

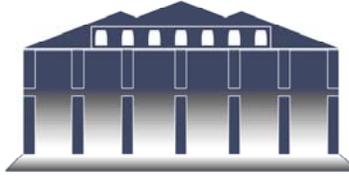
**North Carolina's Water and Wastewater  
Infrastructure Funding Lacks  
Strategic Focus and Coordination**



**Final Report to the Joint Legislative  
Program Evaluation Oversight Committee**

**Report Number 2008-12-07**

**January 27, 2009**



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*John W. Turcotte*  
Director

January 27, 2009

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Senator Daniel G. Clodfelter, Co-Chair, Joint Legislative Program Evaluation Oversight Committee

Senator Fletcher L. Hartsell, Jr., Co-Chair, Joint Legislative Program Evaluation Oversight Committee

North Carolina General Assembly

Legislative Building

16 West Jones Street

Raleigh, NC 27601

Honorable Co-Chairs:

The Program Evaluation Division 2007-2008 Work Plan, approved December 5<sup>th</sup>, 2007, directed the Program Evaluation Division to evaluate water and wastewater infrastructure funding to determine the effectiveness of the current allocation system and to identify funding alternatives for infrastructure improvements. This study examined how North Carolina and other states conduct water and wastewater infrastructure funding and identified options for improving the effectiveness and efficiency of North Carolina's water and wastewater infrastructure funding.

I am pleased to report that all of the agencies cooperated with us fully and were at all times courteous to our evaluators during the evaluation.

Sincerely,

A handwritten signature in black ink, appearing to read "John W. Turcotte".

John W. Turcotte  
Director





# PROGRAM EVALUATION DIVISION

## NORTH CAROLINA GENERAL ASSEMBLY

December 2008

Report No. 2008-12-07

# North Carolina's Water and Wastewater Infrastructure Funding Lacks Strategic Focus and Coordination

## Summary

The North Carolina General Assembly's Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division to evaluate water and wastewater infrastructure funding to determine the effectiveness of the current allocation system and to identify funding alternatives for infrastructure improvements.

Funding for water and wastewater infrastructure in North Carolina is provided by six state funding entities; each operates independently with its own mission, goals, and objectives. The General Assembly created the State Water Infrastructure Commission in 2005 to identify the state's water infrastructure needs, develop a plan to meet those needs, and monitor the implementation of the plan, but the commission has fallen short of achieving its mission because it does not have the necessary authority or resources.

Without an effective oversight agency or comprehensive strategic plan in place to coordinate activities among six funding entities, water and wastewater funding is provided in a complex and fragmented manner. This evaluation identified three central problems with this arrangement. First, each entity has its own enabling legislation, funding application, and review process, resulting in a burdensome process for communities seeking funding. Second, funding entities collect and report funding information separately. As a result, there are no systematic data to provide an assessment of state investments across entities, to determine whether the state's needs are being met, and to prioritize North Carolina's water and wastewater infrastructure needs. Finally, state funding for projects is skewed in the direction of grants rather than loans, which limits the state's ability to optimize scarce state dollars.

The General Assembly should consider

- directing the State Water Infrastructure Commission to develop a statewide strategic plan and needs assessment for water and wastewater infrastructure funding by May 1, 2010;
- requiring better oversight of water and wastewater funding by either authorizing the State Water Infrastructure Commission to coordinate and oversee the system or by establishing a single water and wastewater authority; and
- using state loan programs and relying less on grants when determining state appropriations for water and wastewater infrastructure.

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## Scope

Since Fiscal Year 1998-99, the North Carolina General Assembly has invested more than \$1.2 billion<sup>1</sup> in North Carolina's water and wastewater infrastructure. The Joint Legislative Program Evaluation Oversight Committee directed the Program Evaluation Division<sup>2</sup> to evaluate water and wastewater infrastructure funding to determine the effectiveness of the current allocation system and to identify funding alternatives for infrastructure improvements.

This evaluation addresses three specific questions:

- How does the state fund water and wastewater infrastructure in North Carolina?
- Is the current system set up to identify and meet the water and wastewater infrastructure needs of the state?
- What other practices for funding water and wastewater projects can be applied to North Carolina?

The evaluation focused specifically on the six funding entities that use state appropriations to fund water and wastewater infrastructure projects and on the agencies charged with administering federal funds for the state.<sup>3</sup>

These entities include

- the North Carolina Department of Environment and Natural Resources, including
  - the Division of Water Quality, Construction Grants and Loans Section and
  - the Division of Environmental Health, Public Water Supply Section, Financial Services Unit;
- the North Carolina Department of Commerce, including
  - the Division of Community Assistance and
  - the Commerce Finance Center;
- the North Carolina Rural Economic Development Center (the Rural Center); and
- the North Carolina Clean Water Management Trust Fund.<sup>4</sup>

During this evaluation, the Program Evaluation Division collected data from multiple sources, including

- interviews with key stakeholders, including
  - administrators from the Department of Environment and Natural Resources, Department of Commerce, Rural Center, Clean Water Management Trust Fund, United States Department of Agriculture, and the Golden LEAF Foundation;
  - members of the State Water Infrastructure Commission;
  - state legislators;
  - representatives from the Local Government Commission;
  - Environmental Finance Center staff;
  - representatives from the League of Municipalities;

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<sup>1</sup> The \$1.2 billion was provided to the funding entities between Fiscal Years 1998-99 and 2007-08 from state appropriations and money from the Clean Water Bond.

<sup>2</sup> The Joint Legislative Program Evaluation Oversight Committee establishes the Program Evaluation Division's work plan in accordance with N.C. Gen. Stat. § 120-36.13.

<sup>3</sup> The evaluation did not include a review of the state's efforts regarding water quality and water quantity issues.

<sup>4</sup> Only the Clean Water Management Trust Fund's Wastewater Infrastructure Program was included in this evaluation.

- private sector water and wastewater providers; and
- executives of water and wastewater systems;
- 1999-2007 fiscal and project data from each of the agencies (state and federal appropriations and project awards); and
- information on water and wastewater infrastructure funding programs in other states.

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## Background

From Fiscal Years 1998-99 to 2006-07, over \$2.5 billion was provided to North Carolina communities to fund water and wastewater infrastructure projects. This money came from numerous federal, state, and non-profit funding entities.<sup>5</sup> In North Carolina, funding for water and wastewater infrastructure comes from

- federal funding entities, including
  - the United States Department of Agriculture,
  - the United States Environmental Protection Agency,
  - the United States Economic Development Administration, and
  - the Appalachian Regional Commission;<sup>6</sup>
- North Carolina funding entities, including
  - the North Carolina Department of Environment and Natural Resources,
  - the North Carolina Department of Commerce, and
  - the North Carolina Clean Water Management Trust Fund; and
- non-profit funding entities, including
  - the North Carolina Rural Economic Development Center (the Rural Center), and
  - the Golden LEAF Foundation.

Additional information on these funding entities can be found in Appendixes A and B.

Funds were used to repair existing water and wastewater infrastructure, replace pipes, build new systems, create interconnections between systems, extend lines to create and/or retain jobs, and implement other improvements and upgrades at local water and wastewater systems.

This amount of money, however, is small compared to significant needs identified by *Water 2030*, a report completed by the Rural Center in 2005. This multi-year study identified \$16.6 billion in infrastructure needs<sup>7</sup> between 2005 and 2030, and the report recommended more state funding to help address these needs.

Interest in water-related issues in North Carolina has intensified recently with predictions of significant population growth and associated demand

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<sup>5</sup> The \$2.5 billion was awarded by the United States Department of Agriculture, United States Environmental Protection Agency, Appalachian Regional Commission, North Carolina Department of Environment and Natural Resources, North Carolina Department of Commerce, North Carolina Clean Water Management Trust Fund, and North Carolina Rural Economic Development Center.

<sup>6</sup> The Appalachian Regional Commission is a federal-state partnership.

<sup>7</sup> Infrastructure needs include drinking water, wastewater, and stormwater.

for water and wastewater. The recent severe drought further heightened awareness of water-related issues across the state.<sup>8</sup>

**Several terms used in this report require definition.** The system for funding water and wastewater infrastructure in North Carolina is complicated in terms of the types of funders, their funding sources, and the range of projects they consider. Several key terms used throughout this report are defined below.

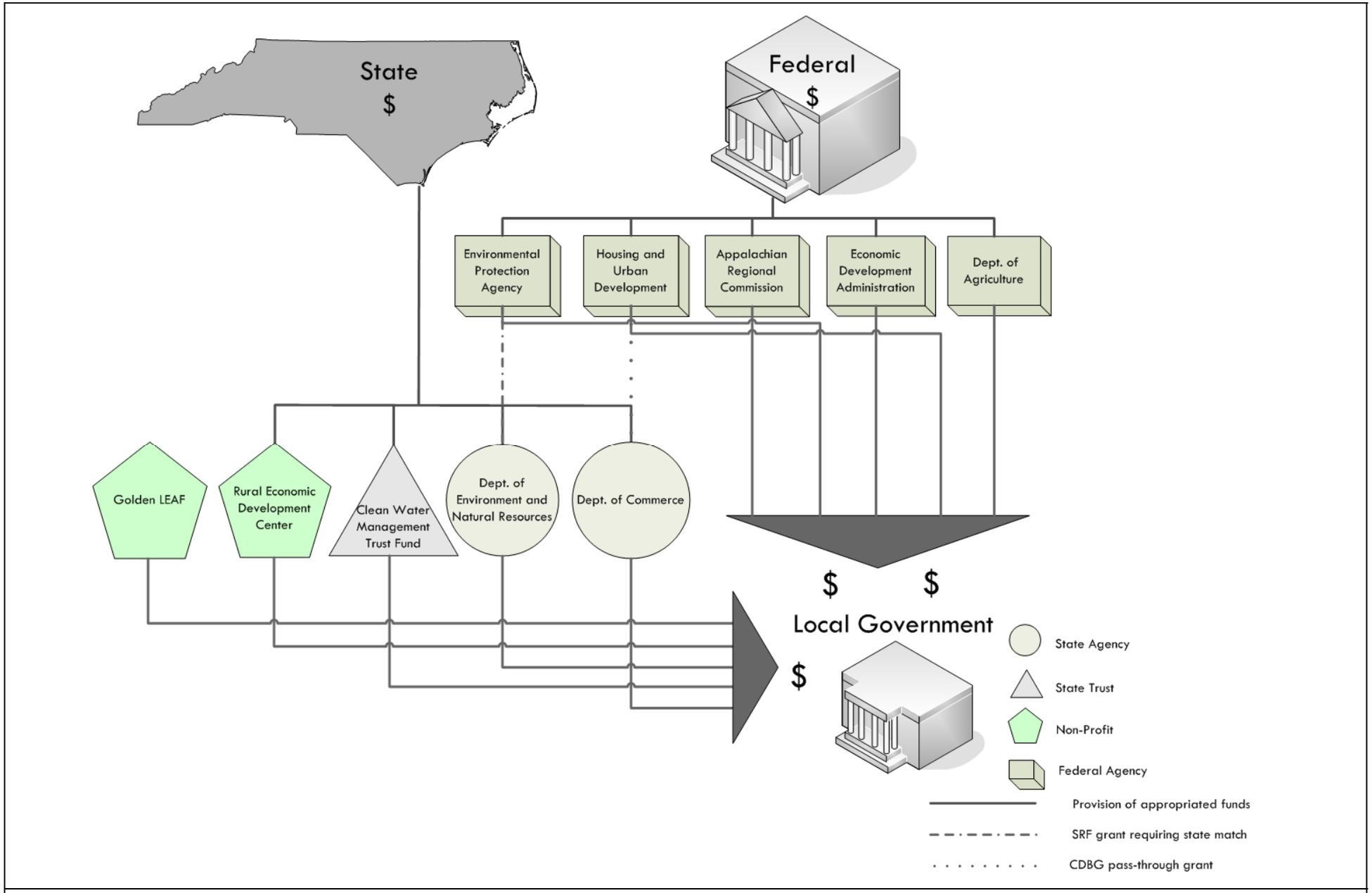
- **Water and wastewater infrastructure** refers to the physical components necessary to provide water and wastewater services, including treatment plants, pipes, and other associated facilities.
- **Water and wastewater systems** are the infrastructure components that provide drinking water and/or wastewater services to the public. Systems vary considerably in the number of people served, from a few households to hundreds of thousands.
- **System operators** are local governments (municipalities and counties), government entities (water and sewer districts), private companies, and non-profit organizations. They are responsible for managing system operations, infrastructure maintenance, and capital improvements, complying with state and federal regulations, and identifying problems and infrastructure needs. Only units of local government and non-profit entities are eligible for grants and loans.
- **Funding sources** are federal and state government funds from which money for infrastructure projects originates. **Federal** sources include the Departments of Agriculture, Housing and Urban Development, and Commerce, Environmental Protection Agency, and Appalachian Regional Commission. **State** sources include appropriations, bonds, and sales of specialized license plates. Exhibit 1 provides an overview of federal and state funding sources and fund distribution mechanisms among funding entities.
- **Funding entities** are organizations that provide money through grants and/or loans to system operators for water and/or wastewater infrastructure repairs, improvements, and upgrades. In North Carolina, funding entities consist of the Department of Environment and Natural Resources, Department of Commerce, Clean Water Management Trust Fund, and Rural Center.<sup>9</sup> Funding entities are described in Exhibit 2, and Appendix A provides a brief overview of each entity and the programs they oversee. As shown in Exhibit 2, entities provide funds to system operators in the form of grants and/or loans.

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<sup>8</sup> In 2008, the General Assembly passed legislation to help North Carolina prepare and respond to future droughts. This legislation includes provisions to improve data on water use, reduce the state's vulnerability to drought, and respond more quickly to water shortage emergencies. The legislation directs the State Water Infrastructure Commission (SWIC) to develop guidelines for water rate structures. These rates must be adequate to maintain and operate systems and be consistent with water conservation. SWIC must report to the Environmental Review Commission on its progress in developing the guidelines no later than January 1, 2009.

<sup>9</sup> The United States Department of Agriculture, Appalachian Regional Commission, United States Economic Development Administration, and Golden LEAF Foundation also provide funding for water and wastewater infrastructure in North Carolina but do not receive state appropriations. Although these organizations are beyond the scope of this evaluation, they are part of the entire system that provides funding to local water and wastewater systems in the state. A description of these non-state organizations appears in Appendix B.

# Exhibit 1: Overview of Federal and State Funding Sources



Note: SRF is the State Revolving Fund and CDBG is the Community Development Block Grant program.

Source: Program Evaluation Division based on information from the Department of Environment and Natural Resources, Department of Commerce, Clean Water Management Trust Fund, Rural Center, Golden LEAF Foundation, Appalachian Regional Commission, United States Economic Development Administration, and United States Department of Agriculture.

## Exhibit 2: North Carolina Water and Wastewater Infrastructure Funding Entities

Funding Entity	Program	Projects Funded		Funding Source	FY 2007-08 Appropriations			Award Type	
		Drinking Water	Wastewater		Federal	State	Total	Grants	Loans
<b>State Agencies</b>									
Department of Environment and Natural Resources, Construction Grants and Loans Section	Clean Water State Revolving Fund		✓	Federal and State	\$ 19,316,385	\$ 3,863,277	\$ 23,179,662		✓
	Wastewater Reserve – General Loans		✓	State		unfunded	unfunded		✓
	Wastewater Reserve – High Unit Cost Grants		✓	State		unfunded	unfunded	✓	
	Wastewater Reserve – Technical Assistance Grants		✓	State		unfunded	unfunded	✓	
	Wastewater Reserve – Emergency Loans		✓	State		unfunded	unfunded		✓
Department of Environment and Natural Resources, Public Water Supply Section	Drinking Water State Revolving Fund	✓		Federal and State	27,694,900	5,538,980	33,233,880		✓
	Drinking Water Reserve – General Loans	✓		State		unfunded	unfunded		✓
	Drinking Water Reserve – High Unit Cost Grants	✓		State		unfunded	unfunded	✓	
Department of Commerce, Division of Community Assistance	Community Development Block Grant – Infrastructure	✓	✓	Federal	13,703,790	0	13,703,790	✓	
Department of Commerce, Commerce Finance Center	Community Development Block Grant – Economic Development	✓	✓	Federal	2,236,000	0	2,236,000	✓	
	Industrial Development Fund	✓	✓	State		150,318	150,318	✓	
<b>Non-profit Organization</b>									
North Carolina Rural Economic Development Center	Clean Water Partners (Supplemental & Planning Grants)	✓	✓	State		100,000,000	100,000,000	✓	
	Economic Infrastructure Program Grants	✓	✓	State		15,000,000	15,000,000	✓	
	Supplemental Program	✓	✓	State		675,000	675,000	✓	
<b>Total Appropriations</b>					<b>\$ 62,951,075</b>	<b>\$ 125,227,575</b>	<b>\$ 188,178,650</b>		

<b>State Trust Fund</b>									
Clean Water Management Trust Fund (see note below)	Wastewater Infrastructure		✓	State		\$100,000,000	\$100,000,000	✓	
<p>Note: The Clean Water Management Trust Fund received an appropriation of \$100 million in Fiscal Year 2007-08; however, actual awards for wastewater projects in Fiscal Year 2007-08 totaled \$41,919,600. Actual wastewater awards vary from year to year and have amounted to 26% of all awards on average over the past 10 years. Because the amount listed for the Clean Water Management Trust Fund is the total appropriation received for all programs, the organization is listed separately and the amount is not included in the total appropriations.</p>									

Source: Program Evaluation Division based on information from the Department of Environment and Natural Resources, Department of Commerce, Clean Water Management Trust Fund, and Rural Center.

