

**Infrastructure Financing Options for Water Supply, Drainage,  
and Environmental Mitigation Projects.**

**Discussion Briefs  
for the  
Business-Sponsored Water Marketing and Finance Project  
Discussion-Group Meetings**

June 1995

The Business Sponsored California Water Marketing and Finance Project is developing two water policy research papers, one addressing methods to finance investments in small- and large-scale water supply infrastructure and the other proposing ways to clarify sections of the California Water Code related to transfers and trades. As part of this project, local water supply agencies, government, and other interested organizations have been invited to participate in focus groups to discuss policy proposals being considered by these papers.

The following discussion briefs present nine water infrastructure finance options that will be presented and discussed at the meetings. They are organized into three categories: (1) debt finance options, (2) revenue generation options, (3) and institutional options. Each brief provides a summary of the option, its precedence, strengths and weaknesses, and issues that would be further addressed by the paper. Existing local agency financial assistance programs available for the design and construction of water projects are also summarized.

In addition to discussing the above finance-related proposals, the focus groups will provide an opportunity for participants to bring up other finance options. We strongly encourage participants to develop and submit other finance proposals that could be discussed at the meetings.

## **Debt Finance Options**

Four options are presented for debt-financing water supply, drainage, and environmental mitigation infrastructure: (1) State General Obligation Bonds, (2) Central Valley Project Act Revenue Bonds, (3) Facility Revenue Bonds, and (4) Lease-Rental Obligations and Installment-Sale Agreements.

## State General Obligation Bond Issue

**Finance Mechanism:** Voter approved authorization to issue bonds pursuant to the State General Obligation Bond Law for the purpose of financing water supply, drainage, and environmental mitigation projects. Bonds would pledge the state's full faith, credit, and taxing power for the payment of principal and interest. Bond repayment would come from either tax revenues, user charges, or some combination of the two.

**Use of Funds:** Bond proceeds could be used for a variety of water-supply-related purposes. For example, S.B. 900 – the Water Resources and Delta Restoration Act of 1996 – proposes to use state general obligation debt to directly fund or provide low-interest loans for numerous activities related to water supply development, wastewater treatment, groundwater management, and fish and wildlife restoration.

- Strengths:**
- Because the state pledges its full faith, credit, and taxing power for repayment of principal and interest, general obligation bonds are typically the lowest cost form of debt obligation available to state and municipal governments. In most cases, state general obligation debt will be less expensive than revenue bonds, lease-revenue bonds, Certificates of Participation, or other less secure forms of debt finance.
  - General obligation debt is an appropriate funding mechanism for "non-enterprise" capital projects, e.g., public good projects that do not produce a vendible output, such as schools, libraries, and roads.
  - Tax-supported general obligation debt spreads cost responsibility across all tax payers, which may be desirable for recovering the cost of public good projects that benefit all Californians.
  - For "enterprise" projects, general obligation debt can provide lower cost financing than revenue bond debt. General obligation debt that has a dedicated revenue stream for repayment is termed self-liquidating. State Water Project general obligation bonds, for example, are self-liquidating debt. The issuance of self-liquidating debt usually will not affect a state's debt ratios or credit rating, and may be lower-cost than other forms of public debt.

- Weaknesses:**
- Issuing state general obligation debt requires a 2/3 vote of the Legislature and a majority vote by the electorate. Recent election results indicate that obtaining this approval may be difficult (see charts on following page). Since the 1990 primary election, 23 state general obligation bond measures have been placed on the ballot. Of these 23, four-fifths were defeated. Of the 5 that passed, 4 were related to education. The fifth issued self-liquidating bonds for veterans home loans (no veterans bond measure has ever been defeated in California).
  - Issuing state general obligation debt for water supply projects would further dilute the state's debt capacity, and limit its ability to debt finance other activities such as education, transportation, and corrections. California has seen a significant deterioration in its debt

ratios and credit rating in recent years. Since 1985, net tax-supported debt as a percent of personal income has more than tripled, while per capita debt has almost quadrupled. Debt service as a percent of total state expenditures has gone from 0.4% in 1985 to 1.4% in 1994.

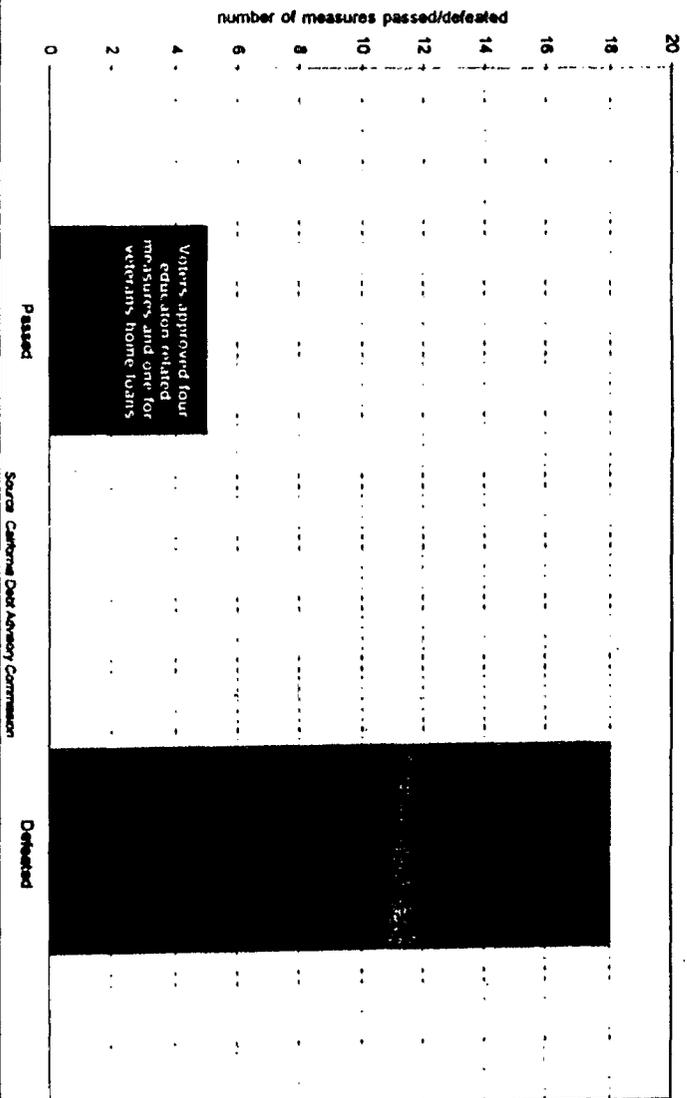
- Since 1992, California's credit rating has been downgraded three times by Moody's Investors Service. In 1992, California was downgraded from Aaa to Aa1, and then to Aa. In 1994, California's credit rating was further reduced to A1. Lower credit ratings result in higher borrowing costs. Restoring California's credit rating may require reducing tax-supported debt issues until investor confidence in the state's credit worthiness is restored.

