

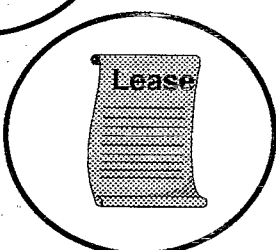
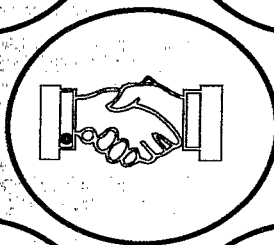
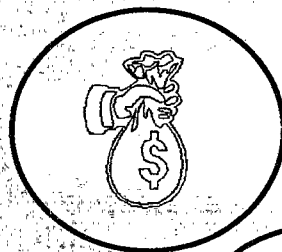
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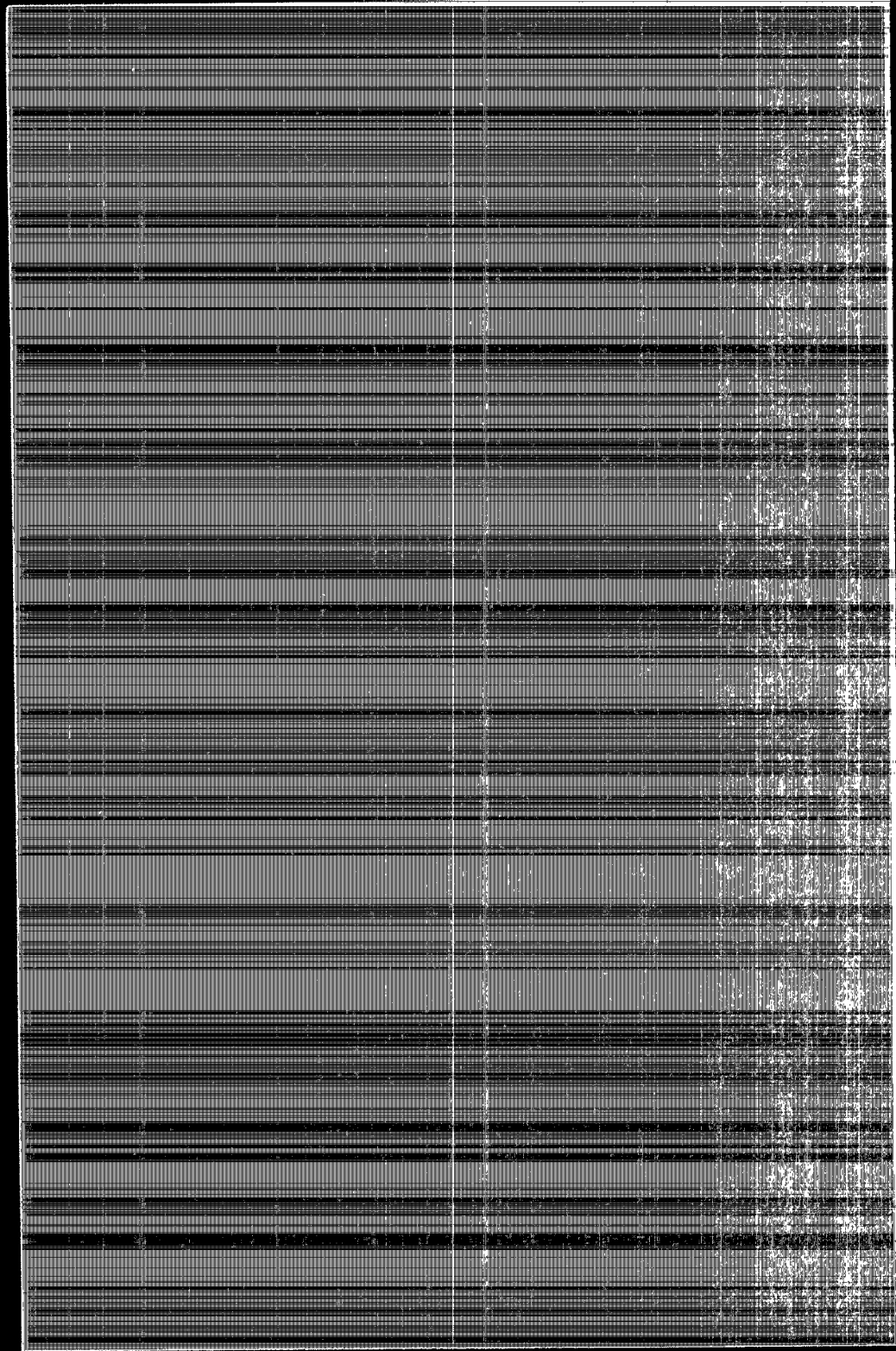
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Office of Water (4503F)



A State and Local Government Guide to Environmental Program Funding Alternatives







Environmental Program Funding Alternatives

Implementation of environmental protection programs at the state and local levels often requires nonfederal government funding. Traditionally, funding for environmental programs has come from general revenue funds. Now that federal, state, and local governments are facing fiscal constraints, alternative sources of funding are becoming important options for implementing nonpoint source pollution controls and other environmental protection measures. Traditional sources of funding, such as taxes and bonds, are being supplemented by innovative funding sources like special license plates and income tax checkoffs.

