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Potential Roles for Clean Water State Revolving Fund Programs in Smart Growth Initiatives

This pamphlet represents the beginning of a dialog in which Clean Water State Revolving Fund (CWSRF) managers are addressing the intersection of CWSRF practices and policies with development patterns. The CWSRF is a widely available financing source used to fund municipal wastewater treatment projects as well as nonpoint source pollution control and estuary protection projects. CWSRF funding decisions can affect development patterns, so states are interested in coordinating their management of CWSRF loans with emerging smart growth policies and initiatives. This coordination is voluntary, and this document is offered as guidance for interested states.

Below are some options for states to use the CWSRF to support smart growth, which will be addressed later in this document:

- Strengthen State and Federal Environmental Review Requirements
- Use the CWSRF for Nonpoint Source and Estuary Projects
- Use Integrated Priority Ranking
- Reduce Interest Rates
- Allow Alternative Repayment Structures
- Provide Additional Funds for Smart Growth Enhancements to Traditional Projects
- Provide Technical Assistance on Smart Growth to Project Applicants
- Expand Applicant Eligibilities
- Comply with Statewide Smart Growth Initiatives
- Require Long-Term Comprehensive Growth Plans
- Require or Encourage Limits on Sewer Connections or Capacity for New Growth

The Land-Water Connection

Many states are facing the issue of sprawl – a form of development that tends to proceed in a leapfrog fashion, consumes excessive green space, promotes dependency on automobiles, and widens our urban fringes. Each year, satellite photographs depict further losses of green space as our urban areas expand into the countryside at rates far faster than population growth. Even without sophisticated satellite imagery, most of us can readily see that tree-lined neighborhoods, sidewalks and town centers are giving way to high speed traffic patterns, large lot residential developments, commercial strips, and huge parking lots.

Numerous efforts around the country are underway to reconfigure development in a more "eco-efficient" and "community-oriented" style, so that open and green space is conserved, town centers are more conducive to community life, and pedestrian and transit choices are more available. This counterpoint to sprawl is sometimes called the "livability" movement. Its strategies are often referred to as "smart growth."

In addition to the aesthetic and quality of life concerns motivating the livability agenda, there are compelling environmental and fiscal reasons for controlling sprawl. As our cities and suburbs expand, so do our impervious surfaces (streets, parking lots, driveways and rooftops). With more pavement, rainfall is less able to percolate into the ground. This raises the volume and velocity of runoff that carries pollutants and sediments into our waterways. Our groundwater recharge zones are diminished and our water tables can be threatened. Because of this land-water connection, development decisions have a direct bearing on water quantity and quality.

Finally, there are fiscal reasons for pursuing a more compact development pattern and preserving and upgrading existing infrastructure. Local governments around the country are discovering that scattered greenfield development has had a negative impact on municipal budgets as roads, utility pipes, police and fire protection, and schools must be extended further outward. In the 1999 report *The Costs of Suburban Sprawl and Urban Decay in Rhode Island* prepared for the coalition Grow Smart Rhode Island, H.C. Planning Consultants and Planimetrics documented the high cost of sprawl. The study concluded that if the State's current pattern of development

continues (sprawl and urban disinvestment), over the next twenty years the state could spend as much as $142 million more in operating public sewer infrastructure than if growth followed a more compact model.

Strategies for enabling smart growth are layered and complex, spanning a range as wide and varied as the roots of sprawl itself. Those root causes have been variously listed as ineffective zoning laws, population growth, the decline of the inner city, road building incentives under the Highway Trust Fund, the availability of cars and cheap gas, etc. A complex array of federal, state, and local changes will be needed if we are to reverse course and make more efficient choices about development.

Clean Water State Revolving Fund (CWSRF) managers are beginning to address the intersection of CWSRF practices and policies with development patterns. States are interested in coordinating their management of CWSRF loans with emerging smart growth policies and initiatives. This is strictly a choice for states. No federal statutory authority exists or is being considered to require states to adopt CWSRF practices and policies that favor smart growth. This document offers ideas for those states interested in exercising their own discretion.

The first question CWSRF managers should consider is whether the CWSRF has contributed to sprawl. CWSRF managers might wish to consider:

- ❑ Have CWSRF funds provided wastewater treatment capacity for future growth – without adequately accounting for the effects of projected growth?

