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CALFED Bay Delta Program: Financing Overview

I. Introduction

This financing overview presents an array of financing alternatives which may be available to provide funding for short and long range projects developed as part of the CALFED Bay Delta Program ("CALFED"). The list of revenue sources and financial techniques is intended to be as broad and inclusive as possible to foster discussion and further analysis prior to narrowing the range of feasible alternatives, and may include some concepts which may not be immediately applicable to a Bay Delta solution. In many cases, the concepts listed here would require legislative or other significant actions in order to be implemented. It is intended that the concepts developed in this paper will serve as the broad set of alternatives from which the elements of the eventual financial plan are to be taken.

II. Program Description

Any of the alternative long term solutions developed through the CALFED process will likely result in a number of distinct short and long term activities with capital requirements as well as ongoing operations and maintenance costs. Although the specific short term activities are likely to be identified in sufficient detail to enable accurate funding estimates, the exact nature and costs of the longer term activities will not be known at the time of development of the financial plan. Despite this fact, the financial architecture must anticipate such future needs and provide the mechanisms for future funding as an integral part of the structure.

In addition to anticipating future needs, the financial plan must also demonstrate the relative financial feasibility of alternative solutions. A key aspect of the CALFED process is that proposed solutions be realistic and affordable.

III. Financial Principles

The CALFED Bay Delta Program has established a number of key principles which are viewed as essential to the development of a long term solution. Within the subset of financial issues, there are similar underlying principles or policies which will direct the creating of the revenue package to fund the overall program.

A basic principle is that to the extent an action creates a benefit that can be quantified and traced to an identifiable group, the revenue for that action should come from the group of beneficiaries. When choosing revenue sources for that action, a source must be devised which addresses that group and is adequate to pay for the costs related to that action. When actions create benefits to a broad group, then a revenue source which addresses that broad group must be developed. Actions may create benefits to both specific parties and broad groups, in which case revenue needs must be allocated between the two.

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A second principle is that the financial structure should create linkages between different parts of the long term solution to provide structural support to the ongoing compatibility of the different aspects of the program. For example, linking the financial structure for certain habitat programs to the structure for increasing water reliability could ensure that reliability actions cannot be funded without also funding the habitat actions.

IV. Revenue Sources

Finding the sources of revenue to pay the annual operating costs, capital needs, and debt service payments for CALFED is one of the major challenges of the program. Although bond issues are often looked to as a revenue source, this is somewhat erroneous. Borrowed funds which must be repaid at interest cannot be viewed as a revenue source. Bond issues can serve to accelerate the availability of future revenues, but a source of revenue to repay the debt with interest must be identified in any case prior to issuance of the debt.

The combination of revenues which will support implementation of a long term Bay Delta solution into the future is likely to be diverse, including sources of varying credit strength, predictability and timing. While certain potential sources are easy to identify, new revenue sources identified in this process will help relieve the burden placed on more conventional sources of revenue. It is also useful to distinguish between new sources of revenue and redirection of existing sources. The following paragraphs identify a number of potential sources of revenue.

A. Traditional Sources

A variety of conventional sources of revenue for public projects may be available to CALFED. The following list covers a wide range of such potential sources. It should be noted that in many cases implementation of these revenue sources would require legislative action or voter approval.

1. Federal and State Appropriations

A portion of the revenue may be appropriated by the federal government and the State of California. These sources of revenue are often difficult to project, due to appropriation procedures and the nature of the political process. Although government sources of funding are disappearing in many cases, an example of such funding was the establishment of State Revolving Funds related to the Clean Water Act. There has been some discussion of extending this concept to drinking water purposes through the Safe Drinking Water Act in recent years. This category could include both new appropriations, as well as some redirection of existing funds from lower priority uses. For CALFED, for example, this could mean applying for funding from USDA programs relating to pollution control to pay for certain aspects of water quality related actions, or redirecting a portion of vanity license plate revenues to CALFED programs.