There are four basic ways to fund public programs and facilities: current revenues (pay as you go), borrowing (bonding), intergovernmental transfers/assistance (fees or taxes collected by one level of government and passed on to another in the form of loans or grants), and public-private partnerships (private sector involvement in historically public sector activities). Since not every financing source or mechanism is appropriate for every state or local program, legal, administrative, and political aspects of financing must be taken into consideration when selecting funding alternatives.

This booklet provides an overview of traditional funding mechanisms and introduces state and local governments to innovative alternatives to traditional funding. The focus is on nonpoint source pollution, but funding sources and mechanisms can be applied to environmental programs in general. A list of contacts and references is included at the back of the booklet to answer questions and provide additional information.

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What Are State Revolving Funds?



State Revolving Funds (SRFs) provide long-term, low-interest loans to local governments or individuals for capital investments. The repayment of these loans over time allows the fund to revolve its lending ability continuously. In other words, through repayments the number of available loans is increased. Established by the Clean Water Act Amendments of 1987, SRFs are intended to be administered and operated by the states to provide a permanent source of financing for state

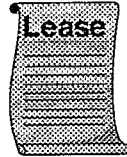
and local government water quality projects. SRF assistance can be used for the construction of wastewater treatment plants, the implementation of approved state nonpoint source management programs and ground-water protection strategies under section 319 of the

California Uses State Revolving Fund to Control NPS Pollution

California uses part of its State Revolving Fund (SRF) for nonpoint source pollution control. The fund is administered by the State Water Board. The State Water Board has separated the administration of the fund from the wastewater treatment facilities program and has developed a flexible program that will evaluate and select for funding a wide variety of nonpoint source pollution control projects. Eligible projects include construction of demonstration projects, retention/detention basins, wetlands for stormwater treatment, and a variety of best management practices to reduce or remove nonpoint source pollutants. The nonpoint source program for the SRF also permits the establishment of substate revolving funds that can provide funding to private individuals to finance new onsite septic systems, mound systems, leach fields, etc.

Clean Water Act, and the development and implementation of estuary conservation and management plans under section 320 of the Clean Water Act.

What Are Leases?



A lease is a contract that allows another party to use land or a building for a specified time, usually in return for repayment. Leasing obligations aren't considered debt in most states, and voter approval for financing is not required.

A lease-purchase agreement (municipal lease) grants the party holding the property lease (the lessee) the option of applying lease payments to the purchase of the facility. The lessee is responsible for paying taxes. These agreements can be used to finance the purchase of environmentally sensitive areas, land for wetlands restoration, or other projects.

Georgia Leases Shellfish Beds to Commercial Fishermen

Georgia promotes oyster management through its innovative Shellfish Program. Georgia does not allow open shellfishing. Recreational harvesting by the general public takes place in designated public grounds, and commercial harvesters must obtain a lease for harvesting shellfish from the Georgia Department of Natural Resources, Coastal Resources Division. Leases are awarded on the basis of bids for a specific shellfish harvesting area. The bid is awarded to the most preferable combination of lease payments and the strongest management plan. The shellfish resource management plans are judged on the basis of certain criteria, such as shell deposition methods. Funds gained from the lease program are used to manage the shellfish program.

A *sale-lease back arrangement* allows the owner of a facility to sell it to another entity and subsequently lease it back from the new owner. Under a tax-exempt lease, for example, Town X sells a sewage treatment plant to Y Corporation in order to finance upgrades and repays Y Corporation's investment with lease payments. These arrangements can provide alternative financing for a facility and may limit a government's liability.

What Are Grants?



Grants are sums of money awarded to state or local governments or nonprofit organizations that do not need to be repaid. Grants are awarded for the purpose of financing a particular activity or facility.

EPA grants provide funding for state and local governments to meet national environmental quality goals. EPA establishes criteria to receive grant funds, which applicants must meet before using the funds for a specific activity or program. Section 319 of the Clean Water Act allocates federal funds to states for implementing approved nonpoint source management programs. Grant money can also be used for post-implementation monitoring and groundwater assessment as part of an approved NPS pollution control program.

Sea Grant Funded through NOAA

The Sea Grant College Chesapeake Bay Studies Program is funded through an environmental research grant financed and administered by NOAA. The program provides a focal point for all of NOAA's Chesapeake Bay efforts. It funds research on fish populations, toxic substance transport, fate and effects, and remote sensing, and it coordinates directly with the state/federal Chesapeake Bay Program on issues related to living resources, habitat restoration, and coastal zone management.