- ❑ Have the project environmental assessments accounted for the environmental costs posed by new development?

- ❑ Has CWSRF-funded wastewater treatment capacity made it more economically attractive for developers to build in areas that might be better left as open or green space?

If answers to the above questions provide cause for concern, CWSRF managers should consider what role, if any, their programs could play in preventing sprawl or, conversely, in supporting smart growth initiatives. Each state's political climate, growth management strategy, and CWSRF regulations and practices will figure prominently in determining feasible options. Below is a discussion of the potential roles that a state CWSRF program might choose to play to encourage smart growth.

Options for States to Use the CWSRF to Support Smart Growth

To date, CWSRFs have assumed varying degrees of involvement in smart growth strategies. At a minimum, the CWSRF must ensure that projects receiving funding meet the environmental review requirements of the Clean Water Act (CWA). At the other end of the spectrum, programs have assumed a prominent role in the growth management process. This has been accomplished in various ways, including ensuring that projects comply with state smart growth requirements (*e.g.*, with respect to location, sizing, project type and purpose) before providing CWSRF funding. Some CWSRF program managers may require fund recipients to adopt growth management strategies in specific project areas. Below is a listing of options that states might consider in using the CWSRF to support smart growth.

Strengthen State and Federal Environmental Review Requirements

At a minimum, the CWSRF must meet the environmental review requirements of the Clean Water Act (CWA). Section 35.3140 of the Code of Federal Regulations, Title 40, mandates that states "conduct reviews of the potential environmental impacts of all Section 212 construction projects receiving assistance from the CWSRF, including nonpoint source pollution control (Section 319) and estuary protection (Section 320) projects that are also Section 212 projects." Each state has developed a formal environmental review process that contains specific environmental review requirements for projects. States may wish to review these processes to check for opportunities to be more consistent with smart growth goals and policies.

Although many of the issues addressed in the review are the same from state to state (*e.g.*, secondary impacts), environmental reviews vary widely. The New York CWSRF's state environmental review requirements are captured in the State Environmental Quality Review Act (SEQR), which requires all state and local government agencies to consider environmental impacts equally with social and economic factors during discretionary decision-making. This review begins at the local level, incorporates public review and is generally more comprehensive in its inclusion of social, economic, and environmental factors. Under New York's SEQR, projects seeking funds must do an analysis of development, including impacts of secondary growth. For the complete text of New York's SEQR, go to http://www.dec.state.ny.us/website/dcs/EP_SEQR/.

CWSRF Eligible Projects

- *Conservation easements* attach restrictions on the future use of land. They are used in many situations, including those where land owners want to retain ownership for their personal use, but are open to granting rights to others in exchange for some sort of consideration (e.g., a fee or tax reduction). These rights often allow for the undertaking of environmentally beneficial activities such as stream-bank stabilization and habitat restoration.

  In one of the more creative SRF projects, The Nature Conservancy (TNC) received a SRF loan from the California State Water Resources Control Board to purchase more than 12,000 acres of ranchland known as the Howard Ranch. The land is home to valuable, fragile vernal pools. TNC will place conservation easements on the land, and then resell much of it to a ranching company to assist with repaying the SRF loan.

- *Land acquisition* is another method of managing growth and reducing nonpoint source pollution. In a now famous example, the city of New York set aside $260 million for land acquisition and conservation easements in areas needed to protect its Delaware/Catskill water supply. Of this total amount, $27 million has been granted in the form of low interest loans from the New York CWSRF.

- *Development best management practices* are another method of managing the effects of growth and reducing nonpoint source pollution. The Ohio Water Pollution Control Loan Fund provided over $1.1 million in loans to a housing development company in West Jefferson, Ohio. The loans financed a wide variety of structural and non-structural best management practices that protect Big Darby Creek watershed, one of the highest quality warm-water aquatic ecosystems in the Nation.

