

# Financing Flood Management Infrastructure

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LEGISLATIVE ANALYST'S OFFICE

Presented To:

Assembly Water, Parks and Wildlife Committee and  
Assembly Select Committee on Growth and Infrastructure

Hon. Lois Wolk and Hon. Joe Canciamilla, Chairs





## Summary of LAO Presentation

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### **Our Presentation Will Be in Three Parts:**

- Framework for setting resources infrastructure funding priorities.
- Bond financing issues.
- Flood management-specific financing issues.



## Setting Resources Infrastructure Funding Priorities

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We provide below a framework to assist the Legislature in evaluating and addressing resources-related infrastructure requirements:

- ☑ **Infrastructure Planning.** Construct an estimate of resources infrastructure needs, guided by statutory goals relative to resources that are as specific as possible.
  - An appropriate mechanism for establishing such goals would be the comprehensive statewide environmental plan required under current law.
  - The Legislature should consider the appropriate role of state government relative to federal and local governments and the private sector in carrying out activities to meet the goals.
  - Direct capital outlay improvement is only one of several means of accomplishing the state's resources goals. The Legislature should adopt whichever mechanism will accomplish the goals most cost effectively.
  - A project-specific needs inventory can then be developed by state departments. The Legislature's assessment and prioritization of infrastructure needs could be guided by the five-year state infrastructure plan required to be submitted annually by the Governor (but not submitted since 2003).
  - Establishing infrastructure funding priorities, both across all state program areas and within resources programs, is ultimately a legislative policy decision. Priority should be given to projects that protect public health and safety, fulfill statutory requirements, address broad and multiple state objectives, and/or provide savings in state operations or avoid future state costs. The state should fund those projects for which ongoing funding for support and maintenance is reasonably assured.



## Setting Resources Infrastructure Funding Priorities

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### **Choice of Financing Mechanism—Several Options Exist.**

- **Key Issues.** Regarding the acquisition and use of capital infrastructure, decisions have to be made about two distinctly different issues. These are:
  - The basic **financial approach** to use.
  - The **source of funds** to ultimately pay for the acquisition or use facilities, regardless of the financial approach used.
- **Financial Approaches.** Generally speaking, three main options are available for financing the acquisition and use of capital infrastructure. These include:
  - **Direct Appropriations.** This is when infrastructure projects are directly paid for in their entirety upfront.
  - **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 on money to be paid off over several decades to build or acquire long-lived capital facilities that generate services over many years.
- **Ultimate 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. The allocation of a project's costs among funding sources should be guided by 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



## Setting Resources Infrastructure Funding Priorities

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be appropriate to finance the expenditure, in whole or in part, from fees levied on that group. As another example, in cases where private activities degrade a natural resource and necessitate capital investment to prevent the degradation and/or restore the resource, it may be appropriate to levy fees on those activities to defray some of these capital costs.

- ***Other Considerations.*** Other important considerations involving infrastructure financing include such issues as (1) whether facilities should be the responsibility of the state government, localities, or some type of state-local partnership agreement, and (2) who is responsible for ongoing infrastructure maintenance, once the initial construction or acquisition has been completed.



## Bond Financing

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### Basics About Bonds

- ***What Is Bond Financing?*** Bond financing is a type of long-term borrowing that the state uses to raise money for various purposes. The state obtains this money by selling bonds to investors. In exchange, it agrees to repay this money, with interest, according to a specified schedule.
- ***Why Are Bonds Used?*** The state has traditionally used bonds to finance major capital outlay projects such as roads, educational facilities, prisons, parks, water projects, and office buildings. This is done mainly because these facilities provide services over many years, their large dollar costs can be difficult to pay for all at once, and different taxpayers over time benefit from the facilities. Recently, however, the state has also used bond financing to help close major shortfalls in its General Fund budget.
- ***What Types of Bonds Does the State Sell?*** The state sells three 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 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 general obligation bonds.
  - ***Traditional Revenue Bonds.*** These also finance capital projects but are not supported by the General Fund.



## Bond Financing

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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.

- **Budget-Related Bonds.** In March 2004, the voters authorized \$15 billion in bonds to pay off the state's accumulated budget deficit and other obligations. Of this amount, \$11.3 billion was raised through bond sales in May and June of 2004. The General Fund cost of repaying the principal and interest on these bonds is the equivalent of a one-quarter-cent share of the state sales tax (over \$1.3 billion in 2005–06). The bonds' repayments are also guaranteed by the state's general taxing power in the event the sales tax proceeds fall short.