Operators of each water and wastewater system, regardless of system size and ownership, are responsible for managing the operation, maintaining infrastructure, complying with state and federal rules and regulations, and identifying problems and infrastructure needs. When a system has a problem that requires a capital improvement, operators are also responsible for obtaining necessary funds to finance the associated projects. Funding for these projects can come from a variety of sources including reserve accounts funded by consumer fees and charges, the sale of local bonds, local taxes, private loans, and grants and loans from government-funded agencies.

Many large system operators in North Carolina are able to fund projects without help from state and federal agencies; however, other systems, especially small ones, may not have sufficient local resources and may not qualify for loans in the private market.<sup>10</sup> As a result, smaller systems turn to state and federal agencies for grants and loans.

In North Carolina, funding for water and wastewater infrastructure occurs through a bottom-up process: system operators determine their own maintenance and improvement needs, and if their system needs financial assistance, they can apply for funds from federal, state, and non-profit entities. Because it is a bottom-up process, only system operators that apply can be funded. Even when funding entities identify significant problems in communities, they cannot fund systems that do not apply to receive funding.

**Once the major funding source, federal grants have diminished over time and have been replaced by grants and loans from state sources.**

The federal government first began providing financial assistance to wastewater facilities in 1956. As a result of amendments to the Water Pollution Control Act, the federal government provided grants for up to 30% of construction costs for wastewater treatment facilities. Between 1956 and the early 1980s, federal grant funds increased dramatically,<sup>11</sup> covering up to 85% of eligible costs.<sup>12</sup> Federal grant funding persisted until the 1980s, when federal funds were reduced and grants were replaced with a state/federal revolving loan fund that required a 20% state match.<sup>13</sup> The money in this loan fund is recycled and can be re-loaned to other communities after the money has been repaid. The Safe Drinking Water Act of 1996 established a similar federal loan program for drinking water. The federal government created state-operated revolving loan programs with the intent that they would eventually operate without continued support from the federal government.

In response to reductions in federal funding, the North Carolina General Assembly has made several efforts to provide money to communities for water and wastewater infrastructure. In 1987, the General Assembly created the North Carolina Revolving Loan and Grant Program. In 1993, additional funds were made available through the 1993 Clean Water Bond bill. Two new programs to help low-income communities were initiated

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<sup>10</sup> A bond rating is required to qualify for private loans. Some communities have a low rating, and some do not have a bond rating at all, which makes them ineligible for loans in the private market.

<sup>11</sup> Clean Water Act, 33 U.S.C. § 1251 (1972).

<sup>12</sup> 1977 amendment to the Clean Water Act.

<sup>13</sup> 1981 and 1987 amendments to the Clean Water Act.

at the Rural Center, a non-profit organization. In 1996, the General Assembly created the Clean Water Management Trust Fund to protect waters and address pollution in surface waters.

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## Findings

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**Finding 1. The State Water Infrastructure Commission was created to develop a strategic plan for water and wastewater funding but has not achieved its mission because it does not have the authority or resources necessary to fulfill its mission.**

Specifically, the State Water Infrastructure Commission (SWIC) was established in 2005<sup>14</sup> by the North Carolina General Assembly to identify the state's water infrastructure needs, develop a plan to meet those needs, and monitor the implementation of the plan. The commission's 13 members include representatives from each state funding entity, representatives of local systems, and six members appointed by the Governor, President Pro Tempore of the Senate, Speaker of the House of Representatives, Chancellor of North Carolina State University, American Council of Engineering Companies, and Water Resources and Research Institute. SWIC is housed in the Office of the Governor, reports to the Environmental Review Commission and the General Assembly, and has met monthly since its initial meeting in May 2006. It is staffed by a private consultant.

According to N.C. Gen. Stat. §159G-66, SWIC has the following eight duties:

- assess and make recommendations on the role of the state in the development and funding of wastewater, drinking water, and stormwater infrastructure in the state;
- analyze the adequacy of projected funding to meet expected needs over the next five years;
- propose state priorities for funding;
- make recommendations on ways to maximize the use of current funding resources (whether federal, state, or local) and ensure funds are used in a coordinated manner;
- review the application of management practices in wastewater, drinking water, and stormwater utilities and determine the best practices;
- assess the role of public-private partnerships in the future provision of utility service;
- assess the application of the river basin approach to utility planning and management; and
- assess the need for a "troubled system" protocol.

Since 2006, the commission has submitted three reports to the Environmental Review Commission and the General Assembly on infrastructure financing, planning and incentives to encourage regional water and wastewater systems, and water efficiency.

**SWIC has made little progress on achieving its mission and the eight duties described in statute.** According to the private consultant who staffs the commission, SWIC has a roadmap for a strategic plan but has not

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<sup>14</sup> N.C. Gen. Stat. § 159G-65.

developed concrete, measurable outcomes. Furthermore, the statute that created SWIC did not provide a timeline for completing its tasks. Instead of developing a strategic plan, SWIC has focused its attention and limited resources on enhancing cooperation, communication, and collaboration among funding entities. The monthly meetings provide a forum for state and federal funding entities to discuss water and wastewater issues. According to SWIC officials, the organization has been successful in getting funding entities to discuss important issues and work together more frequently. SWIC officials stated they need clearer goals and objectives from the General Assembly and/or the Governor to develop a strategic water infrastructure financing plan.

**SWIC does not have the authority to require agencies to adopt or comply with best practices.** Much of SWIC's work has been focused on identifying, discussing, and determining best practices for water and wastewater financing, planning, and efficiencies. However, funding entities are not required to adopt practices identified by SWIC.

**SWIC lacks sufficient resources to carry out its duties.** When asked about SWIC's effectiveness, four of the seven representatives of funding entities interviewed stated SWIC has not carried out its established duties because of inadequate resources. The legislation that created SWIC does not provide a source of funding for the commission—permanent or otherwise—and does not fund personnel to staff the commission. Without funding for staff positions, SWIC relies on a consultant to handle administrative minutes from meetings and to carry out other administrative duties, including developing and publishing an annual report.

In 2007, SWIC received \$250,000<sup>15</sup> to fund operations and administration through the North Carolina Rural Economic Development Center<sup>16</sup> for use until 2009. If SWIC does not receive funding beginning in 2009, the commission will either have to operate without funding or will have to disband. SWIC's 2008 report to the General Assembly<sup>17</sup> estimates \$250,000 per year is needed to carry out its responsibilities.

**Five of seven representatives from funding entities interviewed for this evaluation stated SWIC does not have a clearly defined role in water and wastewater infrastructure funding.** Members of the water and wastewater infrastructure funding community do not understand the role of SWIC and have different opinions on how it should interact with funding agencies. Some interviewees suggested the commission should meet its responsibilities by taking a more academic approach in commissioning studies and reports, whereas others believed SWIC should take a more active role in policymaking and framing issues.

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<sup>15</sup> 2007 N.C. Sess. Laws, 2007-323 § 13.13A(m).

<sup>16</sup> Funding is now administered by the North Carolina Department of Environment and Natural Resources.

<sup>17</sup> State Water Infrastructure Commission. (2008, November). *Annual Report with Recommendations Supporting Enhanced Water Efficiency*.

**Finding 2. The lack of a statewide strategic plan for water and wastewater infrastructure funding has compromised the state's ability to identify needs, determine the type and amount of money required to meet these needs, and calculate return on investment.**

Each water and wastewater funding entity was established independently from other entities, each with its own enabling legislation. These entities address water supply, water quality and public health, and economic development; however, the state has yet to collectively identify or prioritize North Carolina's overarching water and wastewater infrastructure needs. Without a detailed strategic plan, infrastructure projects are funded to meet specific legislative and agency requirements and criteria for a given time period and situation rather than meeting long-term, statewide goals. A statewide strategic plan would provide mechanisms to

- identify and prioritize needs;
- develop a capital budget for infrastructure based upon identified needs;
- determine funding solutions (e.g., dedicated funding sources, appropriate mix of grants and loans, and prioritized allocation of funding) to better address the state's current and future financial needs;
- establish policy goals that are linked to performance measures; and
- provide implementation strategies for funding entities.

Furthermore, a strategic plan for North Carolina would establish the state's role in financing infrastructure needs not only within the context of focus areas (e.g., water supply, water quality and public health, and economic development) but collectively across funding entities. In addition, the plan would establish policies and objectives that bring order and priority to the current process for funding state water and wastewater initiatives. Because local units of government assess and plan based upon their individual system needs, their participation in developing and maintaining a statewide strategic plan for funding water and wastewater infrastructure initiatives is necessary and critical.

**Data has been collected on North Carolina water and wastewater infrastructure assets, but this information is not current and does not inform a statewide plan or provide the basis for prioritization of spending.** No one agency can provide a complete picture of water and wastewater assets across the state. The North Carolina Rural Economic Development Center (the Rural Center), United States Environmental Protection Agency, and North Carolina Department of Environment and Natural Resources (DENR) have each compiled partial data.

In two efforts to create a database of water and wastewater infrastructure, the Rural Center completed surveys of water and wastewater infrastructure, one in 1998 that covered 75 counties and another in 2005 of all 100 counties. The information was provided to the North Carolina Center for Geographic Information and Analysis and includes GIS information on the location and attributes of facilities and pipes. However, there is no process for ensuring this information stays

current. Without one organization to collect, analyze, and report statewide information on water and wastewater infrastructure, a statewide understanding of the types and significance of infrastructure needs is compromised. The lack of an organization to implement a statewide strategic plan results in the inability to set funding priorities and also may hinder planning responses to droughts.

In addition to the Rural Center surveys, the United States Environmental Protection Agency conducts needs surveys on water and wastewater infrastructure every four years. These surveys aim to capture a statewide picture of future infrastructure needs in order to compile a list of anticipated costs to install, upgrade, or replace infrastructure. These surveys compile the type and estimated cost of infrastructure needs over the next 20 years but do not collect information on the condition of current systems. This information provides a statewide inventory of existing needs and the cost of addressing them. However, a complete inventory does not exist. Without this information, a statewide understanding of the types, significance, and prioritization of needs across the state cannot be determined.

DENR collects statewide information on water quality and quantity, but these efforts only contain limited, if any, information on infrastructure, and the information is not used in the funding process. Information on water quantity is provided through the local water supply plans—assessment of the water system's current and future water needs and its ability to meet those needs—that every unit of local government must submit at least every five years. DENR's Source Water Assessment program delineates source water areas, inventories potential contaminants, and determines the susceptibility of each public water supply to contamination. The Basinwide Planning Program collects water quality information from each of the state's 17 major river basins. Both of these programs collect information related to water quantity and water quality in North Carolina, but neither focus on the state's water and wastewater infrastructure.

**The lack of a statewide strategic plan has resulted in inconsistent funding.** Without a statewide strategic plan, the North Carolina General Assembly cannot determine the amount and type of money that should be provided each year or fund the highest priorities during revenue shortfalls. As a result, funding for water and wastewater infrastructure has been appropriated based on individual funding agencies' requests rather than based on a statewide strategic plan. Current planning is conducted largely by entities in isolation from one another; each bases its decisions on separate guidelines and procedures. Under a strategic plan, each entity's rules, goals, and objectives would be considered together and examined for gaps and overlaps from a statewide perspective. A statewide strategic plan would identify and prioritize statewide water and wastewater infrastructure needs and determine the amount and type of funding required.

**State and local roles are not well defined for water and wastewater infrastructure funding.** A statewide strategic plan would clarify the state's role in providing financing for water and wastewater infrastructure owned and operated at the local level. There are several examples in North Carolina where state and local roles for planning, financing, construction,

operation, and maintenance are defined, including public schools, community colleges, and transportation. Clearly defined roles would give system operators a better idea of what can be expected from the state and facilitate local planning.

**Because there is no statewide strategic plan, the appropriate mix of grants and loans has not been determined.** Money from the 1998 Clean Water Bond was originally intended for loans but was converted to grants. In response to the identification of over \$11 billion in water and wastewater infrastructure needs by the Rural Center,<sup>18</sup> the state authorized the \$800 million Clean Water Bond in 1998 to fund infrastructure projects. Funds were allocated to DENR, the Department of Commerce, and the Rural Center to be awarded to community system operators over a five-year period (see Exhibit 3). However, this allocation was changed by the General Assembly during the five-year time period. Initially, DENR was allocated \$665 million to award to system operators, about half (\$330 million) as grants and half (\$335 million) as loans. In 2001, the General Assembly converted a portion of the allocation from loans to grants and transferred the funds from DENR to the Rural Center. The amount of money allocated to the Rural Center increased from \$115 million to \$240.4 million. In addition, 81% of the money initially allocated to DENR for loans was converted to grants. A statewide strategic plan would have identified the financial needs of local water and wastewater systems and the type of funds required to meet these needs more efficiently.

### Exhibit 3: Allocation of the \$800 Million Clean Water Bond Fund

Agency	Initial Bond Allocation	Final Bond Allocation	Difference
Department of Environment and Natural Resources			
Loan Funds	\$ 335,000,000	\$ 63,574,954	\$ (271,425,046)
Grant Funds	330,000,000	476,000,000	146,000,000
<b>Subtotal DENR Allocation</b>	<b>665,000,000</b>	<b>539,574,954</b>	<b>(125,425,046)</b>
North Carolina Rural Economic Development Center			
Loan Funds	-	-	-
Grant Funds	115,000,000	240,425,046	125,425,046
<b>Subtotal Rural Center Allocation</b>	<b>115,000,000</b>	<b>240,425,046</b>	<b>125,425,046</b>
Department of Commerce			
Loan Funds	-	-	-
Grant Funds	20,000,000	20,000,000	-
<b>Subtotal Commerce Allocation</b>	<b>20,000,000</b>	<b>20,000,000</b>	<b>-</b>
<b>Total Loans</b>	<b>335,000,000</b>	<b>63,574,954</b>	<b>(271,425,046)</b>
<b>Total Grants</b>	<b>\$ 465,000,000</b>	<b>\$ 736,425,046</b>	<b>\$ 271,425,046</b>
<b>Total Bond Funds</b>	<b>\$ 800,000,000</b>	<b>\$ 800,000,000</b>	<b>\$ -</b>

Source: Program Evaluation Division based on information from DENR, the Department of Commerce, and the Rural Center.

**Without a statewide plan, there is no basis for prioritizing funding requests.** Two of the six state funding entities—the Clean Water Management Trust Fund and the Rural Center<sup>19</sup>—currently receive

<sup>18</sup> The Rural Center. (1998, October). Clean Water: Our Livelihood, Our Life: A Report on the North Carolina Water and Sewer Initiative. Retrieved from <ftp://ftp.denovo.net/rural/CleanWaterReport99.pdf>.

<sup>19</sup> Only \$15.7 million of the \$115.7 million the Rural Center receives for its water and wastewater program is recurring funding.

recurring appropriations to support water and wastewater infrastructure projects, whereas funding for the four other entities is non-recurring. Without a capital budget linked to a strategic plan that spells out when and how much should be invested in infrastructure, each funding entity makes separate funding requests to the General Assembly to fund their specific missions. Over a 10-year period, \$421,160,413 was appropriated to state funding entities by the General Assembly. These appropriations varied from year to year but have increased substantially in the three most recent fiscal years. More than half of the funds (59% or \$247,552,032) were allocated from Fiscal Years 2005-06 through 2007-08.

**Uncertainty about funding for the state revolving loan programs' state match inhibits DENR's ability to plan for the best use of federal dollars.**

A statewide strategic plan would identify how best to fund the state match for the revolving loan programs. DENR administrators asserted the lack of recurring funding for the state match creates uncertainty and limits the agency's ability to develop long-term plans. The state has used different funding sources to provide the state dollars needed to draw down the federal capitalization grants for the state revolving loan programs. In the past, when tight budgets limited state appropriations, the General Assembly directed DENR to use funding transferred from the Department of Commerce, the 1998 Clean Water Bonds, and the state's general loan programs to fund the state match for the federal revolving loan program. In recent years, the General Assembly has appropriated non-recurring funds for the state match.

Issues associated with unpredictable funding for infrastructure projects trickle down to local governments. Uncertain funding also hinders the ability of the DENR funding entities to promote long-term planning and project prioritization with the units of local government. More consistent funding would enable local governments to embark on larger, multi-phase infrastructure projects or regional initiatives.

**Because the state does not have an overarching statewide plan for funding water and wastewater infrastructure, return on investment cannot be calculated.** An overarching statewide plan for infrastructure funding would identify the state's needs and priorities through a formal needs assessment. These needs and priorities would establish benchmarks from which to gauge investments. Without identified needs and priorities, it cannot be determined whether the state is meeting North Carolina's water and wastewater infrastructure needs.

**Finding 3. Six entities administer funding for water and wastewater infrastructure, creating a complex, fragmented, and burdensome system.**

Each entity operates independently with its own mission, goals, and objectives based on its legislative mandate. Adding to the fragmentation of the system, several different funding programs exist within each entity to provide grants and loans to system operators. As shown in Exhibit 4, each state funding entity has a distinct purpose. In general, the focus is on public health (at the Public Water Supply Section and Rural Center), pollution

control (at the Construction Grants and Loans Section, Clean Water Management Trust Fund, and Rural Center), or economic development (at both the Department of Commerce programs and Rural Center). Four of the six entities do not restrict which communities may apply for funds,<sup>20</sup> whereas the remaining two focus on economically distressed areas.

