Making Better Wastewater Infrastructure Investments

Melissa G. Kramer

U.S. EPA's Office of Sustainable Communities

Why Does Wastewater Infrastructure Matter?

- The type of wastewater infrastructure available shapes development patterns
- Centralized wastewater treatment and collection is expensive to build, maintain, and operate

Clean Water State Revolving Fund (CWSRF)

- Established 1988
- Provides communities with low-cost funds for wastewater infrastructure, nonpoint source pollution control, and estuary projects
- Federal government appropriates funds to EPA for formula-based distribution to states
- For every \$1 provided by federal government, state SRF programs contribute \$0.20
- Over \$89.5 billion in assistance provided since 1988

Other Public Wastewater Infrastructure Spending: New York

| | Time Period | Amount |
|---|----------------------|---|
| Clean Water State Revolving Fund | 2011 | \$227,170,000 (federal contribution only) |
| Rural Utilities Service of U. S. Department of Agriculture | 2006-2010 average | \$20,334,168 |
| Community Development Block Grant Program | 2001-2010 average | \$8,583,964 |
| Public Works and Economic Development Program of the U.S. Economic Development Administration | 2005-2010 average | \$366,667 |
| The Appalachian Regional Commission | 2010 | \$o |
| Water Quality Improvement Project Program of New York | 2010 | \$20,777,598 |

State Revolving Fund Pilot Program

- Project of the Partnership for Sustainable Communities
- Collaboration between EPA's Office of Water and Office of Sustainable Communities
- Worked with New York, Maryland, California to explore potential modifications to their state SRF programs that could encourage more sustainable water infrastructure investments
- Intended to provide models for other states
- Considered intended use plans, project priority systems, borrower application processes, and other funding guidelines.

CWSRF Spending on New Wastewater Infrastructure

2006-2010

| State | Percentag e |
|---------------|----------------|
| Vermont | 3.01% |
| Oklahoma | 3.41% |
| Virginia | 4.27% |
| New York | 4.58% |
| California | 5.24% |
| Hawaii | 5.30% |
| Connecticut | 5.31% |
| Washington | 6.51% |
| Maryland | 6.71% |
| New Hampshire | 7.90% |

| State | Percentag e |
|---------------|----------------|
| North Dakota | 50.78% |
| Puerto Rico | 48.57% |
| Arizona | 45.44% |
| Georgia | 40.34% |
| Delaware | 39.41% |
| Mississippi | 36.87% |
| Arkansas | 35.89% |
| Idaho | 35.30% |
| Nevada | 32.74% |
| West Virginia | 29.57% |

New York

- Initial goals
 - Direct funding to repair/replace existing infrastructure
 - Improve outreach and technical assistance regarding smart growth
 - Encourage projects consistent with community planning goals
- September 2010: **Smart Growth Public Infrastructure Act** requires most state agencies to determine that funded projects are consistent with smart growth criteria
 - Repair/replacement not subject to review under Act
 - Applicant must demonstrate that projects
 - Use or improve existing infrastructure
 - Serve a municipal center
 - Involve community-based planning and collaboration
 - Do not compromise needs of future generations

Maryland

- Overhauled CWSRF Priority Ranking System
- Threshold criteria
 - Project and service area must be in a Priority Funding Area
 - Project must be consistent with local land use plans
- New sustainability criteria
 - Points for serving existing sustainable communities
 - Points for sustainable utility practices incorporated by the project
- Possible next steps
 - Evaluate and refine sustainability criteria
 - Improve coordinated infrastructure planning
 - Improve evaluation of long-term needs
 - Improve decentralized system management

California

- Many complementary efforts
 - Strategic Growth Council
 - State Planning Priorities
 - Water Plan
 - Regional Blueprint Planning Process
- Little competition for CWSRF loans focus on attracting more applicants with sustainable projects
 - Streamline and tailor application process
 - Develop structure and process for community onsite systems

Other Best Practices

- Pennsylvania: points for infill projects
- New Jersey: points and reduced interest rate for smart growth projects
- **Iowa**: o% planning and design loans
- **Texas**: requires robust alternatives analysis
- Indiana: sustainable design checklist
- Ohio/Oregon: interest rate break to undertake separate nonpoint source or conservation project
- Connecticut: points for proactive upgrades
- Minnesota: decentralized systems must create dedicated source of revenue for debt service and O&M
- Maine: 5% principal forgiveness if asset management plan established

But Federal Spending is Still a Small Part of the Picture

- Most wastewater infrastructure is funded by cities, towns, and other municipalities.
- According to a 2005 National Association of Clean Water Agencies survey of utilities, capital improvements funded by
 - 49% municipal bonds and other types of debt
 - 16% CWSRF loans
 - 16% from user charges
 - 19% from other sources.

Lessons for any Wastewater Infrastructure Investment

- Focus on repairs and upgrades to existing infrastructure
- Adopt internal and cross-sector planning processes
 - Alternatives analysis including decentralized and green infrastructure solutions
 - Coordination with other infrastructure spending
- Preserve open space
- Ensure adequate revenues to finance, operate, maintain, and replace essential infrastructure assets
- Ensure adequate technical, managerial, and financial capacity of utilities

More Information

New York

http://www.nysefc.org/AboutUs/SRFSustainabilityInitiative.aspx http://www.nysefc.org/CleanWaterStateRevolvingFund/SmartGrowth.aspx

Maryland

http://www.mde.state.md.us/programs/Water/QualityFinancing/Documents/www.mde.state.md.us/CW%20DW%20draft%20IPPS/2010%20CW %20IPPS_Final.pdf

California

http://www.swrcb.ca.gov/water_issues/programs/grants_loans/srf/

Email: Kramer.melissa@epa.gov