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2. Ad Valorem Tax

Also known as property tax, this revenue source is usually viewed as the very highest quality of credit. Property taxes are imposed by every California county. Although many municipalities receive a portion of the property taxes collected in California, significant restrictions exist on imposing new ad valorem taxes, including the requirement for a voter approval by a 2/3 vote. Some redirection of existing ad valorem tax revenues not pledged for outstanding bonds has taken place in recent years as a way of indirectly addressing the State's budget deficit.

3. Sales Tax

Sales tax revenues have provided for large revenue needs for a variety of publicly supported projects in recent years. Sales tax revenues are more difficult to project than many other revenue sources. Recent court decisions have placed certain conditions on the ability of California entities to impose sales taxes, which are approved by voters prior to implementation. A recent example is the 1/2 cent sales tax measure passed by voters in Santa Clara County for purposes of funding billions of dollars of transportation improvements. For CALFED, a sales tax could be implemented to provide funding for larger scale projects with identifiable regional benefits such as levee programs.

4. Franchise and Excise Taxes

Other potential tax sources include franchise or excise taxes imposed on various entities for diverse purposes statewide. There are currently a wide variety of such taxes imposed throughout the state on any number of activities. One example of such a tax is the charge on electric energy sales which appears on the retail electric bill and provides funding for the California Energy Commission. Such a tax could be used in connection with a revolving fund, for example, to provide a statewide source of financing for water reclamation programs.

5. Special Taxes

A provision of California law allows the imposition of a special tax within an identified district for the purpose of making various public improvements (Mello Roos Districts). Typically this revenue has been used to provide for infrastructure in areas of new development, but is not limited to that use. Creation requires voter approval under the terms of the law. Application of this source to CALFED could be related to costs imposed on new communities to comply with new regulations or local matching participation in CALFED programs.

6. Assessment

Several provisions in California law allow the creation of various assessment or improvement districts to provide for public improvements. Assessments are made on property within the district and are secured by the land. Such districts have been used by a wide variety of California municipalities to raise revenue for needed capital improvements. Otay Water District, for example, has made extensive use of improvement districts and assessments to provide funding for needed capital expenditures. Flood control or levee programs benefiting specific parcels of land could use this revenue source.

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7. Water Sales Revenue

Water sales revenue is derived from charges to water users. The charges may take any number of forms, including fixed charges and charges based on use. Most water-related entities in California rely heavily on water sales revenues, including the Metropolitan Water District of Southern California. The benefit of these revenues is that the amount of the charges can be adjusted over time as needed. In the context of CALFED, user charges could pay for actions providing direct benefits related to increased water supply.

8. Power Sales Revenue

Sales of electric power generated by the flow of water in aqueducts or through reservoir releases can provide a relatively stable source of revenue. The electric industry is in the midst of dramatic structural changes, but it is likely that electric power sales can continue in some form into the future. Modesto Irrigation District, for example, has produced substantial power sales revenues by virtue of their hydroelectric power resources.

9. Standby/Availability Charges

Standby or availability charges are often imposed on land on a parcel basis. The rationale for the charge is the implied value to property owners of having access to certain services or benefits. Typically this source of revenue is very stable, predictable and dependable. The San Diego County Water Authority, for example, has a \$10 per parcel availability charge which supplements their other revenue sources. Such a charge could be used to pay for programs actions which create indirect benefits to certain users, such as reduced water treatment costs due to higher water quality in the Delta.

10. Impact Fees

Impact fees have been widely used in California to capture the effect that new development has on the requirements for public facilities. They are typically charged on new construction projects at the point of permitting, and as a result can be difficult to project. In periods of rapid construction activity, they can provide substantial revenue. Placer County Water Agency has its Plant Expansion and Replacement Charge (PERC) which is intended to provide funding to meet the water needs of new residential development.