### Exhibit 4: Role of the Six Funding Entities

Funding Entity	Purpose	Communities Served <sup>i</sup>
<b>State Agencies</b>		
Department of Environment and Natural Resources, Construction Grants and Loans Section	To preserve, protect, and enhance the state's water resources	No restrictions <sup>ii</sup>
Department of Environment and Natural Resources, Public Water Supply Section	To promote public health by ensuring safe, potable water is available in adequate quantities	No restrictions <sup>iii</sup>
Department of Commerce, Division of Community Assistance	To assist local governments with economic development, community development, growth management, and downtown revitalization	Low-income communities
Department of Commerce, Commerce Finance Center	To offer information on financing programs available to qualifying companies planning to locate or expand in North Carolina	Low-income and economically distressed communities
<b>State Trust Fund</b>		
Clean Water Management Trust Fund	To help finance projects that address water pollution problems	No restrictions <sup>vi</sup>
<b>Non-profit Organization</b>		
North Carolina Rural Economic Development Center	To develop, implement, and promote sound economic strategies that improve the quality of life of rural North Carolinians	Rural and economically distressed communities
Notes: <sup>i</sup> Only units of local government and non-profit organizations are eligible for funding. <sup>ii</sup> The Construction Grants and Loans Section has a High Unit Cost Grant which is limited to communities with high wastewater and/or water rates. <sup>iii</sup> The Public Water Supply Section has a High Unit Cost Grant which is limited to communities with high water and/or wastewater rates. <sup>vi</sup> The Clean Water Management Trust Fund gives priority to economically distressed communities.		

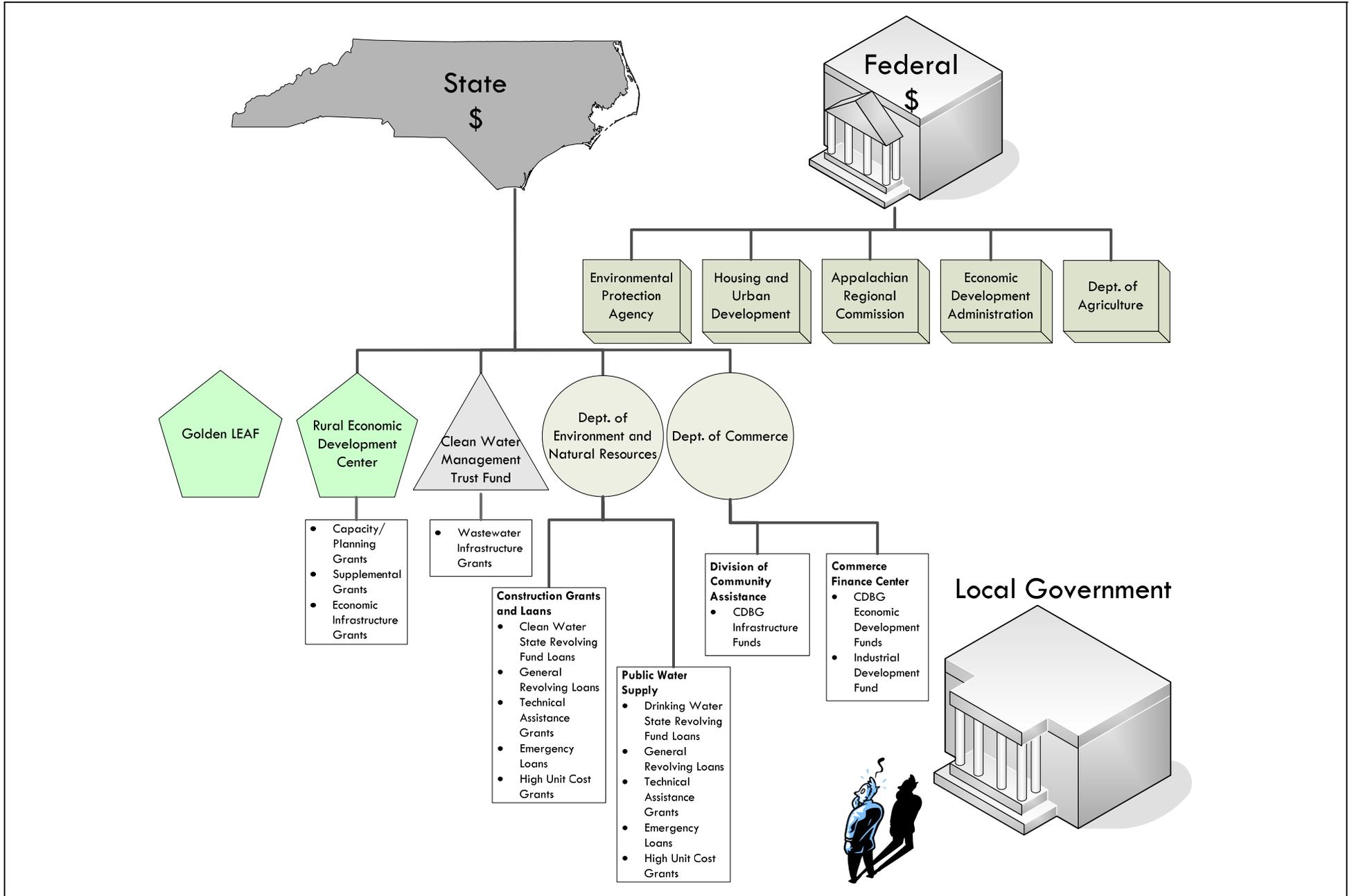
Source: Program Evaluation Division based on information from DENR, the Department of Commerce, and the Rural Center.

Exhibit 5 shows the different funding programs within each funding entity. Because large projects may require more funds than are available from any one funding entity, system operators seeking funding may be faced with submitting applications to more than one funder. Projects may be funded through multiple programs assuming different aspects of the project fit the purpose of the funding entity. For example, if a system operator in Sampson County seeks funding for improvements to a wastewater treatment plant, the operator could apply to the following programs:

- the Department of Environment and Natural Resources's (DENR's) Clean Water State Revolving Fund, assuming the municipality had requested to be placed on the priority list;
- the Rural Center's Clean Water Partners Supplemental Grant, because the town is located in one of the state's 85 rural counties;

<sup>20</sup> Only local units of government and non-profit entities are eligible to apply for funding.

# Exhibit 5: Numerous Funding Entities and Associated Programs Create a Puzzling System for Communities Seeking Funding



Note: CDBG is the Community Development Block Grant program funded by the United States Department of Housing and Urban Development.

Source: Program Evaluation Division based on program information from DENR, Department of Commerce, Clean Water Management Trust Fund, and Rural Center.

- the Clean Water Management Trust Fund's Wastewater Infrastructure Program, because the improvements will reduce the emission of waste into a nearby stream; and
- the Department of Commerce's Community Development Block Grant, because the improvements will benefit an area where 70% of the residents are considered low- and moderate-income.

**Each state program has a different process for submitting applications and making award decisions, increasing the time and money system operators must spend on the application process.** The North Carolina funding entities shown in Exhibit 5 have no cooperative or consistent application process,<sup>21</sup> which creates undue hardship on applicants. Some entities require applicants to submit a letter of interest or pre-application letter before being invited to officially apply. Other programs require that potential applicants meet with program staff or that field representatives visit the proposed project site before consideration for funding. These differences in the application process highlight the complexity and fragmentation of the current system.

**The decision-making process also differs from entity to entity.** Clean Water Management Trust Fund staff conducts an initial screen of applications and develops recommendations, but the organization's Board of Trustees makes final funding decisions. Currently, the Construction Grants and Loans Section within DENR has sufficient funds, and projects are funded in order of priority. Within other entities, staff engineers and administrators determine which applicants receive funding based on defined criteria and priorities. The Secretary of DENR and the Board of Directors at the Rural Center must signoff on projects funded by those entities.

**Award decisions are made at different times throughout the year.** The state's economic development and emergency loan programs have continuous award cycles, whereas other programs are funded during established, yet different, award cycles. Funding programs require disclosure of all matching and supplemental funds, yet receiving funding from programs is contingent on being approved for funding from other entities. Because there are different application cycles, applicants do not know if they will indeed receive funding from other programs or receive conditional funding based on the determinations to be made by other funding entities. As a result, different application cycles for state water and wastewater funding impedes applicants' ability to apply for and secure funding, even when each of the programs uses state allocations to make awards.

**Other states have developed a more coordinated application process to address their fragmented funding systems.** Arkansas created the Water and Wastewater Advisory Committee at the request of funding agencies. The committee provides guidance to local communities on projects and can recommend financing. The committee, consisting of funding entities, meets monthly to review pre-applications for water and wastewater infrastructure projects. This process allows Arkansas's regulatory agencies,

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<sup>21</sup> The two sections in DENR (Public Water Supply and Construction Grants and Loans) use the same application. However, because Public Water Supply only funds drinking water and Construction Grants and Loans only funds wastewater, it does not simplify the process for local units of government.

funding entities, and communities to discuss the strengths and weaknesses of proposed projects as well as recurring problems with particular types of projects. Communities cannot receive public funding without first going through the committee. This process provides communities and their engineers with vital information early in the process and prevents communities from submitting applications to multiple funding agencies.

Montana also has developed a coordinated application process. Montana created the Water, Wastewater and Solid Waste Action Coordinating Team, with the cooperation of funding agencies, to provide the best possible coordination and funding for projects. It created a uniform application for Montana's communities to detail their needs and possible funding strategies. The team meets bi-monthly to review and discuss the applications. A coordinated reply is provided to the community that identifies shortfalls in its application and potential funding resources. It is then up to the community to act on these recommendations. The team also sponsors outreach education programs for local communities to provide information about available resources.

**Coordination across funding entities in North Carolina is informal.**

Because the current system for funding water and wastewater infrastructure is fragmented, funding entities are left to coordinate<sup>22</sup> the activity of awarding state-appropriated dollars on an *ad hoc*, project-by-project basis. Because coordination activities can streamline the state funding process and better optimize the use of state money, formalizing the process creates greater efficiency.

When the Program Evaluation Division asked representatives from funding entities about the issue of coordination, they all indicated coordination is an informal process. Agencies even commented current coordination activities are dependent on the personalities involved. Program administrators stated coordination was carried out through phone calls and email rather than through a formal review and follow-up process.

Although it remains informal, the coordination process has become more structured through the Funders Forum, a meeting of federal, state, and non-profit funding entities located in North Carolina and coordinated by the Environmental Finance Center. The forum provides one of the few mediums for coordination across funding entities. At these meetings, entities may discuss project awards and current issues related to infrastructure funding; however, there is no strategic co-funding or development of solutions to current problems. Whereas these meetings are a step in the right direction for coordination, they remain informal and voluntary.

One example of the benefits of coordination is the memorandum of understanding between the Rural Center and the United States Department of Agriculture. This agreement allowed the Department of Agriculture to match every Rural Center grant dollar-for-dollar, resulting in the largest amount of money that North Carolina has ever received from the Department of Agriculture (\$107 million) and more than any other state in

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<sup>22</sup> This evaluation defines coordination as the regular gathering of funding entities to discuss issues related to the funding of North Carolina water and wastewater initiatives and working together on activities such as identifying priorities, making funding decisions, creating integrated information management, and discussion and resolution of pressing issues affecting current water and wastewater infrastructure funding systems.

the country received in federal Fiscal Year 2007-08. Without an established mechanism for coordination, agreements such as this one are unlikely to be replicated with other agencies or in future years.

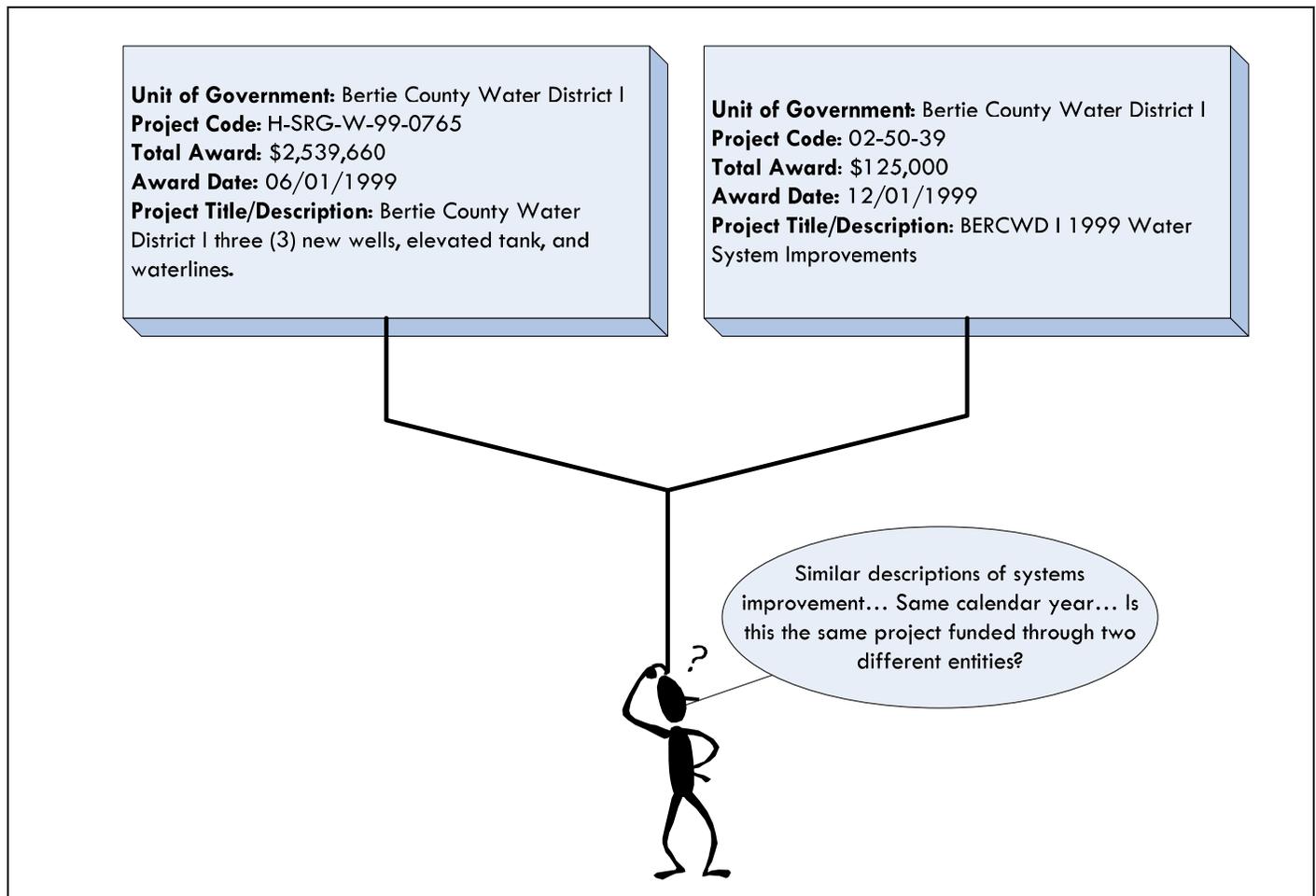
**The complex and fragmented system compromises the state's ability to track state-appropriated dollars.** Because there is no one agency responsible for collecting, maintaining, and reporting information on project funding, the North Carolina General Assembly does not have a complete picture of the investments made. An initial goal of this evaluation was to compile information gathered from state funding entities to present a comprehensive summary of state water and wastewater infrastructure investments and return on those investments. The Program Evaluation Division sought to establish

- how much money the state and federal governments have provided for water and wastewater infrastructure,
- which communities received funds,
- the number of projects that received funding from more than one funding entity,
- the types of projects funded, and
- the proportion of grants versus loans.

The information required to answer these questions was requested from each of the six funding entities. However, when the information was received, it was not possible to systematically analyze the information across the six funding entities because each funding entity maintains its own database of project awards with different project names, project identifiers, and descriptions of projects. Because the projects do not have standard names and account numbers, it was not possible to determine whether a project was funded by more than one entity.

Exhibit 6 depicts the information included in project award information provided by two of the funding agencies. In the illustration, it is clear that the recipient of funds is Bertie County Water District I and that both awards were made during Calendar Year 1999. However, the project descriptions are not detailed enough to determine if they are the same project. These inconsistencies make it impossible to evaluate the information on project funding and determine where the state's money has been spent. Furthermore, each entity reports individually to the General Assembly each year; as a result, no comprehensive report captures how and where state funds are being spent on water and wastewater funding.

## Exhibit 6: Bertie County Water and Wastewater Infrastructure Projects



Source: Program Evaluation Division based on project award data provided by funding entities.

There are several options for developing an integrated database to manage the state's information on water and wastewater infrastructure funding. One low-cost option is for funding entities to adopt common data standards and enter this standardized information into a single database that would provide *ad hoc* reporting. At a minimum, this information would be maintained within a Microsoft Access database and would include standardized project identification codes, project status reports, project descriptions, funding recipients, amount of funding, type of funding, and overall project cost.

More costly information systems, involving a web-based tool designed for reporting and information management, capitalize on standardized data by integrating geographic information with project funding data. The Kentucky Infrastructure Authority has developed the Water Resource Information System, a centralized information system for water and wastewater infrastructure with multi-level internet access.<sup>23</sup> The database contains detailed information on water and wastewater infrastructure including funding status on the state's water, wastewater, and solid waste infrastructure. The authority's homepage provides a link with "read only"

<sup>23</sup> Available online as of December 3, 2008 at [www.kia.ky.gov](http://www.kia.ky.gov).

capability for all water and wastewater project profiles, allowing anyone to search by county, House or Senate District, or project number for water and wastewater infrastructure projects. According to a Kentucky Infrastructure Authority administrator, individuals working within the system are granted password-protected access to update profiles and projects on a real-time basis.<sup>24</sup> This database provides state agencies, regional planning councils, local units of government, and the public with information on the status of projects, the amount and type of funding that has been provided, and whether additional funding is required. This single-point reference database for water and wastewater infrastructure allows the state to understand the funds already allocated and spent and the funding required for future needs.