Section 604(b) of the Clean Water Act requires an allotment of funds to provide grants to states to carry out water quality management planning. Section 314 of the Clean Water Act provides funding for project grants to states for assessing the water quality of publicly owned lakes, developing lake restoration and protection plans, implementing the plans to restore and preserve a lake, and performing post-restoration monitoring to determine the longevity and effectiveness of the restoration. Section 106 of the Clean Water Act provides state and interstate agencies and Indian tribes with funding to administer programs for the prevention, reduction, and elimination of water pollution, for example the prevention and abatement of surface water pollution. Other grant programs under the Clean Water Act include section 604(b) (Water Quality Management Planning), section 320 (National Estuary Program), section 104(b)(3) (Water Quality Cooperative Agreements), and section 104(g) (Small Community Outreach). Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA) requires states to establish Coastal Nonpoint Source Programs, which must be approved by both NOAA and EPA. Approved programs will be implemented through changes to the state nonpoint source management program approved and funded by EPA under section 319 of the Clean Water Act and through changes to the state coastal zone management program approved by NOAA under section 306 of the Coastal Zone Management Act.

What Are Public-Private Partnerships?



Public-private partnerships can be defined as private sector involvement in what historically have been public sector activities. Private sector investment in capital facilities reduces the burden on public budgets. For example, a developer could build a stormwater facility large enough to also treat the runoff from nearby public roads. Partnerships can be used to pay for capital and/or operating costs, when neither the public nor the private entity can afford to fund the project alone. Capital arrangements involve private ownership and operation

Wetlands Mitigation Partnership

The U.S. Army Corps of Engineers issued a permit to some Florida developers to restore a degraded 345-acre wetland on land owned by the city of Pembroke Pines. These entrepreneurs, who call themselves the Florida Wetlandsbank, sell credits to other developers who have impacted degraded wetlands elsewhere and have gained approval to satisfy the state's wetlands mitigation requirements through offsite mitigation. The Florida Wetlandsbank will transform the land into a public park.

of a public facility. Private construction and operating costs are often lower than public costs.

Private sector wastewater treatment programs have been 15 to 20 percent more cost-efficient than public programs (USEPA, *The Clean Air Act of 1990: A Guide to Public Financing Options*). Public-private partnerships often result in higher-quality service and shorter implementation time, according to a 1991 survey of state officials. However, statutory or regulatory changes needed to arrange public-private partnerships may delay implementation of a program. Other issues that may need to be considered include government concern over loss of control in a partnership, political opposition from government workers, and negative public opinion.

What Are Taxes?



A tax is a charge against income, property, or the sale of goods and services. Most jurisdictions do not require that a tax be used for a specific purpose but instead use the funds to provide a variety of public services, such as solid waste management, public safety, education, and environmental programs. However, taxes can be targeted to raise funds for a specific activity.

Property and sales taxes are charged as a percentage of property value or gross sales and are imposed at the state and local levels. Revenue from a property or sales tax can be used to fund projects. Dare County, North Carolina, for example, has an economy dominated by seasonal tourism. The county uses sales taxes on lodging, meals, and entertainment to obtain funds to finance public facilities that must accommodate the infrastructure needs of sudden, but temporary, population increases. Similar local sales taxes could be used by a state or local government to fund nonpoint pollution control programs at the local level.

Real estate transfer taxes are assessed as a percentage of property values when property is sold. These taxes are imposed on property buyers, sellers, or both. Funds raised by such taxes could be dedicated to help purchase environmentally sensitive lands or to support resource conservation programs.

Commodity taxes are charged on specific items (commodities) such as gasoline, cigarettes, and hunting or fishing equipment. The money raised could be targeted for environmental programs or services. The federal gasoline tax, for example,

Annual NPS Control Tax

A proposal has been developed to charge Puget Sound, Washington, landowners an annual nonpoint source pollution control tax based on property size and land use. Owners with onsite sewage systems, livestock, and parcels in areas required to develop comprehensive stormwater management plans would be assessed a surcharge if land uses are not managed to reduce nonpoint source pollution.

Tobacco Tax Used to Protect Water Quality

A tobacco tax helps finance Washington State's water quality protection plan. In 1986, the Washington legislature passed the Centennial Clean Water Act, which established a sales tax on tobacco products. The law dedicates half of the funds raised to the control of wastewater discharged directly into marine waters and the other half to water quality initiatives such as ground water protection.

Duck Stamps Used to Propagate Waterfowl

In 1974, the Maryland General Assembly enacted a bill requiring all who hunt waterfowl in the state to purchase a \$1.10 stamp annually that must be signed by the hunter, affixed to his/her statewide license, and carried while hunting. Funds from the sale of the stamps are used for the propagation of waterfowl in the state. The cost of the stamp has since increased to \$6.00, generating nearly \$400,000 a year. Similar programs can be used to generate funds for a variety of environmental programs such as the purchase of environmentally sensitive habitat.

finances highway improvements. Since 1981, a tax on the diesel fuel consumed by tugboats has helped to finance maintenance of the Nation's system of inland waterways.