11. Service Charges

This revenue source represents specific fees for specific actions performed by a public agency, as distinguished from the fixed charge portion of a water sales charge. Any time that a public entity performs specific special services on a discrete basis, a fee may be imposed, if only to cover the costs of such service. Such fee revenues are usually modest, but are relatively stable and predictable. Most agencies, for instance, would charge a modest fee for repairing a broken water meter.

12. Recreational Fees

This revenue source would represent fees charged for public usage of recreational facilities, or for use of the Bay/Delta for recreational purposes. Examples of this category would include items such as fishing

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licenses, stamps, access fees and many other types of existing charges. Similar to service charges, these revenues are more stable, but may not produce sizable revenue.

13. Commercial Fees

This revenue source would represent fees for commercial uses of the Bay/Delta not otherwise captured in other revenue sources, such as leases of land or commercial fishing fees. In the Puget Sound, for example, commercial clam harvesting operations lease certain areas in which to conduct their operations. Such charges could help provide for programs which indirectly benefit commercial fishing, for example.

B. Non-Traditional Sources

1. Water Transfer Sources

There may be a number of new revenue opportunities, should water transfers become more widespread in the future. Discussion of a few potential sources follows.

Water transfer charges would represent a type of administrative fee on water transfers which could occur in the future. Taking action to facilitate water transfers has been advocated by some parties, and this type of charge would generate revenue based on the volume of such transfers.

If efficient water trading is to come about, it is likely that some sort of formal exchange would need to be established. Parties interested in participating in this exchange could be expected to be willing to pay some amount in order to secure a position on such exchange. A portion of these payments could be directed to CALFED programs.

There might also be an opportunity to create a diverse array of derivative applications based on water values. This could include futures, options, and swaps. The exact nature of such instruments, and the nature of the underlying physical market, is at present hypothetical. It is, however, conceivable that CALFED programs could benefit financially from the sale of certain derivative products associated with water if trading were widespread and efficient.

2. Privatization

Sale of the State Water Project and/or the Central Valley Project has been advocated by some parties. During such a privatization process, there are likely to be significant amounts of money on the table as part of the negotiations to divide the financial benefits among the parties. If such sales were conducted as an integral part of the CALFED process, there is potential for a portion of the financial benefit to be directed to CALFED programs. This could be through a direct financial contribution either over time or at the time of sale, or by assumption of responsibility, including costs, for a portion of the program by the ultimate purchaser.

Public private partnerships could also provide funding for certain CALFED programs. For example, a private consortium could provide funding and construct a structure, and then recover their costs through a charge for usage of the structure.

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3. Base Closures

This idea is based on dedication of certain commercially or environmentally valuable portions of military bases which are slated for closure to purposes supportive of CALFED programs. In the case of commercial property, it could be sold and the proceeds directed to CALFED programs. Desirable environmental property could be viewed as an in-kind contribution, reducing the cost of completing CALFED programs.

4. Gaming Revenues

Many jurisdictions throughout the United States have been examining legalizing various forms of casino gambling in order to generate new revenue. This concept has typically involved relaxing restrictions on gambling within a limited area, and imposing a new tax on revenues of the casino operations. In the context of CALFED programs, creating a zone for riverboat casinos in the Delta and imposing a tax which was directed to Delta programs could generate new revenue.

5. Usage of New Works

If new physical works are created as part of CALFED solutions, charges could be imposed for the use of these structures. A simple example in current practice is the collection of tolls at various bridges around the Bay Area.

6. Other Sources

Other unconventional revenue sources have been identified, including affinity credit card arrangements, tax return check-off donations and charitable "adopt a bay" programs. Although these ideas are not likely to supply major funding, if properly structured and managed, they could generate important additional revenue as well as provide useful public information benefits.

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V. Financing Alternatives

Financing alternatives have been distinguished from revenue sources in order to illustrate the use of cash as well as the many forms of debt.