**Because each funding entity is operated independently, activities are duplicated across agencies.** The six state funding entities spent \$2,685,966 to administer funds for water and wastewater infrastructure projects during Fiscal Year 2007-08. Exhibit 7 shows the amount of money each funding entity reported they spent on administrative costs. Independent administrative functions result in inefficient operations across entities. For example, when a system operator applies to multiple funding entities, each entity reviews the application separately. If that project is subsequently funded by multiple entities, each entity also is involved in oversight of the project.

**Exhibit 7**

Administrative Costs by Funding Entity in Fiscal Year 2007-08

Entity	Administrative Costs
<b>Department of Environment and Natural Resources</b>	
Construction Grants and Loans Section	\$ 760,000
Public Water Supply Section	531,223
<b>Subtotal DENR</b>	<b>1,291,223</b>
<b>Department of Commerce</b>	
Division of Community Assistance <sup>i</sup>	81,694
Commerce Finance Center	58,020
<b>Subtotal Department of Commerce</b>	<b>139,714</b>
<b>Clean Water Management Trust Fund<sup>ii</sup></b>	<b>583,183</b>
<b>North Carolina Rural Economic Development Center</b>	<b>718,938</b>
<b>Total for All Funding Entities</b>	<b>\$ 2,733,058</b>
Notes:	
<sup>i</sup> The Division of Community Assistance estimated its administrative costs to be 10% of the total budgeted costs for the Community Development Block Grant program.	
<sup>ii</sup> The Clean Water Management Trust Fund estimated its administrative costs to be 27%, based on an estimate of staff time during the fiscal year.	

Source: Program Evaluation Division based on information from DENR, Department of Commerce, Clean Water Management Trust Fund, and Rural Center.

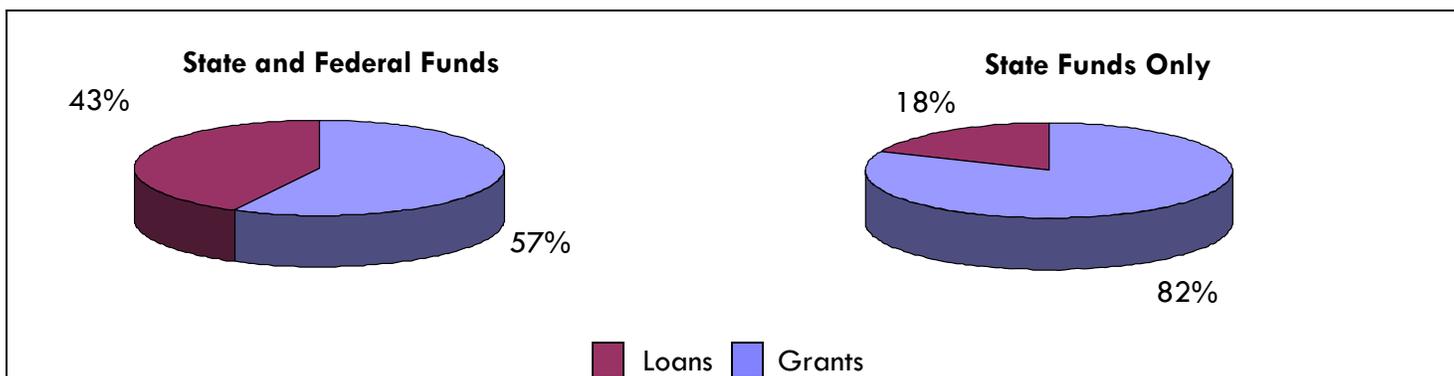
<sup>24</sup> Personal communication, Kentucky Infrastructure Authority Executive Director John Covington, November 6, 2008.

**Finding 4. State funding for water and wastewater infrastructure projects is skewed towards grants rather than loans, limiting the state’s ability to optimize scarce state dollars.**

When water and wastewater projects are funded with grants, the money does not have to be repaid to funding entities. When water and wastewater projects are funded with loans, funding entities not only recoup the funds through repayment but also may collect interest.<sup>25</sup> If more systems were funded with loans, the state could focus grant money on projects in communities with greater financial needs and, at the same time, build a sustainable fund that would exist even in tight budget years. Many systems currently receiving grants have the resources to pay back loans. In interviews conducted for this evaluation, representatives of local governments stated most system operators are able to take on loans. In low-wealth communities and in communities that are too small to raise enough revenue to pay back loans, however, grant money will need to continue to play a critical role in funding systems.

Between Fiscal Years 1998-99 and 2006-07, the six funding entities awarded just under \$1.9 billion dollars from state and federal appropriations and state bonds to water and wastewater systems in North Carolina. As shown in the left-hand chart in Exhibit 8, grants represented 57% of these awards, and 43% were loans. When examining the allocation of only state money, the proportion of grants and loans shifts—grants comprised 82% of all awards and loans 18% (see right-hand chart in Exhibit 8). Over four-fifths of state funding for water and wastewater infrastructure, then, was allocated in the form of unsustainable funds.

**Exhibit 8: Grant-to-Loan Ratio Across Six Funding Entities, FY 1998-99 to FY 2006-07**



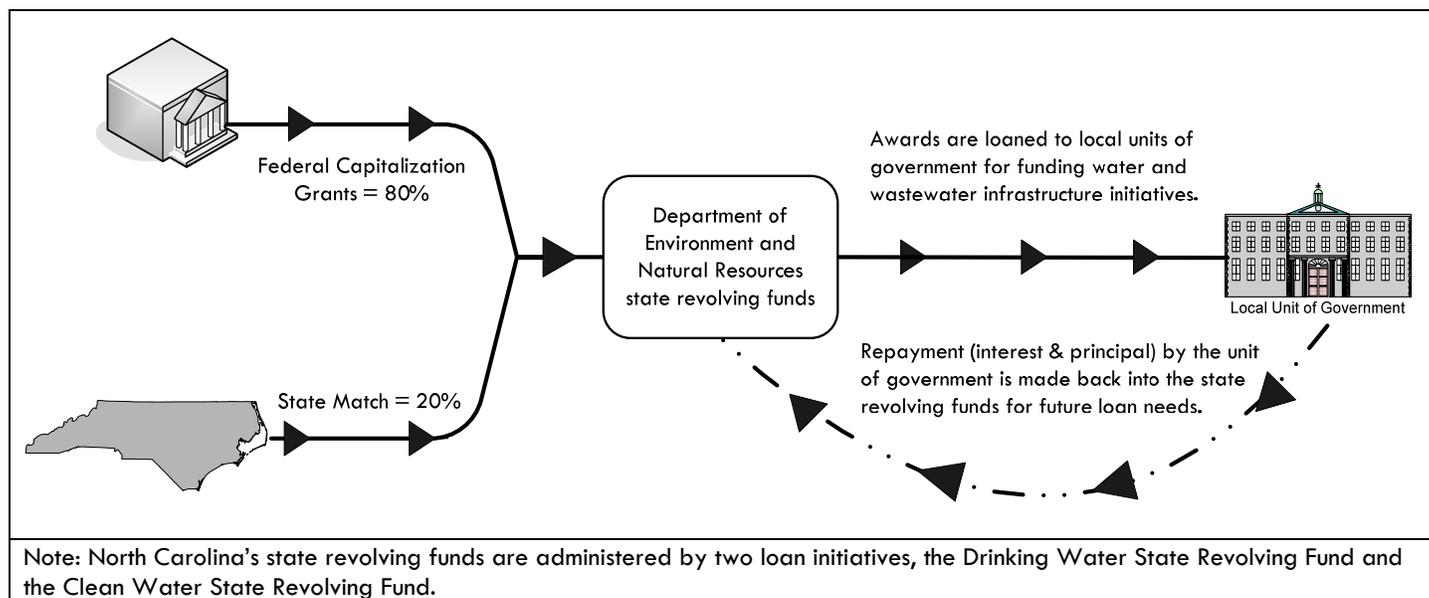
Source: Program Evaluation Division based on project award data from DENR, Department of Commerce, Clean Water Management Trust Fund, and Rural Center.

**Loan funds are sustainable.** When loans are repaid to funding programs, funds then can be loaned out to another community. As an example of how loan programs operate, Exhibit 9 depicts the flow of money in the state revolving loan programs. The state provides a 20% match to each federal capitalization grant, which is deposited in the state revolving funds. The funds are administered by the two loan initiatives within the Department of Environment and Natural Resources (DENR), and DENR loans the money out to system operators for water or wastewater infrastructure projects.

<sup>25</sup> The state does offer some zero-percent interest loans.

Subsequently, loan recipients pay the money back to DENR so the funds are available for loans to other communities.

### Exhibit 9: State Revolving Loan Programs



Source: Program Evaluation Division based on program information from DENR.

From Fiscal Year 1998-99 to 2006-07, the state and federal governments have appropriated \$406,096,499 to state revolving funds, but 84% more than that amount (\$748,413,774) has been awarded to system operators. More money was available for awards than had been appropriated because prior loans had been repaid. The Clean Water State Revolving Loan Fund was established in 1987, and the Drinking Water State Revolving Loan Fund was established in 1996; since the creation of these funds, money has been returned to these funds as system operators make payments on their loans (see Exhibit 10).

### Exhibit 10: Drinking Water and Clean Water State Revolving Funds, FY 1998-99 to FY 2006-07

Drinking Water State Revolving Fund		Clean Water State Revolving Fund	
<b>Total Loans Awarded</b>	<b>\$ 206,812,622</b>	<b>Total Loans Awarded</b>	<b>\$ 541,601,152</b>
Available funds from state and federal appropriations	167,314,560	Available funds from state and federal appropriations	238,781,939
Estimated awards from loan repayment	39,498,062	Estimated awards from loan repayment	302,819,213

Source: Program Evaluation Division based on financial data from DENR.

**System operators are more likely to maintain infrastructure when systems are funded by loans rather than grants.** In four of six interviews conducted by Program Evaluation Division, funding entity staff stated system infrastructure maintenance is sometimes lacking. In some cases, the system will qualify for grant funding to fix the problem. Interviewees suggested system operators who were poor managers were essentially

being rewarded with grant funding that does not have to be repaid, whereas operators who had maintained their systems appropriately were lower priorities on the funding list because limited funds had already been awarded as grants to repair systems in crisis. Interviewees stated system operators are more likely to maintain infrastructure if they have a financial interest in the process and have to charge more sustainable rates to pay back the loan. The 2008 drought legislation will require system operators applying for state funds to extend waterlines or expand water treatment capacity to demonstrate they have a water rate structure adequate to pay the cost of maintaining, repairing, and operating the system.<sup>26</sup>

**Federal loan funds may be lost while system operators “play the system,” trying to get grants.** Most system operators would prefer to have a grant to make repairs, improvements, and upgrades to system infrastructure instead of a loan because grants do not require repayment. Funding entity administrators stated sometimes operators may apply for both grants and loans in hopes of obtaining a grant. To minimize the amount operators have to repay, they may apply for grants even though they have been awarded loans. Meanwhile, the loan funds are unavailable to fund projects in other communities, at least until the operator informs the funding entity the loan will not be needed. Administrators at the United States Department of Agriculture stated loan money may revert back to the federal government and will no longer be available to any North Carolina system if a system operator decides it does not need the loan because it received a grant.

**Existing loan programs are not fully funded or used or have been converted to grants.** The Construction Grants and Loans Section and the Public Water Supply Section in DENR have general loan programs in addition to the federally funded state revolving loan programs; however, the North Carolina General Assembly has not funded these programs since the Clean Water Bond was passed in 1998. The General Assembly originally allocated \$300 million for loans but later converted a majority of that money (81%) to grants and only allocated \$63,574,954 for loans.<sup>27</sup> In addition, Community Development Block Grant funds for water and wastewater infrastructure projects managed by the North Carolina Department of Commerce may be provided to communities as loans, but department administrators currently distribute the money only as grants.

North Carolina already has a strong process for vetting loans. Any system operator applying for funding through state loan programs must first have approval from the Local Government Commission. The Local Government Commission ensures the applicant is in good financial health and can repay the loan. It has the authority to take over water and wastewater systems operated by local units of government to ensure the loan will be paid back. No system operator has ever defaulted on a loan since the Local Government Commission was established in the 1930s.

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<sup>26</sup> This legislation applies to water systems applying for funds from the Drinking Water Revolving Fund, the Drinking Water Reserve Fund, or any other grant or loan of fund allocated by the General Assembly. SWIC is developing the guidelines for water rate structures and will report on its progress in January 2009.

<sup>27</sup> Of the \$63,574,954 used for loans, \$35 million was used to fund the state match for the state revolving loan programs.

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## Recommendations

### **Recommendation 1. The North Carolina General Assembly should direct the State Water Infrastructure Commission to develop a statewide strategic plan and needs assessment for water and wastewater infrastructure funding by May 1, 2010.**

The General Assembly should transfer \$750,000 from the Clean Water Management Trust Fund and the Rural Economic Development Fund (\$375,000 from each entity) so the State Water Infrastructure Commission (SWIC) can issue a contract for completing these tasks. The statewide strategic plan should establish the vision, goals, and objectives for water and wastewater infrastructure funding in North Carolina and should include the following components:

- statewide policy goals for water and wastewater infrastructure funding that are linked to performance measures and will indicate to the Legislature that policy goals are being met;
- water and wastewater infrastructure needs and statewide priorities for meeting those needs; and
- funding strategies for water and wastewater infrastructure including sources of funding, appropriate mix of grants and loans, and funding allocation based on statewide priorities.

SWIC should submit the strategic plan to the General Assembly on or before May 1, 2010. The General Assembly should consider the plan during the 2010 session.

The needs assessment should be conducted at the same time as the strategic plan and should be used to inform the plan. Whereas the entity named to conduct the plan should work closely with SWIC to determine the parameters for the assessment, potential domains to include are the condition of existing infrastructure, demand for improvements, cost of improvements, and financial needs of communities.

### **Recommendation 2. The North Carolina General Assembly should require better oversight of water and wastewater funding by either authorizing the State Water Infrastructure Commission to coordinate and oversee the funding system or establishing a single water and wastewater funding authority.**

The federal government recognized the importance of coordination for water and wastewater funding in 1997 when the federal funding entities for water and wastewater—the Environmental Protection Agency (EPA), Department of Housing and Urban Development, and Department of Agriculture—issued a memorandum of agreement encouraging cooperation. The EPA also identified the benefits of enhanced coordination for states. State-level coordination improves communication by providing forums for staff to discuss projects, matching applicants with appropriate funding sources, and resolving conflicts among different program funding requirements. The EPA noted coordination reduces duplicative project funding, reduces administrative expenses, and guards against venue shopping for prospective recipients. Finally, the EPA suggests enhanced coordination results in a more efficient and effective system for water and wastewater funding.

An EPA handbook provides states with guidelines and best practices for coordinating state water and wastewater infrastructure funding.<sup>28</sup> The EPA proposes coordination occurs along a continuum of informal cooperation to formal coordination. The handbook identifies four aspects of the funding process that can be coordinated when there are multiple funding agencies. Exhibit 11 describes the continuum of coordinating functions for each aspect of the funding process.

## Exhibit 11: Continuum of Funding Coordination

Funding Process	Funding Coordination Functions	
	Informal Cooperation	Formal Coordination
Identification of Applicants	Funding Fairs & Websites	One-stop meetings
Application Process	Coordinated Technical Assistance	Screening Form
Application Review	Informal Review Meetings	Regular Review Meetings
Award Funding	Share Project Information	Coordinate Requirements

Source: Program Evaluation Division based on information in the EPA (2003, October) *Handbook on Coordinating Funding for Water and Wastewater Infrastructure: A Compilation of State Approaches*.