### What Are the Direct Costs of Bond Financing?

- The state's cost for using bonds of a given type depends primarily on their interest rates and the time period over which they are repaid. For example, the most recently sold general obligation bonds will be paid off over a 30-year period.
- Assuming for illustrative purposes tax-exempt interest rates for such bonds of about 5.25 percent, the cost of paying them off over 30 years is about \$2 for each dollar borrowed—\$1 for the amount borrowed and \$1 for interest.
- This cost, however, is spread over the entire 30-year period, so the cost after adjusting for inflation is considerably less—about \$1.25 for each \$1 borrowed.



### The State's Current Outstanding Debt

- **Amount of General Fund Debt.** As of October 1, 2005, the state had about \$42 billion of General Fund bond debt outstanding on which it is making principal and interest pay-



## Bond Financing

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ments. This consists of close to \$35 billion of general obligation bonds and nearly \$8 billion of lease-revenue bonds.

- **Unissued General Obligation Bonds.** In addition, the state has not yet sold about \$30 billion of authorized general obligation bonds, either because the projects involved have not yet been started or those in progress have not yet reached their major construction phase. (This \$30 billion amount includes \$19.3 billion of commercial paper authorized by bond-related Finance Committees that could be issued for “new money” projects.)
- **Deficit-Financing Bonds.** The above totals do not include the \$15 billion of deficit-related bonds authorized in March 2004, from which \$11.3 billion has been raised.



### General Fund Debt-Service Costs

- The expenditure estimates in our recently released report entitled *California's Fiscal Outlook* (November 2005) are that General Fund debt payments for traditional general obligation and lease-revenue bonds will total about \$3.9 billion in 2005-06 and \$4.3 billion in 2006-07.
- If the annual costs of the deficit-related bonds are included, total debt-service costs will be about \$5.1 billion in 2005-06 and \$5.8 billion in 2006-07.
- Our out-year debt-service projections beyond 2006-07 assume that the volumes and maturity structures of future annual bond sales are similar to recent experience, and that bond interest rates will track our economic forecast.
- Under these assumptions, General Fund debt-service costs would reach \$6.1 billion in 2010-11.



## Bond Financing

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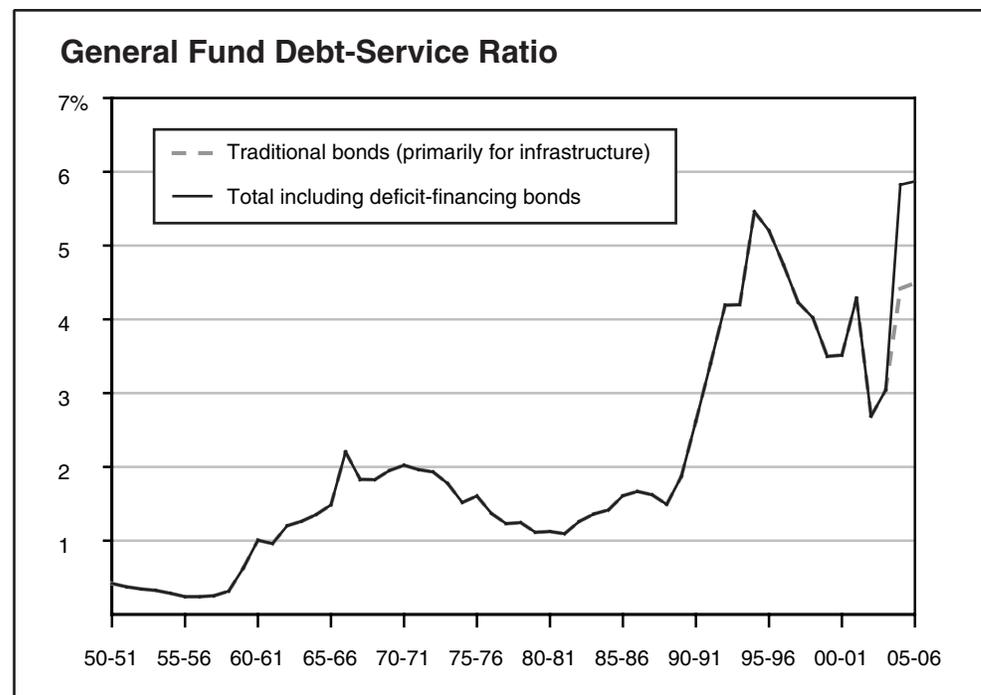
### Affordability and the Debt-Service Ratio

- There is no accepted rule for how much debt is “too much” or how much debt the state can “afford.” Rather, this depends on policy choices about how many revenues to devote to the funding of infrastructure and other bond-financed activities.
- However, some in the investment community look to the *debt-service ratio* (the ratio of General Fund debt payments as a percentage of state revenues) as a useful general indicator of how dependent the state is on paying off debt, and some have expressed concerns when the ratio starts to exceed 6 percent.
- The accompanying figure (see page 9) shows that the ratio increased in the early 1990s and peaked at somewhat over 5 percent in the middle of the decade.