A. Pay As You Go

This is the most obvious way to pay for capital and operating costs, namely to pay for them as they are incurred on a current basis. Practically speaking, it is the only way to provide for ongoing operations and maintenance costs. Long-term tax-exempt financing is not available except for capital projects, and other forms of financing can be too expensive. Pay as you go is also usually the least expensive, as borrowing funds always results in both transaction costs and interest costs. Due to the nature of borrowing requirements, even programs heavily dependent on debt end up paying for at least a portion of their capital on a pay as you go basis.

For most financial programs, there is an optimum range for the amount of the program to complete on a pay as you go basis, as opposed to borrowing. This optimum will change based on the nature and timing of revenues and expenses. This implies that coordinating the financial program will be an iterative process.

B. Bonded Indebtedness

Bonded indebtedness is the corporate form of borrowing money. It is nothing more than a highly formalized, highly documented loan. Due to the corporate nature of the borrower, and the potential for numerous discrete lenders, many specific agreements are made with respect to repayment of the loan and the financial behavior of the borrower while the loan is outstanding. The agreements concerning financial behavior of the borrower are typically referred to as bond covenants.

1. Tax Exemption

An important concept for CALFED financing is the availability of tax-exempt financing. Federal tax law essentially exempts lenders (bondholders) from paying income tax on their interest earnings in certain cases. There is a complex set of rules relating to how bonds must be issued and accounted for in order to gain this exemption, but it is generally available only to public agencies for capital projects. The benefit is that the borrower pays much less interest on tax-exempt bonds, sometimes more than two full percentage points less, than borrowers of similar credit standing pay on taxable bonds. For a large bond issue, this reduction is substantial.

2. Legal Structures

There are many subtypes of bonds representing differences in legal structures and the credit quality of the revenue stream dedicated to repayment of the loan. In many cases, the type of bond issued corresponds to a specific type of revenue stream. The more recently developed legal structures are more flexible, and can be adapted to a wide variety of revenue structures.

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a) **General Obligation Bonds**

General Obligation (GO) bonds represent the strongest form of credit for a given issuer of debt. In essence the borrower pledges to use all legal sources of revenue to repay the loan, including the pledge to impose ad valorem taxes to provide for debt service. A fundamental example of this technique would be a school district, which levies a tax to pay debt service on general obligation bonds issued to build a new school.

b) **Self-Supporting General Obligation Bonds**

This type of bonds has the same credit pledge as other GO bonds, but is intended to be repaid primarily from a distinct revenue source as opposed to property taxes. This structure offers the credit quality of the GO pledge without creating additional burden on general fund revenue sources. The Contra Costa Water District, for example, has the authority to levy a tax for debt service on its GO bonds, but has in practice paid interest on the bonds from water sales revenue.

c) **Limited Tax Bonds**

Limited ability to impose ad-valorem taxes to provide for repayment is what distinguishes this category from GO bonds. An example would be bond secured by the enactment of a sales and use tax by ordinance by a redevelopment agency. Such a tax would not require voter approval, but the amount of the tax would be limited to the amount specified in the ordinance. In some cases, the credit is perceived as equal to GO, due to the fact that the limit on taxes does not have practical effect of the ability to repay the loan.

d) **Special Tax Bonds**

This category represents bond which are secured by the pledge of a specific tax, such as a franchise tax or hotel tax. The credit strength is heavily dependent on the specific tax structure and the economic characteristics of the tax base.

e) **Tax Increment Bonds**

Tax Increment bonds are used to segregate the increase in certain tax revenues after a given point in time and apply the amount by which collections exceed the baseline year to a designated separate purpose. The typical use is to finance improvements which are expected to result in an increase the tax collections within a specified zone. Many redevelopment agencies, including the San Jose Redevelopment Agency, have used this technique as a way of funding improvements to the increment zone.

f) **Revenue Bonds**

Revenue bonds are issued by municipal enterprises such as water or sewer departments and are to be repaid from the revenues associated with the operation of the enterprise. Credit strength is dependent of the financial management and performance of the enterprise as well as the economics of the service area. Under the California Revenue Bond Act of 1941, revenue bonds must be voter approved by a majority vote. The California Department of Water Resources has made extensive use of voter approved revenue bonds for the State Water Project.