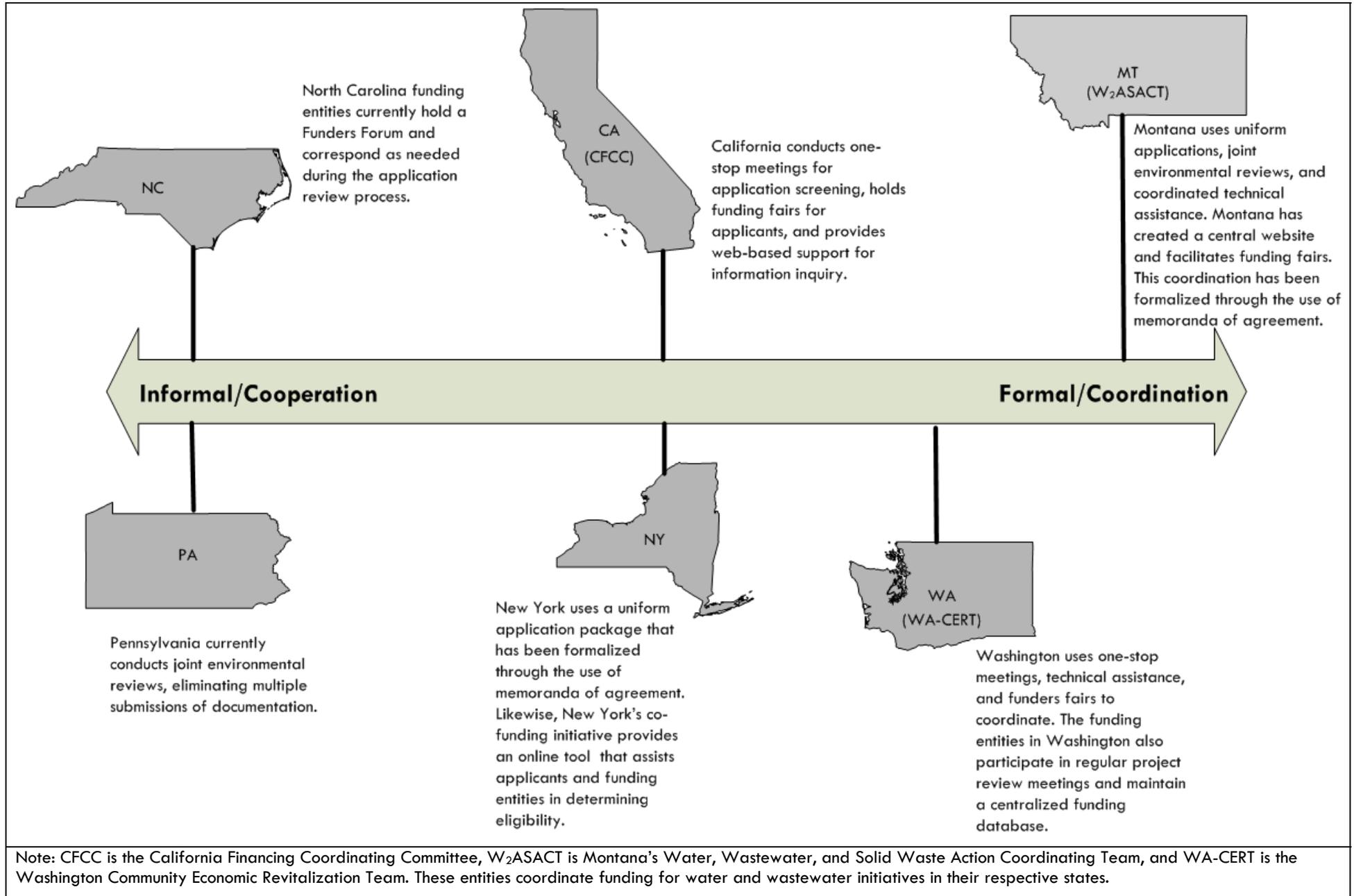
Based on funding entity documentation and interviews with funding entity staff, the Program Evaluation Division found North Carolina uses informal cooperation to coordinate the funding process. For example, North Carolina funding entities have held funding fairs and share project information informally. The EPA handbook provides examples showing how states are coordinating their funding process. Exhibit 12 compares North Carolina to other states on the continuum of coordinating functions.<sup>29</sup>

The EPA recommends funding should be coordinated at a level matching the circumstances of each state. The circumstances in North Carolina indicate the system for funding water and wastewater infrastructure is complex and fragmented. Informal cooperation is insufficient to solve the problems associated with fragmentation, and the General Assembly should require better oversight and coordination of the system for water and wastewater funding. The Program Evaluation Division developed the following two options for improving coordination and oversight.

<sup>28</sup> EPA. (2003, October). *Handbook on Coordinating Funding for Water and Wastewater Infrastructure: A Compilation of State Approaches*.

<sup>29</sup> The Program Evaluation Division organized the states along this continuum based on information taken from the EPA's *Handbook on Coordinating Funding for Water and Wastewater Infrastructure*. The states were placed along the continuum by taking counts of the coordinative practices implemented by each of the states in the exhibit.

## Exhibit 12: Funding Coordination in Other States



Source: Program Evaluation Division based on information found in the EPA (2003, October) Handbook on Coordinating Funding for Water and Wastewater Infrastructure: A Compilation of State Approaches.

**Option A. Authorize the State Water Infrastructure Commission to oversee the current system of water and wastewater infrastructure funding and set standards for the six funding entities that administer funding for water and wastewater infrastructure.** This option increases coordination and reduces the fragmentation caused by the current funding system because the State Water Infrastructure Commission (SWIC) would have the authority and responsibility to coordinate water and wastewater funding. Under this option, the current structure of six separate funding entities would continue.

The following state and state-supported agencies identified in this evaluation will be required to adhere to the standards established by SWIC and provide information to SWIC:

- the Department of Environment and Natural Resources, Division of Water Quality, Construction Grants and Loans Section;
- the Department of Environment and Natural Resources, Division of Environmental Health, Public Water Supply Section;
- the Clean Water Management Trust Fund; and
- the North Carolina Rural Economic Development Center (the Rural Center).

In addition, the two divisions in the Department of Commerce (the Division of Community Assistance and the Commerce Finance Center) would be required to provide information to SWIC and participate in coordination activities when appropriate.

The statutes establishing SWIC would need to be modified to clearly state that SWIC has the following responsibilities and obligations:

- serving as the lead coordinating body for water and wastewater infrastructure funding in North Carolina;
- implementing the statewide strategic plan in coordination with the six funding entities;
- developing and tracking performance measures to indicate how the six funding entities are meeting the goals established in the strategic plan;
- establishing and maintaining a baseline inventory of water and wastewater infrastructure in North Carolina;
- maintaining a statewide database of project awards including standardized project identification codes, project status reports, project descriptions, funding recipients, amount of funding, type of funding, and overall project cost;
- conducting a detailed needs assessment to determine water and wastewater infrastructure funding needs;
- setting the application and project award process standards for funding water and wastewater infrastructure; and
- reporting to the General Assembly by January 1, 2012 on the initial implementation of the strategic plan and then reporting every two years beginning January 1, 2014.

To carry out these responsibilities, SWIC will need recurring funding. The SWIC's 2008 report to the General Assembly estimated that \$250,000 per year is needed to carry out its current responsibilities. Because this recommendation increases SWIC's responsibilities, the Program Evaluation

Division estimates a total of \$500,000 per year is needed to hire permanent staff for SWIC and to cover other operating expenditures. The General Assembly should consider transferring state funds currently appropriated to the Clean Water Management Trust Fund and the Rural Center to permanently fund SWIC.

**Option B. Establish a single independent authority with primary responsibility for receiving applications for water and wastewater infrastructure projects and awarding funding for these projects.** The current water and wastewater funding entities would be incorporated into an independent state authority housed for administrative purposes in the Department of Environment and Natural Resources (DENR). This option eliminates the fragmented system and the need for coordination because a single authority would be responsible for funding water and wastewater infrastructure.

The Construction Grants and Loans Section of the Division of Water Quality and the Financial Services Unit in the Public Water Supply Section of the Division of Environmental Health would be transferred from DENR to the new authority through a Type I transfer process. When part of an agency is transferred to another department under a Type I transfer, its statutory authority, powers, duties, functions (including budgeting and purchasing), records, personnel, property, and unexpended balances of appropriations, allocations, or other funds are transferred to the other department.

Only funding allocated by the Clean Water Management Trust Fund for wastewater infrastructure would be transferred to the new authority. The Clean Water Management Trust Fund would continue to finance projects that address water quality, but it would no longer provide funding for wastewater infrastructure projects. Funding for the Clean Water Partners Program and the water and wastewater portion of the Economic Infrastructure Program operated by the Rural Center would be transferred, and the Rural Center would continue all other activities not related to water and wastewater infrastructure funding. The Community Development Block Grant and the Industrial Development Fund programs operated by the Department of Commerce would not be transferred because their primary purpose is not water and wastewater funding; however, these programs would be required to provide information and cooperate with the new authority so the state could account for all state and federal funds used to fund water and wastewater infrastructure.

The new authority would have the following responsibilities:

- awarding grants and loans for water and wastewater systems to system operators using a single application and project award process while maintaining distinct funding priorities (i.e., public health, pollution control, economic development);
- implementing the statewide strategic plan developed by SWIC and approved by the General Assembly;
- developing and tracking performance measures to indicate how the independent authority is meeting the goals established in the strategic plan;
- establishing and maintaining a baseline inventory of water and wastewater infrastructure in North Carolina;

- developing and maintaining an integrated database designed to provide *ad hoc* reporting capabilities based on performance measures identified by the strategic plan;
- conducting a detailed needs assessment to determine water and wastewater infrastructure funding needs; and
- reporting to the General Assembly by January 1, 2012 on the initial implementation of the strategic plan and then reporting every two years beginning January 1, 2014.

Using the model for the Clean Water Management Trust Fund, a Board of Trustees should oversee operations for the new authority. The Board of Trustees should be composed of 12 members appointed to four-year terms as follows:

- four members appointed by the Governor,
- four members appointed by the President Pro Tempore of the Senate, and
- four members appointed by the Speaker of the House of Representatives.

Members of the Board of Trustees should be appointed based on their knowledge and expertise of funding and construction of water and wastewater infrastructure.

The authority will use the existing administrative funds that are available in each of the current funding programs. The new authority will not need any additional funds.

**Recommendation 3. To promote sustainability of funding for water and wastewater infrastructure, the North Carolina General Assembly should increase its emphasis on state loan programs when determining state appropriations for water and wastewater infrastructure.**

Grant funds remain necessary for funding systems in low-wealth communities and in communities that are too small to raise enough revenue to pay back loans. However, representatives of local governments interviewed for this evaluation stated many systems currently receiving grants have the resources to pay back a loan. If more systems were funded with loans, the state could focus grant money on projects in communities with greater financial needs and, at the same time, build a sustainable fund that would exist even in tight budget years.

Increased state investment in loans for water and wastewater infrastructure has the following benefits:

- funding sustainability, because loan repayments can be loaned to another community;
- improving maintenance of water and wastewater infrastructure, because system operators have a vested interest;
- involving the Local Government Commission process to ensure the applicant is in good financial health and can repay the loan; and
- utilizing existing state-funded loan programs in the Department of Environment and Natural Resources, which were established by the General Assembly.

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A statewide strategic plan would identify the appropriate mix of grants and loans needed.

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## Appendixes

### **Appendix A: State Funding Entity Profiles**

One-page profiles for each of the state entities funding water and/or wastewater infrastructure. Profiles include brief overviews of each entity's mission, background, and funding opportunities.

### **Appendix B: Non-State Funding Entity Profiles**

A brief description of funding entities that provide funds to North Carolina communities but do not receive state appropriations.

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## Agency Response

A draft of our report was submitted to the Department of Environment and Natural Resources, Department of Commerce, Clean Water Management Trust Fund, North Carolina Rural Economic Development Center, and State Water Infrastructure Commission to review and respond. Their responses are provided following the appendixes.

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## PED Contact and Staff Acknowledgments

For more information on this report, please contact the lead evaluator, Larry Yates, at [larry@ncleg.net](mailto:larry@ncleg.net).

Staff members who made key contributions to this report include Sean Hamel, Catherine Moga Bryant, Kelly Quick, Carol Shaw, and Pamela L. Taylor. John W. Turcotte is the director of the Program Evaluation Division.





# NC Department of Environment and Natural Resources

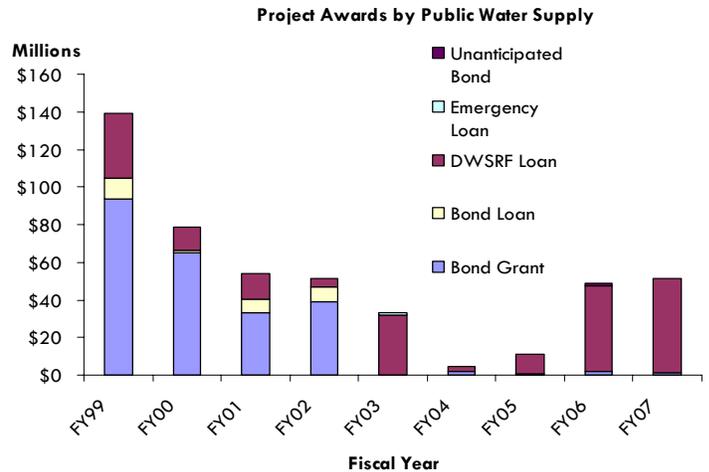
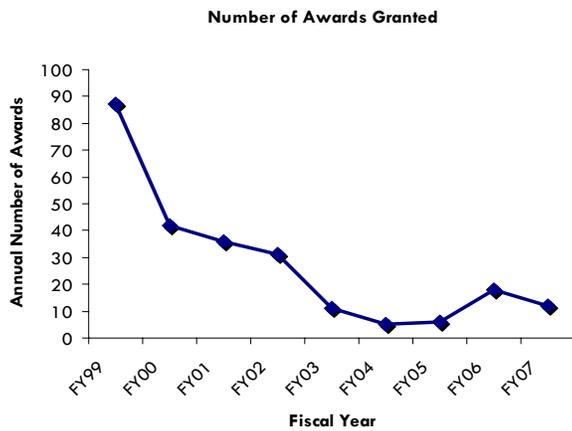
## Division of Environmental Health, Public Water Supply Section

### Mission

The mission of the Public Water Supply Section is to promote public health by ensuring that safe, potable water is available in adequate quantities to the residents and visitors of North Carolina served by public water systems by assuring that such systems are properly located, constructed, operated, and maintained.

### Background

The Public Water Supply Section administers two loan and grant programs: the federal Drinking Water State Revolving Fund (DWSRF) and the state Drinking Water Reserve. The Drinking Water Reserve consists of two funds: High Unit Cost Grants and General Revolving Loans. Emergency loans also are available from the section through both the federal and state programs.



### Funding Opportunities

The Public Water Supply Section provides grants and loans to units of local government and certain non-profit water corporations to protect public health. Loans are provided at one-half of the market rate for a period of up to 20 years.

#### Drinking Water State Revolving Fund Loans

The Drinking Water State Revolving Fund was created through 1996 amendments to the Safe Drinking Water Act to assist public water systems in financing the cost of infrastructure needed to achieve or maintain compliance with the act's requirements and to protect public health. The federal government, through the Environmental Protection Agency, provides a capitalization grant award to states which are then required to provide a 20% match. The maximum loan amount for this program is currently \$3,000,000 for construction projects and \$25,000 for project planning.

#### Drinking Water Reserve – High Unit Cost Grants

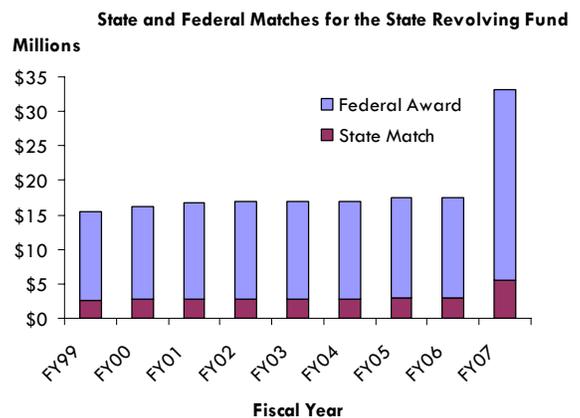
High Unit Cost Grants are available to water systems with projected rates that exceed the high unit cost threshold of 0.75% for homes with only public water or 1.5% for homes with both public water and public sewer. The maximum grant amount for this program is currently \$3,000,000 per three fiscal years.

#### Drinking Water Reserve – General Revolving Loans

General Revolving Loans are available to public water systems for projects that protect public health. The maximum loan amount for this program is currently \$3,000,000.

#### Emergency Loans

Emergency Loans are available from both federal and state programs in the event that the Secretary of the Department of Environment and Natural Resources certifies either a serious public health hazard or drought emergency related to the water supply system is present or imminent in a community. The maximum loan amount for this program is currently \$3,000,000 from the state program, depending on the amount of funds available, and there is no maximum from the federal program.



# NC Department of Environment and Natural Resources

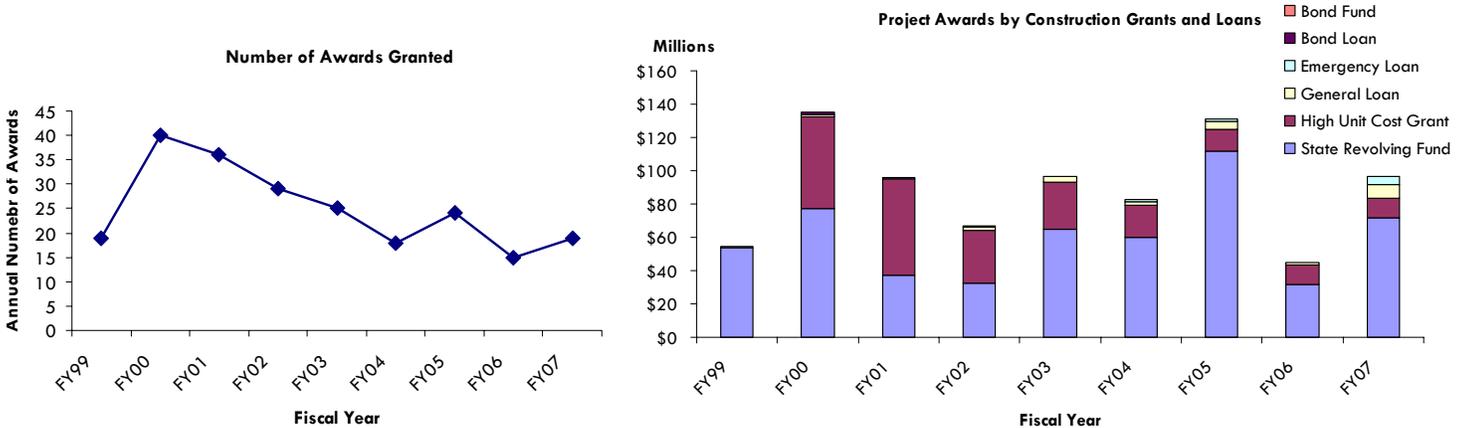
## Division of Water Quality, Construction Grants and Loans Section

### Mission

The mission of the Construction Grants and Loans Section is to provide timely approval and permitting decisions for North Carolina's wastewater facilities' applicants and to preserve, protect, and enhance the state's water resources.