## Bond Financing

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- Based on the assumptions in our *California's Fiscal Outlook*, we estimate that the ratio for 2005-06 would stand at about 4.5 percent and at 4.8 percent for 2006-07. If the annual debt service on the deficit-related bonds is included, the ratio for 2005-06 would be about 5.9 percent and would increase to roughly 6.3 percent in 2006-07.



### Conditions Favorable to the Use of Bond Financing

- The projects or purposes for which bonds are to be used are themselves worthy of spending taxpayers' money on, based on a favorable cost-benefit comparison.
- Acquiring a capital facility through nonbond financing is not feasible, such as when sufficient funds for direct appropria-



## Bond Financing

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tions are not available, leasing or renting is not feasible, or there are higher-priority uses for such monies.

- A project is extremely expensive, and either must be put in place relatively quickly or cannot be completed in stages.
- A project's costs are to be shared over time by its beneficiaries, and its benefits will last over many years or are skewed toward the future.
- The financial trade-offs between bond and nonbond financing favor the former, such as when the increases in tax rates or fees needed to provide up-front project funding are simply too large to consider.
- It is an acceptable borrowing environment, meaning that interest rates are not abnormally high, the state's debt level is not excessive, and enough bonding capacity is being saved for high-priority future bond financing needs.



## Financing California's Flood Control Infrastructure

### Funding History

- The figure below shows the State's funding level and funding sources for flood management over the last six years. These funds are spent on a combination of state operations, capital outlay, and local assistance.

<b>DWR's Flood Management Appropriations</b>						
<i>(Dollars in Millions)</i>						
<b>Fund Source</b>	<b>1999-00</b>	<b>2000-01</b>	<b>2001-02</b>	<b>2002-03</b>	<b>2003-04</b>	<b>2004-05</b>
General Fund	\$90.8	\$84.3	\$77.2	\$22.6	\$28.7	\$14.1
Proposition 13 bond funds	1.8	142.7	15.6	28.2	14.7	18.6
Proposition 50 bond funds	—	—	—	2.3	21.4	21.4
Other funds <sup>a</sup>	12.1	13.8	12.1	6.7	6.5	5.3
<b>Totals</b>	<b>\$103.7</b>	<b>\$240.8</b>	<b>\$104.9</b>	<b>\$59.8</b>	<b>\$71.3</b>	<b>\$59.4</b>

<sup>a</sup> Includes federal funds and reimbursements.

- In 2005-06, the budget includes \$107 million for flood control activities, including a \$10 million increase for state operations.

### The State's Funding Role Varies Depending on Location of Flood Control Infrastructure

- There are three areas of flood control infrastructure in the state: the Central Valley, the Delta, and the rest of the state.



## Financing California's Flood Control Infrastructure

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The state's funding role varies significantly among these three areas:

- **The Central Valley.** In the Central Valley, the state (acting through the Reclamation Board) is the nonfederal sponsor of federally authorized flood control projects. For federally authorized projects, the federal government contributes 65 percent of the cost. Of the remaining non-federal share, the state contributes between 50 and 70 percent of the cost (capital outlay), while the local agency contributes the rest.
- **The Delta.** The state is generally not responsible for Delta levees, with the exception of the minority of Delta levees that are state sponsored, federally authorized projects. In the past, the state has provided funds to local agencies through the Delta Levees program, largely with bond funds in recent years.
- **The Remainder of the State.** The state's role is generally limited to providing local assistance funds to the sponsoring local agencies of federally authorized projects. The state currently owes approximately \$190 million to local agencies for claims on hand for the state's share of costs for these projects.



### Options for Financing Flood Control Infrastructure

- Continued reliance on General Fund appropriations and General Fund-backed general obligation bond funds.
  - Puts the funding responsibility on all taxpayers—this is appropriate where there are general benefits to the state as a whole.
  - Availability of such funds can vary considerably—the condition of the General Fund varies with the strength of the



## Financing California's Flood Control Infrastructure

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state's economy and statewide funding priorities change over time. General obligation bond funds are only available intermittently, subject to voter authorization.