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g) Installment Sale and Lease Revenue Bonds

These two credit structures enable issuers to borrow funds without voter approval. In both cases a municipal entity makes payments to a specially created legal entity, which in turn issues debt secured by the stream of payments from the municipality. The City of San Diego recently used the installment sale structure to issue \$250 million in Sewer Revenue Bonds.

h) Special Tax and Assessment Bonds

Assessment bonds are issued by assessment districts and may be authorized under a number of different California statutes. The security of assessment bonds is related to the market value of the underlying land as a source of collateral for the loan. Mello Roos bonds and other improvement district bonds can be grouped into this category, although the specific issuance procedures vary.

i) Pooled Loan Programs

This category represents bonds secured by the stream of revenues from a pool of underlying loans. Such pools are usually organized to benefit smaller borrowers who could not get favorable terms on their own due to their size or lack of credit strength. The diversity of the loan portfolio provides the lender greater assurance in the case of default. Examples of this structure abound in the residential mortgage market, and some states have used this technique to leverage their revolving fund programs as a way of increasing availability of funds. The California Municipal Utilities Association used this technique in its Farecal program.

j) Revolving Funds

In basic form a revolving fund consists of federal and/or state money deposited into a fund and then loaned out to borrowers (usually at a rate lower than the borrower would otherwise obtain). As the borrowers repay their loans, the fund is replenished, with new loans being made from the proceeds of the repayments. The advantage of the basic structure is to allow borrowers to gain a subsidized interest rate. California's Revolving Fund administered by the Water Resources Control Board is of this type.

Leveraging a revolving fund can expand the amount of money available to be loaned out by using the initial fund balance as collateral rather than as loan principal. In effect the loans made to borrowers are resold to the public. This sale is somewhat like a pooled financing, with the added security that if repayments are not made, the state or federal money will be there in reserve to provide for payment. Interest earnings from the initial balance held in reserve are often used to subsidize the loan rates to the borrowers. Eighteen states including Minnesota, Maryland and Ohio have leveraged Revolving Funds.

k) Notes

Notes are short term borrowings, usually payable within five years. Every year in California hundreds of municipalities, including the State, issue notes, usually as a way of funding intra-year cash flow deficits. Bond Anticipation notes are scheduled to be repaid with the proceeds of a later long term borrowing, but may also be repaid directly from revenues if short term revenues are adequate. Because

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the repayment of notes is short term, the identification of exact sources, amounts, and timing of revenues for repayment is usually much more important than in the case of longer term issues. The Alameda County Transportation Authority used a bond anticipation note structure in the late 1980's as a way of enhancing investment yields.

VI. Organizational Alternatives

Implementation of the selected Bay Delta alternative must be assigned to one or more specific organizations. It is likely that at least a portion of the program will be financed with some form of debt. To achieve the lowest costs, it is important that the organization responsible for debt issuance has the ability to use tax-exempt financing. The federal government does not finance on a tax-exempt basis, so either an existing state agency or a newly created special agency must take the lead.

The selected alternative is likely to require funding for a wide variety of actions related to habitat restoration, habitat management, levees, screens and other physical works. Successful implementation of these many programs may require unusually flexible, innovative financial and organizational approaches. This will be necessary to provide sufficient funding, as well as to create a funding network facilitating continued cooperation and the mutual interests of all parties well into the future. To the extent such benefits can be integrated into the financial and organizational structure of CALFED programs, the likelihood of the long-term viability of CALFED programs will be greatly enhanced.

A. Existing Institutional Structures

There are numerous existing entities that could undertake implementation of portions of the long term solutions developed through the CALFED process. Several examples are discussed below.

