
Total	\$5,800
^a As introduced, September 19, 2007.	

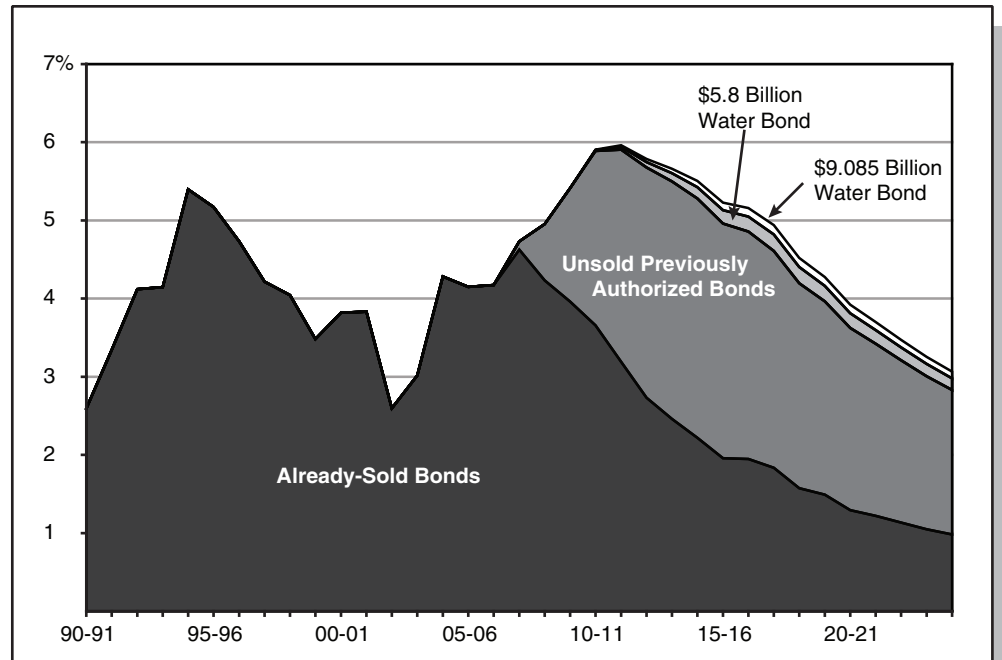


Proposed Special Session Water Bonds— Summary of Major Provisions (Continued)

Senate Bill 3xx (Cogdill)^a	
Uses of Bond Funds	
<i>(In Millions)</i>	
Water Storage Development	\$5,600
<ul style="list-style-type: none"> • State's share of costs for design, acquisition, and construction of three surface storage projects being studied under CALFED program. 	5,100
<ul style="list-style-type: none"> • Local surface storage and groundwater projects, with a regional allocation of funds. 	500
Delta Sustainability	\$1,900
<ul style="list-style-type: none"> • Projects to protect and enhance sustainability of Delta ecosystem. 	1,400
<ul style="list-style-type: none"> • Protection and improvements to Delta-related levees, drinking water quality, transportation and other vital infrastructure, and fish and wildlife habitat; other projects that support Delta sustainability. 	500
Regional Water Supply Reliability	\$1,000
<ul style="list-style-type: none"> • Competitive grants for a wide variety of projects to improve water supply and water supply reliability, protect and improve water quality, and protect the environment, with funding allocated among 12 hydrologic regions and subregions. 	1,000
Resource Stewardship	\$585
<ul style="list-style-type: none"> • Resource stewardship, ecosystem restoration, urban watershed, and stormwater management projects. 	500
<ul style="list-style-type: none"> • Invasive species control to protect Delta ecosystem and state's water supply. 	85
Total	\$9,085
^a As introduced, September 19, 2007.	



Impact of Proposed Water Bonds on Debt-Service Ratios



- The debt-service ratio (DSR) is the ratio of annual debt-service costs to annual revenues. It is sometimes used as a measure of debt burden.
- There is no single “right” DSR for states. Rather, the right DSR depends on policy decisions about the share of state revenues to spend on infrastructure.
- When future sales of already-authorized but as-yet-unsold bonds are considered, the DSR is projected to peak at 5.9 percent in 2011-12. The DSR would peak at a slightly higher level in 2011-12—but still remain under 6 percent—with the addition of either a \$5.8 billion or \$9.085 water bond, due to the time lags in selling the bonds.



Funding 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.

- ☑ ***Financial Approaches.*** Generally speaking, three main options are available for financing the acquisition and/or use of capital infrastructure. These include:
 - ***Pay-As-You-Go.*** This is when infrastructure projects are paid for directly from current revenues.
 - ***Renting and Leasing.*** This can sometimes be feasible in cases where privately owned infrastructure (such as buildings) is available for public use.
 - ***Bond Financing.*** This is the most common form of infrastructure financing, and typically involves borrowing money to be paid off over several decades to build or acquire long-lived capital facilities that generate services over many years.



Funding Infrastructure— Choice of Financing Mechanism *(Continued)*

- ☑ ***Sources of Funding.*** Regarding sources of funding to ultimately pay for infrastructure, these can include both general and selective taxes, user fees, the sales of other physical assets or income streams, and a variety of other alternatives.
 - One approach of allocating a project's costs among funding sources is the “beneficiary pays” funding principle. For example, in cases where an identified population or group—as opposed to the population as a whole—benefits from the infrastructure expenditure, it may be appropriate to finance the expenditure, in whole or in part, from fees levied on that group.