Use the CWSRF for Nonpoint Source and Estuary Projects

Nonpoint source and estuary projects can accomplish significant objectives for smart growth. They can be used to conserve land in sensitive areas or facilitate reuse of already developed land. Both of these types of projects are eligible for CWSRF funds. Nonpoint source projects must be consistent with the state's nonpoint source management plan under Section 319 of the Clean Water Act. Estuary projects must be consistent with Section 320 which authorizes the National Estuary Program. A detailed explanation of these expanded uses of the CWSRF and actual projects funded by states can be found in EPA's *The Clean Water State Revolving Fund: How to Fund Nonpoint Source and Estuary Enhancement Projects* (EPA 909-K-97-001). The accompanying sidebar contains a list of SRF-eligible projects that overlap with the themes and objectives of smart growth.

- *Brownfields remediation* is the restoration or reclamation of abandoned, idled, or under-used industrial and commercial facilities where expansion or redevelopment is complicated by real or perceived environmental contamination. Remediation of existing developed land helps to slow the development of greenfields and is therefore a powerful smart growth strategy that can be funded with the CWSRF. The Ohio CWSRF provided a loan for the cleanup of contaminated groundwater and soils in a 20-acre industrial site in Cleveland to prepare the area for commercial reuse.
- *Installation or upgrade of onsite wastewater systems.* Maintaining a reliance on onsite (individual or cluster) systems can, in certain circumstances, help control undesirable development by eliminating the need for sewers that could otherwise expose environmentally sensitive and fringe areas to development. The CWSRF may choose to fund onsite system upgrades or installations as nonpoint source or estuary projects. Since 1995, the Maine CWSRF has also been making loan funds available to owners of single-family residences for the repair and upgrade of septic systems. Under the program, the Maine Municipal Bond Bank (MMBB) lends money to the Maine State Housing Authority (MSHA). The MSHA then makes 1% loans to homeowners that carry maximum repayment terms of 20 years. Any repayments received by the MSHA are remitted to the MMBB and returned to the CWSRF. The State has provided funding in amount equal to $1.5 million out of $2 million committed to the program. However, the decision about funding onsite systems must take into account a variety of factors such as soil conditions, development repercussions, and the likelihood of appropriate maintenance practices. If allowed indiscriminately, onsite systems can accommodate and sustain a lower density development that may ultimately consume more land and resources than higher density options.

Use Integrated Priority Ranking

CWSRFs are required to establish and use priority ranking systems which prioritize eligible treatment works projects based on public health and environmental considerations. States may wish to consider assigning a portion of the points in the ranking system to treatment works projects that embody smart growth principles or which support the state's smart growth goals. In addition, since the universe of smart growth projects and loan applicants (farmers, conservation groups, citizen groups, landowners, etc.) is wide, not all smart growth projects will fall under a state's approved Nonpoint Source Management Plan (Section 319) or a management plan associated with the National Estuary Program (Section 320). Certain "non-traditional" projects may not have water quality protection as their primary purpose but will yield important water quality benefits nevertheless.

A salt storage shed, a new landfill, a bird sanctuary, or the purchase of leaf removal equipment would all be examples of non-traditional projects because their water quality benefits would be secondary to their main purpose. CWSRF programs considering funding projects with a primary purpose other than water quality will need to develop an

Massachusetts is one of a growing number of states making loans for the upgrade of onsite systems. To date the MASRF has lent more than $30 million to individual communities for this purpose. Additionally, the MASRF makes grant funds (from a non-SRF source) available to communities receiving loans to assist them in implementing onsite management programs.

- *Wetlands (re)construction.* Wetlands construction projects have a strong growth management components as they serve to both preserve land and create natural habitats. If the land is not already owned by the project applicant, wetland construction projects are often accompanied by a land acquisition/ conservation easement component. In order to protect Puget Sound, the Washington CWSRF is using funds to purchase and reconstruct a degraded wetland area and to construct a sediment trap/pond facility in the city of Des Moines. This project is allowing the city to meet three goals simultaneously: flood protection, wetlands preservation and stormwater management.

integrated priority ranking system, as described in EPA's *The Clean Water State Revolving Fund Funding Framework* (EPA 832-B-96-005). States can identify their high priority projects using an integrated priority ranking system, using available data with the state's priority system to rank and select projects for funding. The State of New York uses its ranking system to favor environmentally significant projects over economic development type projects, first granting loans for projects that alleviate an existing water quality problem before considering future growth type projects. Ranking systems can be tweaked in a number of ways to award additional points for projects that are consistent with smart growth objectives. For more information on the integrated priority ranking system, see http://www.epa.gov/owm/finan.htm.