1. State Department of Water Resources

The State Department of Water Resources ("DWR") currently has an extensive financial program. This has the advantage of pre-existing market acceptance, and DWR has the ability to develop several of the revenue sources and borrowing techniques described above. Flexibility to develop new revenue sources and financial structures may be limited to some extent. New financing activities would have to be coordinated and in accordance with existing bond covenants and revenue obligations of DWR. To the extent that users of the SWP provide a portion of the revenue streams through contract payments, DWR would serve as the focal point.

2. State Water Resources Control Board

The State Water Resources Control Board ("SWRCB") is intimately involved in the existing Bay Delta situation, and could implement certain new programs. The SWRCB has also been administering the existing State Revolving Fund, and could potentially continue this role should new or extended revolving fund programs be developed.

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3. Local and Regional Entities

There are hundreds of local and regional water agencies who could become involved in implementing certain programs. Larger entities, for example Metropolitan Water District, could potentially take a lead role in implementing portions of the Bay Delta solution.

B. New Institutional Structures

Creation of a new institutional entity would allow development of a financial structure specially designed for CALFED. This may be useful not only in opening up the range of alternatives available to address the issues, but could potentially reduce the financial burden on existing institutional structures. In some cases it may be essential to work with a clean slate in order for legal experts to implement successfully the revenue and financing alternatives selected. There are several options for creating such an entity.

1. Joint Powers Authority

Formed pursuant to a Joint Powers Agreement, this is an entity formed by a group of existing entities to facilitate planning and finance of projects of mutual interest. Such entities have been widely used nationally to enable disparate interests and parties to work together and combine resources on major undertakings.

There exists some dispute as to the ability of federal agencies to participate directly in such a JPA. Environmental interests would need to represent a public entity in order to have direct membership, as well. In general, the powers of such an agency are limited to the powers possessed in common by all participants, and those given to such agencies under California law.

2. Authority

Typically created by a special legislative act, an Authority would be created with a specific set of duties and powers as specified in the act. Such duties and powers would be designed to implement CALFED programs. A new Authority of this type would be able to implement the alternatives suggested, provided power to do so was vested in the Authority. One of the benefits of this alternative is the ability to craft financial powers in view of the many recent financial innovations in the tax-exempt market.

Power to form certain generic types of Authorities is also provided generally in existing state statutes. Many such Authorities have been created in California to provide for regional or statewide governance in specific areas. Powers of such districts are defined by statute.

3. Special District

Although a special district may not be ideal to serve as a lead agency due to the limited nature of their powers and duties, it may be useful to use one or more special districts as an integral part of the financial program of a larger agency. Examples include improvement districts and flood control districts. This approach has been successful in a number of regions in California.

VII. Appendix: Case Studies

A. Chesapeake Bay

In Maryland, about \$200 million is spent each year from federal, state, local and private sources to protect and restore water quality in the Chesapeake Bay.

Estimates indicate that about \$60 million per year in new money will be needed to address a Tributary Strategies Plan in coming years. The Governor of Maryland appointed a Blue Ribbon panel in June 1994 to investigate new revenue sources. This panel developed a list of revenue alternatives which includes many of the sources listed in this paper as either conventional or innovative sources of revenue. The panel found it difficult to identify truly new sources, and one of its findings was that there would be continued reliance on existing revenue sources for the bulk of the program.

The panel suggested, among other things, the creation of a new storm water utility to be funded with user fees, the creation of assessment districts, the imposition of a fee for depletion/degradation of the aquifer on wells and septic tanks, and the imposition of an impact fee for new septic systems.

B. Boston Harbor

The Massachusetts Water Resources Authority was created in 1985 to construct and maintain sewer facilities to ensure that discharges into Boston Harbor met regulatory guidelines, to distribute water, and to establish and administer charges to foster the conservation of water and improve the quality of the environment. For Fiscal Year 1995, nearly 80% of revenues are expected to come from wholesale rates and charges to local entities for water and sewer service.