Funding Infrastructure— Choice of Financing Mechanism *(Continued)*

- ☑ ***What Types of Bonds Does the State Sell?*** The state has traditionally sold two major types of bonds. These are:
- ***General Fund-Supported Bonds.*** These are paid off from the state's General Fund, which is largely supported by tax revenues. These bonds take two forms. The majority are ***general obligation (GO) bonds***. These must be approved by the voters and their repayment is guaranteed by the state's general taxing power. The second type is ***lease-revenue bonds***, which are authorized by the Legislature. These are paid off from lease payments (primarily financed from the General Fund) 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.
 - ***Traditional Revenue 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 bridge tolls. These bonds also do not require voter approval.

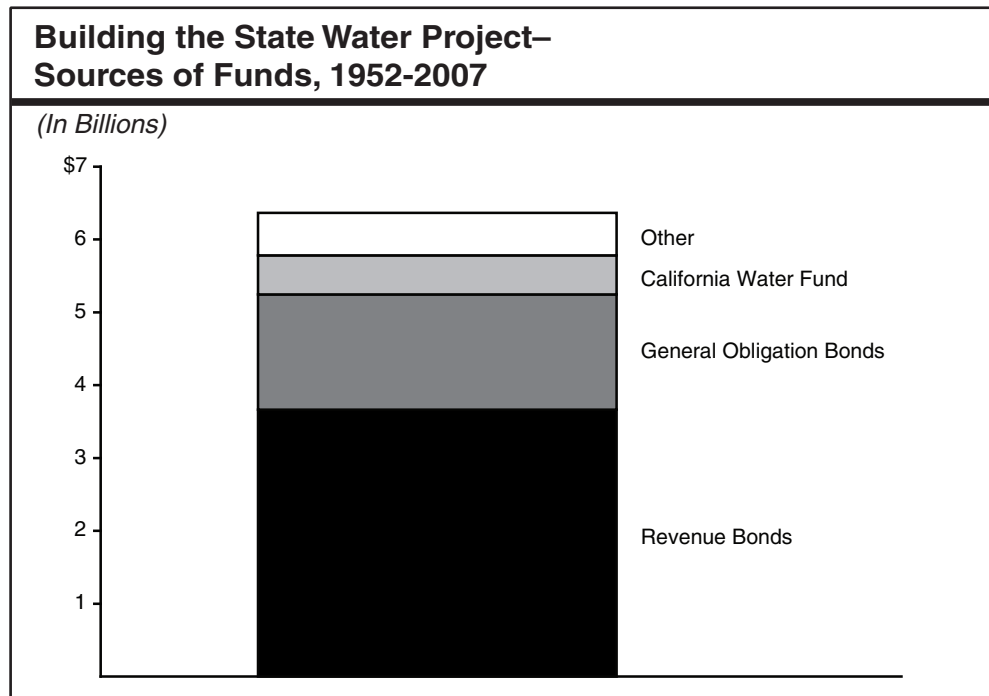


Financing Water Projects: A History



The State Water Project (SWP)

- From 1952 to 2007, funding to build the SWP totaled about \$6.4 billion mainly from revenue bonds and some GO bonds.
- When the bonds are paid off, it is estimated that contractors who receive the water from the SWP will have paid for about 96 percent of the cost of building the project. The remainder is paid by the state, to cover fish and wildlife and recreation enhancements associated with SWP, and the federal government, primarily for flood control benefits.
- About \$530 million is funded by the California Water Fund—funded mainly from project revenues and tideland oil revenues.





Financing Water Projects: A History *(Continued)*

CALFED Surface Storage Studies Funding

Summary of CALFED Expenditures On Surface Storage Studies		
<i>August 2000 Through 2006-07 (In Millions)</i>		
	Estimated Expenditures	
	State	Federal
Common Assumptions ^a	\$5.4	\$5.8
Shasta Lake Enlargement ^b	0.4	14.5
North-of-Delta Offstream Storage (Sites Reservoir)	30.8	5.5
In-Delta Storage Investigations ^b	9.3	0.7
Los Vaqueros Reservoir	13.5	13.2
Upper San Joaquin River Storage Investigations (Temperance Flat)	3.2	15.7
Totals	\$62.6	\$55.4
^a Refers to development of a common analytical framework to guide state and federal agencies in preparing feasibility studies. ^b There has been no state funding for Shasta Lake Enlargement and In-Delta Storage Investigations since 2004-05.		

- In the *1999-00 and 2000-01 Budget Acts*, the Legislature stated its intent that the beneficiary pays funding principle govern the financing of CALFED surface storage projects. Specifically, the budget control language provides that if any storage construction should proceed, beneficiaries of the project are required to reimburse all prior planning expenditures from the General Fund.



Financing Water Projects: A History *(Continued)*



Local Water Projects

- To finance water projects, local agencies generally use revenue bonds; local GO bonds backed by property taxes have occasionally been used. For example, the Diamond Valley Reservoir—a \$2 billion, 800,000 acre-foot reservoir developed by the Metropolitan Water District of Southern California (MWD)—was funded approximately 80 percent from revenue bonds and 20 percent in cash from MWD's current revenues (water deliveries, investment income).
- Data are not readily available regarding the level of state financial assistance and total local water project costs over time.
- With an exception for certain local flood control projects, there are not statutory requirements specifying the state-local cost shares for local water projects receiving state financial assistance. Typically, bond measures have been silent on this issue. We recommend that the Legislature provide explicit policy direction in statute regarding cost-sharing requirements.



Financing Water Projects: A History *(Continued)*



Federal Financing of Water Projects

- The federal treasury finances water supply projects developed by the Bureau of Reclamation, based on feasibility studies showing net economic benefits and repayment ability. Direct project beneficiaries—mainly irrigation and municipal or industrial users—reimburse the federal treasury under water supply contracts, with the amount of the reimbursement varying depending on the type of water user. The federal treasury pays, and is not reimbursed for, project costs with a broad public benefit, including some of the environmental restoration activities under the Central Valley Project Improvement Act and a portion of dam safety projects.