Tax surcharges are fees added to established tax rates. They are often used for sudden unforeseen events. A tax surcharge on residential sewer bills, for instance, might be used to finance the replacement of stormwater retention basins destroyed during a hurricane.

Tax incentives and disincentives. A tax system can be set up to encourage or discourage certain behaviors by offering tax reductions or

Tax Incentives

Road capacity can be allocated more efficiently by taxing its users during peak travel times. This tax takes the form of a "congestion toll." It can be used as an incentive to travel before or after rush hour, take the bus, or carpool. The resultant decrease in traffic could reduce capital outlays for highways by making many expansion projects unnecessary. In regions facing severe transportation and air pollution problems, such as southern California, road-use tolls are being implemented. A system of congestion tolls for drivers crossing the San Francisco-Oakland Bay Bridge began in September 1993.

Water can be allocated more efficiently by imposing higher prices during peak hours of use or an increased fee for water use above an allocated amount. This economic incentive fosters conservation.

increases. Incentives often take the form of state tax credits, deductions, or rebates. A tax credit for the use of low-flow plumbing fixtures, for example, can encourage water efficiency. Because of the desire to save money, disincentives often take the form of fees, taxes, or price increases. A tax or fee can discourage the inefficient use of a product because of the increased cost of using more of a product than needed.

Tax differentiation is a tax incentive used to promote the consumption of environmentally safe products. This financing mechanism involves a surcharge added to the cost of a polluting product to encourage the consumer to purchase a cleaner alternative.

A selective sales tax can be levied either as a retail tax or as an inspection fee. Kansas, for example, charges a per-ton fertilizer inspection fee, with proceeds going to support the State Water Plan. A selective sales tax could fund remediation of agricultural nonpoint source pollution or could fund research on farming techniques to reduce environmental impacts. This tax could apply to pesticides, herbicides, automotive lubricants, etc.

Tax increment financing is the dedication of incremental increases in real estate taxes to repay an original investment in improved public facilities, such as stormwater facilities, that resulted in increased real estate values. Tax increment financing is appropriate for areas

Tax Increment Financing Used to Redevelop Depressed Areas

Tax increment financing is appropriate for areas where substantial new development is probable. The City of Orlando, Florida, for example, created a Community Redevelopment Trust in 1982 to establish a fund to redevelop depressed areas of the city. The city created a series of revenue bonds to finance public housing, transportation, and other capital investment. These bonds are not a general obligation of the trust or the City of Orlando; they are secured by an irrevocable lien on the increment in property tax revenues paid into the Trust Fund and interest earned by the Trust Fund.

where substantial new development is anticipated as a result of public investment in roads, sewers, or other infrastructure. A cleaner watershed, for instance, could boost neighboring property values. The tax increment created could be used to support continued environmental protection programs.

What Are Fees?



Fees are charges for services rendered and are one way for governments to recover the costs of providing certain services to the public. Although laws vary widely, many states require that fees be set at rates that cover only the actual costs of the services provided, including administrative services.

Plan review fees are assessed by a local government for conducting a review of development plans to ensure that they meet certain requirements.

This technical review is used to determine the adequacy of stormwater management facilities or erosion and sediment controls and to ensure proper siting of structures or onsite sewage disposal systems. These fees help cover the cost of conducting plan reviews and inspections.

Stormwater utility fees are imposed on property owners to pay for stormwater management. The charge can be based on the amount of runoff generated from the property, the amount of impervious area (hard surfaces) on the property, or the assessed value of the property.

Stormwater Utility Fees

There are more than 100 stormwater utilities in the United States. Methods of determining stormwater utility charges vary considerably around the country, depending on local stormwater management goals and conditions. In general, utilities are either publicly owned and operated enterprises or privately owned enterprises whose ability to profit from providing public services is regulated by a public agency. Utility fees provide a more reliable source of funds for local stormwater management than do property taxes.

Impact fees transfer the costs of infrastructure services (roads, sewers, stormwater treatment, etc.) needed for private development directly to developers or property owners. Unlike user fees, which recover costs over the life of a project, impact fees are usually collected in one lump sum at the beginning of a project. These fees are particularly attractive to local governments because they relieve up-front financing pressures on local budgets. In California, for example, several wastewater treatment plants have been financed with fees paid by developers based on the projects' anticipated treatment requirements. Impact fees can be used to fund the installation and maintenance of stormwater management facilities on newly developed sites.

Impact Fees for New Development

Carroll County, Maryland, charges an impact fee on new land development. The amount of the fee depends on the type of development (i.e., a single-family home, commercial development, etc.). These fees fund a variety of programs ranging from water supply protection to elementary school education.