Reduce Interest Rates

CWSRFs can provide lower interest rates (down to zero percent) to projects that go beyond basic requirements in assessing and addressing their impacts on growth. For example, the CWSRF may choose to provide an interest rate subsidy for:

- ❑ Project applicants voluntarily establishing conservation easements or purchasing land for preservation.

- ❑ Municipalities who agree to adopt master plans as well as zoning and sub-division regulations that require developments to be designed, constructed, and managed using "smart growth" concepts.

Allow Alternative Repayment Structures

Some smart growth projects may have a difficult time in establishing a revenue stream. Repayment structures can be altered to allow for more lenient payments in the early years (*e.g.*, balloon payments). Types of alternative structures include principal-only or interest-only payments, as well as graduated principal payments.

The Maine CWSRF is considering a proposal to implement a "patient loan" program. The purpose of the proposal is to assist Maine cities and towns that wish to encourage development in residential growth areas by offering low interest, "patient" loans for financing sewer extensions to serve these growth areas. CWSRF funding would allow a community to extend sewer services to undeveloped growth areas as designated in local comprehensive plans and thereby attract development to that area. These designated growth areas to be sewered will be high density (3 residences per acre). Patient loans would provide low-interest rate loans covering the cost of the extensions to eligible areas with a graduated or "patient" payback provision that keeps payments low at the start of the project. The State anticipates making $3 million available for the program.

Provide Additional Funds for Smart Growth Enhancements to Traditional Projects

As part of a larger traditional project, such as a treatment works project, additional funds could be provided for enhancements or "add-ons" to traditional projects. As an example, a municipality applying for a treatment works upgrade loan might, as part of the same loan package, purchase stream corridor conservation easements within the municipality's boundaries. Similarly, a

wetlands restoration might be combined with a loan for a wastewater treatment plant. Providing additional funds for these enhancements could go a long way toward promoting smarter designs for new or upgraded wastewater treatment.

Provide Technical Assistance on Smart Growth to Project Applicants

States can provide technical assistance to applicants on the principles of smart growth as part of the application process. Areas of technical assistance can range from comprehensive planning on a community or county level down to utilizing smart growth principles on an individual project basis. Technical assistance may be particularly attractive to applicants with limited planning resources. If the state's CWSRF agency lacks the capacity to provide technical assistance, it may be possible to refer applicants to other offices within the state that can assist – perhaps the state planning office or a smart growth office.

Expand Applicant Eligibilities

Loan recipients for nonpoint source control and estuarine protection projects are not limited to public entities. Alternatively, CWSRFs could consider linked deposit programs like those in Ohio or Minnesota. This mechanism allows CWSRF funds to be used for loans to individuals. In a linked deposit program, CWSRF funds equal to the required project funds are placed in a Certificate of Deposit with a private bank at an interest rate somewhat lower than the market rate at the time. The bank, in turn, is able to loan the funds to individuals (usually farmers) proposing projects that are consistent with area watershed management plans. The loan recipient repays the loan to the bank, and the bank repays the CWSRF.

Currently, 22 states have made nonpoint source loans to recipients such as municipalities, community groups, conservation districts, nonprofit organizations, and private individuals and companies.

Comply with Statewide Smart Growth Initiatives

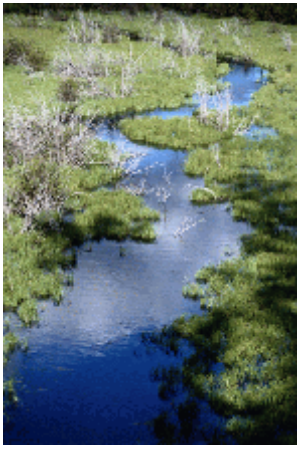
The state of Maryland is the first to have a statewide smart growth policy that directs development to community-designated growth areas. Since 1997, the Neighborhood Conservation and Smart Growth Initiative directs the expenditure of specific types of State funding to geographic areas of Maryland that have been locally designated as growth areas. State law requires local governments to identify "Priority Funding Areas" (PFA's) that are essentially designated growth areas for future development. These designated growth areas are incorporated into 20-year county land use plans.