**Other Issues:**

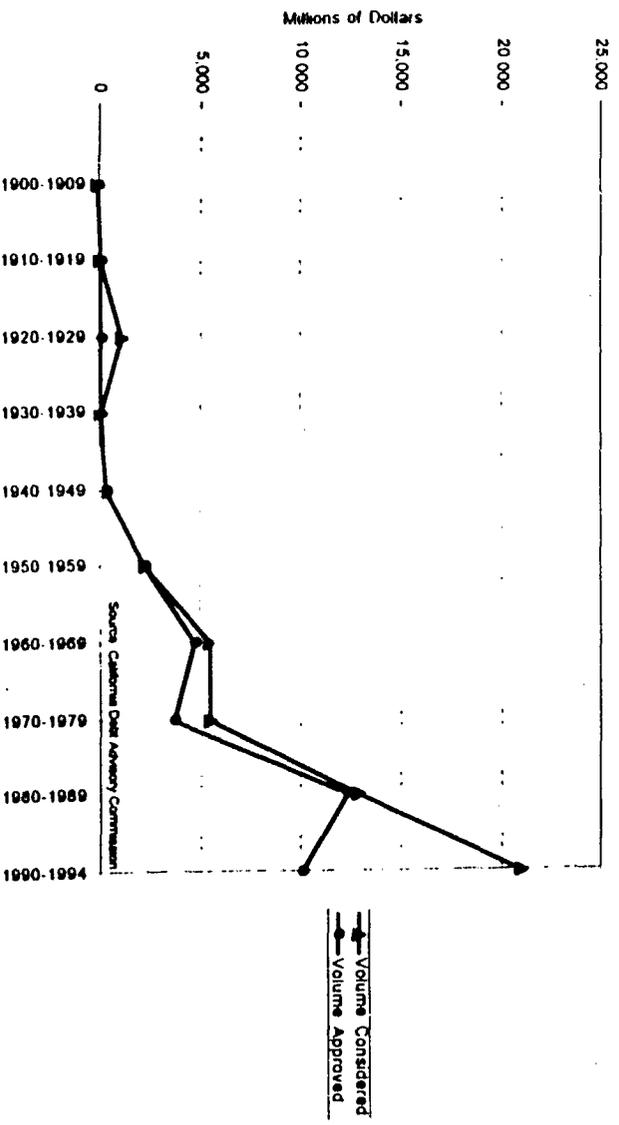
The researchers will further explore the following areas:

- Voting trends for general obligation bond measures, by type and volume.
- State's debt capacity and demands for general obligation funds.
- Opportunities to structure self-liquidating general obligation debt by attaching debt repayment to user fees or surcharges.
- Current proposals to finance water supply, drainage, and environmental mitigation projects with general obligation debt, including grant and loan programs, and revolving funds programs.

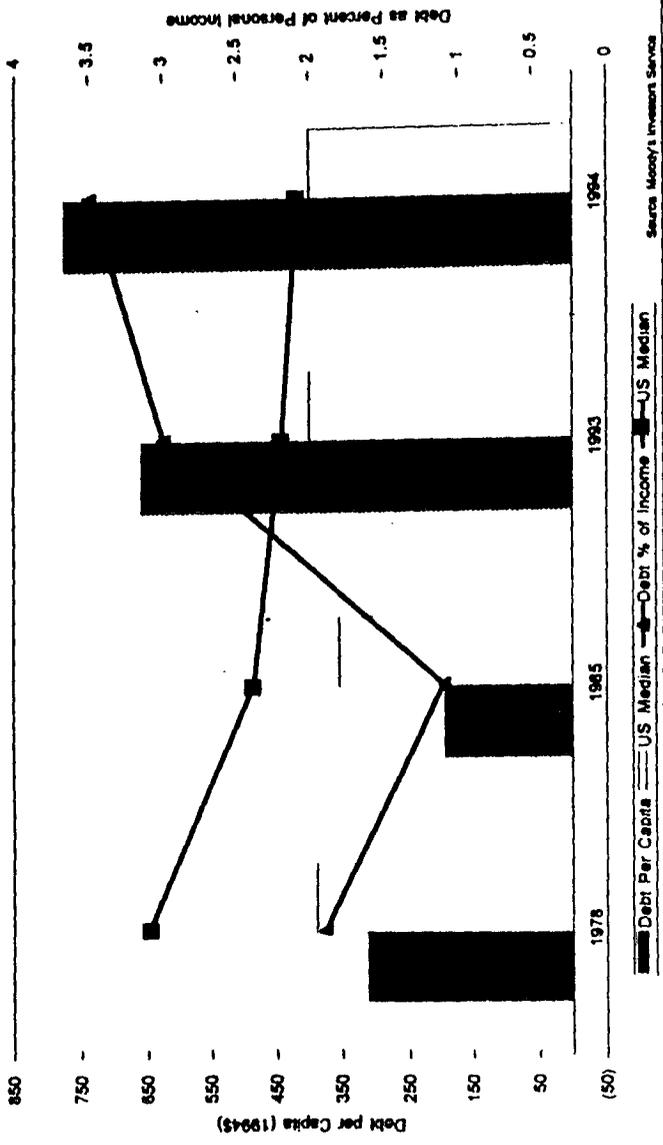
**General Obligation Bond Measure Results  
Since 1990 Primary Election**



**Summary of State General Obligation Bond Measures  
Considered in Each Decade since 1900**



State of California Net Tax-Supported Debt  
Per Capita and Percent of Personal Income