### Background

The Construction Grants and Loans Section administers two loan and grant programs: the federal Clean Water State Revolving Fund and the state Wastewater Reserve. The Wastewater Reserve consists of four funds: General Revolving Loans, High Unit Cost Grants, Technical Assistance Grants, and Emergency Loans. The section also administers the federal State and Tribal Assistance Grants program on behalf of the United States Environmental Protection Agency.



### Funding Opportunities

The Construction Grants and Loans Section provides both grants and loans to units of local government to help finance the construction of wastewater facilities.

#### Clean Water State Revolving Loans

The Clean Water State Revolving Fund replaced the Construction Grants program through 1987 amendments to the federal Clean Water Act. Congress provides grant funds to establish revolving loan programs for wastewater treatment facilities and projects associated with estuary and nonpoint source programs. The Environmental Protection Agency provides capitalization grant awards to states that provide a 20% match. Loans are provided to units of local government at one-half of the market rate for up to 20 years. Currently, the maximum loan amount for this program is \$17,500,000.

#### Wastewater Reserve – General Revolving Loans

General Revolving Loans are available to wastewater systems to help finance the construction of wastewater facilities. The maximum loan amount for this program is currently \$3,000,000.

#### Wastewater Reserve – High Unit Cost Grants

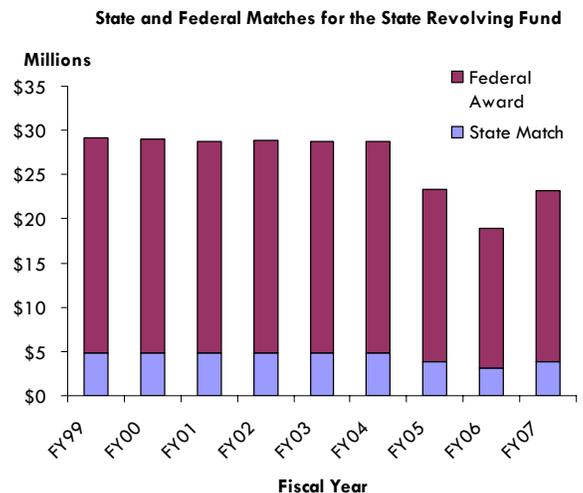
High Unit Cost Grants are available to wastewater systems with projected rates that exceed the high unit cost threshold of 0.75% for homes with only public sewer or 1.5% for homes with both public sewer and public water. The maximum grant amount for this program is currently \$3,000,000 over three consecutive years.

#### Wastewater Reserve – Technical Assistance Grants

Technical Assistance Grants are provided to correct deficiencies in wastewater collection or treatment facilities. The maximum grant amount is \$50,000 over three consecutive years.

#### Wastewater Reserve – Emergency Loans

Emergency Loans are available in the event that the Secretary of the Department of Environment and Natural Resources certifies either a serious public health hazard or water quality emergency related to the wastewater system is present or imminent in a community. The maximum loan amount for this program is currently \$3,000,000.



# NC Department of Commerce

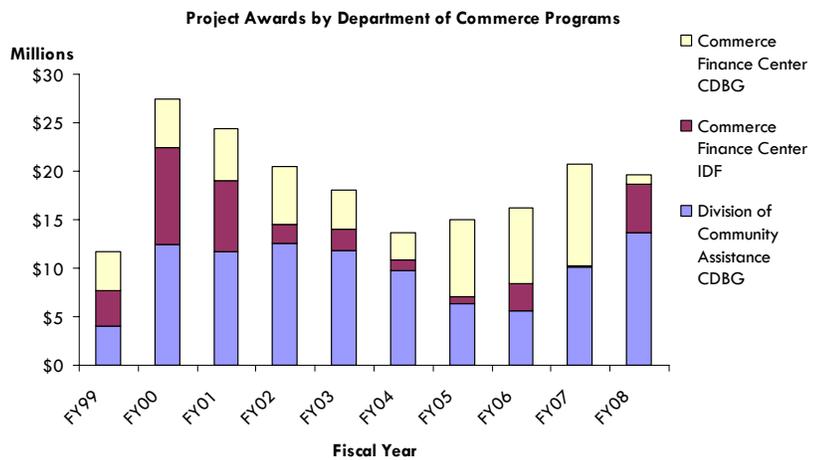
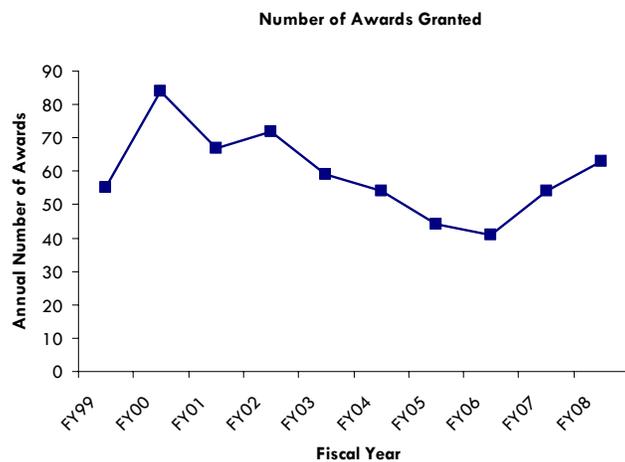
## Commerce Finance Center and Division of Community Assistance

### Mission

The mission of the Division of Community Assistance is to assist local governments with economic development, community development, growth management, and downtown revitalization in three major areas: resources and services for economic prosperity, growth management, and customized community development assistance. The mission of the Commerce Finance Center is to offer information on financing programs available to qualifying companies planning to locate or expand in North Carolina and to direct programs that provide grants and loans to businesses locating or expanding in the state.

### Background

The Division of Community Assistance assists local governments through seven programs: Small Business and Entrepreneurial Assistance, Community Revitalization, Scattered Site Housing, Infrastructure, Housing Development, Urgent Needs, and Capacity Building. Water and wastewater funding is primarily supported through Community Development Block Grant (CDBG) infrastructure funds. CDBG funds focus on improving low and moderate-income residential areas that pose an environmental risk where at least 70% of the residents have low or moderate incomes. The Commerce Finance Center administers two programs that fund water and wastewater infrastructure for the purpose of economic development: the Economic Development portion of CDBG funds and the Industrial Development Fund (IDF).



### Funding Opportunities

#### CDBG Infrastructure Funds

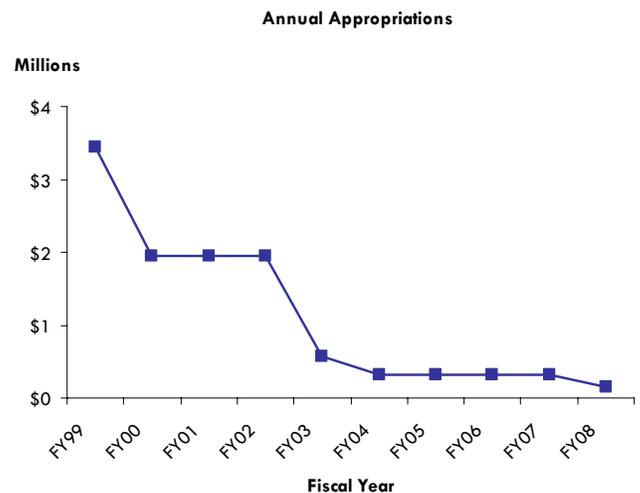
Infrastructure funds can be used for the installation of public water or sewer lines and improvements to water or sewer treatment plants that have specific problems (e.g., being under moratoriums or special orders of consent). The maximum grant amount is \$750,000.

#### CDBG Economic Development Funds

Economic development funds provide grants to local governments, which in turn provide assistance to local businesses that create or retain jobs. Funding is based on the number of jobs created and the level of community distress. CDBG funds are granted to local governments for infrastructure improvements to assist businesses in creating or retaining jobs. The maximum award is \$1,250,000 per project.

#### Industrial Development Fund

The Industrial Development Fund provides incentive industrial financing grants and loans to local municipal or county government applicants located in the 67 most economically distressed counties in the state. Funds can be used for construction of or improvements to new or existing water, sewer, gas, telecommunications, high-speed broadband, electrical utility distribution lines or equipment, or transportation infrastructure in existing, new, or proposed industrial buildings. The maximum award is \$500,000 per project.



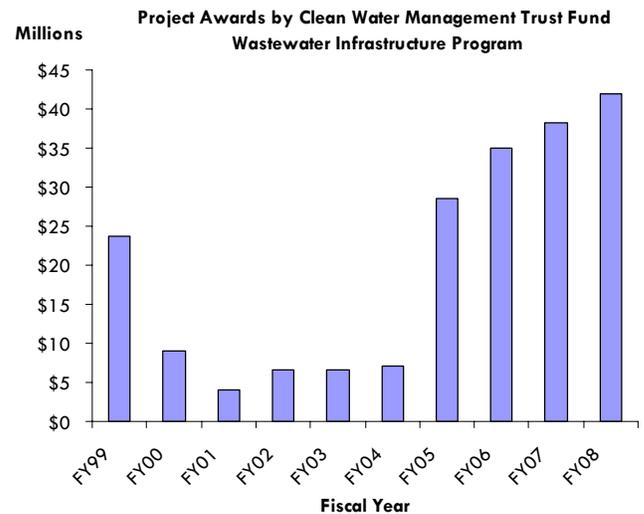
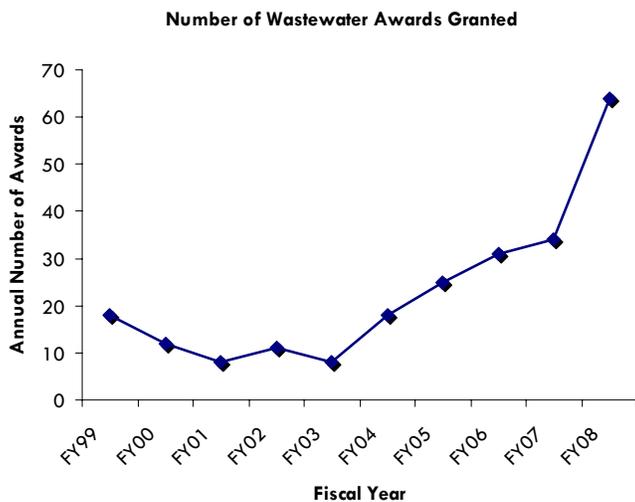
# Clean Water Management Trust Fund

## Mission

Using state appropriations, the Clean Water Management Trust Fund helps finance projects that address water pollution problems. The Clean Water Management Trust Fund seeks to enhance or restore degraded waters, protect unpolluted waters, and contribute toward a network of riparian buffers and greenways for environmental, educational, and recreational benefits.

## Background

The Clean Water Management Trust Fund was created in 1996 by the General Assembly in response to water quality issues across the state. It is an independent agency housed for administrative purposes in the Department of Environment and Natural Resources. The Clean Water Management Trust Fund provides grants in three categories: land acquisition, wastewater infrastructure, and stormwater mitigation. The fund finances projects to clean up or prevent surface water pollution.



## Funding Opportunities

The Clean Water Management Trust Fund provides grant-based funding to state agencies, municipalities, counties, other local government agencies, and conservation non-profits. Funding exists in three distinct programs: land acquisition, wastewater infrastructure, and stormwater management.<sup>1</sup>

### Wastewater Infrastructure Program

The purpose of the wastewater infrastructure grants program is to fund projects to repair failing wastewater treatment systems, repair or eliminate failing septic tank systems, eliminate illegal drainage connections, and expand waste treatment systems if the system is being expanded as a remedy to eliminate failing septic tank systems or illegal drainage connections.

<sup>1</sup> For purposes of this evaluation attention was directed to only the wastewater infrastructure program.

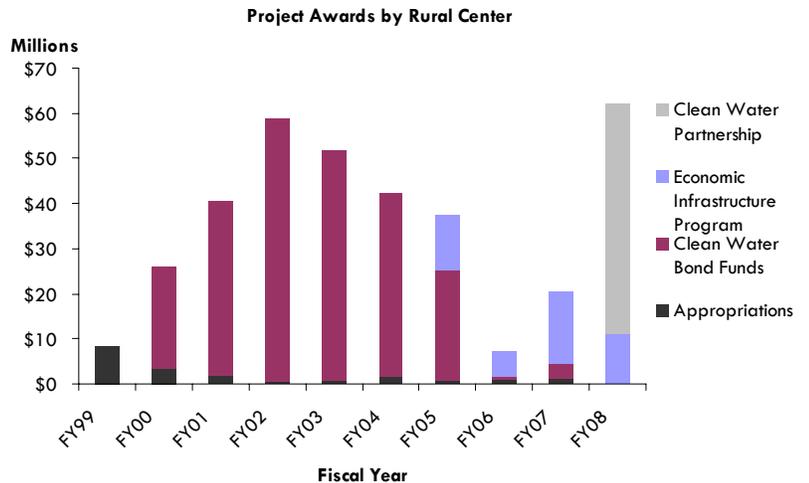
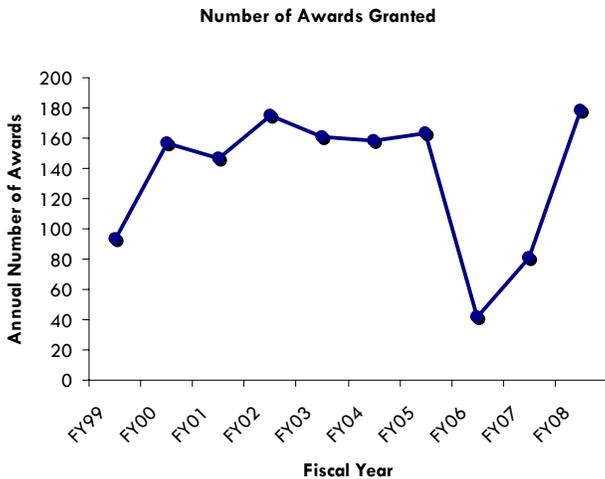
# North Carolina Rural Economic Development Center

## Mission

The mission of the Rural Center is to develop, implement, and promote sound economic strategies that improve the quality of life of rural North Carolinians, with a special focus on individuals with low to moderate incomes and communities with limited resources.

## Background

The Rural Center operates four distinct program areas: business development, physical infrastructure, civil and social infrastructure, and workforce development. North Carolina's water and wastewater infrastructure funding is housed within the physical infrastructure program and has four unique funding areas: the Supplemental Grants Fund, Clean Water Bond Grant Program,<sup>2</sup> Economic Infrastructure Fund, and Clean Water Partners Fund.



## Funding Opportunities

All funding opportunities are 100% grant-based. Within the four funding programs, the Rural Center executes two types of grants: planning/capacity grants and supplemental grants.

### Capacity/Planning Grants

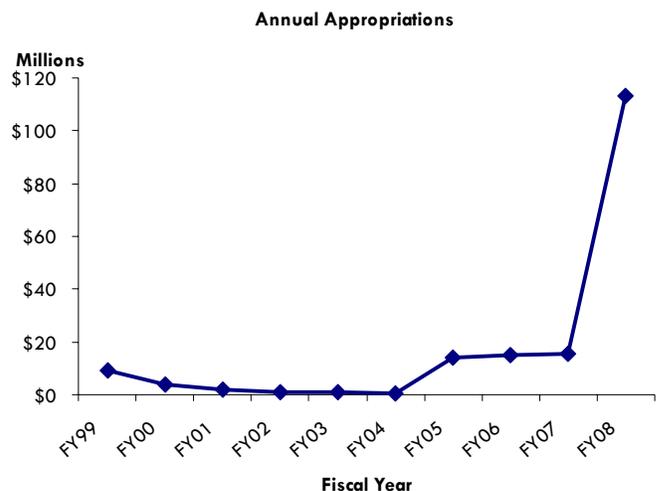
Capacity/planning grants provide a revenue stream for local units of government to prepare and plan initiatives in support of water and sewer facilities. Funds typically are used to prepare preliminary engineering reports, master water/sewer plans, develop capital improvement plans, conduct water/sewer feasibility studies, perform rate structure studies, or complete grant applications. The maximum grant amount for this program is generally \$40,000.

### Supplemental Grants

These grants are designed to match federal, state, and/or other loan or grant program funds for projects that aim to improve physical infrastructure and strengthen prospects for economic development in distressed areas of North Carolina. The maximum grant amount for this program is currently \$500,000.

### Economic Infrastructure Program

With a local match of 5%, the Economic Infrastructure Program assists local units of government with funding of up to \$10,000 per job created, for up to one half of water and sewer infrastructure costs, or support up to \$1,000,000 for projects that result in the creation of private sector jobs.



<sup>2</sup> These monies are associated with the 1998 Clean Water Bond and have been obligated in the appropriate time frame. However, individual projects funded through this effort are still under way under the administration of these funds.



## **Non-State Funding Entity Profiles**

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**United States Department of Agriculture.** The Utilities Section of the United States Department of Agriculture, Rural Development Division provides grants and loans for drinking water, sanitary sewer, solid waste, and storm drainage facilities in rural areas and municipalities with a population of 10,000 or less through its Water and Environment Program. This program provides more money to local water and wastewater systems than any other one agency in North Carolina. In Fiscal Year 2007-2008, the Water and Environment Program provided \$107 million in grants and loans (\$92 million in loans and \$14 million in grants).