Inspection fees are charged to cover the costs of making sure that development plans are properly implemented. These fees may

Homeowners Pay Inspection and Operation and Maintenance Fees

Otter Tail County, Minnesota, has developed an onsite utility to protect its lakes from contamination due to onsite sewage disposal system failures. All onsite system owners pay a basic fee for inspections and administration costs and have the option to pay an additional amount for additional services. Operation and maintenance costs are financed by fees paid by homeowners.

defray the program costs of erosion and sediment control, septic system siting and installation inspections, and stormwater treatment facility operation and maintenance.

User fees are the most common way to recover the costs of providing a service. These fees can be tied directly to the use of a resource or facility

(sports fishing and hunting license fees, park entrance fees, etc.). User fees are particularly useful at the local level where user groups are easily identified.

Product charges, similar to commodity taxes, are fees that can be added to the price of products that could potentially cause degradation of water quality, such as nonreturnable containers, batteries, lubricating oil, fertilizers, and pesticides. These revenues can be earmarked for environmental programs.

Capacity credits are a form of financing in which private interests (usually developers) purchase future capacity in a public facility such as a stormwater treatment facility. Applicants are guaranteed future access to the excess capacity of that particular facility. Where project construction hinges on adequate funding, capacity credits can contribute to project completion.

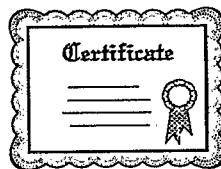
Effluent discharge fees are levied on an industrial facility by a government authority, based on the volume of pollutants discharged into water. Under an effluent discharge fee system, a discharger is required to pay a certain amount for every unit of pollution discharged into surface water. The system can be based on water quality objectives, the costs for financing a pollution abatement scheme, or effluent standards. The system has several advantages: it allows firms to reduce pollution at lower costs than those incurred under a

Effluent Discharge Fees for Industrial and Municipal Sources

Wisconsin has established an unusually comprehensive fee system for its water program to recover total direct and indirect program costs. The state issues general permits and levies permit fees for discharges based on volume and type of pollutant. Such pollutants are associated with various industrial sources or users, such as concrete products operations; sand, gravel, or crushed stone operations; swimming pools; petroleum storage terminals; water treatment plants; and dredging projects involving uncontaminated sediments. This effluent discharge fee program generated more than \$7 million in 1993.

command-and-control approach; it provides incentives to firms to invest in pollution control technology; and it can generate revenue that can be used to fund activities that promote environmental quality. The disadvantages of the charge system are the complex planning, analysis, monitoring, enforcement, litigation, and interjurisdictional negotiation required by local authorities. In addition, assigning monetary values to pollution damage may be difficult.

What Are Bonds?



Bonds are a mechanism to borrow capital for a project and distribute the burden of repayment over the life span of the project among those who benefit from it. Just as individuals borrow to finance their homes through bank-issued mortgages, governments borrow funds from investors by issuing debt in the form of bonds. Bonds usually finance capital facilities, such as erosion control structures and stormwater treatment facilities.

Typically, bonds are used only to finance projects that have both known and proven life expectancies.

Short-term bonds are usually payable within 1 year. Establishing short-term debt provides interim funding of projects waiting to receive long-term financing. There are two categories of short-term bonds: notes and

\$75 Million Bond Passed to Protect Environmentally Sensitive Lands

Broward County, Florida, residents voted to pass a \$75 million bond to purchase environmentally sensitive lands. The money has been used to purchase more than 560 acres of wetlands, pristine uplands, endangered species habitat, and lands necessary for maintaining the integrity of the Everglades ecosystem. Initial site maintenance (exotic plant removal, fencing, etc.) will be paid for with bond money. Long-term maintenance will be funded as part of the county parks department's operating budget.

tax-exempt commercial paper. Notes are loans issued in anticipation of grants, bonds, or taxes. Tax-exempt commercial paper is a form of unsecured debt backed by a letter or line of credit.

Long-term bonds traditionally match the term of financing with the life expectancy of the project. A stormwater treatment facility, for example, might be expected to perform adequately for 30 years; therefore, the community could issue bonds that have a term of up to 30 years. There are two categories of long-term bonds. Term bonds are loans for which the entire loan amount and interest are payable on the final maturity date. Serial bonds are similar to traditional home mortgages: the principal and interest are repaid in periodic installments over the life of the bond. Long-term bonds can be issued as general obligation bonds or as revenue bonds, as described below.

General obligation bonds are long-term municipal bonds that are backed by the full faith and credit of the state or local government. This means that the state or local government pledges to use all of its taxing and other revenue-raising powers to repay bond holders. Both state and local governments have used general obligation bonds to finance capital projects related to environmental programs, including purchases of environmentally sensitive lands.

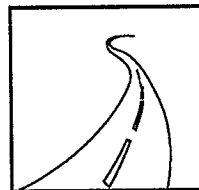
Revenue bonds are long-term municipal bonds guaranteed solely by the dedication of project income or system funds (e.g., user fees from the infrastructure where capital costs are covered by the bond) rather than by a general tax. Both state and local governments have used revenue bonds to provide start-up capital for stormwater utilities and to finance environmental projects, including the renovation of wastewater treatment plants.