### State Water Project Revenue Bond Issue

- Finance Mechanism:** Issue revenue bonds as authorized by the Central Valley Project Act (CVPA) of 1933. State Water Project (SWP) contractor payments would secure the debt.
- Use of Funds:** CVPA revenue bonds can be used for the construction of additional SWP facilities. These might include facilities to augment SWP supply, or increase its reliability through the Delta; on-stream and off-stream surface water storage; groundwater storage and recharge facilities; and distribution facilities.
- Precedence:** DWR's authority to issue revenue bonds authorized by the Central Valley Project Act of 1933 was upheld by the California Supreme Court in 1963. To date, DWR has issued approximately \$2.4 billion in CVPA revenue bonds to construct SWP power and water supply facilities.
- Strengths:**
- Bonds would not be subject to the state's debt ceiling or voter approval requirements.
  - DWR's revenue bond rating of Aa currently exceeds the state's credit rating of A1, which may result in lower financing costs than from state general obligation debt.
  - Revenue bonds can be used to finance a variety of SWP capital projects.
  - Revenue bonds encourage full-cost pricing of SWP service. Debt service costs would be charged to project beneficiaries through user charges.
  - SWP's share of Delta mitigation projects probably could be financed with CVPA revenue bonds.
- Weaknesses:**
- Heavy reliance on CVPA revenue bonds could significantly increase SWP contractor costs.
  - Revenue bonds typically are more complicated and have higher issuance costs than general obligation bonds. This is not likely a significant obstacle for large agencies, such as DWR.
- Other Issues:** The researchers will further explore the following areas:
- Types of projects that could be financed using CVPA revenue bonds.
  - DWR capital plans and debt capacity
  - Cost impacts on SWP contractors
  - Institutional issues

### Facility Revenue Bonds

**Finance Mechanism:** Facility revenue bonds are secured by the anticipated direct revenues from the project or system being constructed. There are a variety of ways to structure and secure revenue bonds. Lower-cost structures typically involve more restrictive bond covenants.

**Use of Funds:** Facility revenue bonds can be used to finance projects that will generate revenues. Revenue sources might include use fees, user charges, and revenue from complementary goods made available by the project. Revenue bonds traditionally have been used to finance water supply and wastewater treatment facilities that provide vendible services.

**Strengths:**

- Revenue bonds preserve local government credit ratings and protect the general taxpayer from liability.
- Revenue bonds typically are not subject to legal debt ceilings and voter approval requirements.
- Revenue bonds encourage self-supporting projects and full-cost pricing of services.
- In instances where a government's credit rating is low, revenue bonds may provide stronger security and lower borrowing cost than general obligation debt (e.g., DWR revenue bonds are currently rated higher than State of California general obligation debt).

**Weaknesses:**

- Marketing costs for revenue bonds are usually higher than for general obligation debt because of the need for detailed, project-specific information and evaluation.
- In instances where a government's credit rating is good, interest costs for revenue-backed debt will be higher than for general obligation debt.
- Revenue bonds usually have high coverage requirements. Net revenues typically must exceed debt service requirements by 25 to 50 percent.
- Revenue bonds usually require a reserve fund equal to as much as 10 percent of the debt obligation be established.

**Other Issues:** The researchers will further explore the following areas:

- Facility revenue bond structures
- Types of projects that could be funded with revenue bonds

## Lease-Rental and Installment-Sales Agreements

- Finance Mechanism:** For large capital projects, local and state agencies can secure financing by marketing lease obligations through the retail securities market. This is done by issuing Certificates of Participation (COPs) in tax-exempt lease obligations or installment sale agreements. COPs pay tax-exempt interest and are freely tradable, as with a municipal or state bond. Government agencies often find that their leasing powers provide more expedient access to capital markets than their more limited powers to incur debt. Tax-exempt leases are designed to avoid classification as debt for purposes of the constitutional debt limitation (Article XVI, Section 18 of the California Constitution), which prohibits cities, counties, school districts and boards of education from incurring indebtedness without two-thirds voter approval (special districts other than school districts are not subject to this limitation).
- Use of Funds:** Facility revenue from the sale of lease obligations and installment-sale agreements can be used to finance a variety of capital projects. Lease obligations are used when payment of principal and interest are appropriated from general fund moneys. Installment-sale agreements are used when special fund moneys, such as from project user fees, are available.
- Precedence:** Since Proposition 13, lease-revenue and installment-sales agreements have been used increasingly by local governments to fund capital improvement projects. The state government has also begun to rely more heavily on lease-rental obligations in recent years. As of June 10, 1994, the state had \$5.1 billion in lease-rental obligations outstanding.
- Strengths:**
- Because lease-rental obligations and installment-sale agreements are not legally defined as debt, their issuance is not subject to constitutional debt limitations or super-majority voting requirements. This gives local governments access to general fund moneys for capital financing that they would not have otherwise.
  - Lease-rental and installment-sale Certificates of Participation enjoy a ready market and are freely tradable.
- Weaknesses:**
- Because they constitute unsecured debt, which carries a risk premium, lease-rental obligations and installment-sale agreements are a relatively high-cost form of borrowing .
  - Because they do not require voter approval, a government can incur debt without the consent of its citizens. Capital projects may also undergo less public scrutiny when this type of financing is used. It should be noted, however, that local governments frequently seek voter approval to issue Certificates of Participation.
  - Lease-rental agreements have come under increasing scrutiny in recent months. Some analysts argue that they are contrary to democratic decision making, stifle public oversight of capital planning, and intentionally skirt constitutional debt limitations.

**Other Issues:**

The researchers will further explore the following areas:

- Potential use of lease-rental obligations and installment-sale agreements to finance local water supply and drainage infrastructure.
- Issues related to structuring lease-rental obligations and installment-sale agreements.
- The current controversy surrounding the use of these debt instruments.

## **Revenue Generation Options**

Two revenue generation options to secure debt issues or provide loans and grants for water supply and conservation, water quality, drainage, and Delta mitigation projects are presented: (1) Delta User Fee; and (2) Statewide Water Utility Surcharge.