**Appalachian Regional Commission.** Another federally funded program that provides grants for water and wastewater infrastructure projects is the Appalachian Regional Commission, a federal-state partnership that was established to create economic development opportunities and improve the quality of life in a 13-state region along the Appalachian Mountains. Developing and improving infrastructure in the region is one of the commission's four goals in its strategic plan for 2005-2010. In North Carolina, the commission works in 29 counties in the western part of the state.

**Economic Development Administration.** The Economic Development Administration within the United States Department of Commerce also provides grants for water and wastewater infrastructure. The funds are provided out of two programs, Public Works and Economic Adjustment Implementation. The Public Works program provides support to communities for economic development activities, especially regional projects, while the Economic Adjustment Implementation program works with communities that have experienced sudden and severe economic dislocation. Water and wastewater infrastructure activities are generally included as part of larger economic development projects.

**Golden LEAF Foundation.** The Golden LEAF Foundation also provides money for water and wastewater infrastructure projects in North Carolina. The foundation was created in 1999 to receive half of North Carolina's portion of the money from the master settlement agreement with cigarette manufacturers. Water and wastewater projects can be funded through both the Economic Catalyst Program and the Community Assistance Initiative. The foundation does not set aside money specifically for infrastructure projects, but selects projects from the entire application group.



**cleanwater**  
MANAGEMENT TRUST FUND

Richard Rogers  
Executive Director

**CWMTF TRUSTEES**

January 12, 2009

Mr. John W. Turcotte  
North Carolina General Assembly  
Program Evaluation Division  
Legislative Office Building, Suite 100  
300 North Salisbury Street  
Raleigh, NC 27603-5925

Dear Mr. Turcotte,

We appreciate the opportunity to comment on the final report (2008-12-07) prepared by the Program Evaluation Division on the effectiveness of the state's water and wastewater infrastructure programs. We thank you for the time and effort that you took to understand CWMTF's wastewater program in the context of the state's overall strategy for water and wastewater infrastructure. As you learned through your evaluation process, providing wastewater treatment can relate to many different objectives including: protection and restoration of surface water quality, provision of treatment capacity for economic growth, provision of water and wastewater systems to rural communities, protection of public health, and replacement of aging systems. In recognizing this diversity, the North Carolina General Assembly established the state's water and wastewater programs to address these objectives and gave them unique missions and legislative authority.

As established under NC General Statute 113A-253, the wastewater program within CWMTF is to be focused on the repair and elimination of wastewater treatment systems to protect and restore water quality. In addition, the statute requires CWMTF to give priority for wastewater funding to economically distressed local governments. In its 12 years of existence, CWMTF has carried out its legislative mandate in an efficient and effective manner by funding wastewater projects that focus on maximizing water quality benefits, especially in economically distressed communities.

We do agree with the report that there is a need to increase coordination and communication among the agencies, especially related to the customer service, evaluation of potential wastewater projects, database management of funded projects, needs assessment and strategic planning. However, we disagree that the best way to accomplish this would be to establish a new, "top-down" bureaucratic program as described in Recommendation 2 (pages 24-29). This recommendation envisions a single wastewater funding authority which would coordinate and oversee funding decisions. The proposed approach would run counter to how North

Chair, Philip A. Baddour, Jr.  
GOLDSBORO

Ron Beane  
LENOIR

Yevonne S. Brannon  
RALEIGH

Norman C. Camp, III  
RALEIGH

Rick Coleman  
TABOR CITY

Karen Cragolin  
ASHEVILLE

John Crumpler  
RALEIGH

Rance Henderson  
MORGANTON

Joseph M. Hester, Jr.  
ROCKY MOUNT

William Hollan  
WINSTON SALEM

Robert Howard  
SOUTHPORT

Charles Johnson  
GREENVILLE

Kevin Markham  
CARY

Chuck McGrady  
HENDERSONVILLE

Dickson McLean, Jr.  
WILMINGTON

John McMillan  
RALEIGH

Peter Rascoe  
EDENTON

Stan Vaughan  
CHARLOTTE

Claudette Weston  
WINSTON SALEM

Jerry Wright  
JARVISBURG

Mr. John W. Turcotte  
January 9, 2009  
Page Two

Carolina's General Assembly has established independent agencies to address unique funding objectives through a "bottom-up" approach. In the current system, local communities can apply to the most appropriate combination of funding sources to meet their own objectives when they are best prepared to do so. We believe that the current system serves the local communities much better than a "top-down" system in which the state would direct wastewater funding.

We also strongly disagree that CWMTF should be eliminated from the funding sources for wastewater projects (page 28). CWMTF's legislative emphasis on water quality protection and restoration, coupled with a priority on economically distressed local governments, provides an important compliment to other programs' funding objectives. Taken together, the funding objectives of the various agencies provide a comprehensive wastewater funding program that meets the needs of the local communities in our state.

We agree with many of the points raised in Finding 1 related to the State Water Infrastructure Commission (SWIC) (pages 8-9) and support efforts to refocus and strengthen SWIC as detailed in Recommendation 1. We also agree that it is imperative that additional resources be provided to SWIC to carry out its objectives, but these funds should be appropriated from the legislature, not transferred from the budgets of existing programs like CWMTF, as suggested in Recommendation 1 (page 24).

We do not agree with Recommendation 3 (page 29) that more emphasis should be put on state loan programs. While loans would stretch limited state funds, many communities would still require grants in order to avoid creating user charges too burdensome for their communities. This is part of the reason that the General Assembly created the High Unit Cost threshold requirement. It may be appropriate to request that SWIC evaluate the appropriate balance between state loans and grants and any potential improvements to the HUC threshold calculation and application.

Thank you again for the opportunity to comment on this report. Given the limited time for review and comment, we offer these comments only as opinions of the Executive Director and Chairman of the Clean Water Management Trust Fund, not as a formal submittal by our Board. We have shared the final report with our Board of Trustees and have invited them to provide comments to us that we would like to submit as additional comments after the report is presented to the legislative committee in December. We also look forward to working with SWIC and the other funding agencies to make necessary improvements to the state's wastewater program so that the goals as established by the NC legislature can be fully realized.

Sincerely,



Philip A. Baddour, Chairman



Richard E. Rogers, Jr., Executive Director



**North Carolina**  
**Department of Commerce**  
*Commerce Finance Center*

**Beverly Eaves Perdue, Governor**  
**J. Keith Crisco, Secretary**

**Stewart Dickinson, Director**

January 14, 2009

Mr. John W. Turcotte, Director  
Program Evaluation Division  
North Carolina General Assembly  
300 North Salisbury Street, Suite 100  
Raleigh, North Carolina 27603

RE: Department of Commerce Formal Response to Amended  
Water and Wastewater Infrastructure Funding Study

Dear Mr. Turcotte

I wish to thank you for the opportunity to review and respond to the amended findings and recommendations in the Water and Wastewater Infrastructure Funding Study dated December 12, 2008 completed by your office.

The Department of Commerce has reviewed the amended findings and recommendations in the study. After reviewing the amendments to the original report, we have the same position that the best use of state resources to accomplish the General Assembly's goal of effective infrastructure funding is to enhance the State Water Infrastructure Commission (SWIC) role and responsibility as identified in Recommendation 1 of the report. We do not support the creation of a new North Carolina Water and Wastewater Authority (NCW<sup>2</sup>A) that would implement the statewide strategic plan, establish and maintain a baseline infrastructure inventory, set infrastructure application and project award process standards with the six funding agencies and report to the General Assembly as described in recommendation 2. With SWIC fulfilling the oversight and leadership role as described in recommendation 1, the agencies involved with infrastructure funding in the state could coordinate activities via memorandums of agreement without the necessity of creating a new agency. Recommendation 3 in the study states that the General Assembly should increase the emphasis on state loan programs when determining state appropriations for water and wastewater infrastructure. While we agree that loans enhance funding sustainability, our programs generally benefit low wealth communities where grants not loans are essential for economic and community development. We do not concur with the finding in recommendation 3 that loans vice grants improve the maintenance of systems or that the Local Government Commission needs to be involved in the funding process for water and wastewater programs.

***North Carolina: The State of Minds***

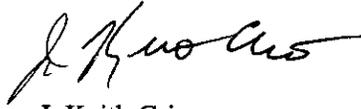
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The technical response was previously provided to Mr. Larry Yates of your staff. If you need additional information, please do not hesitate to contact Ms. Rita Harris, Legislative Liaison, at 715-2785 or [rharris@ncommerce.com](mailto:rharris@ncommerce.com).

Sincerely,

A handwritten signature in black ink, appearing to read "J. Keith Crisco". The signature is written in a cursive style with a long horizontal flourish at the end.

J. Keith Crisco



## North Carolina Department of Environment and Natural Resources

Beverly Eaves Perdue, Governor

Dee Freeman, Secretary

January 13, 2009

John W. Turcotte, Director  
Program Evaluation Division  
North Carolina General Assembly  
300 North Salisbury Street, Suite 100  
Raleigh, N.C. 27603-5925

Re: Formal Response to the Draft Program Evaluation Report on Water and Wastewater Infrastructure Funding

Dear Mr. Turcotte:

Thank you for the opportunity to comment on the final report on water and wastewater infrastructure funding. The Department appreciates the revisions that were made in response to comments submitted on the draft report.

The final report does a better job of acknowledging the role of local governments in infrastructure projects and the existing statutory framework for funding decisions. As noted in our earlier comments, local governments own the water/wastewater infrastructure and make the most basic decisions about how to allocate funds for operation, maintenance and repair, or expansion. The kind of changes recommended in the report will require close attention to the state-local relationship in planning for infrastructure improvements. A strategic plan could be very helpful in allocating state infrastructure funds efficiently, but it must recognize the key role that local governments play in decisions about infrastructure improvements.

DENR offers the following comments on specific Findings and Recommendations:

**Finding 2:** "The lack of a statewide strategic plan for water and wastewater infrastructure funding has compromised the state's ability to identify needs, determine the type and amount of money required to meet these needs and calculate return on investment."

**Value of a strategic plan.** The Department agrees that a strategic plan could be helpful in allocating state infrastructure funds most efficiently. Thought needs to be given to the nature of the strategic plan because of the key role that local governments play in decisions about infrastructure improvements. A strategic plan could mean simply overlaying state funding priorities on an inventory of water/wastewater needs, while continuing to rely on local governments to propose projects for funding. Another – more proactive – alternative might be to earmark a percentage of state funding for the different purposes now addressed by individual funding agencies, i.e. infrastructure expansion for growth; maintenance and improvement of existing systems;

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infrastructure projects intended to eliminate a specific water quality problem; or projects designed to reduce drought vulnerability. Within that framework, state funding agencies could more actively recruit projects for funding within each category.

There is little discussion in the report of what the contents of a strategic plan might be. DENR would suggest that a strategic plan should: assess needs for maintenance and repair as well as infrastructure expansion to meet growth; recommend an appropriate balance between rural and urban needs; and identify the right mix of loan versus grant funding.

**Prioritizing infrastructure projects.** As noted above, any state strategic plan will need to acknowledge the critical role of local governments in water/wastewater infrastructure decisions. In North Carolina, most water and wastewater systems are owned and controlled by local governments. (Only local government systems qualify for state loans and grants.) The current process for allocating infrastructure funding assumes that each local government will evaluate system needs, set priorities for maintenance and expansion, and identify a funding strategy. If the local government applies to a DENR program for a water/wastewater loan, the loan request is reviewed against a set of legislatively established priorities that reflect state policy goals. In 2008, for example, the General Assembly amended the statute setting priorities for water infrastructure funding to give additional weight to projects creating interconnections between water systems as a drought mitigation measure.

DENR agrees that planning to meet the state's infrastructure needs would be aided by greater predictability in state infrastructure funding and a stronger link between the level of funding and demonstrated statewide needs. In terms of prioritizing infrastructure funding, it is fair to say that state agencies do not currently fund water/wastewater infrastructure projects based on a comprehensive ranking of statewide infrastructure needs. Since the state does not control the water/wastewater infrastructure or provide full funding for construction and maintenance of the projects, a project moves forward only by decision of the local government. Any strategic plan will need to recognize that funding agencies cannot unilaterally develop a water/wastewater project no matter how high a priority.

There is little discussion in the report of current statutory priorities for funding. State agencies fund water/wastewater projects from a pool of local government applications. The funding agencies cannot determine the makeup of the pool, but projects are funded based on statutory criteria that were developed to advance state policy goals. Within the application pool, projects that advance state policy objectives receive funding before those that do not. Over time, knowledge of those statutory funding priorities tends to influence the applicant pool.

State influence on the type of projects funded could be increased. One possibility would be to more actively shape the applicant pool by providing incentives for submission of high priority projects -- perhaps by earmarking a certain amount of grant funding for those projects. The General Assembly could also direct funding agencies to leave money unspent in a given grant or loan cycle rather than allocate it to a lower priority project and increase outreach efforts to solicit

proposals for higher priority projects in the next application cycle. (Federal timelines for expenditure of funds would need to be considered to avoid reversion of funds.)<sup>1</sup>

**Finding 3.** “Six entities administer funding for water and wastewater infrastructure, creating a complex, fragmented and burdensome system.”

**Improved Coordination Among Programs.** DENR agrees with a number of the recommendations for increased coordination among the programs --including use of a common application form; consistent funding cycles; and a more formal process for coordinating activity among programs.

**Administrative Costs.** Total administrative costs for the six programs addressed in the report appear to be very low -- approximately 1% of the total state/federal dollars allocated for infrastructure projects through those programs (based on the 2007-2008 figures set out in the report). It is not clear how the changes recommended by the report would affect future administrative costs.

**Centralized Database of Infrastructure Projects.** The costs and benefits of a new database need to be carefully assessed, since database projects are both expensive and time-consuming. As the report notes, each of the funding agencies now maintains a separate database of projects funded. The report identified some obstacles to combining the information from different databases to create a complete picture of state funding activity; many of those obstacles can be addressed in the short term through simple and inexpensive changes. One problem cited in the report is lack of a standard project description that would make it possible to track funds allocated by different programs to the same project. DENR agrees that it would be helpful to have a single funding application that could be used by all programs for water and wastewater projects; standardizing the application form would be a way to move all of the programs toward consistent project descriptions. The General Assembly could also direct a combined report from the funding agencies that would draw together information on projects funded by the different agencies.

Under Finding 2, the report advocates a comprehensive inventory of existing water/wastewater infrastructure but provides little discussion of how the information would be used. For baseline infrastructure information to be useful in setting state funding priorities, it would need to be put in the context of population growth and other factors. Knowing that a sewer line exists does not tell you the condition of the line or whether the line has sufficient capacity to meet current demand. Currently, the water and wastewater programs conduct needs surveys every four years to identify infrastructure funding needs. The report is not clear in identifying how a comprehensive inventory of existing water/wastewater infrastructure would improve state decision making. There needs to be additional discussion of the cost and value of maintaining information on the location of water/wastewater infrastructure at the state level. Given the expense, DENR suggests that new data collection and database development should be focused on areas where there is a demonstrated state need for the data.<sup>2</sup> The General Assembly should also be made aware of security concerns

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<sup>1</sup> The practice to date has been to allocate all of the infrastructure money available in a given cycle if there are eligible projects to be funded.

<sup>2</sup> The Public Water Supply Section currently has a contract with the Environmental Finance Center at the School of Government to collect data on water system interconnections. That information relates directly to the state's role in

related to public databases that include information about the location of water infrastructure in particular.

**Finding 4:** “State Funding for water and wastewater infrastructure projects is tilted heavily in the direction of grants rather than loans, which limits the ability to leverage scarce state dollars.”

The report also recommends an increased use of loans rather than grants to fund infrastructure projects. Greater use of loans could make the state funding programs more sustainable over time. The report should acknowledge, however, that the mix of loans and grants is also closely related to the balance in urban versus rural projects. Some local governments are less able than others to take on additional debt.

**Recommendation 1:** “The North Carolina General Assembly should direct the State Water Infrastructure Commission (SWIC) to develop a statewide strategic plan and needs assessment for water and wastewater infrastructure funding by May 1, 2010.”

Please note the earlier comments about the need for greater clarity about the nature of the strategic plan. The report never discusses the appropriateness of existing state priorities for infrastructure funding as set out in statutes governing the funding agencies. If the recommendation intends a review of current priorities, DENR would agree that is an appropriate role for SWIC. DENR believes that the needs assessment can be accomplished through the existing needs surveys prepared by the Public Water Supply Section for water systems and by the Construction Grants and Loan Section for wastewater systems. Both surveys respond directly to federal program requirements and look at a 20-year planning horizon; the report does not explain why it is necessary to create another needs assessment.

**Recommendation 2:** “The North Carolina General Assembly should require better oversight of water and wastewater funding by either authorizing the State Water Infrastructure Commission to coordinate and oversee the funding system or establishing a single water and wastewater funding authority.”

DENR is not prepared to take a position with respect to the recommendation, but offers the following comments. Both Option A and B recommend giving a new entity the authority to oversee water and wastewater funding decisions. Many of the responsibilities that would be assigned to the State Water Infrastructure Council under Option A fit well with SWIC’s existing statutory mandate. It would be important, however, to carefully delineate the relationship between SWIC and the funding programs which would continue to report administratively to their individual cabinet secretaries or boards under Option A.

Option B would involve the additional cost of creating a new state agency governed by a new board of directors and significantly more administrative disruption.<sup>3</sup> If both Commerce and

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responding to drought and other water shortage emergencies; it will also be useful in applying the new legislative priority for water projects that create interconnections as a drought mitigation measure.