Bond banks, of which there are at least 11 across the country, are financial institutions created primarily to provide smaller communities access to the national bond market to finance infrastructure projects. Typically, a bond bank either sells bonds in the bond market and uses the proceeds to purchase bonds from local communities or buys bonds directly from local communities and pools several small issues into one large bond

issue to be sold in the bond market. Small communities could take advantage of bond banks to finance environmental infrastructure projects.

Look to the Future... Pollutant Trading



Point and nonpoint source pollutant trading involves financing reductions in nonpoint source pollution in lieu of undertaking more expensive point source pollution reduction efforts. A trading program is intended to produce cost savings to point source dischargers while improving water quality. Implementing a trading program requires a waterbody identifiable as a watershed or segment, as well as a measurable combination of point sources and controllable nonpoint sources. There must be significant load reductions for which the cost per pound reduced for nonpoint source controls is lower than the cost for upgrading point source controls. Lastly, point source dischargers must face requirements to either upgrade facility treatment capabilities or trade for nonpoint source reductions in order to meet water quality goals.

Such a program allows the private sector to allocate its resources to reduce pollutants in the most cost-effective manner, and it encourages the development of a watershed-wide or basin-wide approach to water quality protection. Such a program also entails cooperation between agencies, however, and requires a

Pollutant Trading for Nutrients

In a North Carolina watershed, the Tar-Pamlico Basin Association (a coalition of point source dischargers) and state and regional environmental groups have proposed a two-phased nutrient management strategy that incorporates point and nonpoint source pollutant trading. The plan requires association members to finance nonpoint source reduction activities in the basin if their nutrient discharges exceed a base allowance.

system to arrive at trading ratios between point and nonpoint source controls.

Be Creative!



The State of Maryland has been imaginative in its acquisition of funding to restore the Chesapeake Bay. The Chesapeake Bay Trust was created in 1985 to bring the financial support of the business community and private donors together with the many community groups and educators that need financial assistance for their Bay projects. Maryland's programs exemplify successful implementation of innovative funding alternatives.

State lotteries are becoming a potential source of revenue for environmental programs. For

License Plates to Save the Bay

The State of Maryland has implemented a license plate program to fund its Chesapeake Bay Trust. More than 400,000 "Treasure the Chesapeake" license plates have been sold, raising more than \$4 million. In the Baltimore area, automobile dealers offered Bay license plates at no cost to their new car and truck customers by paying the \$10 fee in June and July 1992, raising \$20,000 for the Trust.

Tax Checkoff to Fund Restoration and Conservation Programs



Maryland's tax checkoff for the Chesapeake Bay and Endangered Species Fund is included on the standard tax form. Taxpayers can contribute a portion of their taxes to the fund, which yielded a record \$1.1 million in 1992. Divided equally between the Chesapeake Bay Trust and the Department of Natural Resources' Endangered Species Fund, the checkoff funds a variety of Bay restoration and conservation programs.

Lottery Revenues

Kansas uses a portion of its lottery receipts to help finance its water resource management programs, including wetland protection activities. Kansas created the State Water Plan Fund in 1989, for which half of the revenues are derived from the state general fund and state lottery funds. The other half are derived from a system of fees on municipal water use, industrial water use, stockwater use, pesticides, fertilizers, and pollution fines and penalties. In Minnesota, voters approved state constitutional amendments establishing the Environmental and Natural Resources Trust Fund and a state lottery to finance the fund.

example, Kansas and Minnesota use lottery receipts to help finance natural resource management programs.

Comparing Your Options



Several funding alternatives may be available for a particular project. For example, the following four funding strategies to control solid waste could easily be adapted to fund nonpoint source programs: property taxes, tax incentives/disincentives, user fees, or tax surcharges. Funding for regional stormwater management facilities or a shoreline erosion control project could be obtained in similar ways.

Capital and operating costs and cost-effectiveness must be carefully analyzed before choosing a funding alternative. Legal, administrative, and political aspects and impacts of each alternative need to be considered. One must consider the legal workability and political attractiveness of a financing mechanism; the effort needed for implementation, including start-up costs and costs for ongoing collection and management of funds; the fairness of distribution of the funding burden among individuals; and the public's willingness to pay or to make a particular sector pay.

Four Funding Strategies to Control Solid Waste



Tax Incentive/Disincentive

Estherville, Iowa, uses the pay-by-the-bag approach to trash collection. This system gives households an incentive to recycle, compost, and change their buying habits to reduce the volume of waste they generate.

Property Tax

Fairfax City, Virginia, uses property taxes to finance trash collection. Residents are charged a flat annual amount that is not related to the volume or type of trash they discard.