## Water Utility Surcharge

- Revenue Mechanism:** A statewide surcharge on purchases of water from water utilities, to be calculated on a dollar per unit of water basis. Differential surcharges for agricultural and municipal/industrial uses could be applied. Charges would apply to retail uses of water; wholesale purchases would not be subject to the surcharge. Surcharges could appear as separate line items on customer billing statements.
- Revenue Potential:** Revenue potential would depend on the level of surcharges, and amount of supply not subject to surcharge (e.g., self-supplied groundwater and riparian diversions). For example, based on 1990 urban and agricultural demands, accounting for water losses, and assuming 50% and 5% of agricultural and urban demands are self-supplied, respectively, surcharges of \$5 per acre-foot for urban uses and \$2.50 per acre-foot for agricultural uses would have collected approximately \$58 million in revenues.
- Use of Funds:** Surcharge revenues would be collected by the State Board of Equalization, transferred to the General Fund, and credited to a special account. Moneys could be appropriated by the Legislature from this account to finance public benefit components of water supply, drainage, and environmental mitigation infrastructure projects.
- Limits and Sunset:** Authorizing legislation could set limits on surcharge levels. Surcharges could then be varied within those limits according to funding needs. A sunset provision could be instituted to phase-out the surcharges over time.
- Precedence:** Excise taxes in California are attached to numerous goods and are used for a variety of purposes.
- An energy resources surcharge is currently placed on a per kilowatt-hour basis on electricity sales. Surcharge revenue is credited to the State Energy Resources Conservation and Development Account in the General Fund. The Legislature appropriates account funds to support the California Energy Commission and the California Public Utilities Commission, and to fund research, design, and development of energy supply and conservation technologies.
  - The motor vehicle fuel tax applies a per gallon surcharge on gasoline and diesel fuel sales. Surcharge funds are appropriated by the Legislature to fund a variety of transportation-related activities, including the repair, upgrading, and development of transportation infrastructure.
- Strengths:**
- The surcharge would provide a reliable source of revenue for pay-as-you-go or debt financing public benefit aspects of water supply, drainage and environmental mitigation projects.

- Revenue could be used to secure self-liquidating general obligation debt.
- Revenue could be used to help establish a state-administered revolving loan fund for water supply, drainage, and environmental mitigation projects.
- The surcharge would promote cost-effective conservation investments and more efficient water use.

**Weaknesses:**

- Legislature approval would be required to enact surcharge.
- Fund availability would depend on periodic appropriations by the Legislature.
- May be burdensome for utilities to administer.
- Would require utilities to meter their customers or have some other reasonable way to assess the surcharge.
- May encourage "system by pass" by agricultural or large industrial customers, and may increase reliance on groundwater in some areas by increasing the relative cost of surface water.

**Other Issues:**

The researchers will further explore the following areas:

- Legislative and legal requirements to establish a surcharge
- Alternative surcharge structures and revenue potential
- Types of debt that could be secured from surcharge revenues
- Cost impacts on different classes of water user
- Other equity issues
- Institutional issues

### Delta Water User Fee

- Revenue Mechanism:** Delta Water User Fee. The user fee would assess a per acre-foot dollar amount against diversions or exports from the Delta and its tributaries by water rights holders. Fees could be structured to balance cost responsibility between in-basin versus export uses, and agricultural versus municipal/industrial uses. Water deliveries subject to mitigation fund charges under Public Law 102-575 could be exempted from the fee. This proposal is similar to the SWRCB's Draft Decision 1630 proposed user fees to fund environmental mitigation projects for the Delta and its tributaries. Under the SWRCB proposal, water exported for urban uses would be assessed \$15 per acre-foot, while agricultural exports would be assessed \$3 per acre-foot. In-basin urban and agricultural uses would have been assessed \$10 and \$2 per acre-foot respectively.
- Revenue Potential:** Likely to range between \$20 and \$60 million per year, depending on the fee level and amount of water diversions.
- Use of Funds:** Department of Water Resources (DWR) Bulletin 160-93 and State Water Resources Control Board (SWRCB) Draft Decision 1630 list various Delta estuary mitigation projects that have been proposed for the Sacramento and San Joaquin Rivers and the Delta. Costs for these projects are uncertain, but preliminary estimates indicate costs ranging between \$10 to \$50 million per project. Total mitigation costs may run to several hundred million dollars. Revenue collected from the Delta Water User Fee could be used to directly pay for mitigation projects (pay-as-you-go financing) or to secure a bond authorization to finance Delta mitigation projects (pay-as-you-use financing). An "enterprise fund" general obligation debt issuance would be consistent with this type of revenue mechanism.
- Allocation of Funds:** Mitigation funds secured through the user fee could be administered and allocated by an existing institution, such as DWR or SWRCB, or by a new public authority (see Bay Delta Water Authority). Both DWR and SWRCB currently administer bond fund programs for conservation, groundwater recharge, reclamation, and drainage management capital improvements.
- Sunset:** Collection of fees and allocation of funds could be reviewed by an appropriate state agency (e.g. Dept. of Finance or Treasurer's Office) at the end of each fiscal year. If fee revenues are used to directly fund projects, a sunset provision could be included, either in terms of a revenue target or time elapsed. If fee revenues are used to secure debt, the repayment provisions for the debt would determine the life of the fee.
- Precedence:**
- Title 34 of Public Law 102-575 established a variety of user fees attached to use of CVP water to fund environmental restoration projects and water purchases for environmental purposes.

- The City of Santa Monica recently instituted the Bay Saver Fee. Under this program, households that have not retrofitted their toilets and showerheads are assessed a monthly fee of \$2.00/month for single-family households and \$1.30/month for multi-family households.

**Cost Impacts:**

Cost impacts to end-users would vary according to fee structure, type of user, pre-fee cost of water, and assessed water as a proportion of total supply. The chart on the following page shows the change in supply cost for agricultural and urban water supply agencies paying a \$3 and \$15 per acre-foot fee, respectively, given different initial supply cost and mix combinations.

**Strengths:**

From a finance perspective, a system of user fees to fund Delta improvements offers several advantages.