The Maryland CWSRF funds sewer projects only within PFAs. CWSRF staff review projects and county land use for compliance. If the project is not within a designated growth area, the project will not receive funding, unless an exception is granted. A similar requirement holds for water projects funded through the State's Drinking Water SRF program. Any project outside the growth area will need to qualify as an exception. Exceptions are granted where a project is necessary to protect public health/safety or where a denial of a project funded with federal funds would be inconsistent with federal law. At the time of pre-application, the CWSRF program staff review all projects for consistency with PFA requirements. This involves correlating projects with designated growth area maps in the county land use plans. To date, the CWSRF has funded both expansion and upgrade projects and has not had to deny any high ranking project on the basis of smart growth deficiency.

For more information on Maryland's Smart Growth Initiative, go to http://www.mde.state.md.us/environment/sm_grwth/. For CWSRF-specific information on Maryland's Smart Growth Initiative, go to http://www.mde.state.md.us/environment/sm_grwth/wmasm.html.

Require Long-Term Comprehensive Growth Plans

Comprehensive long-term planning is one of the most effective growth management/sprawl control tools available to municipalities. Recognizing this, some states are requiring individual communities and counties to develop long-term comprehensive growth management plans. In the absence of such a statewide requirement, CWSRFs can consider requiring applicants to develop such a plan before it can receive funding from the program.



Require or Encourage Limits on Sewer Connections or Capacity for New Growth

CWSRF programs could require or encourage municipalities to adopt some form of "access management" for sewer lines to serve new development areas. These requirements can be applied broadly or on a case-by-case basis.

The Ohio CWSRF negotiated the adoption of a smart growth city ordinance with the city of Broadview Heights. The city had applied for a CWSRF loan for the construction of an interceptor sewer and plant upgrades in order to eliminate a local package treatment plant.

CWSRF staff became concerned upon discovering that sensitive riparian stream corridors could now be developed through connection to the sewer. In order to protect these valuable resources, the CWSRF successfully convinced Broadview Heights to pass a city ordinance that would not allow new developments that eliminated riparian stream corridors to connect to the interceptor. The CWSRF loan terms were attractive enough that the city found it in their best interest to pass the ordinance rather than seek funding elsewhere.

The state of Massachusetts actively limits the use of SRF funds to support new growth. Collection system projects are eligible only if 75% of the flows existed as of April 1995. Thus, no more than 25% of the capacity of a project may be for new growth. Both capacity limits and access management can play a role in each state's CWSRF decisions.

Peter Essick/Aurora

This document is the result of a Work Group formed under the auspices of the State/EPA SRF Work Group, a committee of state SRF program managers and EPA representatives who collectively address issues pertaining to the CWSRF and DWSRF. In response to a solicitation from EPA Headquarters in the fall of 1999, a "sub-work group" was formed to address issues of CWSRF management and smart growth. The group held monthly teleconferences to generate policy options and management protocols that might allow SRF managers to better integrate their programs with their states' smart growth objectives. This report is the collective result of those teleconferences.

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Useful On-line Resources:

- The Clean Water State Revolving Fund
  http://www.epa.gov/owm/finan.htm

- Clinton-Gore Administration's Livable Communities Initiative
  http://www.livablecommunities.gov/

- EPA Region 1 – Smart Growth Strategies
  http://www.epa.gov/region01/ra/sprawl/index.html

- EPA Region 5 – Antidotes to Sprawl
  http://www.epa.gov/region5/sprawl/index.html

- Department of Energy Center of Excellence for Sustainable Development – Land Use Planning
  http://www.sustainable.doe.gov/landuse/luintro.shtml

- Smart Growth Network
  http://www.smartgrowth.org/index2.html

- Brookings Institute Center on Urban and Metropolitan Policy
  http://www.brookings.org/es/urban/urban.htm

- Sierra Club – Sprawl Solutions
  http://www.sierraclub.org/sprawl/

- Planning Commissioners Journal – Sprawl Guide
  http://www.plannersweb.com/sprawl/home.html

- Sprawl Watch Clearinghouse
  http://www.sprawlwatch.org/