User Fee

Hollywood, Florida, charges residents a standard monthly "fee" for solid waste management services. This establishes a direct link between those who use the services and those who pay for them.

Tax Surcharge

Oregon funds solid waste management through proceeds from the Bottle Bill, a law that requires consumers to pay a deposit on each container purchased. The deposit is refunded when the container is returned for recycling.

For Further Information . . .

BONDS

USEPA. 1992. *Alternative Financing Mechanisms for Environmental Programs*. Final draft. Environmental Finance Program, Office of Administration and Resources Management.

USEPA. 1988. *Financing Marine and Estuarine Programs: A Guide to Resources*. Office of Marine and Estuarine Protection. EPA Document No. 503-8-88-001.

For more information about Broward County Bond Issue, contact: Broward County Administrator's Office, 115 South Andrews Avenue, Rm 409, Ft. Lauderdale, FL 33301, ph. (305) 357-7354.

BOTTLE BILLS

For more information on bottle bills, contact: The Public Interest Research Group (PIRG) in your area, or PIRG National Headquarters, 215 Pennsylvania Avenue, SE, Washington, DC 20003, ph. (202) 546-9707.

CONGESTION TOLLS

World Resources Institute. 1992. *Green Fees: How a Tax Shift Can Work for the Environment and the Economy*.

For more information on congestion tolls, contact: World Resources Institute, 1709 New York Avenue, NW, Washington, DC 20006, ph. (202) 638-6300.

DUCK STAMPS

For more information on duck stamps, contact: Duck Stamp Program Manager, Maryland Department of Natural Resources,

Public Communications Office (D-4), Tawes State Office Building, Annapolis, MD 21402, ph. (410) 774-2035.

EFFLUENT DISCHARGE FEES

Bernstein, J. Undated. *Alternative Approaches to Pollution Control and Waste Management*. The World Bank, Urban Management Program.

USEPA. 1992. *Alternative Financing Mechanisms for Environmental Programs*. Final draft. Environmental Finance Program, Office of Administration and Resources Management.

Washington State Department of Ecology. 1993. *A Summary of Other States' Wastewater Discharge Permit Fees*. Document No. 93-63.

For more information about Wisconsin's effluent discharge fee program, contact: Fee Program Manager, Wisconsin Department of Natural Resources, P.O. Box 7921, 101 South Webster Street, Madison, WI 53707, ph. (608) 267-7638.

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USEPA. 1992. *Alternative Financing Mechanisms for Environmental Programs*. Final draft. Environmental Finance Program, Office of Administration and Resources Management.

USEPA. 1992. *State and Local Funding of Nonpoint Source Control Programs*. Office of Water. EPA Document No. EPA-841-R-92-003.

Zachmann, B. 1990. *A Nonpoint Source Pollution Control Fee Proposal*.

For more information on fees, contact: The Environmental Financial Advisory Board, c/o USEPA, Office of Administration and Resources Management (3304), 401 M Street, SW, Washington, DC 20460, ph. (202) 260-1020, fax (202) 260-0710.

For more information about Maryland's impact fee, contact:
Director, Chesapeake Bay Local Government Advisory Committee,
777 North Capitol Street, NE, Suite 300, Washington, DC 20002,
ph. (800) 446-5422.

For more information about Minnesota's onsite utility fee, contact:
District Officer, Route 2, Box 319, Battle Lake, MN 56515,
ph. (212) 864-5533.

For more information about the State of Washington's nonpoint
source pollution control fee, contact: Shellfish Protection Team,
Washington Department of Ecology, P.O. Box 47600, Olympia,
WA 98504-7600, ph. (206) 459-6836.

GRANTS

Government Printing Office. 1991. *Catalog of Federal Domestic Assistance*.

USEPA. 1993. *Watershed Protection: Catalog of Federal Programs*. Office of Water. EPA Document No. 841-B-93-002.

USEPA. 1992. *Alternative Financing Mechanisms for Environmental Programs*. Final draft. Environmental Finance Program, Office of Administration and Resources Management.

For more information about the Chesapeake Bay Studies Program grant, contact: Chesapeake Bay Division, National Marine Fisheries Office of Habitat Protection, NOAA Chesapeake Bay Office, 410 Severn Avenue, Suite 107A, Annapolis, MD 21403, ph. (410) 280-1871.

LEASING/SELLING

USEPA. 1992. *Alternative Financing Mechanisms for Environmental Programs*. Final draft. Environmental Finance Program, Office of Administration and Resources Management.

USEPA. 1988. *Financing Marine and Estuarine Programs: A Guide to Resources*. Office of Marine and Estuarine Protection. EPA Document No. 503-8-88-001.

For more information on leasing/selling, contact: The Environmental Financial Advisory Board, c/o USEPA, Office of Administration and Resources Management (3304), 401 M Street, SW, Washington, DC 20460, ph. (202) 260-1020, fax (202) 260-0710.