- User fees would enable more flexible project financing. User fee revenue could be used either to directly finance mitigation projects or secure bond issues to debt finance mitigation projects.
- Fee revenue could be used to secure self-liquidating general obligation debt. Although self-liquidating general obligation debt is secured by an unqualified pledge of the State's full faith, credit, and taxing power, it is structured to ensure minimal, if any, non reimbursed payment of debt service by the general fund. Self-liquidating debt does not dilute the state's tax-supported debt capacity or affect its credit rating.
- Fees could be structured to allocate cost responsibility for capital projects to all Delta water users.

**Weaknesses:**

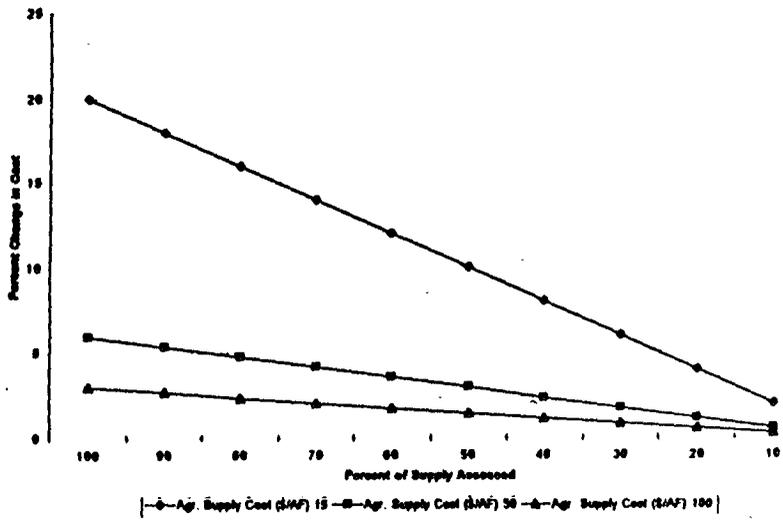
- User fees based on annual diversions may be somewhat difficult to administer. The administering agency would probably have to rely on self-reporting by individual water rights permittees.
- Annual fee revenue would be uncertain depending on weather and other factors affecting diversions.
- Ability to pay problems may also arise.

**Other Issues:**

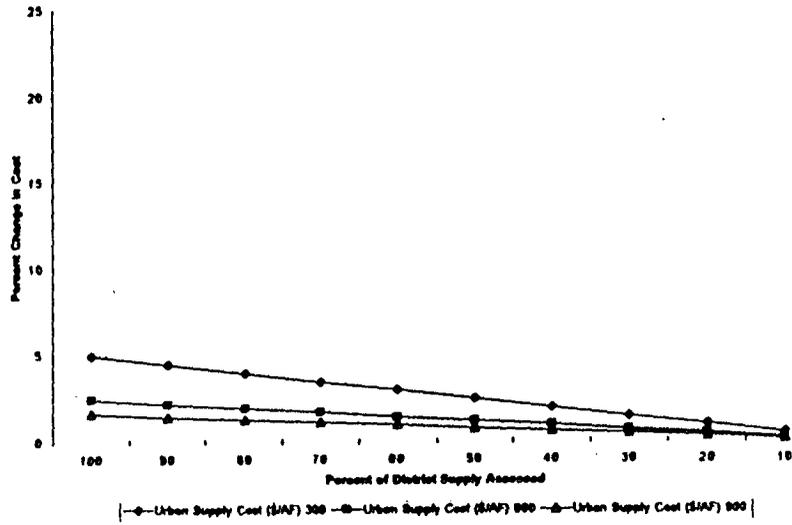
The researchers will further explore the following areas:

- Legal authority to establish and administer system of user fees
- Alternative fee structures and revenue potential
- Types of debt that could be secured with fee revenue
- Use of fee revenues
- Cost impacts on different classes of water user
- Other equity issues

Cost Impact of \$3/AF Delta Fee on Agricultural Water Suppliers



Cost Impact of \$15/AF Delta Fee on Urban Water Suppliers



## **Institutional Options**

Three institution options are presented, one for coordinating Delta-related financing, and two for providing low-cost debt financing for local agencies: (1) Bay-Delta Financing Authority; (2) Water Infrastructure Bank, and (3) Water Bond Pooling Authority.

### **Bay-Delta Financing Authority**

**Institution:** Bay-Delta Financing Authority (BDFA), an independent agency composed of seven voting members, six of whom would be appointed by the Governor and confirmed by the State Senate for staggered five-year terms. An equal number of voting members would notionally represent urban, agricultural, and environmental interests. The Authority would be chaired by the Lieutenant Governor. The BDFA could replace the California Water Commission, which currently performs an advisory role on water policy issues under the auspices of the Department of Water Resources (DWR).

The Authority would be constituted as an independent agency. However, it would operate under the overall rubric of State Water Resource Control Board (SWRCB) water quality rules, DWR water supply policies, and federal water regulation.

**Responsibilities:** The Authority would be responsible for developing five-year capital financing plans for water supply and environmental issues affecting the Bay-Delta region. The Authority would not initiate capital projects, but rather evaluate, amend, and prioritize capital proposals submitted to it by interested parties, including proposals from public sector agencies. The Authority's capital plan could be amended by the State Legislature or by ballot initiative.

The Authority would also be authorized to establish water infrastructure franchises in cases where a project is primarily privately financed (e.g., water transport fees).

Actual capital projects would be undertaken by proposal submitters. Where a project does not have a clear sponsor, the Authority would competitively bid it, enabling public sector agencies (e.g., Department of Water Resources; U.S. Army Corps of Engineers) to compete with private sector entities.

**Financing:** The Authority would be responsible for allocating funds from a trust fund -- the State Water Trust Fund -- which would be financed from a combination of broad and narrow water user fees and debt issues. The Authority would also secure project funding from federal agencies. The Authority would not be responsible for financing all of the projects contained in the capital plan; rather its primary funding responsibility would be related to sponsoring "public goods" (e.g., habitat recovery projects).

The Authority could also act as a third-party financing agent for revenue-generating projects, issuing bonds on behalf of project sponsors secured by certificate-of-participation-like instruments. For example, to the extent that a water re-use project was ultimately self-supporting, the Authority could provide bond financing to project sponsors, secured by future revenue streams.