- Increased, but not exclusive, reliance on user fees and/or assessments, applying the "beneficiary pays" principle. Additional fees or assessments could be used for operations and maintenance, for direct capital outlay, or to pay off bonds.

For Sacramento-San Joaquin River Delta flood control projects (generally locally sponsored or private projects):

- Property owners in the Delta benefit from the flood control provided by the levee system.
- Water users throughout much of the state also benefit, since the continued performance of the levees is necessary for the operation of the Delta pumping plants.
- The state as a whole receives economic benefits from the operations of the State Water Project and Central Valley Project, and the recreation and environmental benefits of the Delta.

For the Central Valley flood control system (state sponsored projects):

- Property owners behind the levees derive a large proportion of the benefits of the flood control system.
- The state has the obligation to protect life and safety of those to be protected by levees in the state system, and under *Paterno*, can be liable for levee failures, even when operations and maintenance is a local responsibility.



## Financing California's Flood Control Infrastructure

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- The Department of Water Resources' Flood Control White Paper (January 2005) proposes creating a Central Valley-wide assessment district to fund flood control. We agree that this would be an effective way to ensure that the beneficiaries contribute to the cost of the state flood control system.



### Flood Control and Land Use Planning

- While new development is being approved by local governments in flood-prone areas, it is often the state that bears the fiscal burden and liability of these land use decisions after the floods have struck. There are several ways to more closely tie land use decision making to the flood risks and related fiscal consequences of those decisions. The following three ways are discussed in *The 2005-06 Budget: Perspectives and Issues* at page 215.
  - **Mandate Flood Insurance in Flood Plains.** The DWR White Paper proposes that the state require flood insurance for all property in flood plains. This would increase the cost of property in flood plains, relative to other areas not at risk, potentially reducing the incentive for such development. Such an insurance program could reduce the state's liability from future floods, if designed accordingly.
  - **Limit State Flood Control Funding for Projects in Local Jurisdictions That Allow Development in Areas With Substantial Flood Risks.** Limiting the availability of state funds may discourage risky development while rewarding development in safer areas. Alternatively, the state could require that local agencies indemnify the state for flood risks or require that the local agencies certify that a certain level of flood protection will occur as a condition of receiving state funds.



## Financing California's Flood Control Infrastructure

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- **Enact a Floodplain Development Fee.** The state could enact a fee on new development in floodplains, requiring new growth to pay for new flood control projects necessitated by the development.

In addition, proposals have been made to specifically tie land-use planning to flood control, for example:

- **Enact a “Show Me the Flood Control” Requirement.** The state could require that local land use agencies certify that new development has an adequate level of flood protection. Alternatively, the state could require that local general plans include a flood control element, as proposed by AB 802 (Wolk), introduced in the 2005 session.



### Financing Flood Control at the Local Level

- There are a number of options available to local jurisdictions to pay for flood protection (in addition to any state funding assistance), including:
  - **Local General Obligation Bonds Backed by Property Taxes.** Counties and special districts can issue general obligation bonds backed by an increase in property taxes. (Proposition 13 has a “debt override” to the 1 percent of assessed value cap on property taxes.) Issuing such bonds requires a two-thirds vote of the electorate in the jurisdiction, given that the taxes backing the bonds are for a special purpose.
  - **Local Property Assessments.** Local agencies can levy an assessment to pay for services (such as flood control) that directly benefit property owners. Assessments (as distinct from property taxes) are not based directly on



## Financing California's Flood Control Infrastructure

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property values, but are apportioned to each property according to the benefits to that property from the infrastructure/activity paid for by the assessment. Under Proposition 218, creating such an assessment requires the vote of the majority of the affected property owners, weighted proportionally by the assessment they would pay. Note: Proposition 218 only applies when a *local* agency is creating a new or increased assessment. Should the *state* decide to assist the funding of local projects by levying a *state* assessment, the provisions of Proposition 218 would not apply.



### Creating a Sustainable State Funding Mechanism

- Given the volatility in the availability of General Fund and bond fund revenues, a Central Valley system-wide assessment or fee could help in providing a stable and predictable fund source for the state's flood control infrastructure. Such a dedicated funding source would allow decision makers to plan for future projects with a higher level of certainty than is provided currently.