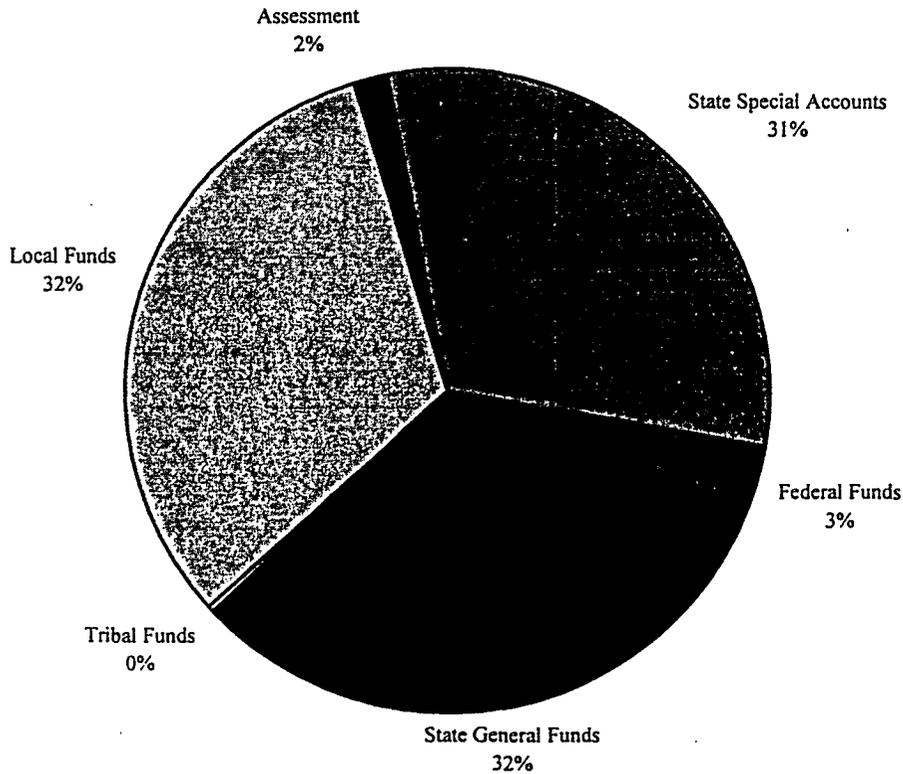
The principal sources of revenue for local entities are user fees and charges, property taxes, and state aid payments. The Authority also serves as a financing vehicle for the ensemble of local entities. The unique feature of the Authority financial structure is its maintenance of a reserve fund ("CORE") to secure bond issues, which enables local entities with poor credit to participate in borrowing at lower rates than they would otherwise obtain.

C. Puget Sound

The 1985 Washington State Legislature created the Puget Sound Water Quality Authority and charged it with developing a Plan to "restore and protect the biological health and diversity of Puget Sound." In 1987 the Authority developed its first Puget Sound Water Quality Management Plan, which was last updated in 1994. Implementation of the Plan has been hampered by funding constraints. Funding for the Plan is projected on a biannual basis.

The 1994 Puget Sound Plan called for expenditures of \$251 million for the 1995-1997 biennium, growing to \$290 million for the following biennium. Nineteen separate funding sources are identified in the 1994 Plan. They can be generally classified as follows:

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Following is a breakdown of significant individual revenue sources in the State Special Account category.

Centennial Fund - \$36 million essentially tobacco tax.

Aquatic Lands Account - \$10 million tide land leasing fees for clam harvesting, marinas, etc.

Permit Fees - \$8 million NPDES permit fees

Puget Sound Grants - \$14 million wholesale vehicle sales tax, marine fuel tax

Toxics Account - \$4 million tax on initial sale of toxics including petroleum