- Sunset:** The Authority's legislative basis could be set to expire at a future date, with all unobligated trust fund moneys returned to the general fund.
- Precedence:**
- The California Water Commission, governed by nine board members nominated by the Governor and confirmed by the State Senate, provides water policy advice to DWR. Predecessor organizations to the Commission held statutory authority to administer specific water revenue programs. In addition, the Central Valley Project Improvement Act (CVPIA) established a restoration fund – financed by water user fees and administered by the U.S. Bureau of Reclamation – to pay for fish and wildlife protection.
  - The California Transportation Commission provides advice and oversight for statewide transportation infrastructure investment. The Commission also allocates infrastructure financing, principally from general obligation funds secured through ballot initiative. Limited statewide capital financing for energy projects is provided by the California Energy Commission.
  - In 1984 the Assembly Office of Research proposed the creation of a California Improvement Authority (CPIA) to administer overall infrastructure investment in the state, including serving as a bond pooling agency for local governments. The CPIA would have been lead by a five member board consisting of the State Treasurer, Director of Finance, State Controller, and two members appointed by the Speaker of the Assembly and the President pro Tempore of the State Senate.
- Strengths:**
- The Authority would provide a single coordinating body which would have the ability to develop and finance long-term water infrastructure capital plans. As a result, the Authority would be well-positioned to break the existing water infrastructure log-jam.
- Weaknesses:**
- Creation of the Authority would add to an already bloated water bureaucracy, which includes the U.S. Environmental Protection Agency, U.S. Bureau of Reclamation, U.S. Army Corps of Engineers, Department of Water Resources, the State Water Resources Control Board, regional water boards, and specific Bay-Delta proceedings.
  - The Authority's responsibilities would also significantly interact with existing delta water projects, including the State Water Project (SWP). As a result, considerable legal and financial interaction between the Authority and other organizations would be required.
- Other Issues:** The researchers will further explore the following areas:
- Composition of the Authority's governing board
  - Relationship of the Authority with existing water-related agencies and federal water projects.

- Structure of water user fees, including consideration of groundwater issues.
- State Water Trust Fund Structure.
- Process of capital plan development.
- Analysis of Trust Fund revenues and project financing characteristics, including potential financing for both capital and operating expenses.

### Water Infrastructure Bank

- Institution:** Water Infrastructure Bank. The Bank could be administered by the State Water Resources Control Board (SWRCB) or by the Department of Water Resources (DWR).
- Responsibilities:** The Bank would provide loans, grants, and matching funds to public agencies, small communities, and water utilities to finance water supply, storage, conservation, and environmental infrastructure. Where appropriate (e.g., for small communities), the Bank would also direct applicants to financing pools as a means of reducing borrowing costs (see related issue brief).
- Applicants would submit proposed projects to the Bank for funding on a multiple-year basis. Criteria to receive Bank financing could include the public benefits engendered by the proposed projects; the project's regional or statewide importance; and the applicant's need. To the extent possible Bank-financing would be based on loans rather than direct grants, so as to maintain available Bank funds over time.
- Financing:** The Bank could be financed by general obligation bonds, as approved by the voters, and/or Delta fees or water use surcharges (see related issue briefs).
- Sunset:** The Bank's initial voter-approved financing would be expected to diminish over time, but some revenue-based and loan funds would remain available indefinitely. The Bank would evaluate the need to garner additional voter-approved moneys every three years.
- Precedence:**
- Approximately one dozen states operate bond banks which provide financing for either broad or narrow purposes. In many cases these banks are more similar to pools, in that financing is generated by local bond initiatives pooled together into a state-sponsored entity.
  - California already has several programs administered by DWR and SWRCB to provide low-interest loans and grants to local agencies for the design and construction of water supply, reclamation, groundwater recharge, conservation, and drainage control projects. For example, Proposition 25 provided \$10.5 million in water-related funding in 1984; Proposition 44 provided \$75 million in 1986; and Proposition 82 provided \$60 million in 1988. Most of these programs are oversubscribed and future funding remains highly uncertain.
- Strengths:**
- The Bank would provide a focus for efforts to raise needed water infrastructure capital through ballot initiative.
  - The Bank may provide capital cost savings by reducing debt-related overhead expenses
- Weaknesses:**
- Bank funds would have to be administered carefully to insure that only cost-effective, beneficial projects that could not otherwise be self-financed are funded

- As in any case where government provides low-or no-cost financing, the Bank would be susceptible to supporting risky or low-priority investment.
- California's net tax-supported debt capacity would be further diluted to the extent that Bank seed money is provided by issuing state general obligation bonds.

**Other Issues:**

The researchers would address the following additional issues:

- Previous in- and out-of-state experience with bond banks and special funds.
- Potential capital cost savings associated with a Bank.
- Potential size of the Bank
- Criteria for obtaining Bank financing.
- Potential Bank financing instruments (e.g., loan guarantees, loans, grants, cost shares).

### Water Bond Pooling Authority

- Institution:** Water Bond Pooling Authority. The Pooling Authority could be administered by the State Treasurer's office. The Authority could be chaired by the State Treasurer with other members representing local and regional agencies.
- Responsibilities:** The Water Bond Pooling Authority would not be backed with the State's full faith and credit. Rather, the Bond Pooling Authority would assemble individual bonds from local agencies, sell a bond issue of its own, and use the funds to purchase the local bonds. The Authority would establish eligibility requirements for local agency participation.
- The Authority would service the local bond debt, provide bond counsel to local agencies, and obtain insurance. It would also be responsible for maintaining coverage requirements for interest and principal on outstanding bonds.
- Financing:** The Bond Pooling Authority would be self-financing through charges to the borrowing agencies. A loan from the State Treasury to provide operational start-up costs may be necessary.
- Sunset:** The Pooling Authority should submit annual reports to the Governor, be reviewed periodically, and, since it is self-financed, could remain in effect indefinitely.
- Precedence:**
- Ten States have Bond banks that act as intermediaries in financial markets.
  - California has debated such an Authority for many years. Currently, the Marks-Roos Local Bond Pooling Act of 1985 allows local agencies to set up a Joint Powers Authority (JPA) to pool bonds. However, this financing mechanism is more restrictive than the proposed Authority.
  - The Association of California Water Agencies Financing Authority operates a pooled financing program to provide competitive financing for water districts with small capital projects.
- Strengths:**
- A Bond Pooling Authority would save local agencies money by providing economies of scale in financial markets. Pooling bond issues would also engender savings related to issuance and transaction costs, such as bond council and underwriter costs.
  - The Authority would maintain a specialized staff to provide local agencies with assistance in structuring financing. The staff would also be in contact with national credit markets when issuing new debt to obtain lower rates.
  - The Authority's financing would not dilute the state's net tax-supported debt capacity.
- Weaknesses:**
- While a Bond Pooling Authority would be a benefit to small agencies with restricted access to financial markets, larger agencies with their own credit ratings would probably not choose to issue bonds through

a Pooling Authority. As a result, it would be important that terms for participation minimize selection bias towards poor risk bonds.