For more information about Georgia's Shellfish Program, contact: The Shellfish Program, Georgia Department of Natural Resources, 1200 Glynn Avenue, Brunswick, GA 31523-9990, ph. (912) 264-7218.

LOTTERY REVENUES

Apogee Research, Inc. 1990. *Financing State Wetlands Programs*. Office of Wetlands Protection, U.S. Environmental Protection Agency.

For more information on lottery revenues, contact: Wetlands Strategies and State Programs Branch, Office of Wetlands, Oceans and Watersheds, Wetlands Division (4502F), 401 M Street, SW, Washington, DC 20460, ph. (202) 260-7791.

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World Resources Institute. 1992. *Green Fees: How a Tax Shift Can Work for the Environment and the Economy*.

For more information about Iowa's system, contact: World Resources Institute, 1709 New York Avenue, NW, Washington, DC 20006, ph. (202) 638-6300.

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For more information on the wetland mitigation bank program in Broward County, contact: Broward County Department of Natural Resources Protection, 218 SW 1st Avenue, Fort Lauderdale, FL 33301, ph. (301) 519-1230.

SPECIAL LICENSE PLATES

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For more information on special license plates, contact: Office of the Governor, Governor's Chesapeake Bay Communications Office, State House, Annapolis, MD 21401, ph. (410) 974-5300, or Chesapeake Bay Trust, 60 West Street, Suite 200A, Annapolis, MD 21401, ph. (410) 974-2941.

STATE REVOLVING FUNDS

USEPA. 1992. *State and Local Funding of Nonpoint Source Control Programs*. Office of Water. EPA Document No. 841-R-92-003.

USEPA. 1990. *Funding of Expanded Uses Activities by State Revolving Fund Programs: Examples and Program Recommendations*. Office of Water. EPA Document No. 430-09-90-006.

USEPA. 1988. *SRF Initial Guidance*. Office of Municipal Pollution Control.

For more information on state revolving funds, contact: Chief, Nonpoint Source Loan Unit, Division of Water Quality, State Water Resources Control Board, 901 P Street, P.O. Box 100, Sacramento, CA 95801, ph. (916) 657-1043.

STORMWATER UTILITIES

Maryland Department of the Environment. 1991. *Potential Revenues From Stormwater Utilities in Maryland*.

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For more information on stormwater utilities, contact: Water Policy Branch, Office of Policy Analysis, Office of Policy, Planning and Evaluation, USEPA (2121), 401 M Street, SW, Washington, DC 20460, ph. (202) 260-2756.

For more information on stormwater utilities, contact: The Environmental Financial Advisory Board, c/o USEPA, Office of Administration and Resources Management (3304), 401 M Street, SW, Washington, DC 20460, ph. (202) 260-1020, fax (202) 260-0710.

TAX CHECKOFFS

Maryland Office of the Governor. 1992. *1992 Chesapeake Bay Progress Report*.

For more information on tax checkoffs, contact: Office of the Governor, Governor's Chesapeake Bay Communications Office, State House, Annapolis, MD 21401, ph. (410) 974-5300, or Chesapeake Bay Trust, 60 West Street, Suite 200A, Annapolis, MD 21401, ph. (410) 974-2941.

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USEPA. 1988. *Financing Marine and Estuarine Programs: A Guide to Resources*. Office of Marine and Estuarine Protection. Document No. 503-8-88-001.

For more information about the State of Washington's tobacco tax, contact: House Office of the Budget, Second Floor, House Office Building, MS AS33, Olympia, WA 98504, ph. (206) 786-7107, or House Ways and Means Committee, MS AS33, Olympia, WA 98504, ph. (206) 786-7136.

Notes

Additional Information on Selected Reference Materials

USEPA. 1992. *Alternative Financing Mechanisms for Environmental Programs*. Final draft. Office of Administration and Resources Management.

This report provides information to resolve two types of funding shortfalls: state capacity (program personnel) and capital infrastructure needs. This comprehensive encyclopedia of alternative financing mechanisms can be used as an information resource for states and local governments. It is intended to provide information about principal features of alternative financing mechanisms, their relative advantages and disadvantages (with particular attention given to administrative considerations), and some of the key questions and issues associated with their use.

For more information contact: U.S. EPA, Office of Administration and Resources Management, Office of the Comptroller, Resource Management Division (3304), 401 M Street, SW, Washington, DC 20460, (202) 260-1020.

U.S. EPA's Environmental Financing Information Network (EFIN)

EPA's Environmental Finance Program manages the Environmental Financing Information Network (EFIN) to disseminate financial information to public entities. This electronic on-line database provides information on financing alternatives for state and local environmental programs and projects. You can use EFIN to search for environmental financing approaches, publications, and activities.

For more information contact: U.S. EPA, EFIN Center, Environmental Finance Program, Office of the Comptroller (3304), 401 M Street, SW, Washington, DC 20460, (202) 260-0420.

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