<sup>3</sup> Any discussion of reorganization should also note that only the Financial Services Unit of the Public Water Supply Section has involvement with water infrastructure funding. It would not be appropriate to move the entire Public

CWMFT remained outside the new agency proposed under Option B, the recommendation would apply only to funding programs currently managed by DENR (Public Water Supply and Construction Grants) and the North Carolina Rural Center. (It would also transfer funds from Clean Water Management Trust Fund to the new entity and remove wastewater infrastructure funding from the authorized uses of the Trust Fund.) The two DENR programs already coordinate activities, using a common application and financial management structure. There needs to be careful consideration of the relative costs and benefits of combining the Rural Center program and the two DENR programs into a single agency. Many of the inconsistencies between funding programs can be addressed without the substantial cost of creating a new agency.

The report notes that the funding programs have taken a step toward greater coordination by creating the Funder's Forum, which meets under the auspices of the Environmental Finance Center at the UNC's School of Government. With legislative direction, the Funder's Forum could both coordinate funding activities (such as development of a common application) and provide a pre-application screening function. North Carolina funding agencies have already done this on an informal basis in emergency situations (such as the 2007-2008 drought) to ensure that local governments were directed to the most appropriate funding source.

**Recommendation 3:** "To promote sustainability of funding for water and wastewater infrastructure, the North Carolina General Assembly should put more emphasis on state loan programs when determining state appropriations for water and wastewater infrastructure."

As noted above, DENR agrees providing more state funds as loans rather than grants could make infrastructure funding more sustainable. The appropriate mix of grants versus loans should be addressed in the strategic plan for water/wastewater funding. Some grant funds will be needed to assist local governments that cannot take on additional debt. Grant funds may also be helpful in recruiting applications for projects that meet state priorities.

DENR would also note the likely relationship between the current state preference for grants over loans and a desire to direct most state funds to rural/low income communities. The decision to transfer all water/wastewater grant funds to the N.C. Rural Center made the largest source of state grant funds available only to rural areas and a small number of towns in low income counties. Later decisions to put most state infrastructure money into grants rather than loans reinforced this focus. The relationship between allocation of state funds to rural areas/ distressed communities and the mix of loans versus grants is not discussed in the report.

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Water Supply Section, which has regulatory responsibilities under the Safe Drinking Water Act, from the Division of Environmental Health to a new funding agency.

Thank you for your consideration of these comments.

Sincerely

A handwritten signature in black ink, appearing to read "Robin W. Smith". The signature is fluid and cursive, with the first name "Robin" being more prominent than the last name "Smith".

Robin W. Smith  
Assistant Secretary for Environment



January 13, 2009

Thomas W. Lambeth  
Chairman

Billy Ray Hall  
President

Mr. John W. Turcotte, Director  
Program Evaluation Division  
North Carolina General Assembly  
Legislative Office Building, Suite 100  
Raleigh, NC 27603-5925

Dear Mr. Turcotte:

The Rural Center appreciates the opportunity to offer comments on the amended draft of the Program Evaluation Division's report on water and wastewater infrastructure funding. We wish to reiterate our support for the recommendations outlined in Water 2030 and developed in conscious and deliberate partnership with other federal and state funders and the hundreds of local governments who operate water and/or wastewater systems in their communities. Based upon two decades of focusing on the water and wastewater needs of rural communities, we believe the following:

- The development of a statewide strategic plan requires a partnership between federal and state funding entities and the local owners and operators of water and wastewater systems;
- The appropriate mix of grant and loan dollars should be predicated on the ability of local governments to pay for essential upgrades and improvements to their infrastructure, and rural communities are disproportionately more likely to need grant dollars in making needed improvements; and
- The Rural Center's 21-year history of working with rural communities on this issue makes us the appropriate entity to deliver water and wastewater infrastructure grants to rural communities.

The Program Evaluation Division offers three recommendations to the oversight committee. Following are our responses to these recommendations which we hope the members of the committee and other members of the General Assembly will note.

North Carolina

Rural Economic

*Recommendation 1: The North Carolina General Assembly should direct the State Water Infrastructure Commission to develop a statewide strategic plan and needs assessment for water and wastewater infrastructure funding by May 1, 2010.*

Development Center, Inc.

4021 Cary Drive

Raleigh, NC 27610

Phone: (919) 250-4314

Fax: (919) 250-4325

- In October 1998, the Rural Center's policy paper, "*Clean Water: Our Livelihood, Our Life*" advocated a statewide strategic plan for water infrastructure. The Rural Center conducted a strategic planning effort with Water 2030 and has now completed two needs assessments, raising its own funding to underwrite the costs. The Rural Center should not have to pay for a third study. The Rural Center is a non-state entity and the center's water and wastewater grant funding is provided largely through a non-recurring appropriation. Typically, the General Assembly does not base a recurring financing proposal on non-recurring money. Further, based on the Rural Center's experience, the funding for the proposed effort is insufficient and the time allotted is inadequate to accomplish the tasks as proposed.

- The Program Evaluation Division report acknowledges the fact that water and sewer infrastructure is locally owned and operated but advocates a top-down approach to strategic planning. While the center would support a strategic plan, the plan described in the recommendation is a capital improvements plan for water and sewer infrastructure. A state-developed capital plan for water and sewer infrastructure that resembles the Transportation TIP is not feasible since, unlike the state highway system, the water and sewer infrastructure is locally owned. A bottom-up approach is the only feasible approach.

*Recommendation 2: The North Carolina General Assembly should require better oversight of water and wastewater funding by either authorizing the State Water Infrastructure Commission to coordinate and oversee the funding system or establishing a single water and wastewater funding authority.*

- Both options offered in the report recommend creating a new entity and, with the new entity, financing additional staffing costs. As reported in the Program Evaluation Division's document, the state only spends \$2.7 million annually to administer \$230 million for water and sewer infrastructure. This administrative cost is equivalent to less than 1.2% of the infrastructure investment by the state. No forecast is offered to quantify the value to be added by the new entity and the additional staff.
- The Rural Center believes that excellent coordination is now occurring between and among agencies. If the General Assembly wishes to have a detailed project tracking system, legislation calling on the funding agencies to develop a common reporting format or a centralized funding database should be introduced.
- The states identified in the Program Evaluation Division report and in the EPA publication cited in the report ("Handbook for Coordinating Water and Wastewater Infrastructure Funding", EPA 816-R-03-018, October 2003) operate with informal coordination networks that have been developed over time. The same network is occurring in NC, as illustrated by the recent Memorandum of Agreement between USDA and the Rural Center.
- State and federal legislation established the current funding programs to meet unique needs. The report does not acknowledge that the priorities for infrastructure funding were set by the General Assembly and the Congress nor does it forecast how those priorities will be maintained within the centralized process that is advocated.

*Recommendation 3: To promote sustainability of funding for water and wastewater infrastructure, the North Carolina General Assembly should increase its emphasis on state loan programs when determining appropriations for water and wastewater infrastructure.*

- The members of the General Assembly consistently have recognized the need for grant assistance in the water and sewer infrastructure programs they create. Further, in the criteria the legislators established for infrastructure programs (GS 159G), the members determined that households should not be required to contribute more than a specific percentage of the median income before qualifying for grant assistance. Thus, the sustainability of funding must be balanced against or with the ability of households to pay for the cost of the service.

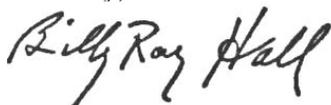
- The loan-grant ratio provided in the report to illustrate the division of funding does not include a principal financial provider (USDA). If the USDA information were included, the proportion of loans would increase significantly and would better state the amount of debt now being incurred by local governments in North Carolina to support water and sewer infrastructure.

In summary:

- Local governments own the water and wastewater infrastructure and make the decisions related to capital improvements.
- We disagree with the findings. The absence of a clear recognition of the local government role in making and implementing infrastructure decisions makes each of the findings flawed to the extent that the underlying premise cannot be implemented.
- Interagency cooperation is critical to developing an efficient delivery system. Agencies and entities are fully capable of developing a coordination plan.
- North Carolina could benefit from having a centralized database for both funding decisions and for quantifying infrastructure needs. The Rural Center and DENR, as the agencies funding both water and sewer, could cooperate to develop a database. The database is best housed at DENR, as the regulatory and enforcement agency. If the General Assembly concurs that the database is needed, it should be implemented through legislation action.
- There still are errors of fact in the report, and the Rural Center will be available to assist the staff in correcting those, if requested. An example is the footnote on page 11. We call your attention to the January 11, 2007 memorandum from Deputy Secretary Dempsey Benton to the SWIC that identifies a listing of 200 systems and begins, "From the perspective of DENR, we believe the primary focus of the next levels of funding should be:..." This memorandum was shared with your staff during the interviews conducted with the Rural Center during July and August 2008 for preparation of the report.

Finally, rural North Carolina has distinct needs. Due to the higher rates of poverty, unemployment, and populations with fixed incomes, parts of rural North Carolina will always need grants to augment local and other state and federal resources for infrastructure. The Rural Center is rural North Carolina's advocate, and has successfully used the appropriations from the General Assembly to leverage other resources to benefit the state's rural residents. To remove grant programs from the Rural Center reduces the leverage available for small towns to secure money from federal and other sources. Those resources now support the rural infrastructure that benefits the entire state's environmental quality.

Sincerely,



Billy Ray Hall

## **Program Evaluation Division Response to the Rural Economic Development Center Response**

**Rural Center Response:** There still are errors of fact in the report, and the Rural Center will be available to assist the staff in correcting those, if requested. An example is the footnote on page 11. We call your attention to the January 11, 2007 memorandum from Deputy Secretary Dempsey Benton to the SWIC that identifies a listing of 200 systems and begins, "From the perspective of DENR, we believe the primary focus of the next levels of funding should be:..." This memorandum was shared with your staff during the interviews conducted with the Rural Center during July and August 2008 for preparation of the report.

### **Program Evaluation Division Response**

Based on the information provided above, the Program Evaluation Division removed the footnote the Rural Center refers to in their response from the final report.



**State Water Infrastructure Commission  
Raleigh, North Carolina**

January 12, 2009

Mr. John Turcotte, Director  
Program Evaluation Division  
General Assembly of North Carolina  
300 North Salisbury Street  
Raleigh, North Carolina 27603-5925

Re: Report No. 2008-12-07: NC's Water and Wastewater Infrastructure Funding  
Lacks Strategic Focus and Coordination

Dear Mr. Turcotte:

I am writing as Chairman of the State Water Infrastructure Commission (SWIC) to provide comments on the Program Evaluation Division's (PED) study of water and wastewater infrastructure funding in North Carolina. Respecting your request, I have not shared the report with the other members of SWIC. After the PED has presented its recommendations to the Joint Legislative Program Evaluation Oversight Committee and the public on January 27, 2009, the SWIC would welcome an opportunity to publicly discuss and debate the study and provide formal comments on behalf of the SWIC. The next meeting of the SWIC is February 17, 2009.

Finding 1

In Finding Number One and in its summary of the report PED states that "SWIC was created to develop a strategic plan for water and wastewater funding, but has not achieved its mission because it does not have the authority, organizational structure, or resources necessary to fulfill its mission."

I agree that SWIC has fallen short of achieving its mission. I also agree that SWIC has little authority or resources to carry out its work. However, I believe that SWIC with limited resources but much good faith by its members has begun to implement many of the objectives of Session Law 2005-454, Clarify Clean Water Funding and Procedure (HB 1095).

The 2005 General Assembly recognized the need to improve coordination of water infrastructure funding. It enacted SL 2005-454 to codify and clarify previous session laws regarding water infrastructure grants and loans, including the Clean Water Bond Act of 1998; to establish eight common criteria to be considered by funders before approving state funding for water, wastewater, and stormwater projects; and to create the SWIC.

The SWIC replaced the ineffective Water Infrastructure Council (WIC) created by the Clean Water Bond Act of 1998. The WIC was appointed by the Governor, House and Senate. WIC members disagreed over allocation of clean water bond funds between the mountains, piedmont, and coastal plain.

Since the spring of 2006 when it was appointed and organized the SWIC has provided a monthly forum for communication, collaboration, and cooperation for state and federal funders of water infrastructure, local governments and other interested parties. I believe the SWIC has successfully increased the communication, cooperation and collaboration among funders and other agencies.

With its limited resources and authority SWIC has chosen to focus on increasing cooperation rather than developing a strategic water infrastructure financing plan. In order to develop a strategic water infrastructure financing plan SWIC or any other agency would need clearer goals and objectives from the Governor and/or General Assembly.

State and federal funding for water infrastructure is important and popular with legislators, local officials and the public. The Department of Environment & Natural Resources' drinking water and wastewater loan and grant programs, the Rural Economic Development Center's Clean Water Partners, the Clean Water Management Trust Fund, and US Department of Agriculture's Rural Development programs are effective mechanisms to help local governments finance water infrastructure.

SWIC is not merely a group of stakeholders. It has helped inform decision makers and the public about better infrastructure practices from encouraging interconnections between water systems, to promoting the use of water audits, to reviewing the advantages and disadvantages of increasing the use of reclaimed water. SWIC does not have the authority and has not sought the authority to require funders or other agencies to comply with what it considers best practices.

Like any state agency SWIC would have more influence if the Governor actively supported its work and required his or her agencies to adopt SWIC recommended practices.

After two years of work SWIC welcomes a debate about its role and the State's role in the planning, financing, constructing, operating and maintaining water infrastructure.

#### Finding Number 2

I agree that the "lack of a statewide strategic plan for water and wastewater (and stormwater) infrastructure has compromised the state's ability to identify needs, determine the type and amount of money required to meet these needs, and calculate return on investment."

The State has encouraged local governments to develop and adopt local water supply plans, water infrastructure operation and maintenance plans, and capital improvement plans. The State through the Local Government Commission (LGC) has also encouraged local governments to value and depreciate their water assets as required by GASB 34.

The State (DENR, Commerce, LGC, SWIC) needs to work with local governments to develop and implement a strategy to continuously improve and make available drinking water, wastewater, stormwater, and financial data. The State needs to make it useful and easy for local governments to regularly and electronically report their data and enable the State to aggregate the local data into regional and statewide data.

The Division of Water Quality currently develops river basin water quality plans for each of the 17 major river basins on a five year cycle. The Division of Water Resources has begun to develop hydrologic models or water use budgets for each of the 17 river basins. DENR should integrate these water quality and quantity plans in the future.

These plans should be used to identify major water quality and quantity problems in each river basin and could be used to set state, regional and local priorities for water investments. River basins provide a more manageable unit for identifying environmental challenges and opportunities than a statewide plan.

I believe that inconsistent funding has resulted in the lack of a statewide strategic plan more than the lack of a plan has caused inconsistent funding. State and local roles in planning, financing, constructing, operating and maintaining other significant infrastructure, including public schools, community colleges, universities, transportation and even parks, is relatively well defined. The State role in water infrastructure is not well defined. In good economic times the General Assembly has been generous in its funding for water infrastructure. The General Assembly's support has been important because national funding for EPA's drinking water and wastewater programs has decreased. The SWIC has advocated for a dedicated source of state funding for water infrastructure to be matched with local water, wastewater and stormwater revenues.

I agree that the lack of a statewide strategic plan has hindered the development of an appropriate mix of grants and loans from the state, and has frustrated prioritization of funding.

### Finding Number 3

PED states that "six entities administer funding for water and wastewater infrastructure, created a complex, fragmented and burdensome system." I agree.

### Finding Number 4

PED states that "State funding for water and wastewater infrastructure projects is skewed towards grants rather than loans, limiting the state's ability to optimize scarce state dollars." I agree.

### Recommendation Number 1

I believe that the SWIC would appreciate the opportunity to develop a statewide strategic plan and needs assessment for water and wastewater infrastructure funding by May 2010. The General Assembly should set the goals that it desires the plan to achieve. The plan should include stormwater and other "new" sources of water such as that found with reclaimed water. SWIC would also appreciate the opportunity to assist in the development of regional strategic plans based on river basins. I believe that the SWIC would oppose transferring funds from the Rural Center and CWMTF to pay for planning and would support an appropriation from the General Assembly instead.

### Recommendation Number 2

Over time the General Assembly has created a decentralized system of meeting different water and wastewater needs. I believe that it is appropriate and timely to discuss, debate, and consider alternatives to our current system. I believe that the SWIC would welcome an opportunity to consider improving oversight and coordination.

Alternatively, I believe that establishing a single independent state water and wastewater would require not only consolidation of funding agencies but also a reduction in the number of funding categories.

### Recommendation Number 3

EPA and USDA primarily provide low interest loans for water finance. I believe that the SWIC could work with funders, the Local Government Commission, and the General Assembly to establish clearer state policies regarding the investment of state funds. Specifically, the state would benefit from clearly defined state policy on the funding of infrastructure improvements. Specifically, this should include guidance on the level of state assistance when the high unit cost threshold now established in NCGS 159G-20 is exceeded.

Related to this topic, the SWIC plans to recommend whether the existing high unit cost threshold of 1.5% of median household income should be increased to the 2009 General Assembly.

### Conclusion

The SWIC greatly appreciates the support that the General Assembly has provided for financing water infrastructure in North Carolina and the General Assembly's interest in improving our system of water finance.

Thank you for the opportunity to comment on this draft report. Please contact me, Jean Crews-Klein, or other members of the SWIC if we can be of assistance.

Sincerely,

A handwritten signature in black ink, appearing to read "Bill Holman". The signature is written in a cursive style with a large initial "B" and a long horizontal stroke at the end.

Bill Holman  
Chairman