- The Authority may have difficulty timing bond issues. For example, the Authority would issue one bond that represents a series of local projects. Once issued, payments on this bond would begin. As a result, all interested parties would need to have similar project start dates to avoid making payments on funds that are not yet needed.

**Other Issues:**

The researchers would address the following additional issues:

- Previous in-state experience with Bond Pooling proposals.
- Previous in- and out-of-state experience with Bond Pooling.
- Potential capital cost savings associated with a Bond Pool.
- Potential financial debt Authority may undertake.
- Types of bonds Authority may consider.
- Type of pooling; Dedicated, Blind, Composite, Other.

## **Existing Local Agency Financial Assistance Programs**

**Existing local agency financial assistance programs for the planning and construction of water supply, conservation, drainage, and environmental mitigation infrastructure are listed below. Many of the programs have limited funding and/or are fully subscribed.**

**The researchers will explore options for extending the funding and/or increasing the scope of services provided by various programs currently in existence.**

## Grant and Low-Interest Loan Programs

### California Safe Drinking Water Bond Law

- Type of Assistance:** Grants -- not to exceed \$400,000 -- and low-interest loans -- not to exceed \$5,000,000 -- for upgrading domestic water supply systems to meet minimum state and federal drinking water standards.
- Eligibility:** Municipalities, water districts, school districts, counties, cities, or any other public or privately owned supplier of a domestic water system. Privately owned domestic water systems may apply for loans. Public agencies may apply for loans and will be considered for grants based on ability to repay loan. Must serve at least 15 service connections or 25 individuals.
- Administering Agency:** Department of Water Resources
- Funding Source:** Safe Drinking Water Bond Laws of 1976, 1984, 1986, 1988. Cumulative amount authorized: \$425 million.
- Availability of Funds:** \$61 million in authorized general obligation bonds unissued as of February 1995. However, only about \$8 million unsubscribed funds remain.

### Water Conservation Bond Law of 1988

- Type of Assistance:** Low-interest loans for new water supply, groundwater recharge facilities and water conservation construction projects and feasibility studies. Interest on loans for recharge and conservation projects is one-half the state's interest rate at the time of the bond sale. Interest on loans for new water supply projects is the state's full interest rate at the time of bond sale. Maximum loan is \$5,000,000 per construction project and \$100,000 per feasibility study (\$500,000 for water supply studies).
- Eligibility:** Public agencies.
- Administering Agency:** Department of Water Resources
- Funding Source:** Water Conservation Bond Law of 1988 (Proposition 82) authorized \$60 million bond sale. Approximately \$27 million remains unissued.
- Program Status:** Funds dispersed on a first come first serve basis. Approximately \$20 million unsubscribed.

**Clean Water and Water Reclamation Bond Law of 1988  
Small Communities Grant Program**

**Type of Assistance:** Grants of up to \$2 million to qualifying small, needy communities (3,500 people or fewer) where a public health hazard, water pollution, or potential water pollution problem exists.

**Eligibility:** Any public agency with the authority to operate and maintain sewage treatment facilities and meeting economic need criteria.

**Administering Agency:** Water Resources Control Board

**Funding Source:** \$25 million from Clean Water and Reclamation Bond Law of 1988.

**Program Status:** Fully subscribed

**State Revolving Fund Loan (SRF) Program**

**Type of Assistance:** Low-interest loans up to \$20 million for planning, design, and construction of publicly owned wastewater treatment works projects, construction of storm drainage and nonpoint source pollution projects, and development and implementation of estuary conservation and management plans. Loan interest is one-half the most recent sale of state general obligation bonds; repayment is up to 20 years.

**Eligibility:**

- Wastewater Treatment:** applicant must be a public agency
- Stormwater Drainage:** applicant must be a public agency
- Nonpoint Source Pollution:** applicant can be any public agency or organization with authority to control nonpoint source pollution; loans may be issued to individuals for demonstration projects only.
- Estuary Enhancement Projects:** applicants may be region water pollution control agencies and entities, state coastal zone management institutions, organizations, and individuals.
- Water Reclamation:** applicant must be a public agency.

**Administering Agency:** State Water Resources Control Board

**Funding Source:** Clean Water Bond Law of 1984

**Program Status:** [waiting for information]

**Agricultural Drainage Water Management Loan Program**

**Type of Assistance:** Low-interest loans of up to \$20 million for design and construction of agricultural water management facilities. Eligible drainage water management projects include land and facilities for the treatment, storage, and disposal of agricultural drainage water which, if discharge untreated, would pollute or threaten to pollute the waters of the state.

**Eligibility:** Any city, county, district, joint power authority, or other political subdivision of the state involved with water management.

**Administering Agency:** Water Resources Control Board

**Funding Source:** Water Conservation and Water Quality Bond Law of 1986; \$75 million of \$150 million total for agricultural drainage projects.

**Program Status:** Loan funds have been fully committed for 15 projects. No additional funds are available.

#### **Water Reclamation Loan Program**

**Type of Assistance:** Low-interest loans of up to \$5 million for the design and construction of water reclamation facilities. Interest on loans is set at one-half the rate paid by the state on the most recent sale of state general obligation bonds.

**Eligibility:** Any local public agency with the authority to operate and maintain water reclamation facilities. Eligible reclamation project include facilities for wastewater treatment and storage and distribution of reclaimed water.

**Administering Agency:** Water Resources Control Board

**Funding Source:** Clean Water Bond Law of 1984; Clean Water and Water Reclamation Bond Law of 1988.

**Program Status:** Approximately \$26 million worth of bonds still to be issued.

#### **Nonpoint Source (NPS) Water Quality Implementation Grant**

**Type of Assistance:** Grants of up to \$200,000 for NPS pollution projects; requires 40% match. All planning and development activities excluded, except for groundwater projects.

**Eligibility:** Public agencies, nonprofit organizations, and universities.

**Administering Agency:** Water Resources Control Board

**Funding Source:** Congressional appropriations for grants; funding varies each year. Authorized by Clean Water Act, Section 319.

**Program Status:** Funding varies annually

#### **USDA Rural Development Administration Grants and Loan Programs**

**Type of Assistance:** Cash grants and low-interest loans for the installation, repair, improvement, or expansion of water and wastewater systems. Specific program criteria and water system characteristics determine loan interest rate, which may vary from 5% to market-rate level.

**Eligibility:** Water districts providing service to rural areas or communities of fewer than 10,000 people. Grants are restricted to public and nonprofit water suppliers.

**Administering Agency:** United State Department of Agriculture

**Funding Source:** Congressional appropriations

**Program Status:** Appropriations vary annually

**CoBank Loan Program**

**Type of Assistance:** Long-term and interim loans for construction and equipment financing.

**Eligibility:** Community water systems serving less than 20,000 and meeting credit risk criteria.

**Administering Agency:** CoBank, a federally chartered private financial institution owned by approximately 2,400 agricultural cooperatives and rural utilities.

**Funding Source:** [waiting for information]

**Program Status:** [waiting for information]

**Environmental License Plate Fund**

**Type of Assistance:** Cash grants of up to \$3 million for a variety of projects that help to preserve or protect California's environment. Projects must have clearly defined benefits, and are funded in one-year increments.

**Eligibility:** State agencies, boards, or commissions; city or county agencies; the University of California; private nonprofit environmental and land acquisition organizations, and private research organizations.

**Administering Agency:** Resources Agency

**Funding Source:** Appropriations from the legislature and revenue from sale of personalized license plates. Available funds vary by year. In fiscal year 1992/93 \$30 million was available. Program authorized by Public Resources Code Section 21190, Division 13.5.

**Program Status:** Funding varies annually.

**USBR Conservation Challenge Grants**

**Type of Assistance:** Challenge grants for competitively selected conservation demonstration projects.

**Eligibility:** Public/private agencies and research institutions

**Administering Agency:** United States Bureau of Reclamation

**Funding Source:** United States Bureau of Reclamation

Program Status: [waiting for information]

### **USBR Drainage Management Challenge Grants**

Type of Assistance: Challenge grants for competitively selected drainage management demonstration projects.

Eligibility: Public/private agencies and research institutions.

Administering Agency: United States Bureau of Reclamation

Funding Source: United States Bureau of Reclamation

Program Status: This is a 3 year demonstration program. Future funding uncertain.

### **Delta Levee Maintenance Subventions**

Type of Assistance: Reimbursement of up to 75% of the cost of maintenance and rehabilitation in excess of \$1,000 per mile. When the program is oversubscribed, funding is prioritized, and reimbursement of some activities may be less than 75%.

Eligibility: Public agencies responsible for the maintenance of nonproject levees in the Sacramento-San Joaquin Delta.

Administering Agency: Department of Water Resources

Funding Source: Subventions -- 1992/93 fiscal year: \$2.8 million. Authorized by SB 34, Urgency Statute, March 12, 1994, and Water Code sections 12300,12301,12310-12316 and 12980-12993.

Availability of Funds: [waiting for information]

### **Flood Control Subventions**

Type of Assistance: Financial assistance to local agencies cooperating in the construction of federal flood control projects by paying a portion of nonfederal costs.

Eligibility: Any political subdivision authorized to cooperate in the construction of the federal projects.

Administering Agency: Department of Water Resources

Funding Source: Subventions -- 1991/92 \$20.1 million; not funded in 1992/93. Authorized by Chapter 1-4, Part 6, Division 6, California Water Code.

Availability of Funds: [waiting for information]

**SB 776 State Water Resources Revolving Loan Fund (pending legislation)**

**Type of Assistance:** SB 776 would create the State Water Resources Revolving Loan Fund to provide loans to local agencies to aid in the construction of local water supply projects and to aid in the funding of voluntary, cost-effective capital outlay water conservation programs and groundwater recharge facilities.

**Eligibility:** Not specified

**Administering Agency:** Department of Water Resources

**Funding Source:** Bond issue; appropriations from general fund.

**Program Status:** Proposed

## **Loan Guarantee and Bond Pooling Programs**

### **California Capital Access Program**

**Type of Assistance:** Loan insurance for small business loans of up to \$2.5 million. Loans can be used to finance the acquisition of land, construction or renovation of facilities, the purchase of equipment, other capital projects, and working capital.

**Eligibility:** Any designated small business within an industry that impacts the environment.

**Administering Agency:** California Pollution Control Financing Authority

**Funding Source:** Not applicable

**Program Status:** Active

### **Conventional Loan Guarantee Program**

**Type of Assistance:** Partial guarantees on conventional commercial loans made by banks and other qualified financial institutions for small business pollution control or waste disposal projects.

**Eligibility:** Any designated small business within an industry that impacts the environment.

**Administering Agency:** California Pollution Control Financing Authority

**Funding Source:** Not applicable

**Program Status:** Active

### **Association of California Water Agencies Financing Authority**

**Type of Assistance:** A pooled financing program to provide competitive cost of financing for water districts with smaller capital projects. Special emphasis is given to first time or occasional issuers. Issues must be greater than \$250,000 and may be up to approximately \$4 million.

**Eligibility:** Municipal and agricultural water districts

**Administering Agency:** Association of California Water Agencies Financing Authority

**Funding Source:** Not applicable

**Program Status:** Active

**Financing Authority for Resource Efficiency of California (FARECal)**

**Type of Assistance:** A pooled financing program to provide competitive cost of financing for energy and water demand-side-management programs and capital investments.

**Eligibility:** Publicly owned electric, water, natural gas, reclaimed water and steam utilities that are eligible for membership in the California Municipal Utilities Association.

**Administering Agency:** Financing Authority for Resource Efficiency of California (FARECal)

**Funding Source:** Not applicable

**Program Status:** Active